

# **Solar Updraft Tower Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Component (Chimney/Tower, Wind Turbine, Solar Air Collector, Generator), By Application (Residential, Industrial, Commercial), By Region, By Competition, 2018-2028**

<https://marketpublishers.com/r/S50527E08079EN.html>

Date: October 2023

Pages: 190

Price: US\$ 4,900.00 (Single User License)

ID: S50527E08079EN

## **Abstracts**

Global Solar Updraft Tower Market was valued at USD 22.08 billion in 2022 and is anticipated to project robust growth in the forecast period with a CAGR of 20.19% through 2028.

The Solar Updraft Tower market refers to the global industry segment dedicated to the development, construction, and operation of large-scale renewable energy facilities known as Solar Updraft Towers. These towers are innovative structures designed to harness solar energy for electricity generation in an environmentally friendly and sustainable manner. At the heart of a Solar Updraft Tower is a tall, chimney-like structure with a wide collector area at its base. The tower operates based on a simple yet effective principle: sunlight heats the air beneath the collector, causing it to rise and create an updraft within the tower. This updraft drives wind turbines located at the base of the tower, generating electricity. The Solar Updraft Tower market serves various stakeholders, including renewable energy companies, engineering firms, research institutions, and governments committed to reducing carbon emissions and promoting clean energy sources. These towers are particularly appealing due to their ability to generate electricity consistently, even during periods of high demand, making them valuable additions to the energy mix. The market's growth is driven by factors such as increasing global demand for clean energy, government policies supporting renewable energy targets, and advancements in tower design and efficiency. As the world seeks

sustainable alternatives to fossil fuel-based energy generation, the Solar Updraft Tower market plays a vital role in providing clean, reliable, and environmentally responsible electricity.

## Key Market Drivers

### Renewable Energy Demand

The global Solar Updraft Tower market is driven by the increasing demand for renewable energy sources. As the world grapples with the urgent need to address climate change and reduce greenhouse gas emissions, the transition to clean and sustainable energy solutions has become paramount. Solar Updraft Towers represent a promising renewable energy technology that harnesses the power of the sun to generate electricity. With growing awareness of the environmental consequences of fossil fuel-based energy generation, governments, businesses, and individuals are seeking cleaner alternatives. Solar Updraft Towers offer a reliable and sustainable source of electricity without the emissions associated with traditional fossil fuel power plants. This demand for renewable energy sources is a fundamental driver of the Solar Updraft Tower market's growth.

### Abundant Solar Resources

Regions with abundant solar resources play a crucial role in driving the Solar Updraft Tower market. Solar Updraft Towers require direct sunlight to heat the air and create the necessary temperature differential for power generation. Consequently, areas with high solar irradiance, such as deserts and arid regions, are particularly well-suited for the deployment of these towers. Countries situated in sun-rich regions recognize the potential of Solar Updraft Towers as a valuable energy source. They leverage their natural solar advantages to invest in and develop solar power projects, including Solar Updraft Towers. The availability of abundant solar resources not only makes these regions attractive for energy production but also enhances the economic viability of such projects.

### Energy Security

The quest for energy security is a significant driver of the global Solar Updraft Tower market. Energy security involves ensuring a stable, reliable, and diverse supply of energy to meet the needs of a nation or region. Dependence on fossil fuels and imported energy sources can pose risks to energy security, making the diversification of

energy generation sources imperative. Solar Updraft Towers contribute to energy security by providing a consistent and predictable source of clean energy. Unlike some intermittent renewable sources like wind and solar photovoltaic, Solar Updraft Towers can generate power consistently throughout the day and night, making them a valuable addition to a diversified energy portfolio. This stability enhances energy security and reduces vulnerability to supply disruptions or price fluctuations in fossil fuel markets.

### Technological Advancements

Continuous technological advancements are driving the growth of the Solar Updraft Tower market. As researchers and engineers explore innovative approaches to tower design, materials, and efficiency improvements, Solar Updraft Towers have become more cost-effective and attractive as a renewable energy solution. Advancements in materials science have led to the development of more efficient and durable tower components, such as improved collector materials and heat exchange systems. Enhanced engineering techniques and modeling have also allowed for the optimization of tower dimensions and configurations, further boosting energy output.

Moreover, ongoing research into energy storage solutions, such as advanced thermal storage systems, is addressing the challenge of intermittent power generation and making Solar Updraft Towers even more reliable and versatile.

### Government Incentives

Supportive government policies, subsidies, and incentives aimed at promoting renewable energy development are instrumental in driving investment in the Solar Updraft Tower market. Many countries have implemented renewable energy targets and emissions reduction goals, encouraging the adoption of clean energy technologies like Solar Updraft Towers. Governments offer various financial incentives to developers and investors in renewable energy projects, including tax credits, grants, feed-in tariffs, and favorable regulatory frameworks. These incentives reduce the financial barriers associated with Solar Updraft Tower projects and provide a predictable return on investment, making them more attractive to stakeholders.

Government support also includes research and development funding, environmental regulations that favor clean energy, and initiatives to streamline permitting and approval processes for renewable energy projects. All of these measures create a conducive environment for the growth of the Solar Updraft Tower market.

## Environmental Benefits

The environmental benefits of solar power generation are significant drivers of the Solar Updraft Tower market. Solar Updraft Towers produce electricity without emitting greenhouse gases, pollutants, or particulate matter, making them an environmentally friendly energy source. These towers have a minimal environmental footprint compared to fossil fuel power plants, which can have detrimental effects on air and water quality, contribute to climate change, and pose health risks to nearby communities. The reduction of air pollution and the conservation of water resources are particularly important environmental benefits of Solar Updraft Towers.

Additionally, Solar Updraft Towers contribute to a reduction in the overall carbon footprint of energy production, aligning with global efforts to mitigate climate change. The reduction of greenhouse gas emissions and the promotion of clean energy technologies are key drivers of investment in Solar Updraft Towers as a sustainable energy solution.

## Government Policies are Likely to Propel the Market

### Renewable Energy Targets and Mandates

Many governments around the world have established ambitious renewable energy targets and mandates to reduce carbon emissions and combat climate change. These policies are a significant driver of the global Solar Updraft Tower market. Governments set specific goals for the percentage of energy that must come from renewable sources within a certain timeframe.

For example, in the European Union, the Renewable Energy Directive mandates that member states achieve a target of at least 32% of energy from renewable sources by 2030. Similar targets and mandates exist in other regions, including the United States, China, and India. Solar Updraft Towers contribute to meeting these targets by providing a reliable source of clean, renewable energy.

To support these policies, governments often offer financial incentives, subsidies, and regulatory frameworks that facilitate the development and deployment of Solar Updraft Tower projects. These measures reduce the financial barriers associated with renewable energy projects and encourage investment in the sector.

### Feed-in Tariffs and Power Purchase Agreements (PPAs)

Feed-in tariffs (FiTs) and power purchase agreements (PPAs) are key government policies that drive the adoption of Solar Updraft Towers. FiTs guarantee a fixed payment for every unit of electricity generated by a renewable energy project, while PPAs involve long-term contracts between energy producers and utilities or buyers. Governments establish FiTs to provide developers with a stable and predictable revenue stream, making Solar Updraft Tower projects more financially attractive. PPAs, on the other hand, enable project developers to secure long-term contracts with buyers, ensuring the sale of electricity at predetermined prices. These policies reduce investment risks and enhance the bankability of Solar Updraft Tower projects.

### Investment Tax Credits (ITCs) and Grants

Many governments offer investment tax credits (ITCs) and grants as financial incentives to support the development and deployment of renewable energy projects, including Solar Updraft Towers. ITCs allow project developers to deduct a percentage of their project costs from their tax liabilities, effectively reducing the overall cost of the project. Grants, often provided by government agencies or organizations, offer direct financial support to renewable energy projects. These funds can be used for project development, construction, and research and development efforts related to Solar Updraft Towers.

### Research and Development (R&D) Funding

Government policies include funding programs dedicated to research and development (R&D) in renewable energy technologies. These programs allocate resources to support innovative projects that advance the efficiency, cost-effectiveness, and performance of Solar Updraft Towers. R&D funding helps overcome technical and technological challenges, accelerates the development of next-generation Solar Updraft Tower designs, and fosters collaboration among research institutions, universities, and private industry players.

### Environmental Regulations and Emission Reduction Targets

Stringent environmental regulations and emission reduction targets are driving governments to promote clean energy sources like Solar Updraft Towers. By reducing greenhouse gas emissions and pollutants associated with traditional energy sources, Solar Updraft Towers contribute to meeting air quality standards and achieving emission reduction goals. Governments enforce emissions caps and emissions trading schemes,

which incentivize the use of renewable energy to lower carbon footprints. Compliance with these regulations encourages the integration of Solar Updraft Towers into the energy mix.

### Streamlined Permitting and Regulatory Processes

To accelerate the deployment of renewable energy projects, governments often implement policies aimed at streamlining permitting and regulatory processes. These policies reduce administrative burdens, shorten approval timelines, and provide clarity to project developers. By simplifying the permitting and regulatory landscape, governments facilitate the development of Solar Updraft Towers and other renewable energy projects, making it easier for developers to navigate the complexities of project implementation.

In summary, government policies play a pivotal role in driving the global Solar Updraft Tower market by setting renewable energy targets, providing financial incentives, ensuring stable revenue streams, funding R&D initiatives, and enforcing environmental regulations. These policies create a favorable environment for the growth of Solar Updraft Towers as a sustainable and clean energy solution.

### Key Market Challenges

#### High Initial Capital Costs

One of the primary challenges hindering the widespread adoption of Solar Updraft Towers is the high initial capital cost associated with their construction and installation. Building a Solar Updraft Tower is a complex engineering endeavor that requires significant financial investment in materials, infrastructure, and technology. The key cost components include:

**Tower Structure:** The tower itself, which can reach considerable heights, demands robust materials and construction techniques to withstand environmental forces, such as wind loads.

**Collector:** The expansive collector area, often constructed using specialized materials like agricultural plastics or glass, requires substantial investment.

**Turbines and Generators:** High-efficiency turbines and generators are essential for converting the rising air currents into electricity, but they come at a considerable cost.



**Land Acquisition:** Securing large tracts of land in suitable locations, often in arid regions with ample sunlight, can be expensive.

**Research and Development:** Continuous research and development efforts are necessary to optimize tower designs and improve energy efficiency, which also adds to the overall project cost.

While the initial capital costs of Solar Updraft Towers can be substantial, they are expected to decrease over time as the technology matures, economies of scale are realized, and advancements in materials and construction techniques are made. Nevertheless, the upfront investment remains a significant challenge, particularly for smaller companies and regions with limited access to funding.

### Intermittency and Energy Storage

Intermittency is a fundamental challenge for Solar Updraft Towers and other renewable energy sources. Unlike fossil fuel power plants that can generate electricity continuously, Solar Updraft Towers rely on sunlight to create temperature differentials, which generate air currents for power generation. Consequently, they are subject to variations in weather conditions, including cloud cover and nighttime.

This intermittency poses challenges in providing a stable and reliable power supply. During cloudy days or at night, the power output from Solar Updraft Towers decreases significantly or ceases altogether. This intermittency can disrupt the grid's reliability and necessitate backup power sources or energy storage solutions to meet energy demands during periods of low or no solar radiation.

Energy storage technologies, such as advanced thermal storage systems or batteries, are essential to address this challenge by storing excess energy generated during sunny periods for use during cloudy or nighttime hours. Implementing effective energy storage solutions adds complexity and cost to Solar Updraft Tower projects, making them more financially challenging.

Moreover, the choice of suitable energy storage technologies and the management of energy storage systems require careful consideration to optimize performance and ensure grid stability.

In summary, the high initial capital costs and intermittency-related challenges are

significant obstacles facing the global Solar Updraft Tower market. While ongoing research and development efforts aim to mitigate these challenges, addressing them effectively is crucial to realizing the full potential of Solar Updraft Towers as a clean and sustainable energy source.

## Segmental Insights

### Wind Turbine Insights

The Wind Turbine segment had the largest market share in 2022 & expected to maintain it in the forecast period. Wind turbines are responsible for converting the kinetic energy generated by the rising air currents within the Solar Updraft Tower into electricity. This conversion process is essential for harnessing the power generated by the tower's updraft and making it usable for various applications, including supplying electricity to the grid. Wind turbines have a significant impact on the electricity generation capacity of a Solar Updraft Tower. Their size, design, and efficiency directly influence the amount of electricity that can be produced by the system. Larger and more efficient turbines can capture a greater amount of kinetic energy from the updraft, leading to higher power output. Wind turbine technology has seen substantial advancements in recent years, leading to improved efficiency in energy capture. Modern wind turbines are designed to maximize energy conversion, ensuring that a significant portion of the updraft's kinetic energy is transformed into electricity. This efficiency is crucial for the economic viability of Solar Updraft Tower projects. Wind turbines have become increasingly cost-effective due to economies of scale, technological innovations, and a competitive market. The reduction in the cost of wind turbine components and manufacturing processes has made them an attractive choice for electricity generation within Solar Updraft Towers. Wind turbines are known for their reliability and durability. They are designed to operate efficiently in a wide range of environmental conditions, including variations in wind speed and direction. This reliability is crucial for ensuring consistent electricity generation from Solar Updraft Towers. Wind turbine technology is highly scalable, allowing developers to adapt the size and capacity of turbines to suit the specific requirements of Solar Updraft Tower projects. This scalability ensures flexibility in designing and optimizing tower systems for various locations and energy needs. Ongoing research and development efforts continue to enhance wind turbine technology, leading to improvements in efficiency, durability, and performance. These advancements drive the dominance of wind turbines in the Solar Updraft Tower market.

## Commercial Insights



The Commercial segment had the largest market share in 2022 and is projected to experience rapid growth during the forecast period. Solar Updraft Towers are massive structures that require significant land area and solar radiation to operate efficiently. Commercial-scale projects, often situated in remote or arid regions with ample sunlight, can harness these conditions to generate substantial electricity. The large collector area and tall chimney of commercial Solar Updraft Towers facilitate higher energy production compared to smaller-scale applications. Commercial Solar Updraft Tower projects are designed to integrate seamlessly into the electrical grid. They have the capacity to generate substantial amounts of electricity, making them valuable contributors to a region's energy supply. The generated power can be distributed to residential, industrial, and commercial consumers through the existing grid infrastructure. Larger-scale Solar Updraft Tower projects benefit from economies of scale, leading to cost efficiencies in terms of materials, construction, and maintenance. This can result in a lower cost per unit of electricity generated, enhancing the economic viability of commercial projects. Commercial projects often have access to the necessary infrastructure, including transmission lines and substations, which simplifies grid connection. Additionally, commercial-scale projects are more likely to secure financing and investments from governments, utilities, and private sector stakeholders due to their potential to make a significant impact on regional energy production. Commercial-scale Solar Updraft Towers are better equipped to meet the substantial energy demands of large urban areas, industrial facilities, and commercial complexes. These projects can provide a stable and reliable source of clean energy to support industries and businesses, helping to reduce carbon emissions and environmental impact. Commercial projects often serve as testbeds for research and development initiatives aimed at optimizing Solar Updraft Tower technology. This ongoing innovation can lead to improvements in tower design, materials, and overall efficiency. Large-scale Solar Updraft Towers have the potential to significantly reduce greenhouse gas emissions and reliance on fossil fuels for electricity generation. Commercial projects can have a more substantial environmental impact than smaller-scale applications.

## Regional Insights

### Europe

Europe is the largest market for solar updraft towers, accounting for over 50% of the global market share. This is due to a number of factors, including favorable government policies, high investment in R&D, and the presence of established players.

Germany is the leading country in the European solar updraft tower market, followed by Spain, Italy, and France. Germany is home to the world's first commercial-scale solar updraft tower plant, which has been in operation since 1982.

### Asia Pacific

The Asia Pacific region is expected to witness the fastest growth in the global solar updraft tower market in the coming years. This is due to a number of factors, including high demand for electricity, abundant solar resources, and government support.

China is the leading country in the Asia Pacific solar updraft tower market, followed by India, Australia, and Japan. China is investing heavily in the development of solar updraft tower technology and is expected to deploy a number of commercial-scale projects in the coming years.

### North America

North America is a moderate-sized market for solar updraft towers. The United States is the leading country in the North American solar updraft tower market. A number of pilot and demonstration projects are currently underway in the United States, and the first commercial-scale solar updraft tower plant is expected to be commissioned in the next few years.

### Key Market Players

EnviroMission Limited

Green Power Energy

Hyperion Solar Energy

SunCentral Inc

Atlantis Solar LLC

SunPower Corporation

New BrightSource, Ltd.

First Solar, Inc.

JinkoSolar Holding Co., Ltd

China Energy Engineering Corporation.

Report Scope:

In this report, the Global Solar Updraft Tower Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Solar Updraft Tower Market, By Component:

Chimney/Tower

Wind Turbine

Solar Air Collector

Generator

Solar Updraft Tower Market, By Application:

Residential

Industrial

Commercial

Solar Updraft Tower Market, By Region:

North America

United States

Canada

Mexico

## Europe

France

United Kingdom

Italy

Germany

Spain

## Asia-Pacific

China

India

Japan

Australia

South Korea

## South America

Brazil

Argentina

Colombia

## Middle East & Africa

South Africa

Saudi Arabia

UAE

Kuwait

Turkey

### Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Solar Updraft Tower Market.

### Available Customizations:

Global Solar Updraft Tower market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

### Company Information

Detailed analysis and profiling of additional market players (up to five).

## Contents

### **1. PRODUCT OVERVIEW**

- 1.1. Market Definition
- 1.2. Scope of the Market
  - 1.2.1. Markets Covered
  - 1.2.2. Years Considered for Study

### **2. KEY MARKET SEGMENTATIONS**

### **3. RESEARCH METHODOLOGY**

- 3.1. Objective of the Study
- 3.2. Baseline Methodology
- 3.3. Formulation of the Scope
- 3.4. Assumptions and Limitations
- 3.5. Sources of Research
  - 3.5.1. Secondary Research
  - 3.5.2. Primary Research
- 3.6. Approach for the Market Study
  - 3.6.1. The Bottom-Up Approach
  - 3.6.2. The Top-Down Approach
- 3.7. Methodology Followed for Calculation of Market Size & Market Shares
- 3.8. Forecasting Methodology
  - 3.8.1. Data Triangulation & Validation

### **4. EXECUTIVE SUMMARY**

### **5. VOICE OF CUSTOMER**

### **6. GLOBAL SOLAR UPDRAFT TOWER MARKET OUTLOOK**

- 6.1. Market Size & Forecast
  - 6.1.1. By Value
- 6.2. Market Share & Forecast
  - 6.2.1. By Component (Chimney/Tower, Wind Turbine, Solar Air Collector, Generator),
  - 6.2.2. By Application (Residential, Industrial, Commercial)
  - 6.2.3. By Region



- 6.2.4. By Company (2022)
- 6.3. Market Map

## **7. NORTH AMERICA SOLAR UPDRAFT TOWER MARKET OUTLOOK**

- 7.1. Market Size & Forecast
  - 7.1.1. By Value
- 7.2. Market Share & Forecast
  - 7.2.1. By Component
  - 7.2.2. By Application
  - 7.2.3. By Country
- 7.3. North America: Country Analysis
  - 7.3.1. United States Solar Updraft Tower Market Outlook
    - 7.3.1.1. Market Size & Forecast
      - 7.3.1.1.1. By Value
    - 7.3.1.2. Market Share & Forecast
      - 7.3.1.2.1. By Component
      - 7.3.1.2.2. By Application
  - 7.3.2. Canada Solar Updraft Tower Market Outlook
    - 7.3.2.1. Market Size & Forecast
      - 7.3.2.1.1. By Value
    - 7.3.2.2. Market Share & Forecast
      - 7.3.2.2.1. By Component
      - 7.3.2.2.2. By Application
  - 7.3.3. Mexico Solar Updraft Tower Market Outlook
    - 7.3.3.1. Market Size & Forecast
      - 7.3.3.1.1. By Value
    - 7.3.3.2. Market Share & Forecast
      - 7.3.3.2.1. By Component
      - 7.3.3.2.2. By Application

## **8. EUROPE SOLAR UPDRAFT TOWER MARKET OUTLOOK**

- 8.1. Market Size & Forecast
  - 8.1.1. By Value
- 8.2. Market Share & Forecast
  - 8.2.1. By Component
  - 8.2.2. By Application
  - 8.2.3. By Country

### 8.3. Europe: Country Analysis

#### 8.3.1. Germany Solar Updraft Tower Market Outlook

##### 8.3.1.1. Market Size & Forecast

###### 8.3.1.1.1. By Value

##### 8.3.1.2. Market Share & Forecast

###### 8.3.1.2.1. By Component

###### 8.3.1.2.2. By Application

#### 8.3.2. United Kingdom Solar Updraft Tower Market Outlook

##### 8.3.2.1. Market Size & Forecast

###### 8.3.2.1.1. By Value

##### 8.3.2.2. Market Share & Forecast

###### 8.3.2.2.1. By Component

###### 8.3.2.2.2. By Application

#### 8.3.3. Italy Solar Updraft Tower Market Outlook

##### 8.3.3.1. Market Size & Forecast

###### 8.3.3.1.1. By Value

##### 8.3.3.2. Market Share & Forecast

###### 8.3.3.2.1. By Component

###### 8.3.3.2.2. By Application

#### 8.3.4. France Solar Updraft Tower Market Outlook

##### 8.3.4.1. Market Size & Forecast

###### 8.3.4.1.1. By Value

##### 8.3.4.2. Market Share & Forecast

###### 8.3.4.2.1. By Component

###### 8.3.4.2.2. By Application

#### 8.3.5. Spain Solar Updraft Tower Market Outlook

##### 8.3.5.1. Market Size & Forecast

###### 8.3.5.1.1. By Value

##### 8.3.5.2. Market Share & Forecast

###### 8.3.5.2.1. By Component

###### 8.3.5.2.2. By Application

## 9. ASIA-PACIFIC SOLAR UPDRAFT TOWER MARKET OUTLOOK

### 9.1. Market Size & Forecast

#### 9.1.1. By Value

### 9.2. Market Share & Forecast

#### 9.2.1. By Component

#### 9.2.2. By Application

### 9.2.3. By Country

## 9.3. Asia-Pacific: Country Analysis

### 9.3.1. China Solar Updraft Tower Market Outlook

#### 9.3.1.1. Market Size & Forecast

##### 9.3.1.1.1. By Value

#### 9.3.1.2. Market Share & Forecast

##### 9.3.1.2.1. By Component

##### 9.3.1.2.2. By Application

### 9.3.2. India Solar Updraft Tower Market Outlook

#### 9.3.2.1. Market Size & Forecast

##### 9.3.2.1.1. By Value

#### 9.3.2.2. Market Share & Forecast

##### 9.3.2.2.1. By Component

##### 9.3.2.2.2. By Application

### 9.3.3. Japan Solar Updraft Tower Market Outlook

#### 9.3.3.1. Market Size & Forecast

##### 9.3.3.1.1. By Value

#### 9.3.3.2. Market Share & Forecast

##### 9.3.3.2.1. By Component

##### 9.3.3.2.2. By Application

### 9.3.4. South Korea Solar Updraft Tower Market Outlook

#### 9.3.4.1. Market Size & Forecast

##### 9.3.4.1.1. By Value

#### 9.3.4.2. Market Share & Forecast

##### 9.3.4.2.1. By Component

##### 9.3.4.2.2. By Application

### 9.3.5. Australia Solar Updraft Tower Market Outlook

#### 9.3.5.1. Market Size & Forecast

##### 9.3.5.1.1. By Value

#### 9.3.5.2. Market Share & Forecast

##### 9.3.5.2.1. By Component

##### 9.3.5.2.2. By Application

## 10. SOUTH AMERICA SOLAR UPDRAFT TOWER MARKET OUTLOOK

### 10.1. Market Size & Forecast

#### 10.1.1. By Value

### 10.2. Market Share & Forecast

#### 10.2.1. By Component

- 10.2.2. By Application
- 10.2.3. By Country
- 10.3. South America: Country Analysis
  - 10.3.1. Brazil Solar Updraft Tower Market Outlook
    - 10.3.1.1. Market Size & Forecast
      - 10.3.1.1.1. By Value
    - 10.3.1.2. Market Share & Forecast
      - 10.3.1.2.1. By Component
      - 10.3.1.2.2. By Application
  - 10.3.2. Argentina Solar Updraft Tower Market Outlook
    - 10.3.2.1. Market Size & Forecast
      - 10.3.2.1.1. By Value
    - 10.3.2.2. Market Share & Forecast
      - 10.3.2.2.1. By Component
      - 10.3.2.2.2. By Application
  - 10.3.3. Colombia Solar Updraft Tower Market Outlook
    - 10.3.3.1. Market Size & Forecast
      - 10.3.3.1.1. By Value
    - 10.3.3.2. Market Share & Forecast
      - 10.3.3.2.1. By Component
      - 10.3.3.2.2. By Application

## **11. MIDDLE EAST AND AFRICA SOLAR UPDRAFT TOWER MARKET OUTLOOK**

- 11.1. Market Size & Forecast
  - 11.1.1. By Value
- 11.2. Market Share & Forecast
  - 11.2.1. By Component
  - 11.2.2. By Application
  - 11.2.3. By Country
- 11.3. MEA: Country Analysis
  - 11.3.1. South Africa Solar Updraft Tower Market Outlook
    - 11.3.1.1. Market Size & Forecast
      - 11.3.1.1.1. By Value
    - 11.3.1.2. Market Share & Forecast
      - 11.3.1.2.1. By Component
      - 11.3.1.2.2. By Application
  - 11.3.2. Saudi Arabia Solar Updraft Tower Market Outlook
    - 11.3.2.1. Market Size & Forecast

- 11.3.2.1.1. By Value
- 11.3.2.2. Market Share & Forecast
  - 11.3.2.2.1. By Component
  - 11.3.2.2.2. By Application
- 11.3.3. UAE Solar Updraft Tower Market Outlook
  - 11.3.3.1. Market Size & Forecast
    - 11.3.3.1.1. By Value
  - 11.3.3.2. Market Share & Forecast
    - 11.3.3.2.1. By Component
    - 11.3.3.2.2. By Application
- 11.3.4. Kuwait Solar Updraft Tower Market Outlook
  - 11.3.4.1. Market Size & Forecast
    - 11.3.4.1.1. By Value
  - 11.3.4.2. Market Share & Forecast
    - 11.3.4.2.1. By Component
    - 11.3.4.2.2. By Application
- 11.3.5. Turkey Solar Updraft Tower Market Outlook
  - 11.3.5.1. Market Size & Forecast
    - 11.3.5.1.1. By Value
  - 11.3.5.2. Market Share & Forecast
    - 11.3.5.2.1. By Component
    - 11.3.5.2.2. By Application

## **12. MARKET DYNAMICS**

## **13. MARKET TRENDS & DEVELOPMENTS**

## **14. COMPETITIVE LANDSCAPE**

- 14.1. EnviroMission Limited
  - 14.1.1. Business Overview
  - 14.1.2. Key Revenue and Financials
  - 14.1.3. Recent Developments
  - 14.1.4. Key Personnel/Key Contact Person
  - 14.1.5. Key Product/Services Offered
- 14.2. Green Power Energy
  - 14.2.1. Business Overview
  - 14.2.2. Key Revenue and Financials
  - 14.2.3. Recent Developments

- 14.2.4. Key Personnel/Key Contact Person
- 14.2.5. Key Product/Services Offered
- 14.3. Hyperion Solar Energy
  - 14.3.1. Business Overview
  - 14.3.2. Key Revenue and Financials
  - 14.3.3. Recent Developments
  - 14.3.4. Key Personnel/Key Contact Person
  - 14.3.5. Key Product/Services Offered
- 14.4. SunCentral Inc
  - 14.4.1. Business Overview
  - 14.4.2. Key Revenue and Financials
  - 14.4.3. Recent Developments
  - 14.4.4. Key Personnel/Key Contact Person
  - 14.4.5. Key Product/Services Offered
- 14.5. Atlantis Solar LLC
  - 14.5.1. Business Overview
  - 14.5.2. Key Revenue and Financials
  - 14.5.3. Recent Developments
  - 14.5.4. Key Personnel/Key Contact Person
  - 14.5.5. Key Product/Services Offered
- 14.6. SunPower Corporation
  - 14.6.1. Business Overview
  - 14.6.2. Key Revenue and Financials
  - 14.6.3. Recent Developments
  - 14.6.4. Key Personnel/Key Contact Person
  - 14.6.5. Key Product/Services Offered
- 14.7. New BrightSource, Ltd.
  - 14.7.1. Business Overview
  - 14.7.2. Key Revenue and Financials
  - 14.7.3. Recent Developments
  - 14.7.4. Key Personnel/Key Contact Person
  - 14.7.5. Key Product/Services Offered
- 14.8. First Solar, Inc.
  - 14.8.1. Business Overview
  - 14.8.2. Key Revenue and Financials
  - 14.8.3. Recent Developments
  - 14.8.4. Key Personnel/Key Contact Person
  - 14.8.5. Key Product/Services Offered
- 14.9. JinkoSolar Holding Co., Ltd



- 14.9.1. Business Overview
- 14.9.2. Key Revenue and Financials
- 14.9.3. Recent Developments
- 14.9.4. Key Personnel/Key Contact Person
- 14.9.5. Key Product/Services Offered
- 14.10. China Energy Engineering Corporation
  - 14.10.1. Business Overview
  - 14.10.2. Key Revenue and Financials
  - 14.10.3. Recent Developments
  - 14.10.4. Key Personnel/Key Contact Person
  - 14.10.5. Key Product/Services Offered

## **15. STRATEGIC RECOMMENDATIONS**

## **16. ABOUT US & DISCLAIMER**

## I would like to order

Product name: Solar Updraft Tower Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Component (Chimney/Tower, Wind Turbine, Solar Air Collector, Generator), By Application (Residential, Industrial, Commercial), By Region, By Competition, 2018-2028

Product link: <https://marketpublishers.com/r/S50527E08079EN.html>

Price: US\$ 4,900.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S50527E08079EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below  
and fax the completed form to +44 20 7900 3970