

**Espay Solar Energy S.L.**

# **Planting under photovoltaic panels in Northeast China**



## Overview

---

The novelty of this study lies in offering a systematic and integrative review of PV agriculture in China. The integration of photovoltaic (PV) power generation with agricultural production has emerged as a strategic pathway to advance China's ecological transition and dual carbon goals. This study focused on a large PV site in the Hobq Desert examining the growth characteristics of *Astragalus adsurgens* at different positions within fixed PV. With the rapid progress of energy transition aimed at achieving carbon neutrality goals, a significant number of centralized ground photovoltaic (PV) power plants have been widely established across China. 26 -- In Chaideng Village of Ordos City, 3.46 million blue solar panels stretch across the desert. Imagine tomato plants thriving under solar panels that generate electricity while regulating sunlight exposure. Zhang Wei, a farmer from Hebei, chuckles as he recounts his first reaction: "I thought they wanted to grow."

## Planting under photovoltaic panels in Northeast China



### Accelerating the energy transition towards photovoltaic and wind in ...

To meet China's goal of carbon neutrality by 2060, substantial investment in upgrading power systems needs to be made to optimize the deployment of new photovoltaic and wind power ...

### Application of photovoltaics on different types of land in China

China's experience in land planning categorization, PV land use strategies, and PV project applications across diverse terrains is anticipated to offer invaluable insights for nations with a ...



### Balancing photovoltaic development and cropland protection: ...

This study provides valuable insights for developing policies and best practices related to implementing agrivoltaics and PV spatial planning, thus steering a more sustainable coexistence of ...

### Environmental impact assessment of agrophotovoltaic power plants ...

Our findings suggest that agrophotovoltaic power plants can be a sustainable clean energy development mode in East China through systematic understanding and management of the ...



### 'Photovoltaic sea' forming in north China desert

In Chaideng Village of Ordos City, 3.46 million blue solar panels stretch across the desert, covering 30 million square meters, transforming the endless sands into a shimmering ...

### Current Status and Future Trends in China's Photovoltaic

Overall, this research fills a key gap in systematically and comprehensively describing the current development status of photovoltaic agriculture in China. It also offers transferable lessons for ...



### China's Ningxia taps desert resources to realize green ...

On a vast expanse of desertified land, rows of photovoltaic power panels shine in sunlight, with goji berries planted

under the panels.



---

### Positive impacts of typical desert photovoltaic scenarios in China on

Therefore, this study selected a fixed PV station on the northern edge of the Hobq Desert as the research site, adopting an "electricity generation above, planting below" model to accelerate ...



### Agrivoltaics in China: Status, Potential and Pathways for Synergistic

This report reveals that over the past decade, agrivoltaics in China has developed rapidly, demonstrating significant technical potential and practical experience, and creating new ...

---

### North China's Photovoltaic Greenhouse Revolution: Where Agriculture

Let's face it - the marriage of

photovoltaic panels and greenhouse farming might sound like tech jargon soup at first. But here in North China, manufacturers are cooking up something extraordinary.



## Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://www.espay.es>

