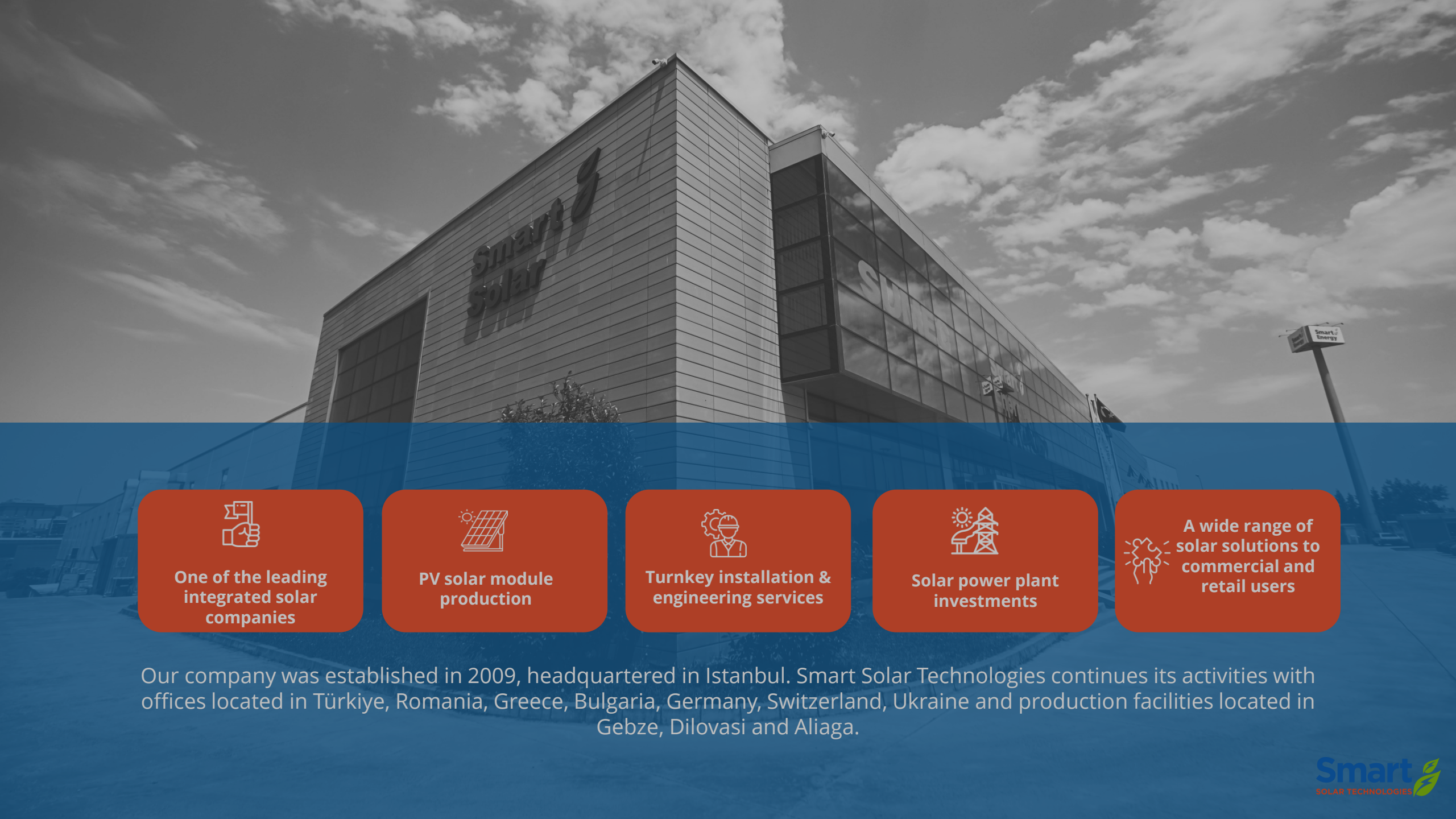




**2023 PRESENTATION**



One of the leading  
integrated solar  
companies



PV solar module  
production



Turnkey installation &  
engineering services



Solar power plant  
investments



A wide range of  
solar solutions to  
commercial and  
retail users

Our company was established in 2009, headquartered in Istanbul. Smart Solar Technologies continues its activities with offices located in Türkiye, Romania, Greece, Bulgaria, Germany, Switzerland, Ukraine and production facilities located in Gebze, Dilovasi and Aliaga.

# Smart

SOLAR TECHNOLOGIES

## Operational Module Capacity

1.2 GW Türkiye (Gebze)  
1.2 GW Türkiye (Aliağa)  
500 MW Türkiye (Dilovası)  
3 GW United States (750 MW 2024 H2)

## Solar Cell Production Capacity

2 GW Aliağa (First Phase 600 MW 2024 Q1)  
1 GW EU (2025 Q2)

## Distributor

120+

## Employment

1200+

## Engineering, Procurement and Construction (EPC)

1 GW+

## Mid-term Project Portfolio

2.2 GW+

## Solar Power Plant Investment

150 MW+

## Export to Country

19+



**WE TURNED OUR FACE TO THE SUN...**



## INVESTMENT

In operation 150+ MW



## EPC

Provided EPC services 500+ MW installed



## PV MODULE PRODUCTION

Production Capacity 2.9 GW



## CELL PRODUCTION

Production Capacity 2 GW (First phase 600 MW 2024 Q1)

# VERTICAL INTEGRATION OUR COMPETITIVE STRATEGY

Smart Solar Technologies is active in large parts of the PV Value Chain.

We believe in the future of solar energy and we are expanding vertical integration with the cell production facility which will be realized next year.

# ABOUT US

## Guiding Principles



QUALITY MANAGEMENT



VALUE ENGINEERING



INVESTMENT OF KINDNESS

## Our Awards



JCR Avrasya tarafından gerçekleştirilen kredi derecelendirme süreci kapsamında,

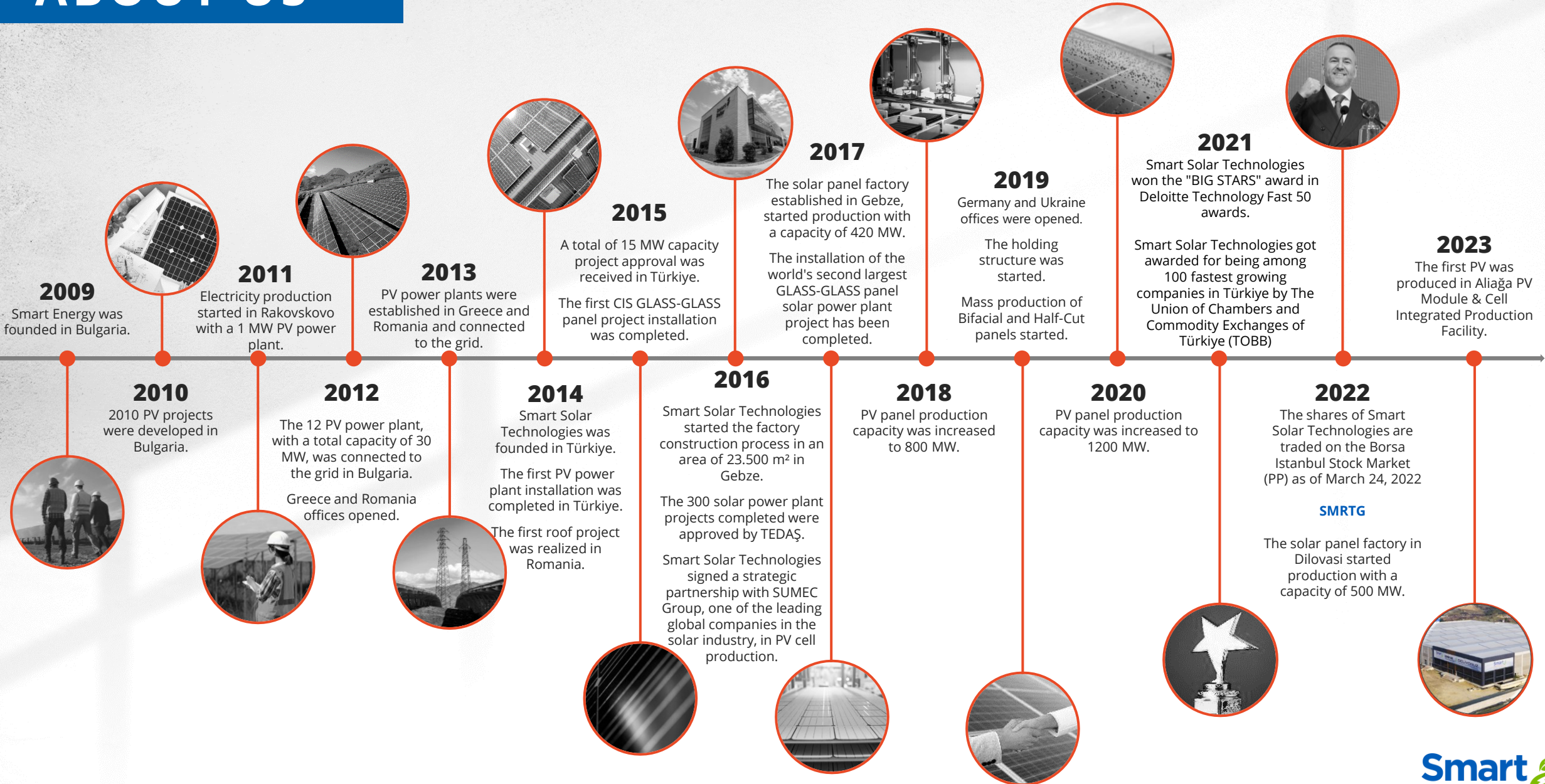
Uzun Vadeli Ulusal Notumuz “A+ Stabil Görünüm”, Kısa Vadeli Ulusal Notumuz “J1 Stabil Görünüm” olarak yüksek seviye yatırım yapılabilir seviyede belirlenmiştir.



Technology  
**Fast 50** TÜRKİYE  
BIG STAR AWARD



# ABOUT US



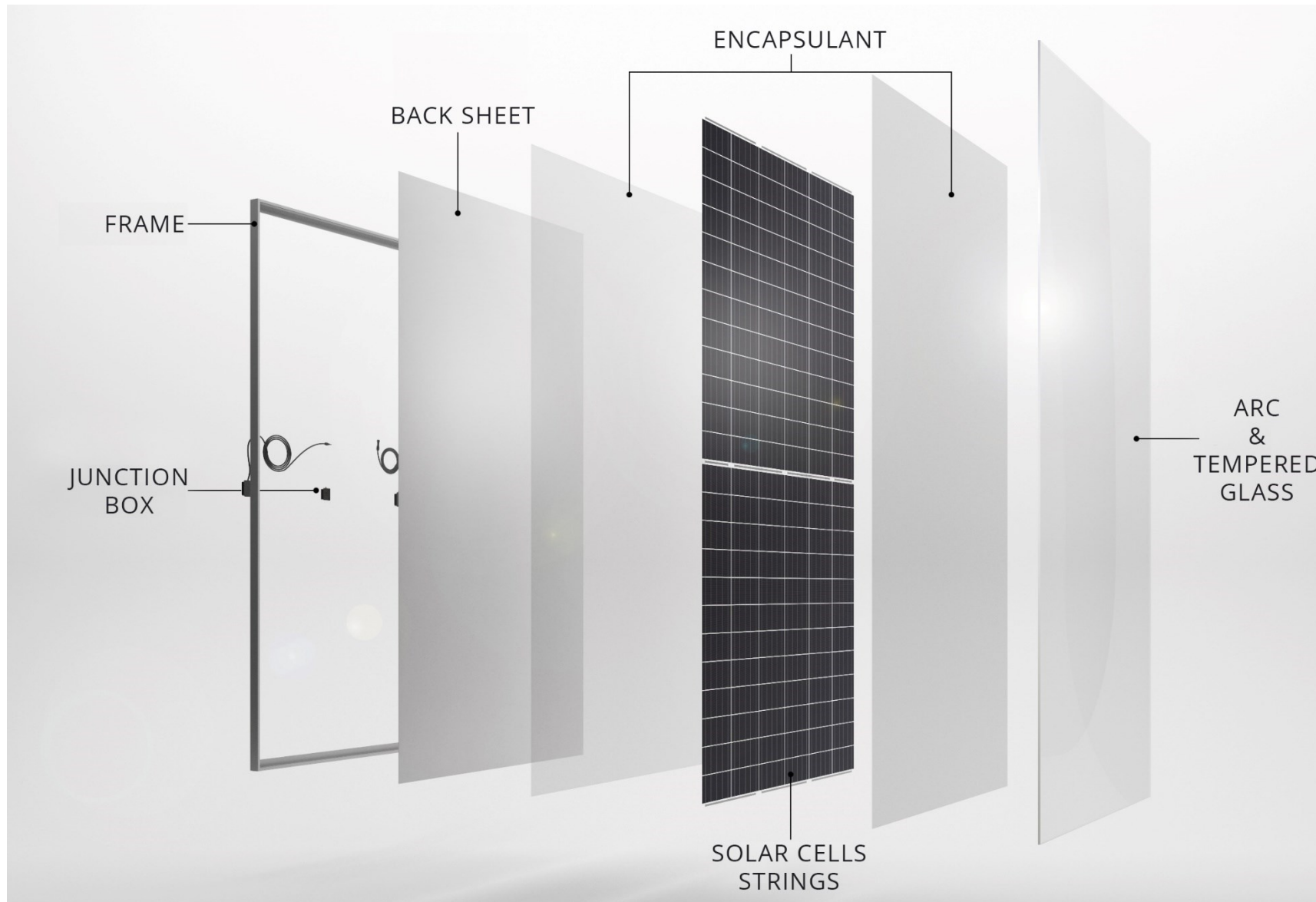
# PV SOLAR MODULE PRODUCTION

## OVERVIEW

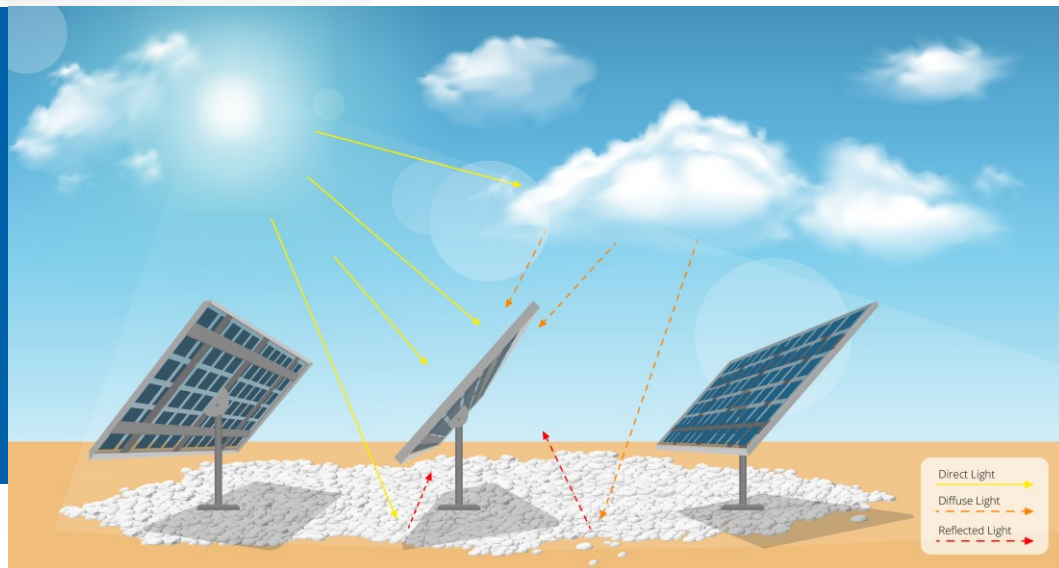
In our production facility, crystalline silicon cell-based high efficiency photovoltaic solar panels are produced for use in land and roof solar power plants.

High efficiency is achieved in solar panel production by using Multi Busbar, PERC, Half-Cut Cell and Bifacial technologies in our state-of-the-art automated production lines with an annual production capacity of **2.900 MW** and installed in an indoor area of **69.363 m<sup>2</sup>** in Gebze Dilovası (Kocaeli) and Aliğa .

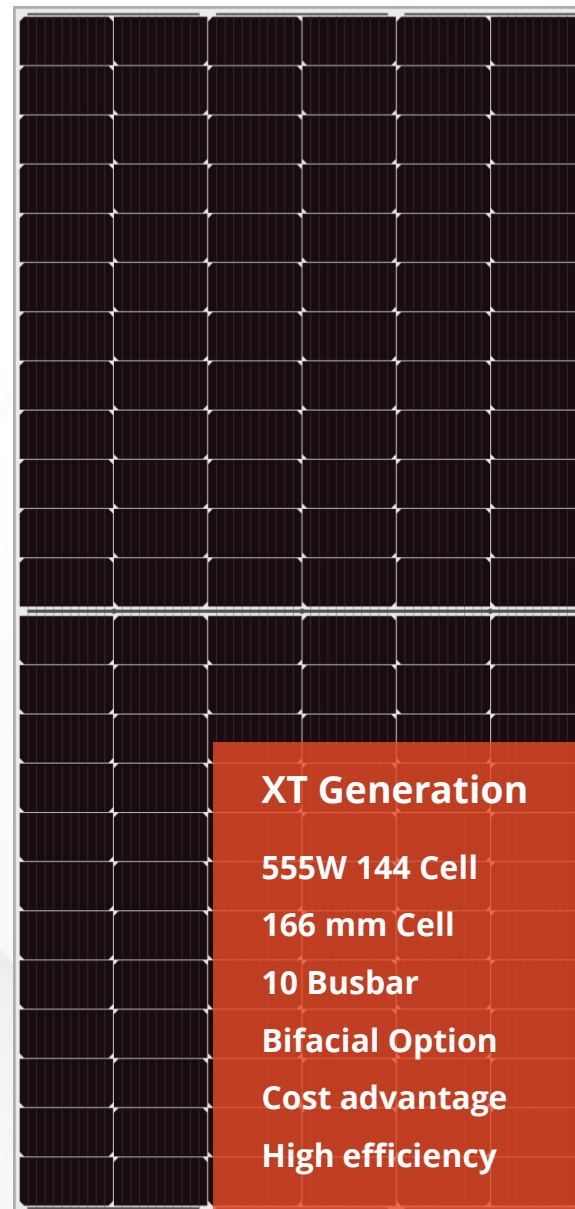
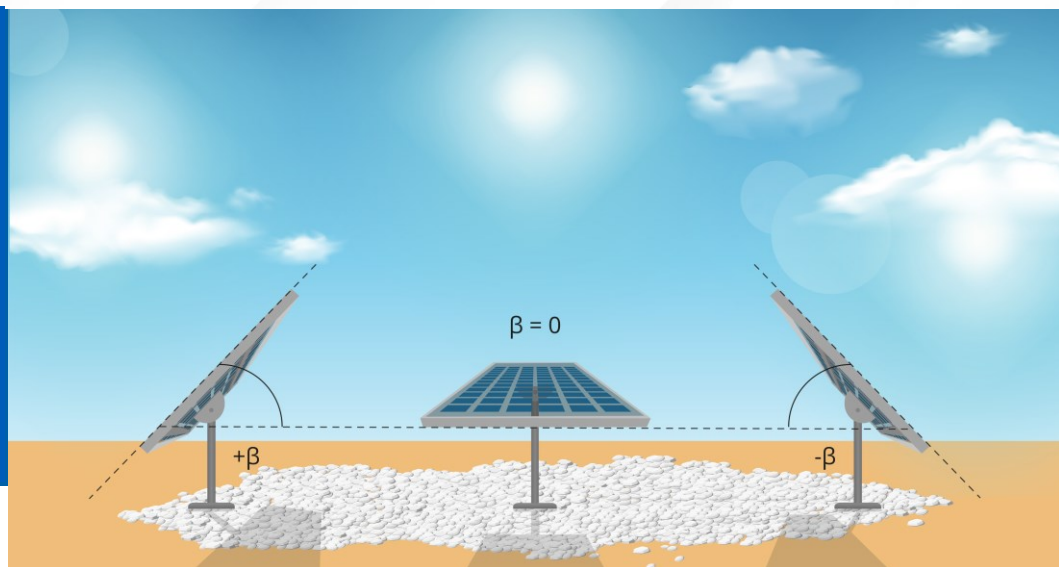
# SMART TECHNOLOGY



## Bifacial Technology



## Solar Tracker System



### XT Generation

555W 144 Cell

166 mm Cell

10 Busbar

Bifacial Option

Cost advantage

High efficiency

# PV Module References

\*Some of our pv module references.



**UCK**

Türkiye

**71.300,00 kWp**



**Doğan Enerji**

Türkiye

**24.690,00 kWp**



**Daikin**

Türkiye

**5.784,00 kWp**



**Çalık Enerji**

Türkiye

**957,00 kWp**



**Akfen**

Türkiye

**24.201,00 kWp**



**Birleşim Grup Edikli**

Türkiye

**15.237,12 kWp**

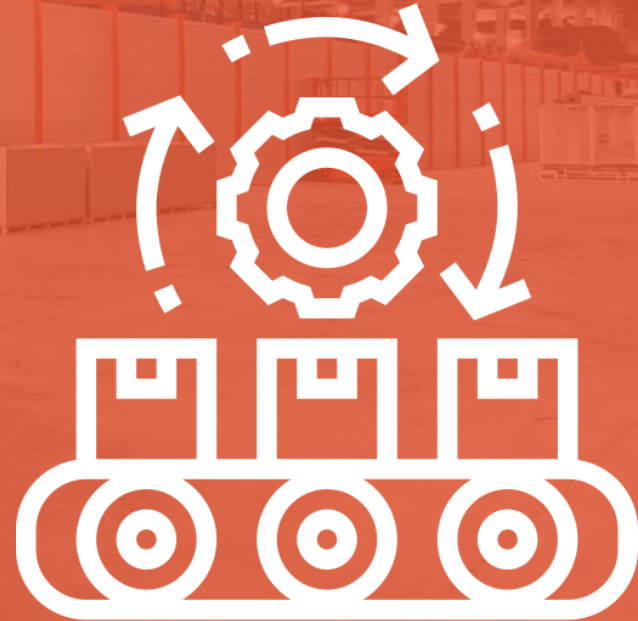


# ALİAĞA PV MODULE & CELL INTEGRATED PRODUCTION

*2 GW Production Capacity (2024 plan) | 50.000 m<sup>2</sup> Production Area*

# FACILITY PLAN

- **PHASE 1**  
600 MW PV line was put into use
- **PHASE 2**  
Equipment orders were given for a 500 MW PERC Cell line
- **PHASE 3**  
1,400 MW TOPCon cell line design was completed



# End-to-End Service/Vertical Integration



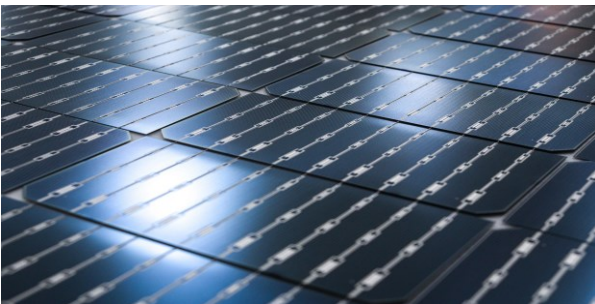
## Engineering and Design

- It covers engineering design services for domestic and international projects.
- A service approach tailored to the needs of the customer with a value engineering approach.



## Panel Production

- In order to meet the increasing customer demand, Smart Güneş makes investments in panel production capacity increase by using Multi Busbar, PERC, Half-Cut Cell and Bifacial technologies.



## Cell Production

- Advantages in working capital and panel production cost
- Minimum 70% - 75% locality criteria for projects to be realized within the scope of YEKA
- A production with lower emissions with the reduction of transportation
- Increase in the volume of exports to countries with anti-dumping
- Tax advantage in the US market



## EPC BASIC AREAS OF APPLICATION

- 🌱 Large Scale Commercial Field Projects
- 🌱 Medium Scale Commercial and Personal Consumption Based Field Projects
- 🌱 Roofing Projects for Large and Medium Scale Commercial and Personal Consumption
- 🌱 Hybrid Projects

We are a solution partner with over 10 years of experience in the installation of **300+ MW** solar power plants.

# EPC ACTIVITIES

In the PV market, which we entered as an investor in Eastern Europe 14 years ago, we can operate all over the world with the identities of project developer, EPC company, BOT (build/operate/transfer), BOO (build/operate) thanks to the experiences we have gained so far.



Thanks to solar energy, we reverse the global energy deficit, air pollution and dependence on fossil fuels. We carry out risk management with our turnkey services and offer a portfolio of projects to investors within the framework of operational excellence.



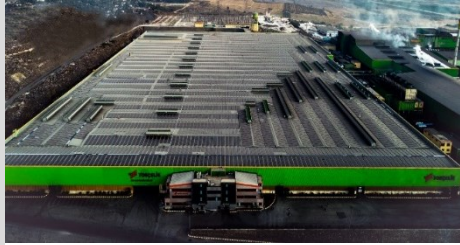
## EPC ACTIVITIES

We inspect materials and products upon delivery to the site and prior to installation. We replace defective products and materials with new ones. We protect all materials and equipment that can be damaged, exposed to bad weather and ultraviolet rays. We make sure that sensitive equipment is never exposed to dirt and dust to maintain production warranty and long-term durability.

We ensure that specific designs for site, mechanical and electrical works are carried out in compliance with local and European standards and regulations. We provide appropriate packaging to protect all materials and equipment during delivery.

# Engineering References

\* Some of our engineering references.



**Osmaniye**

Türkiye

**9.924,17 kWp**



**Şanlıurfa**

Türkiye

**14.400,00 kWp**



**Slobidka**

Ukraine

**11.000,00 kWp**



**Van Arısu**

Türkiye

**55.540,00 kWp**



**Aksaray**

Türkiye

**11.796,72 kWp**



**Mardin Artuklu**

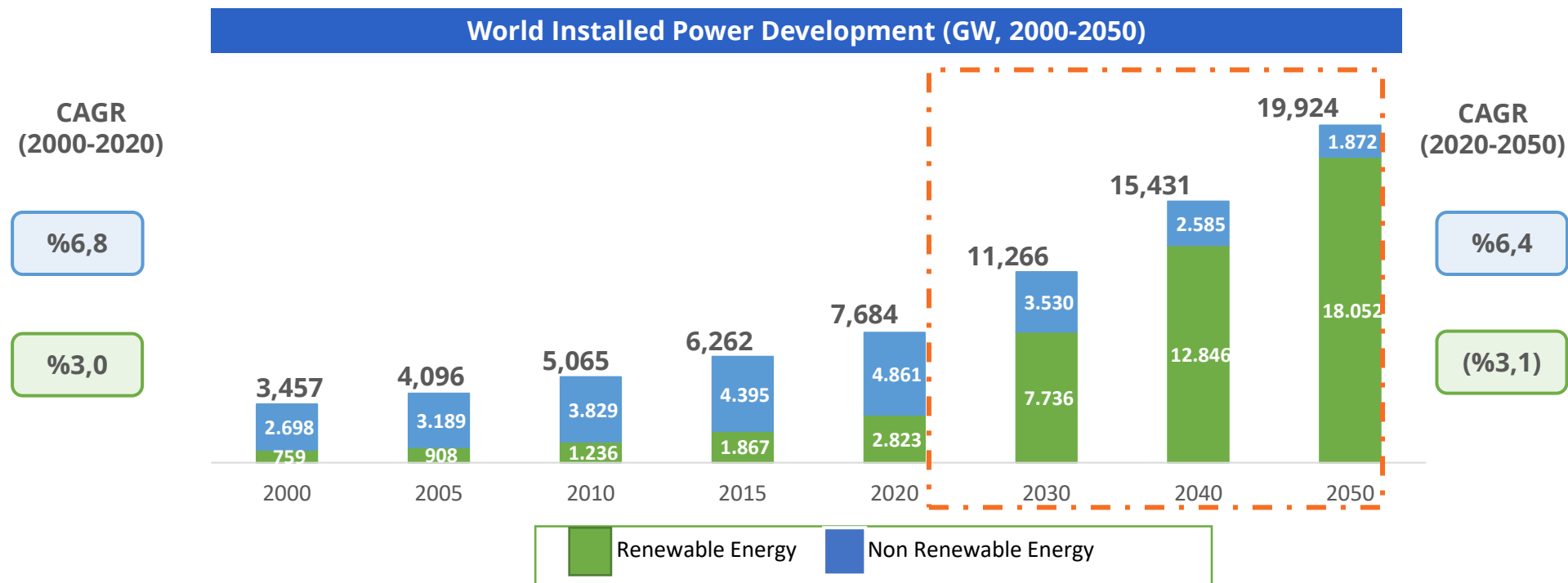
Türkiye

**10.890,76 kWp**



# Solar Energy in the World

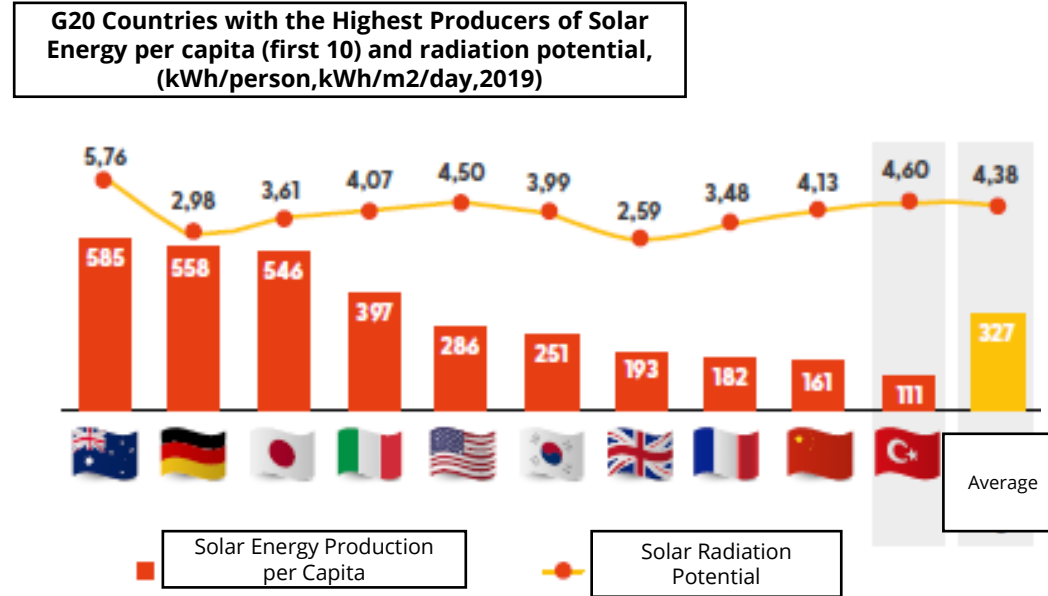
In order to reach the net zero carbon emission target by 2050, it is predicted that electricity generation will depend heavily on renewable energy sources.



- ❖ The share of renewable energy sources in electricity generation was 22% in 2000 and 37% in 2020, showing that it will reach 91% in 2050.

Source: PwC Industry Report

# Solar Energy Sector in Türkiye



Türkiye is among the 10 countries with the highest solar energy production per capita among the G20 countries.

Türkiye's solar radiation potential is higher than all the countries in the ranking, except for Australia.

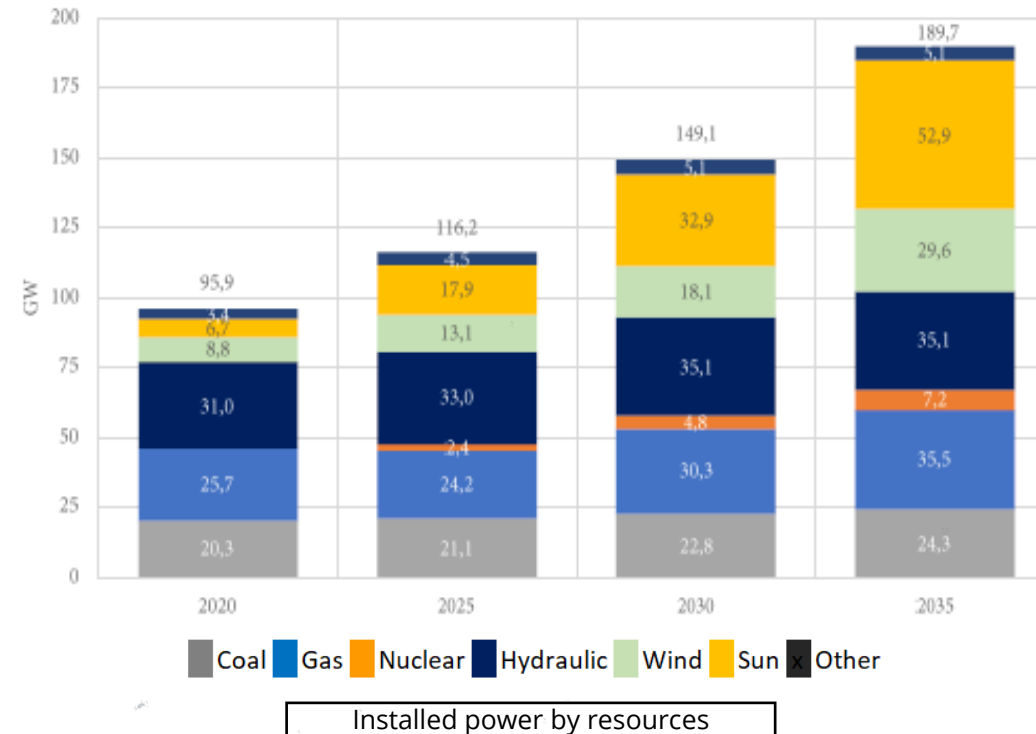
Above average radiation potential and low investment level compared to G20 member developed countries, Türkiye's continued solar energy investments in the coming period without slowing down an indication of the need.

Source World Bank, Solargis, SHURA

# Electricity Installed Capacity in Türkiye

The installed electricity production capacity, which was 95.9 GW in 2020, will increase to 189.7 GW in 2035. The share of renewable energy sources, which was 52.0% in the installed power in 2020, reaches 64.7% by 2035.

Hydroelectric power plants reach an installed power value of 35.1 GW in the medium-long term. Wind energy installed power reaches 29.6 GW and solar energy installed power rises to 52.9 GW.



Source: Türkiye National Energy Plan

# Shareholder Structure

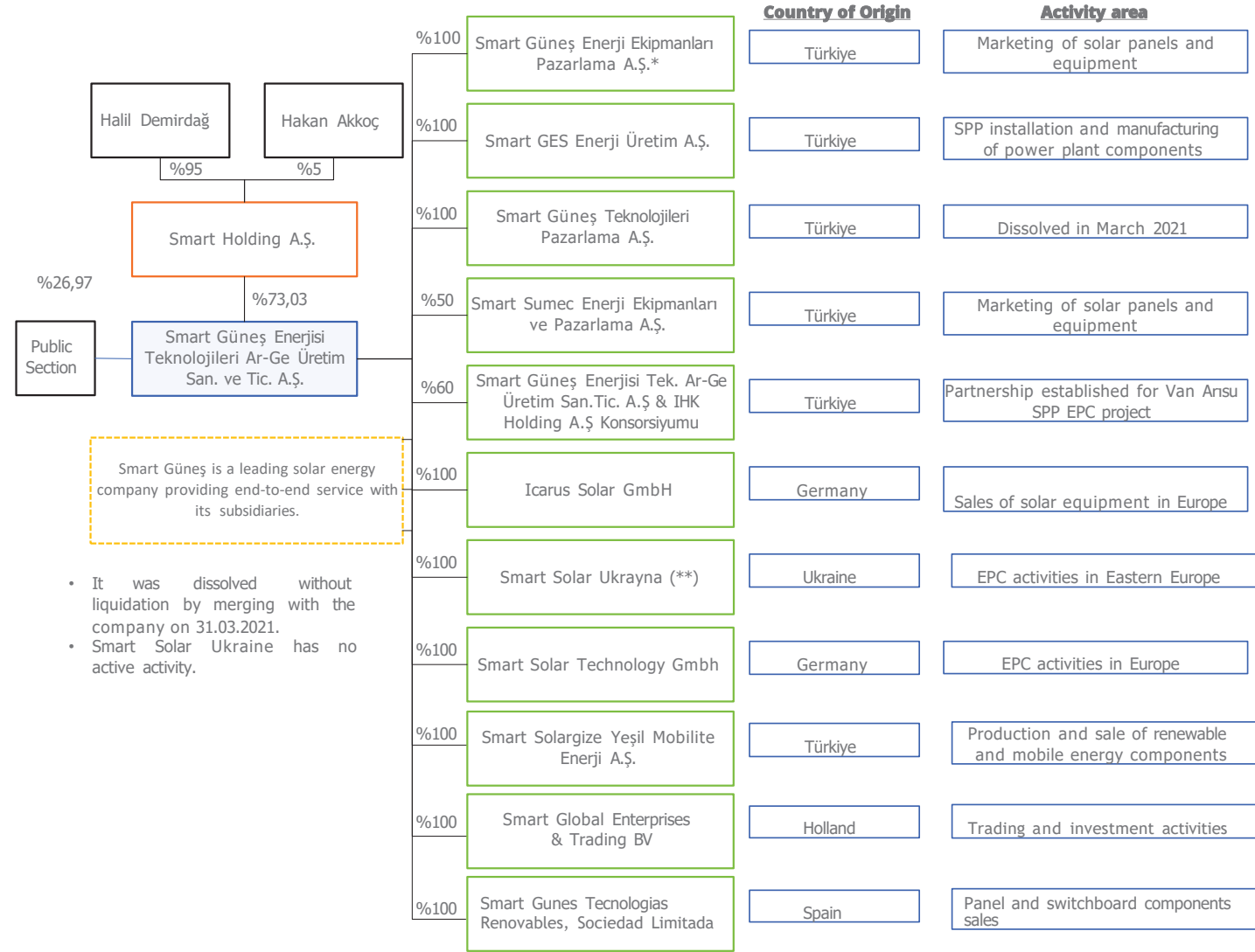


Shareholder	Capital TL	Capital Share (%)
SMART HOLDİNG ANONİM ŞİRKETİ	442.458.798,53	73,03%
FREE FLOAT	163.421.201,47	26,97%
<b>TOTAL</b>	<b>605.880.000,00</b>	<b>100</b>
Smart Holding A.Ş.announced the sale of <b>12,117,600</b> Smrtg shares representing approximately <b>2.0% of the issued share capital</b> . The transaction was priced at <b>TL 67.00 per share</b> and realized on 12 October.		

<b>BIST SHARE CODE</b>	SMRTG
<b>DATE OF PUBLIC OFFER</b>	24.03.2022
<b>INDEXES INCLUDED</b>	BIST 100 / BIST HİZMETLER / BIST HALKA ARZ / BIST KATILIM 30 / BIST 50 / BIST KATILIM 50 / BIST KATILIM TUM / BIST TÜM / BIST ELEKTRİK / BIST KOCAELİ / BIST 100-30 / BIST KATILIM 100 / BIST YILDIZ
<b>TRADED MARKET</b>	YILDIZ MARKET

# Smart Güneş Corporate Structure

Smart Solar has 10 subsidiaries in five different countries.



# Other Investments

## Electric Vehicles Charging Network Establishment Project- **Green Mobility**

- It was decided to support our application for the "Fast Charging Stations for Electric Vehicles Grant Program".
- 
- Our electric vehicles charging network, which we will run, will be run together with the Solargize brand.
- As Smart Solar Technologies, we plan to continue our investments in this field uninterruptedly in order to provide clean energy to national mobility.
- The electrical energy we will supply to our charging network, which we will serve, will be provided by clean energy with zero carbon footprint from our IREC certified solar power plants. "Smart Solargize Yeşil Mobilite Enerji A.Ş." to carry out the activities of our company on "Smart Urbanism and Green Mobility" went into operation.
- Smart Solargize Yeşil Mobilite Enerji A.Ş. obtained the charging network operator license for 49 years with the approval of EMRA dated 23.02.2023.



# Other Investments

## Establishment of new companies for overseas activities

- Through Smart Global Enterprises & Trading BV, a 100% subsidiary of our company, located in the Netherlands, it has been decided to establish a new company called Smart Solar Technologies, which will carry out similar activities with our Company in Bulgaria.
- In order to establish solar panel production facilities up to 3 GW production capacity in at least 2 regions in the United States, it has been decided to establish a new Company through Smart Global Enterprises & Trading BV, a 100% subsidiary of our Company, located in the Netherlands.
- 
- It has been decided to establish a new Company in China to strengthen the procurement and supply chain, and to control the production and quality processes with suppliers, and to participate in this Company 100%.

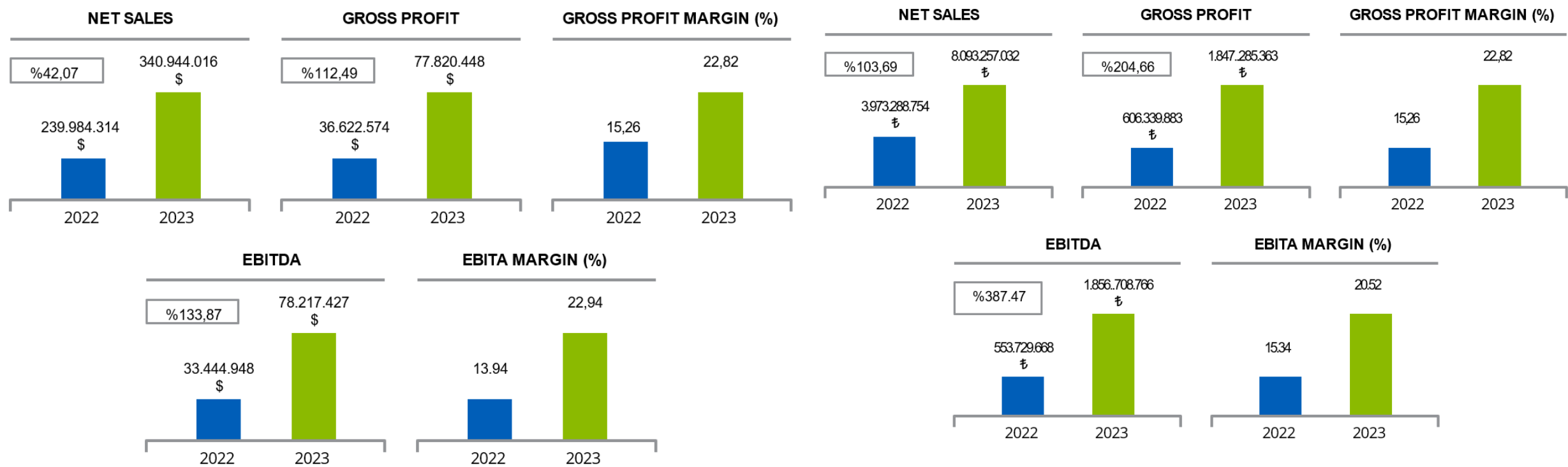


# FINANCIAL INDICATORS 31.12.2023 (TL-USD)

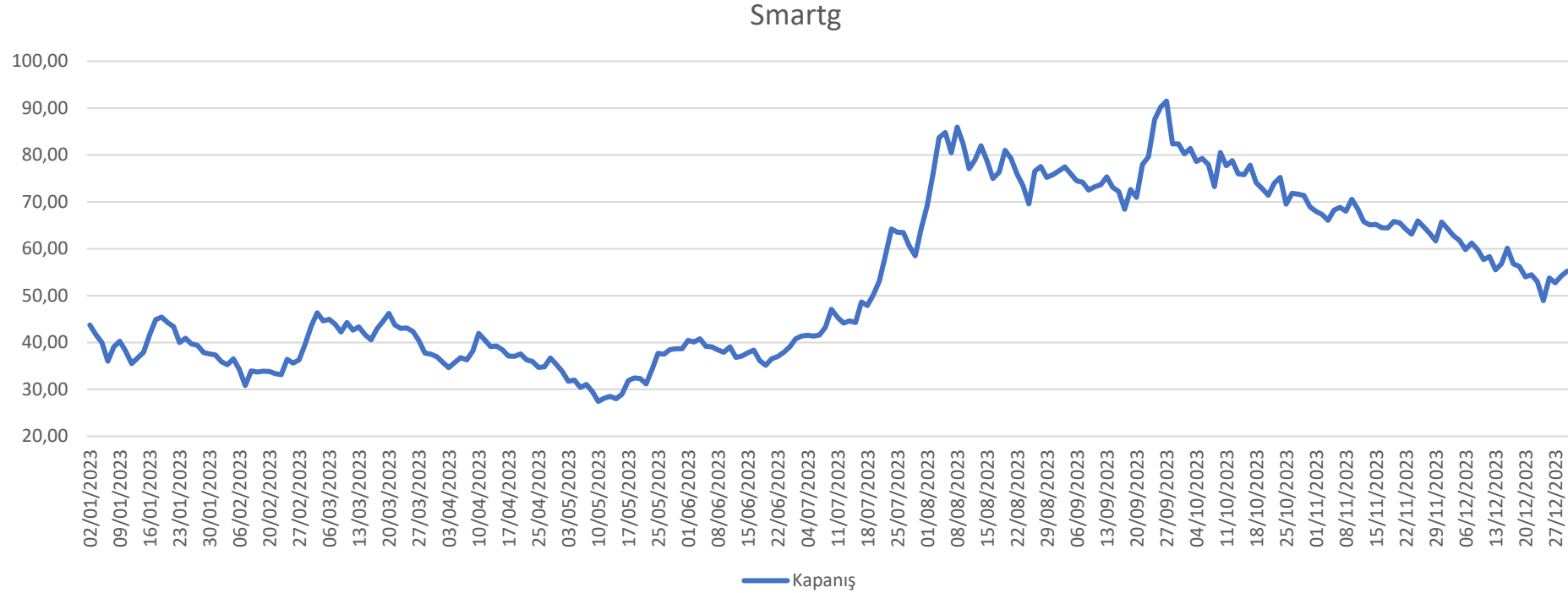
	TL		
BALANCE SHEET ITEMS	31.12.2023	31.12.2022	%
Current Assets	7.124.476.057	3.641.419.864	95,65
Fixed Assets	3.426.215.406	652.843.925	424,81
Short Term Liabilities	6.395.534.877	2.667.816.199	139,73
Long Term Liabilities	2.026.797.599	194.299.153	943,13
Equities	2.128.358.987	1.432.148.437	48,61
INCOME STATEMENT ITEMS	31.12.2023	31.12.2022	%
Net Sales	8.093.257.032	3.973.288.754	103,69
Gross Profit	1.847.285.363	606.339.883	204,66
Gross Profit Margin (%)	22,82	15,26	
Operating Profit Before Financing Expenses	1.790.085.145	483.200.841	270,46
Net Profit For The Period	1.037.416.755	69.836.661	1.385,49
EBITDA	1.856.708.766	553.729.668	235,31
EBITDA Margin (%)	22,94	13,94	

	USD		
	31.12.2023	31.12.2022	%
	242.014.663	194.746.039	24,27
	116.386.715	34.914.614	233,35
	217.252.919	142.676.938	52,27
	68.849.237	10.391.274	562,57
	72.299.223	76.592.441	-5,61
	31.12.2023	31.12.2022	%
	340.944.016	239.984.314	42,07
	77.820.448	36.622.574	112,49
	22,82	15,26	
	75.410.779	29.185.048	158,39
	43.703.176	4.218.093	936,09
	78.217.427	33.444.948	133,87
	22,94	13,94	

# FINANCIAL INDICATORS 31.12.2023 (TL-USD)



# SMRTG Share Performance (Jan-Dec. 2023)



- It started trading on March 24, 2022 with a price of 14.00 TL.
- On October 24, 2022, 100% bonus shares were distributed.
- On July 28, 2023, 98% bonus shares were distributed.
- The lowest 14 TL was traded at the highest 89,15 TL (after the 2 splits).
- The closing price of the company in the Borsa Istanbul Index dated Oct 30, 2023 was 55,25 TL and is about 1,500% higher than the public offering price.
- SMRTG has started to be traded in the BIST 50 Index as of January 1, 2023.

# 2024 Expectations

**REVENUE** : 13.5 Billion TL

**EBITDA** : 2.1 Billion TL

**INVESTMENT AMOUNT**: 2 Billion TL

Average USD Currency Expectation: 34.5 TL



# Contact Information: Investor Relations

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## Offices

Germany  
Bulgaria  
Switzerland  
Romania  
Türkiye  
Ukraine  
Greece  
Spain  
Netherland

## Countries we export to

Germany  
Austria  
Bulgaria  
Georgia  
Iraq  
Spain  
Italy  
Greece  
Ukraine

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## Gebze Production Factory

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Gebze/Kocaeli  
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## Dilovası Production Factory

Çerkeşli OSB Mah., İMES 10. Cad., No:3 Dilovası/Kocaeli  
T: + 90 262 673 71 71



## Aliğa Solar Cell & Solar Module Integrated Production Factory

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# Smart

GÜNEŞ TEKNOLOJİLERİ

