

**NKOSITHANDILEB SOLAR**

# **Profit model of solar air conditioner**



## Overview

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Can solar thermal-assisted air conditioning be a business model design?

With solar thermal-assisted air conditioning as an idea, this research aims to establish an innovative business model design for engineers working on ingenious technologies and seeking commercialization.

Does a solar-assisted air conditioning system save energy?

The existing vapour-compression air conditioning system operating alone consumes more energy compared to that when supplemented with the solar-driven absorption chiller with AES. A maximum of 58% energy-saving is achieved from the integrated solar-assisted cooling system in July and August.

Are solar thermal air conditioners a business model?

In the authors' previous study, Kalair et al. ( 2021) have presented a business model for solar thermal air conditioners for homes, cold storage, and data centers. Ten national and international respondents were interviewed semi-structured one-on-one, and their viewpoints were thematically examined.

What is a value proposition for solar-assisted thermal air conditioning?

Value proposition canvas for solar-assisted thermal air conditioning using CO<sub>2</sub>. (Adopted from Osterwalder and Pigneur ( 2010 ), Strategyzer AG ( 2018a ))  
The air-conditioning industry is exploiting new smart and connected systems to improve the cooling process's flexibility and efficiency.

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Value proposition canvas for solar-assisted thermal air conditioning using CO<sub>2</sub>. (Adopted from Osterwalder and Pigneur ( 2010 ), Strategyzer AG ( 2018a )) The air-conditioning industry is exploiting new smart and connected systems to improve the cooling process's flexibility and efficiency.

The global solar air conditioning market is projected to reach a valuation of USD 3.5 billion by 2033, growing at a compound annual growth rate (CAGR) of 12.5% from 2025 to 2033.

This study explores the economic and technical potential of solar-powered air conditioning systems to reduce greenhouse gas ...

Global Solar Air Conditioner market was valued at USD 601M in 2024 and is projected to

reach USD 925M by 2032, at a 6.6% CAGR.

This study explores the economic and technical potential of solar-powered air conditioning systems to reduce greenhouse gas emissions from buildings in 17 countries.

Discover the ROI of solar air conditioners in 2025 across Asia, Africa, Middle East, Europe, and North America. Learn about payback periods, incentives, and cost savings by region.

A business model is designed for solar thermal air conditioners for domestic, cold storage, and data centers applications in the world, after reviewing and interviewing ...

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**SOLAR AIR CONDITIONING MARKET OVERVIEW** The global solar air conditioning market was valued at USD 0.57 billion in 2025 and is expected to grow to USD ...

Solar air conditioning is one such investment that not only provides cost savings and financial benefits but also supports corporate sustainability goals. By adopting solar AC, ...

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A business model is designed for solar thermal air conditioners for domestic, cold storage, and data centers applications in the world, after reviewing and interviewing ...

Examine the solar air conditioning market, with rising demand for energy-efficient cooling and sustainable technologies.

## Contact Us

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For catalog requests, pricing, or partnerships, please contact:

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