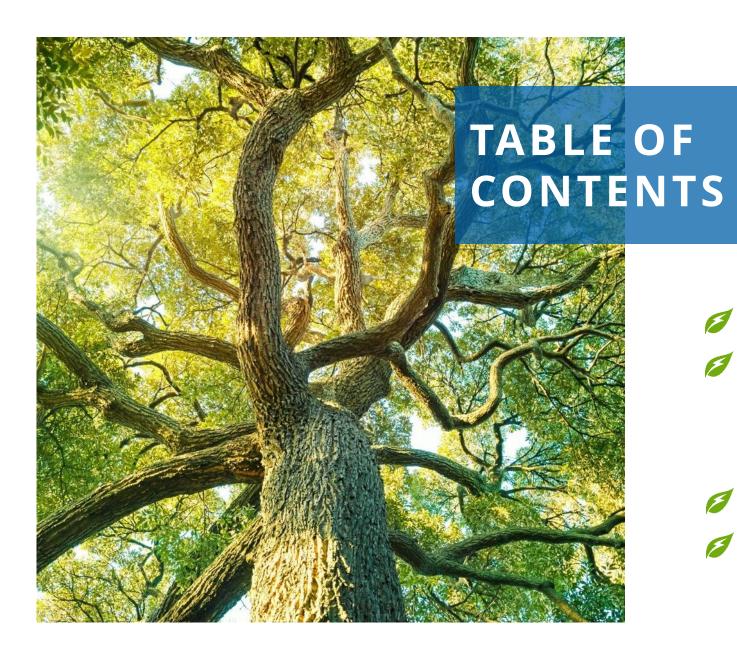




INVESTOR PRESENTATION 2024/Q1







FV MODULE PRODUCTION

EPC

INVESTMENTS

PROJECT PIPELINE

CONTACT DETAILS







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, USA and production facilities located in Gebze and Aliaga.





VERTICAL INTEGRATION



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



























Performed by Japan Credit Rating Eurasia As part of the credit rating process,

Our Long Term National Rating is "A+ Stable Outlook", Our Short Term National Rating "J1 Stable Outlook" determined as high level investment grade, respectively









• Smart Energy was founded in Bulgaria



• PV projects were developed in Bulgaria



• Electricity production started in Rakovskovo PV power plant









- 12 PV power plants got connected to the grid in Bulgaria
- Greece and Romania offices opened

2013

 PV power plants were established in Greece and Romania and connected to the grid



- Smart Solar Technologies was founded in Türkiye
- The first PV power plant installation was completed in Türkiye
- The first roof project was realized in Romania









 The first CIS GLASS-GLASS panel project installation was completed



- Smart Solar Technologies started the factory construction process in an area of 23.500 m² in Gebze
- The 300 solar power plant projects completed were approved by TEDAŞ
- Smart Solar Technologies signed a strategic partnership with SUMEC Group, one of the leading global companies in the solar industry, in PV cell production



- The solar panel factory established in Gebze, started production with a capacity of 420 MW
- The installation of the world's second largest GLASS-GLASS panel solar power plant project completed







 PV panel production capacity was increased to 800 MW

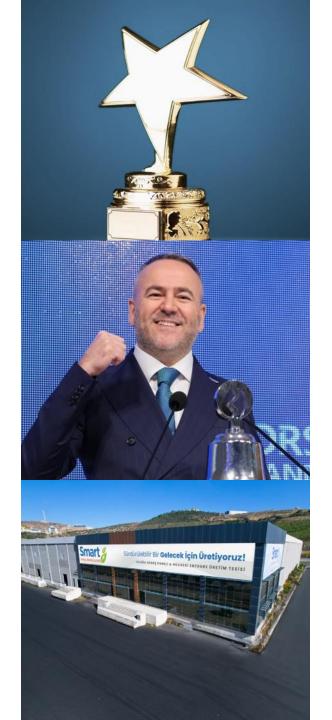


- Germany and Ukraine offices were opened
- The holding structure was started
- Mass production of Bifacial and Half-Cut panels started



• PV panel production capacity was increased to **1200 MW**







 Smart Solar Technologies won the "BIG STARS" award in Deloitte Technology Fast 50 awards

 Smart Solar Technologies got awarded for being among 100 fastest growing companies in Türkiye by The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)



 The shares of Smart Solar Technologies are traded on the Borsa Istanbul Stock Market (PP) as of March 24, 2022. #SMRTG



- Smart Solar Technologies established its **US office**
- Smart obtained a CPO license to operate the charging stations



- **USA** module and cell manufacturing facility investment process started.
- Cell manufacturing in Aliaga began.
- We were among Türkiye's 500 largest industrial companies





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 **2.400 MW** and installed in an indoor area of **69.363 m²**



Shareholder	Capital TL	Capital Share (%)
SMART HOLDİNG ANONİM ŞİRKETİ	442.458.798,53	73,03%
FREE FLOAT	163.421.201,47	26,97%
TOTAL	605.880.000,00	100

BIST SHARE CODE	SMRTG
DATE OF PUBLIC OFFER	24.03.2022
INDEXES INCLUDED	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
TRADED MARKET	YILDIZ MARKET



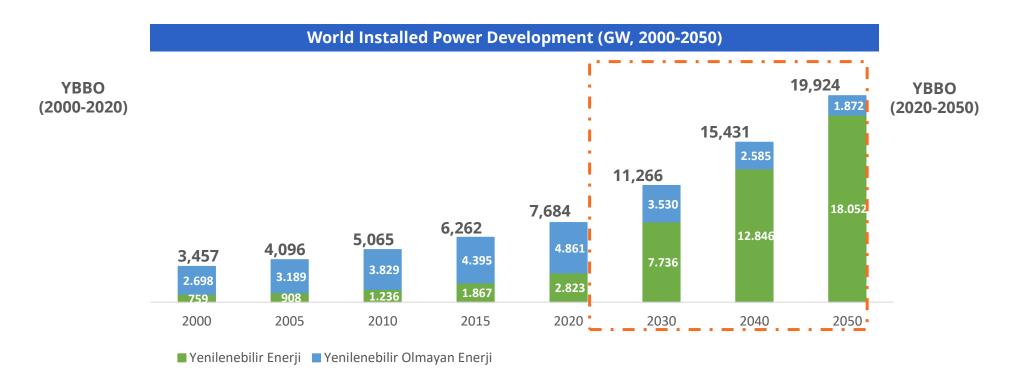
Shareholder Structure



Subsidiary	Business Line	Percentage of Shares (%)	Country
Smart Güneş Enerji Ekipmanları Pazarlama A.Ş.	Solar Power Plant Equipment	100	Türkiye
Smart GES Enerji Üretim A.Ş.	Solar Power Plant Equipmen	100	Türkiye
Smart Sumec Enerji Ekipmanları ve Pazarlama A.Ş.	Solar Power Plant Equipment	50	Türkiye
Consortium of Smart Güneş Enerjisi Teknolojileri Ar- Ge Üretim Sanayi Ticaret A.Ş & IHK Holding A.Ş.	Solar Power Plant Equipment	60	Türkiye
Icarus Solar GmbH	Solar Power Plant Equipment	100	Germany
Smart Solar Ukraine	Solar Power Plant Equipment	100	Ukraine
Smart Solar Technology Gmbh	Solar Power Plant Equipment	100	Germany
Smart Solargize Yeşil Mobilite Enerji Anonim Şirketi	Mobile Charging Stations Distribution Network	100	Türkiye
Smart Gunes Tecnologias Renovables S.L.	Solar Power Plant Equipment	100	Spain
Smart Global Enterprises & Trading B.V.	Solar Panel and Plant Commercial Activities	100	Netherlands
Smart Yeşil Hidrojen Teknolojileri ve Üretim A.Ş.	Fuel and Energy Production	70	Türkiye
Smart Solar Technologies AD	Solar Power Plant Equipment	100	Bulgaria
Smart Güneş Paneli Hücre Üretim Teknolojileri A.Ş.	Solar Power Plant Equipment	100	Türkiye
Smart Energy Global Investment and Development B.V.	Solar Power Plant Equipment Commercial Activities	100	Netherlands
Smart Energy Bulgaria B.V.	Solar Power Plant Equipment Commercial Activities	100	Netherlands
Smart Energ Iberia B.V.	Solar Power Plant Equipment Commercial Activities	100	Netherlands
Smart Energy Romania B.V.	Solar Power Plant Equipment Commercial Activities	100	Netherlands
Smart Energy Overseas Investment B.V.	Solar Power Plant Equipment Commercial Activities	100	Netherlands



It is anticipated that electricity generation will be significantly based on renewable energy sources in order to achieve the goal of net zero carbon emissions in 2050.



❖ The share of renewable energy sources in electricity production was 22% in 2000, 37% in 2020, and is predicted to reach 91% in 2050.

Source: PwC Sector Report



SOLAR ENERGY in TÜRKİYE

Development of Installed Renewable Energy Capacity in Türkiye

Source (MW)	2015	2016	2017	2018	2019	2020	2021	2022	2023
Solar	310	833	3,421	5,063	5,995	6,667	7,816	9,425	11,691
Hydro	25,868	26,682	2,773	28,291	28,503	30,985	31,493	31,571	31,964
Wind	4,498	5,751	6,516	7,005	7,591	8,832	10,607	11,396	11,803
Geothermal	624	821	1,064	1,283	1,515	1,613	1,676	1,691	1,691
Biomass	345	467	575	739	1,163	1,485	2,035	2,309	2,450
Total	31,645	34,554	14,349	42,381	44,767	49,582	53,627	56,392	59,599

Source: TEİAŞ

Türkiye signed the Paris Agreement the previous year, committing to net zero emissions by 2053. Türkiye's National Energy Plan, which is a road map for Türkiye's transition to clean energy and reveals the distance to be recorded by 2035 towards net zero commitments, states that Türkiye's installed power capacity will increase to 189.7 GW by2035 and that the share of renewable energy, which is currently at 53%, will reach 64.7% by 2035.

According to this projection, the installed capacity of solar power plants is expected to increase to 52.9 GW. The 12th Development Plan published in October 2023 states that the target is to increase the solar capacity from 9,425 MW in 2022 to 30,000 MW by 2028.



YERLİ MALI BELGESİ



Belgenin Veriliş Tarihi : 31.12.2021 Belgenin Geçerlilik Tarihi : 31.12.2022 Belge No : 2021108589104 Öretici Ünvanı: SMART GÖNEŞ ENERJİSİ TEKNOLOJİLERİ ARAŞTIRMA GELİŞTİRME ÜRETİM SANAYİ VE TİCABET ANONİM SİRKETİ GEBEZ SUBESİ

İşyeri Adresi: GEBZE OSB MAH. 3200.CADDE NO:3207/1 GEBZE/KOCAELİ

Üreticinin Vergi Kimlik No: 7720708996 TC Kimlik No: MERSIS No: 0772070899600002

 Telefon:
 262-6737100
 E-posta:
 zeynep.zengi@smartsolar.com.tr

 Faks:
 850-3050610
 Web Adresi:
 www.smartsolar.com.tr

 Ticaret Sicil No:
 26927
 Üve Sicil No:
 4464

Ürün Adı: Fotovoltaik Güneş Paneli (Poly, Monoperc, Cama Cam, Yarı Hücre, Bifacial)

Ürün Kodu (PRODCOM/GTİP): 26.11.22.40.00 /

Teknik Özellikleri(Marka Adı, Modeli, Seri Numarası, Cinsi): Phono Solar MonoPerc Backsheetli

Kapasite Raporunun Tarih :16.02.2021 No :5845 Geçerlilik Süresi :16.02.2023

Sanayi Sicil Belgesinin Tarih: 02.11.2017 No: 706763

erli Katkı Oranı : % 55,54

Ürünün Teknolojik Düzeyi (düşük/orta-düşük/orta-yüksek/yüksek)(Eurostat) : yüksek

Diğer bilgi ve belgeler :

İşbu belge Bilim, Sanayi ve Teknoloji Bakanlığı'nın 13/09/2014 tarih ve 29118 sayılı Resmi Gazetede yayımlanan "Yerli Malı Tebliği (SGM 2014/35) "ne istinaden ve TOBB tarafından hazırlanan "Yerli Malı Belgesinin Düzenlenmesi Uygulama Essalarına" göre 31.12.2021 tarihinde düzenlenmiştir. Belgenin geçerlilik süresi veriliş tarihinden itibaren bir yıl geçerlidir.

Düzenleyen Oda/Borsa KOCAELİ SANAYİ ODASI







YERLİ MALI BELGESİ



Belgenin Veriliş Tarihi : 31.12.2021 — Belgenin Geçetilik Tarihi : 31.12.2022 — Belge No : 2021108589108 — Üretici Ünvanı: SMART GÜNEŞ ENERLİSİ TEKNOLOJİLERİ ARAŞTIRMA GELİŞTİRME ÜRETİM SANAYİ VE TİCARET ANONIM ŞİRKETİ GEBZE ŞUBESİ

İşyeri Adresi: GEBZE OSB MAH. 3200.CADDE NO:3207/1 GEBZE/KOCAELİ

Üreticinin Vergi Kimlik No: 7720708996 TC Kimlik No: MERSİS No: 0772070899600002

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 262-6737100
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 Faks:
 262-6737103
 Web Adresi:
 www.smartsolar.com.tr

 Ticaret Sicil No:
 26927
 Üye Sicil No:
 4464

Ürün Adı: Fotovoltaik Güneş Paneli (Poly, Monoperc, Cama Cam, Yarı Hücre, Bifacial)

Ürün Kodu (PRODCOM/GTİP): 26.11.22.40.00 /

Teknik Özellikleri(Marka Adı, Modeli, Seri Numarası, Cinsi): Phono Solar Bifacial Panel Backesheetli Güneş Paneli

 Kapasite Raporunun
 Tarih :16.02.2021
 No :5845
 Geçerlilik Süresi :16.02.2023

 Sanayi Sicil Belgesinin
 Tarih : 02.11.2017
 No : 706763

Yerli Katkı Oranı : % 56,52

Ürünün Teknolojik Düzeyi (düşük/orta-düşük/orta-yüksek/yüksek)(Eurostat) : yüksek

Diğer bilgi ve belgeler :

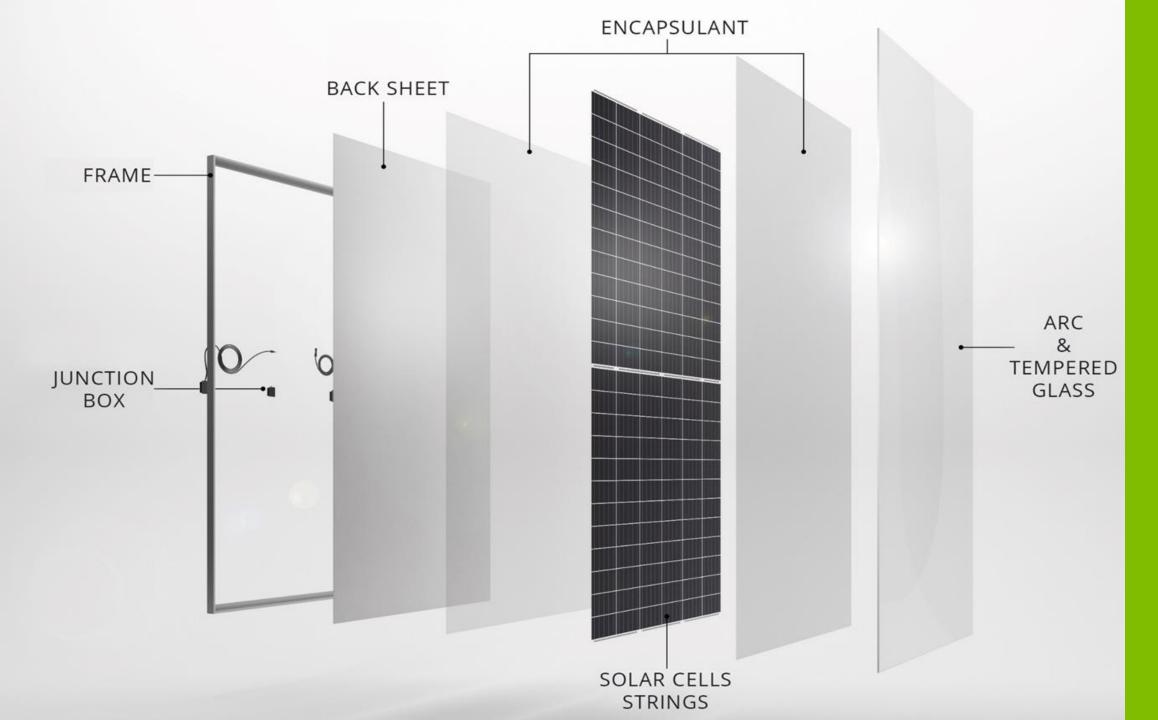
İşbu belge Bilim, Sanayi ve Teknoloji Bakanlığı'nın 13/09/2014 tarih ve 29118 sayılı Resmi Gazetede yayımlanan "Yerli Malı Tebliği (SGM 2014/35) "ne istinaden ve TOBB tarafından hazırlanan "Yerli Malı Belgesinin Düzenlenmesi Uygulama Esaslarına" göre 31.12.2021 tarihinde düzenlenmiştir. Belgenin geçerlilik stresi veriliş tarihinden itibaren bir yıl geçerlidir.

Düzenleyen Oda/Borsa KOCAELİ SANAYİ ODASI

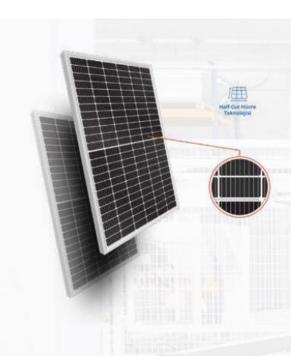












PERC - M10

- Monofacial- Bifacial (energy production with two surfaces)
- Production option with 156/144/132/120/108 cells
- Glass-Backsheet production
- Multi-Busbar technology (10BB)
- Half-cut Technology
- M10 cell technology
- · Anti-PID

PERC - G12R

- Monofacial- Bifacial (energy production with two surfaces)
- Production with 132/120/108 cells
- · Glass-Backsheet production
- Multi-Busbar technology (10BB)
- Half-cut Technology
- · G12R (210 mm rectangular) cell technology
- · Anti-PID

TOPCON - M10

- Bifacial (energy production with two surfaces)
- Production option with 156/144/132/120/108 cells
- Glass-glass production
- Multi-Busbar technology
- Half-cut Technology
- M10 cell technology
- Anti-PID

TOPCON - G12R

- · Bifacial (energy production with two surfaces)
- Production with 132/120/108 cells
- Glass-glass production
- Multi-Busbar technology (16BB)
- Half-cut Technology
- G12R (210 mm rectangular) cell technology
- Anti-PID

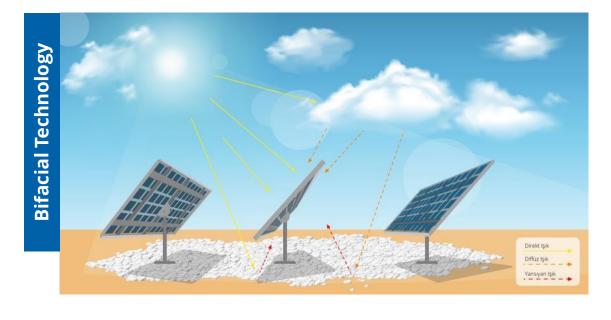
In Smart Solar Energies' production facilities offers capability to produce various products ranging from 108 cells to 156 cells (number of cells used in solar panels produced - more cells

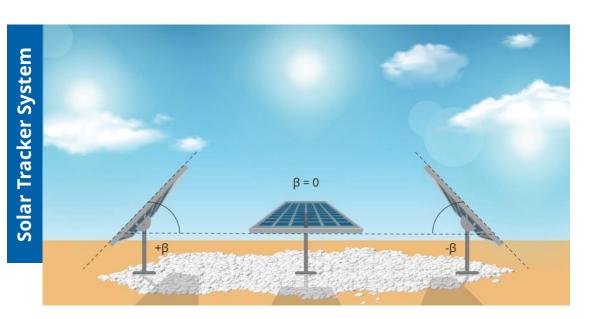
means higher power production), including mono-facial (solar Energy production from a single surface) and bifacial (energy production from two surfaces).

Production in glass-backsheet or glass-glass configuration (represents the production of the panel back surface with glass or backsheet) is carried out and innovative approaches such as the multi busbar technology (more efficient electricity flow and increase in total efficiency by increasing electrical contact points), including 210 mm size square and rectangular cell technology and half-cut technology (allowing the cells to operate more efficiently by providing less resistance) are used. The solar panels produced have power specifications ranging from 400 to 635 Watts..















DC 60-240 KW

- CCS2 Double socket
- · Wall mount option
- · 4G / Ethernet backend option
- · RFID/App user authentication
- OCPP 1.6 JSON
- IK10 & IP54 indoor/outdoor durability
- Multiple protection for user safety
- · 7 inch color touch screen
- · 95% efficiency or more
- Power Factor > 0.98

DC 240-480 KW

- · CCS2 4/8 socket option
- · Dynamic Split Charging System
- 4G / Ethernet backend option
- OCPP 1.6 JSON
- IK10 & IP54 indoor/outdoor durability
- · Multiple protection for user safety
- Boost mode providing high charging efficiency
- Faster charging with liquid-cooled charging gun option
- Use for electric vehicles, bus terminals, commercial fleets, etc.



Having started electric vehicle charging network operations through Solargize Yeşil Mobilite Enerji A.Ş. in 2023, Smart Solar Technologies offers high quality chargers to meet the needs of electric vehicles.

The Company offers innovative products to its customers and produces solutions for a sustainable future as per its mission.

Positioning sustainability at the center of its business model, Smart Solar Technologies is improving its effectiveness in the fields of mobility and logistics, which are becoming increasingly more important in companies' carbon footprint management.

The synergy between solar energy and electric vehicles helps the Company specialize in sustainability-focused projects and produce innovative solutions for future energy needs.

Determined to make significant contributions to the future of sustainability and green Energy in this dynamic sector, the Company commissioned the first charging stations in many provinces of Türkiye through the Charging Network Operation License of SOLARGIZE, a company which is on a stable trend of growth.





ALIAĞA PV MODULE & CELL INTEGRATED PRODUCTION

1.2 GW Solar Module Production Capacity | 2 GW Cell Production Capacity (2024 Q3) 50.000 m² Production Area





FACILITY PLAN

- PHASE 1
 600 MW PV Module Line was activated
- PHASE 2
 Equipment orders were given for a 800 MW PERC Cell Line
- PHASE 3
 1.200 MW TOPCon Cell Line Design was completed





SOLAR MODULE REFERENCES

You can review some reference project information using our high efficiency solar modules.

Our customers who choose our high-efficiency solar modeules in solar power plants have achieved maximum energy production in their projects.







ÇALIK ENERJİ Türkiye - Rooftop SPP 957,00 kWp



DOĞAN ENERJİ Türkiye - Land SPP 24,6 MWp



FORTIS

Türkiye - Land SPP
71,3 MWp
(Representative Image of Whole Portfolio)



GÜNET GRUP SAHA GESTürkiye - Land SPP
338 kWp



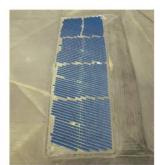
ÖZEN DEĞİRMEN Türkiye - Rooftop SPP 520,125 kWp



POLAT İNŞAAT Türkiye - Land SPP 518 kWp



DAIKINTürkiye - Rooftop SPP
5,7 MWp



AKFEN
Türkiye - Land SPP
21,2 MWp
(Representative Image of Whole Portfolio)



ABAZLAR ET KOMBÎNASI Türkiye - Rooftop SPP 357 kWp



INNOMETAL Türkiye - Rooftop SPP 753,48 kWp



EDİKLİ Türkiye - Land SPP 15,2 MWp



ARPASEKİ Türkiye - Land SPP 2,3 MWp







EPC BASIC APPLICATION AREAS

- Large Scale Commercial Field Projects
- Medium Scale Commercial and Self Consumption Based Field Projects
- ✓ Large and Medium Scale Commercial and Self- Consumption Roof-top Projects
- Invegrated Hybrid Projects with PV

We are a solution partner with over 10 years of experience in the installation of **1000+ MW** solar power plants.



EPC ACTIVITIES

In the PV market which we entered 14 years ago as an investor in Eastern Europe, we are able to work with the business definitions such as Project Developer, EPC company, BOT (build/operate/transfer), BOO (build/own/operate) in all over the world with our experience that we developed so far.





We are reversing the global energy deficit, air pollution, and dependence on fossil fuels through solar energy. With our turnkey services, we perform risk management and offer investors a project portfolio within the framework of operational excellence.





EPC ACTIVITIES

We inspect the materials and products supplied wher delivered to the field and just before installation. We replace damaged or defective materials or products. We protect all materials and equipment that may be exposed to damage, inclement weather or ultraviolet light. We ensure that sensitive equipment is never exposed to dirt or dust to maintain manufacturers' warranties and long-term reliability.

We ensure that all specific designs for construction, mechanical and electrical works comply fully with local and European regulations and standards. We provide appropriate packaging to protect all materials and equipment during delivery or if they are damaged in the field.



ENGINEERING REFERENCES

You can review the project information some of the power plants we install on a turnkey basis.

We are proud to meet our customer's demands for reliability, efficiency and longevity in solar energy projects.





BİNGÖL Türkiye - Land SPP 22 MWp



BATHMEN

Netherlands - Land SPP

18 MWp



SİVEREKTürkiye - Land SPP
18 MWp



LYASKOVEST

Bulgaria - Land SPP
18 MWp



Portugal - Land SPP 21 MWp



GÜLEÇOBA Türkiye - Land SPP 18 MWp



RAMADA Türkiye - Land SPP 1,3 MWp



AKSARAY
Türkiye - Land SPP
11,7 MWp



VAN ARISU
Türkiye - Land SPP
55 MWp



SEBA MARE Türkiye - Rooftop SPP 172,9 kWp



ÇINAR Türkiye - Land SPP 8 MWp



SLOBIDKA
Ukraine - Land SPP
11 MWp



KAYSERİTürkiye - Land SPP 2,2 MWp



Statement of Financial Position - 31.03.2024

(Mio TL)	31.03.2024	31.12.2023	%
Cash and cash equivalents	381	675	-43,6%
Trade receivables	3.435	2.913	17,9%
Inventories	2.656	2.270	17,0%
TOTAL CURRENT ASSETS	8.914	8.198	8,7%
TOTAL NON-CURRENT ASSETS	3.986	3.942	1,1%
TOTAL ASSETS	12.900	12.140	6,3%
Short-term borrowings	1.975	1.737	13,7%
Trade payables	2.924	2.712	7,8%
TOTAL CURRENT LIABILITIES	8.127	7.359	10,4%
Long term borrowings	1.907	2.187	-12,8%
TOTAL NON CURRENT LIABILITIES	2.052	2.332	-12,0%
Paid-in capital	606	606	0,0%
TOTAL SHAREHOLDER'S EQUITY	2.721	2.449	11,1%



Statement of Profit or Loss and Other Comprehensive Income – 31.03.2024

(Mio TL)	31.03.2024	31.03.2023	%
Revenue	2.257	1.360	66%
Gross Profit	803	239	236%
Gross Profit Margin (%)	35,6%	17,6%	
Operational Expenses	-164	-120	37%
Operational Expense Margin (%)	-7,3%	-8,8%	
Others	-57	10	
EBIT	646	174	271%
EBIT Margin (%)	28,6%	12,8%	
Financial Expenses	-374	-67	458%
Profit before Tax	335	-24	
Margin of Profit before Tax (%)	14,9%	-1,8%	
N. P. G	004	00	
Net Profit	291	-32	
Net Profit Margin (%)	12,9%	-2,3%	
Amortization	45	39	14%
Others	21	9	146%
EBITDA	646	174	271%
EBITDA Margin (%)	28,6%	12,8%	

(Mio USD)	31.03.2024	31.03.2023	%
Revenue	73	72	1%
Gross Profit	26	13	105%
Gross Profit Margin (%)	35,6%	17,6%	
Operational Expenses	-5	-6	-16%
Operational Expense Margin (%)	-7,3%	-8,8%	
Others	-2	1	
EBIT	21	9	127%
EBIT Margin (%)	28,6%	12,8%	
Financial Expenses	-12	-4	241%
Profit before Tax	11	-1	
Margin of Profit before Tax (%)	14,9%	-1,8%	
Net Profit	9	-2	
Net Profit Margin (%)	12,9%	-2,3%	
Amortization	1	2	-30%
Others	1	0	50%
EBITDA	21	9	127%
EBITDA Margin (%)	28,6%	12,8%	





Our **270+ MW** capacity of solar power plants in Türkiye, Romania and Bulgaria, operates as an integrated in to the grid.

As of 2024, our **150+ MW** solar power plant investment continues the installation process.

As Smart Solar Technologies, we transfer the experience we have gained in our own investments to solar investors.







BOYNITSA

Bulgaria - Land SPP
4,1 MWp



DETELINA
Bulgaria - Land SPP
4.5 MWp



NATURAL ENERGY Romania - Land SPP 5,01 MWp



MOKRISHTE Bulgaria - Land SPP 2,36 MWp



YEKA GES - 4

Türkiye - Niğde/Bor - Land SPP
G4-Bor-1 SPP 128 MWp
(Under Construction)



YEKA GES - 3

Türkiye - Diyarbakır/Kayapınar - Land SPP
G3-Diyarbakır-1-4 SPP 28MWp
(Under Construction)



TUZLUCA
Türkiye - Land SPP
11,9 MWp

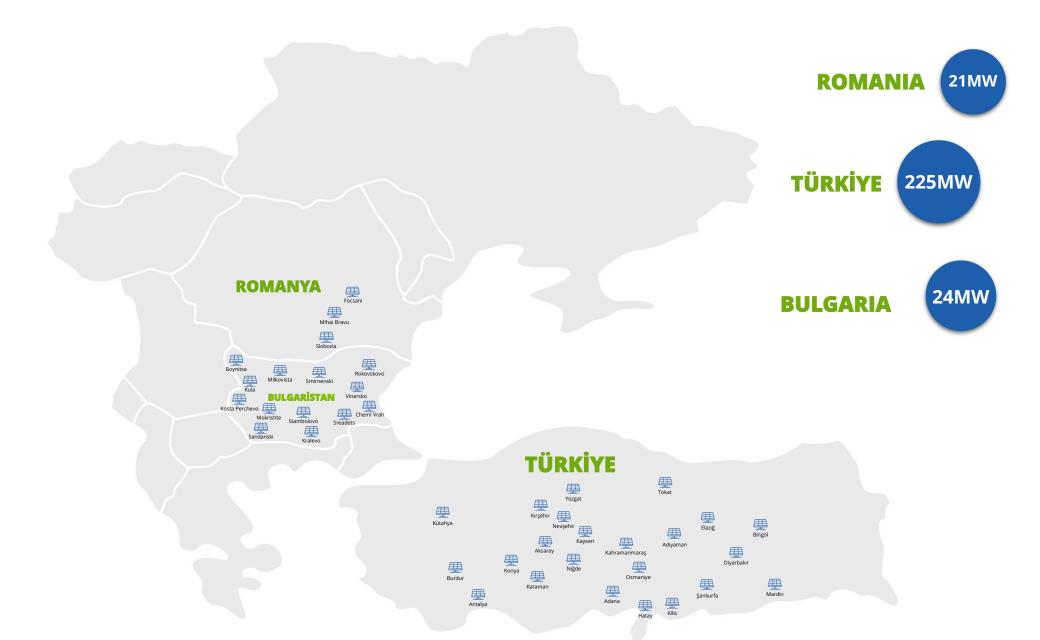


CEF MALU Romania - Land SPP 1,8 MWp



CHERNI VRAH
Bulgaria - Land SPP
3,1 MWp

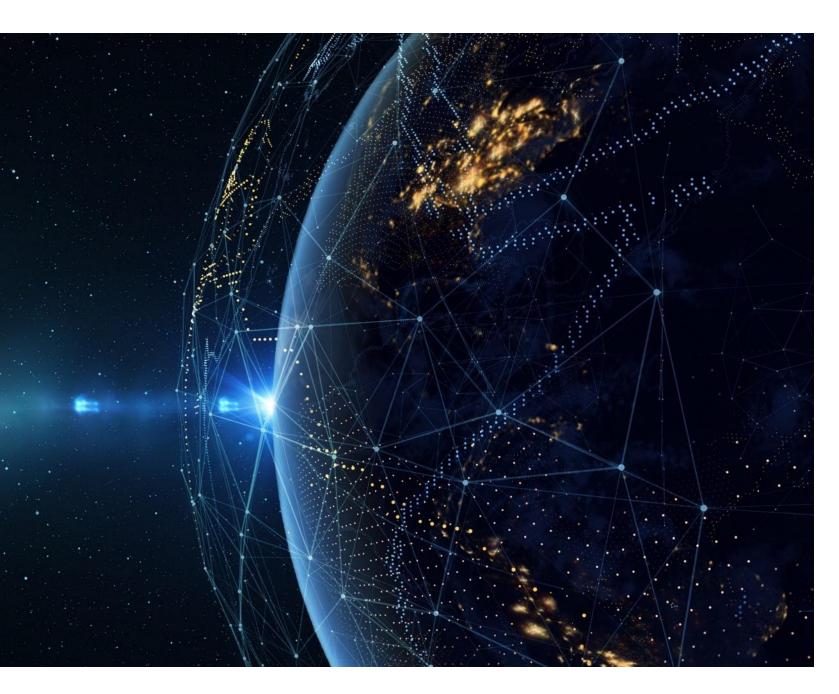






MEDIUM TERM PROJECTED PIPELINE





Offices

Germany
Bulgaria
Switzerland
Romania
Türkiye
Ukraine
Greece
Netherlands
USA

Countries we export

Germany
Austria
Bulgaria
Georgia
Spain
Italy
Greece
Ukraine
South Africa
Belgium +



CONTACT



HEAD OFFICE



ALIAGA I INTEGRATED SOLAR MODULE & CELL FACTORY

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ALIAGA II WAFER & INGOT FACTORY

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GERMANY OFFICE

Lerchenweg 3, 40789 Monheim am Rhein, Germany

USA OFFICE

2513 Shallowford Rd Ste 200, Marietta, GA, 30066, USA

UKRAINE OFFICE

BULGARIA OFFICE

57 Cherni Vrah Blv.Fl 11 Energy Tower Sofia/Bulgaria

GREECE OFFICE

ROMANIA OFFICE

NETHERLANDS OFFICE







