



ÜSİMP ULUSAL Kongresi - Fuarı - Sempozyumu

Değişen Küreselleşmede Sürdürülebilir Üretim için ÜSİ

DEĞİŞİM ORTAMINDA EKOSİSTEMDEN ÖRNEK UYGULAMALAR

Güneş Enerjisi (Fotovoltaik) Sektörü

Doç. Dr. Selçuk Yerci, ODTÜ-GÜNAM & Orta Doğu Teknik Üniversitesi

27-28 Kasım 2025 | ODTÜ Kültür ve Kongre Merkezi, Ankara

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CarbonBrief
CLEAR ON CLIMATE

COAL EMISSIONS NUCLEAR OIL AND GAS RENEWABLES TECHNOLOGY

ENERGY

13 October 2020 ⌚ 8:37

Solar is now 'cheapest electricity in history', confirms IEA

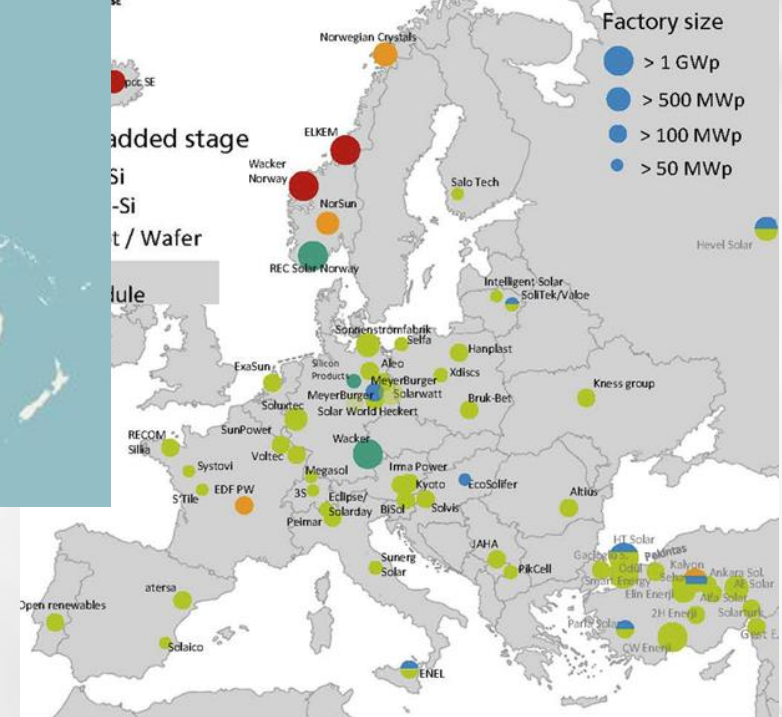


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	Europe	China	US	Türkiye
Scientific Excellence (high impact publications)	★★★★	★★★★	★★★★	★
Technological Advancement (IP, patent)	★★★★	★★★★	★★★★	★
Production Capability and Capacity	★	★★★★	★	★★
PV adaptation	★★★★	★★★★	★★	★

Bu karşılaştırma kişisel yorum ve ispatlanamayacak girdiler içermektedir.



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Feb 25, 2025 4:03 PM Eastern Standard Time

Talon PV Enters TOPCon Patent Licensing Agreement with First Solar

Share      ...

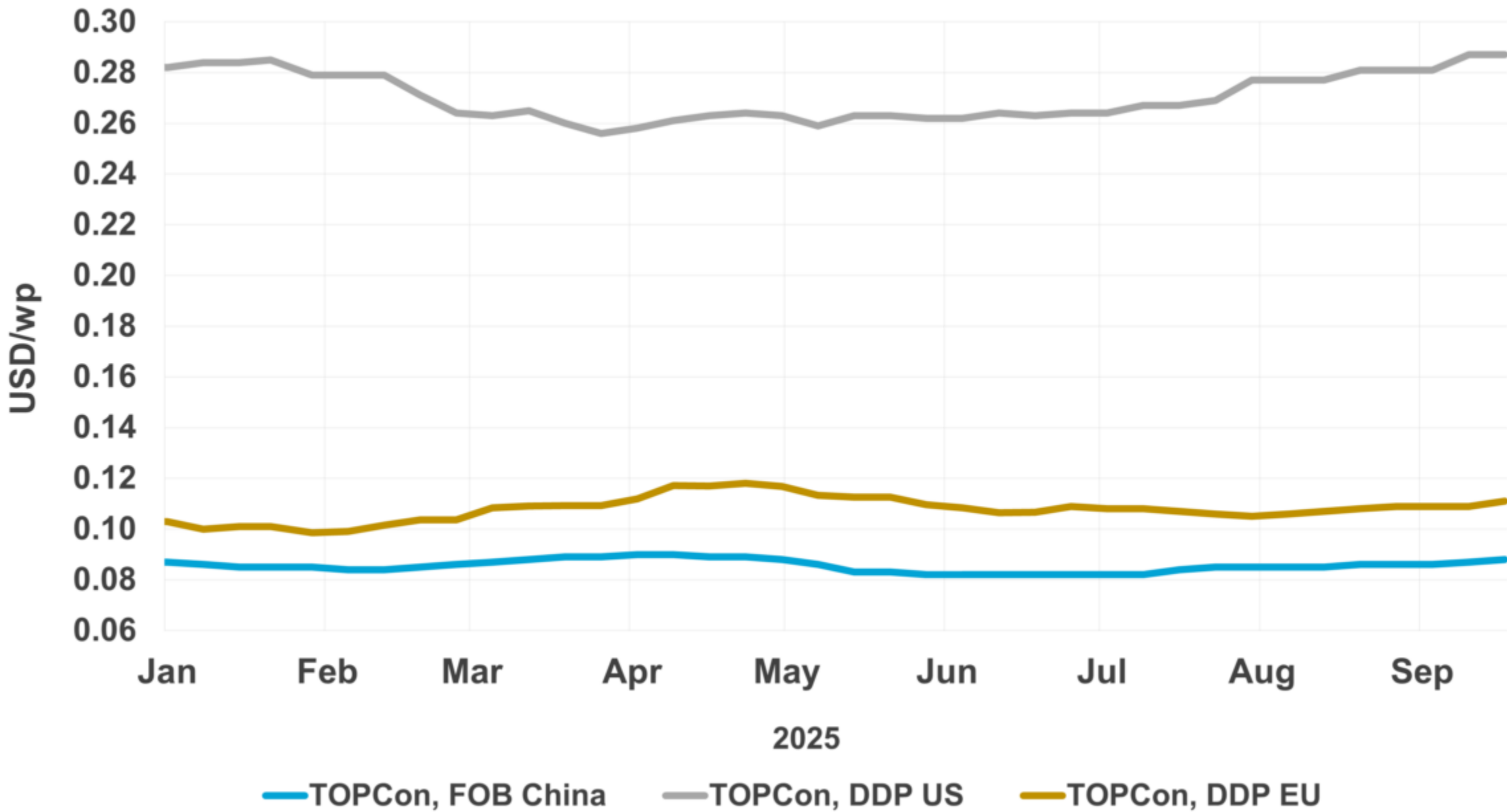
Agreement paves way for American TOPCon crystalline silicon PV cell manufacturing

TEMPE, Ariz. & HOUSTON--(BUSINESS WIRE)--Talon PV, a US-based manufacturer of crystalline silicon (c-Si) photovoltaic (PV) solar cells, has secured the license for crucial Tunnel Oxide Passivated Contact (TOPCon) cell manufacturing patents from First Solar, Inc. (Nasdaq: FSLR), America's leading solar technology and manufacturing company. The terms of the agreement were not disclosed.

Talon's US-based N-type TOPCon cell manufacturing facility is scheduled to commence operations in the first quarter of 2026, adding 4 gigawatts (GW) of annual American c-Si solar cell production capacity by first quarter of 2027.

"We're thrilled to partner with First Solar, America's flagship solar technology company, to ensure that we can differentiate ourselves from other cell manufacturers not just by manufacturing in the United States but also in offering our customers the peace of mind that comes with procuring cells that don't infringe on other companies' intellectual property," said Adam Tesanovich, Chief Executive Officer, Talon PV. "Securing this license keeps us on track to produce American-made TOPCon cells next year, enabling the onshoring of a critical component of the crystalline silicon solar value chain."

OPIS Global TOPCon Module Prices 2025: FOB China, DDP EU, DDP US

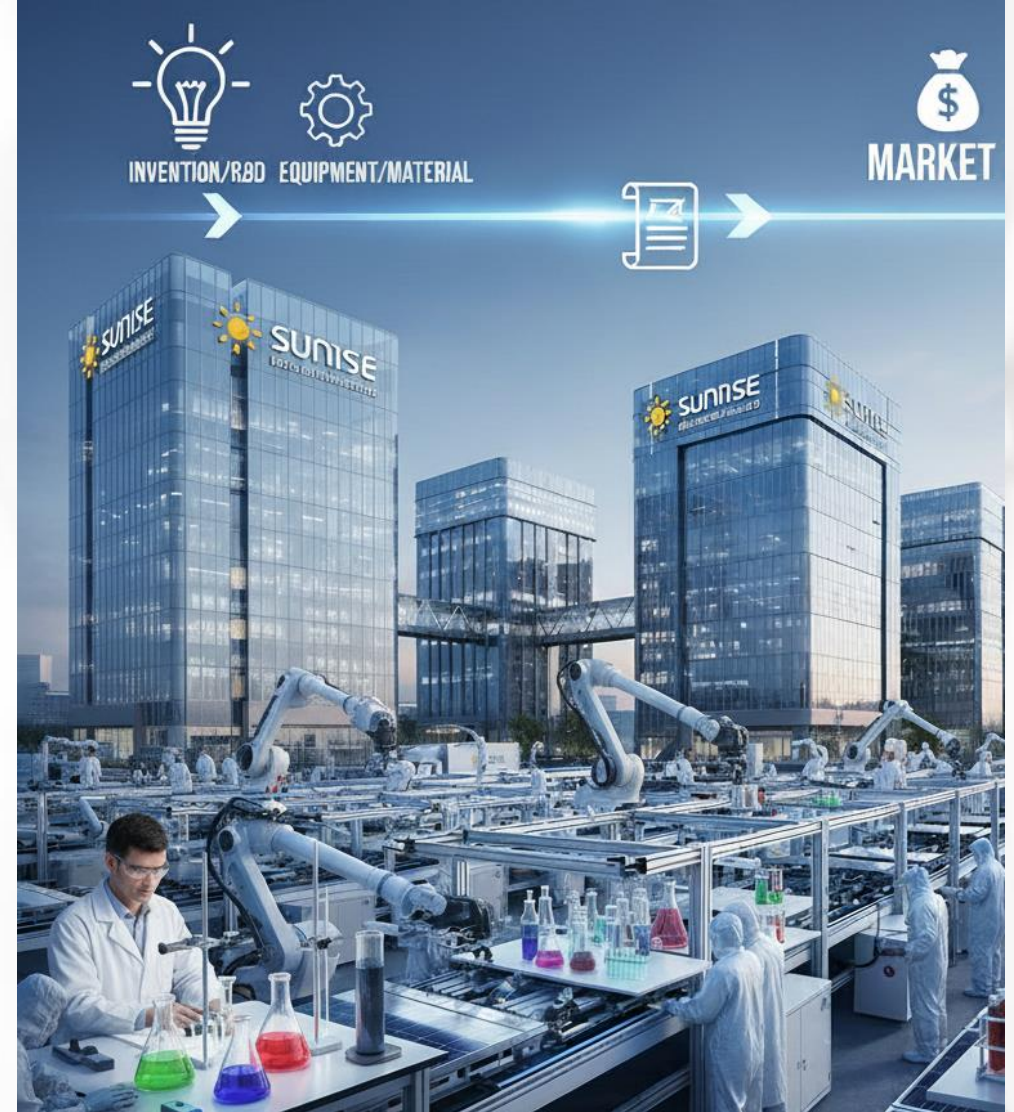




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Araştırma'dan ürüne kadar geçen süre
özellikle Uzakdoğu'da azalmaktadır.



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1

Ar-Ge



Ür-Ge



Market

2

Ar-Ge



Ür-Ge



Market

3

Ar-Ge

Ür-Ge



Market

2009 - 2020



Foundation & Scientific Excellence

Under METU administration

- Industrial-scale AI-BSF & **TOPCon**
- Small-scale **HJT Si, OPV, and PVK**



"Clean Room"



Si Pilot Line

- 2 **FP7** CSA Projects
- Joined **EERA PV**



Industrial Contracts : **10**

SolarTR conference

Güneş enerjisinin
geleceği ODTÜ'de
konuşuldu

Güncelleme Tarihi: Haziran 14, 2016 11:50

#Güneş Enerjisi

#ODTÜ

#Prof. Martin A.



2021-2025



Expansion & Internationalization

National Center of Excellence (2021)

- Pilot scale **TOPCon**
- IBC, OPV, PVK, **PVK/Si Tandem**
- OPV, PVK, Shingled Module**



Research Park



Ayaş AgriPV

- 17 **HE** Projects (5 CSA, 6 RIA, 6 IA)
- Leading 2 of 8 sub-programmes in **EERA PV**

Industrial Contracts : **34**
Spin-off company : **1**

PVCon (300+ attendees in 2024)

Workshops under Solarhub and Solartwins
HIT-30 and **PV industry** workshops

PVDemy trainings combining theoretical
and hands-on sessions for industry.

2025-2030



Industrial Impact & Global Ecosystem Integration

Service to Industry and Wider Impact

- from **sunlight to heat and electricity**
- from **materials to social impact**
- comprehensive R&I service portfolio supporting companies → TÜBİTAK 5746 supporting industry in ESG, sustainability, and EU compliance (Green Deal alignment)



Joint R&D infrastructures

co-creation infrastructures & satellite laboratory

- 30+ **FP10** projects

50+ Industrial Contracts



An **Incubation Programme** in partnership
with ODTU TEKNOKENT

Expanding **PVDemy** to online and include
Integrated PV, Power Electronics, and CST

Organize **SiPV, EU PVSEC, ...**

Roundtables and Policy Papers to accelerate
adoption of AgriPV, BIPV, VIPV, and Floating PV

Technical **high school teacher training**
programme and **National solar energy PhD**
programme to crease talent pipeline to the
industry and academia.

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