



SolarPower  
Europe

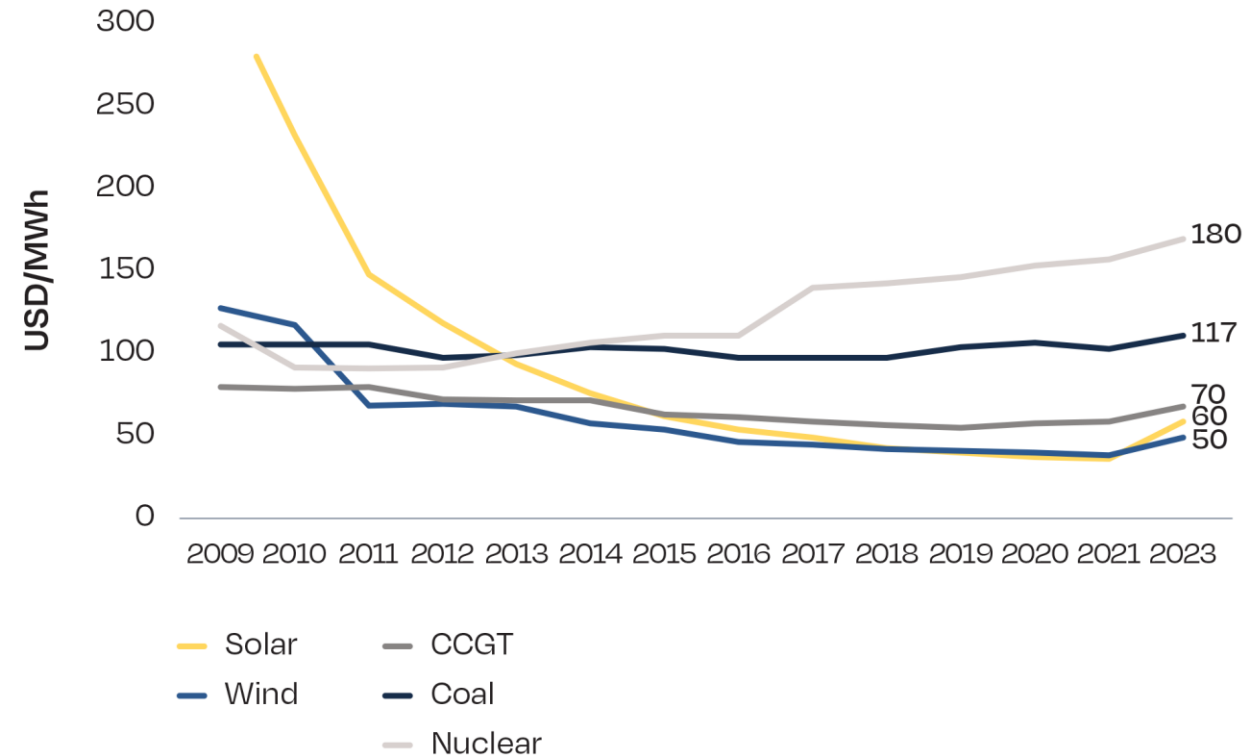
# Global Market Outlook For Solar Power 2023-2027

Intersolar Europe Press Breakfast 14 June 2023

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## SOLAR ELECTRICITY GENERATION COST IN COMPARISON WITH OTHER POWER SOURCES 2009-2023

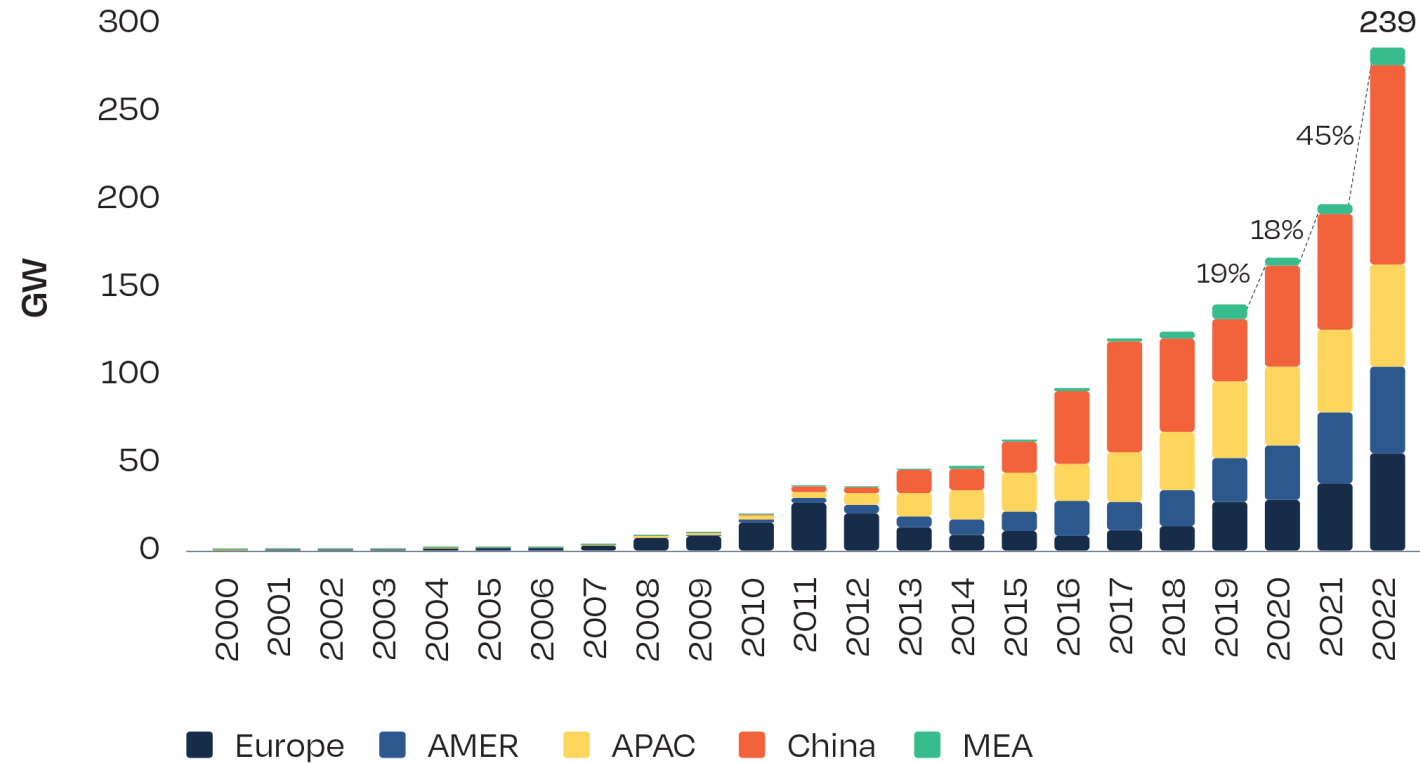


SOURCE: Lazard (2023). Historical mean unsubsidised LCOE values (nominal terms, post-tax).

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Pandemic effects and an inflationary environment have resulted in the first increase in solar PV's Levelised Cost of Electricity after many years of uninterrupted decline. Despite this, solar power remains significantly cheaper than any fossil fuels and nuclear.

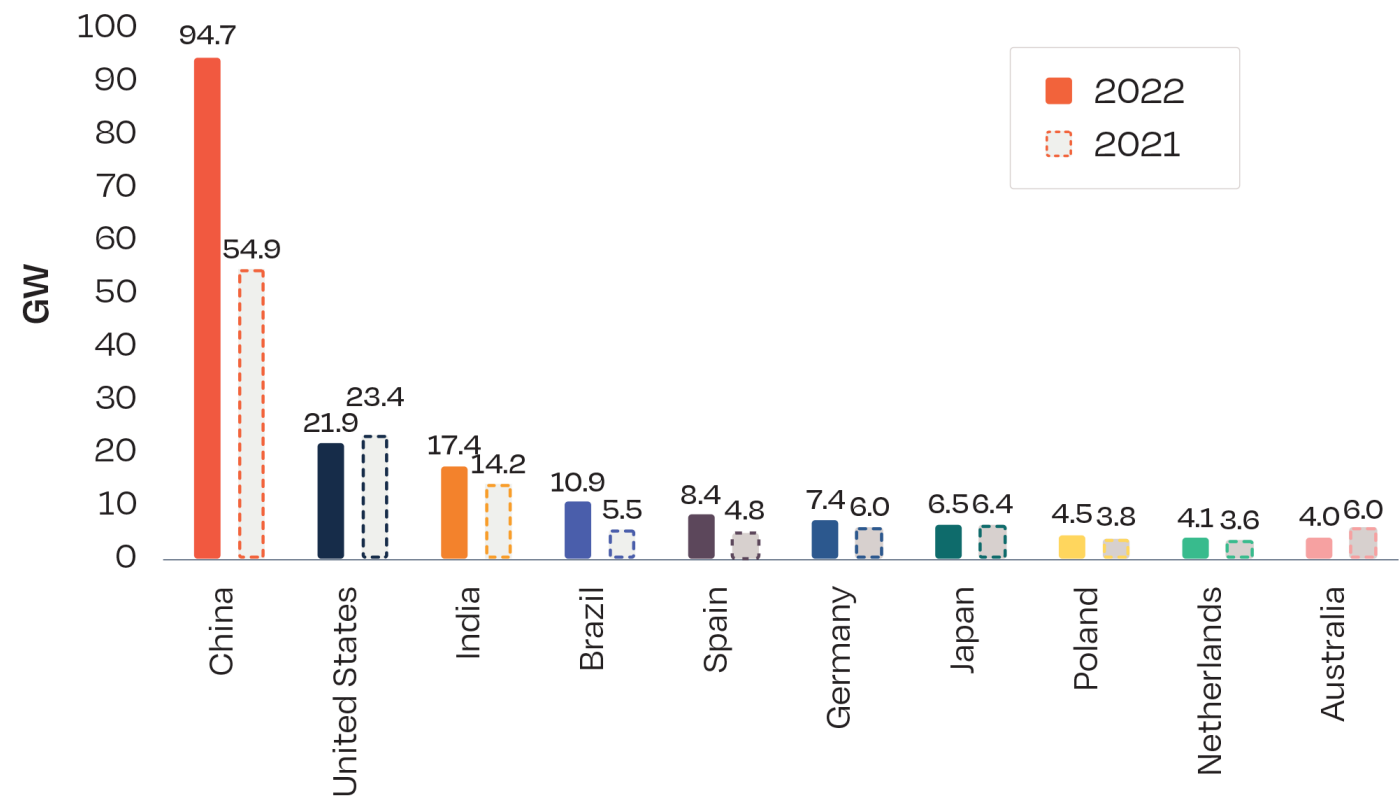
## ANNUAL SOLAR PV INSTALLED CAPACITY 2000-2022



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In 2022, 239 GW of solar were grid-connected globally, a 45% growth year on year. 2022 was characterised by stabilization of supply chains, and an energy crisis that had many discover solar as a hedge against soaring energy prices.

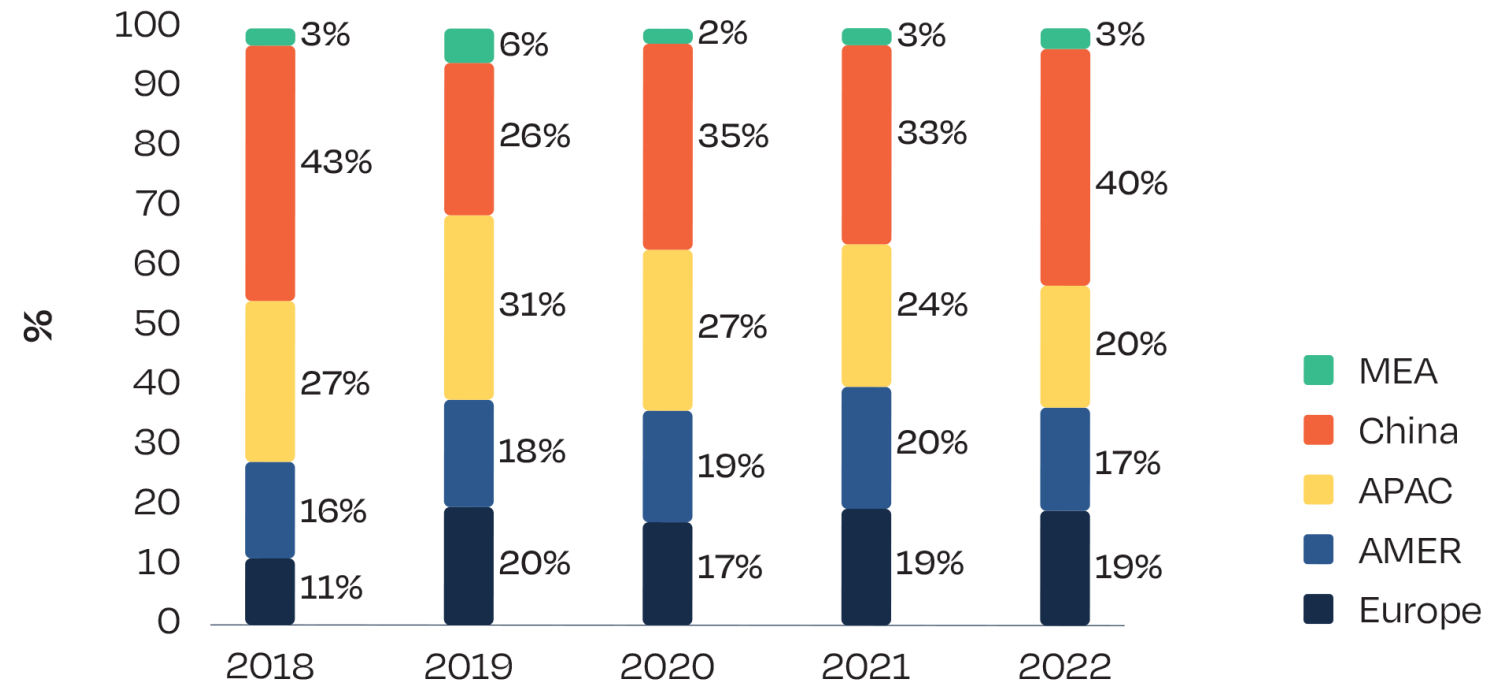
## TOP 10 SOLAR PV MARKETS, 2021-2022



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With new installations almost touching the 100 GW level, China strengthened its leadership adding over 4 times the capacity of the No. 2, USA. All but two top10 markets (USA, Australia) grew, with Brazil & Spain doubling their capacities.

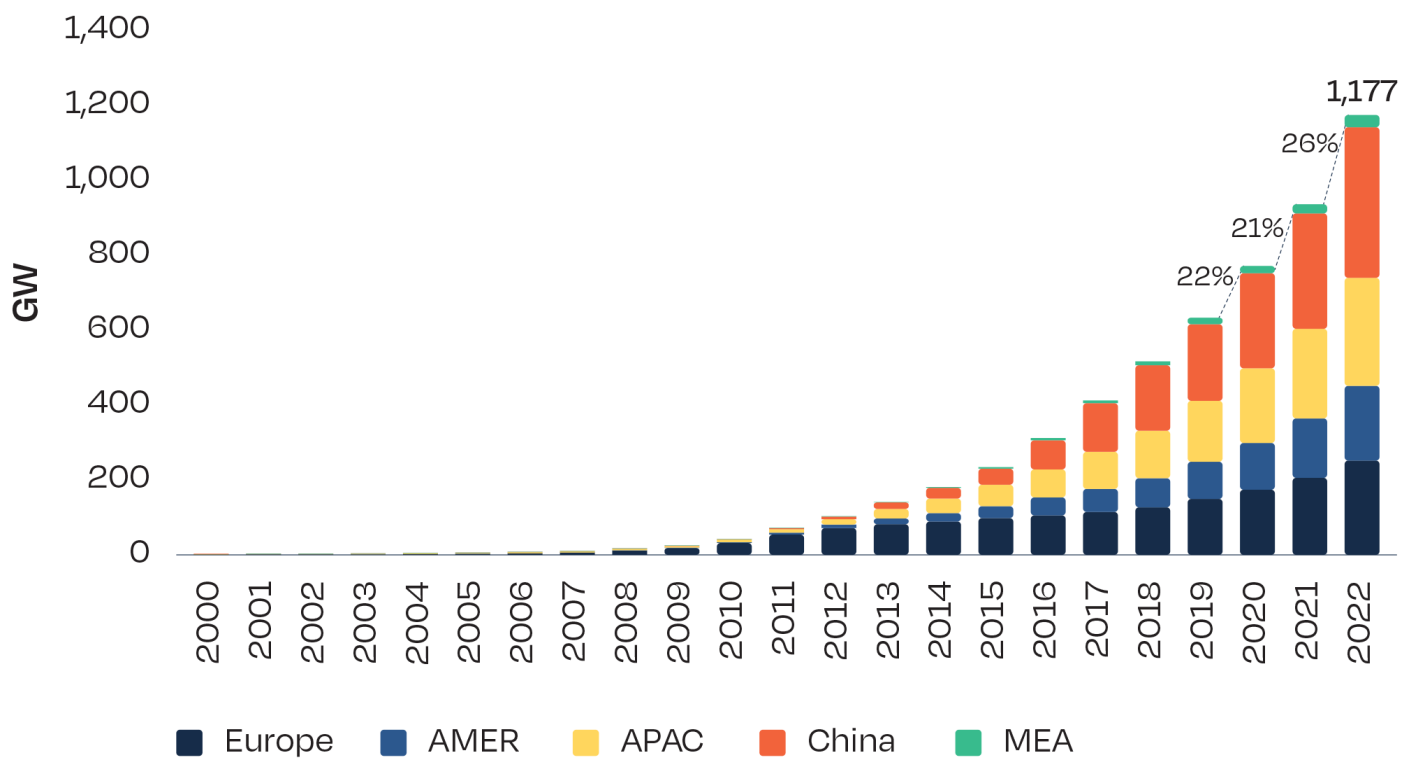
## ANNUAL SOLAR PV INSTALLED CAPACITY SHARES 2018-2022



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China's strong 2022 installation growth lifted the country back to 40% global market share, levels known from before its solar market transition. Europe took over the second rank from the Americas.

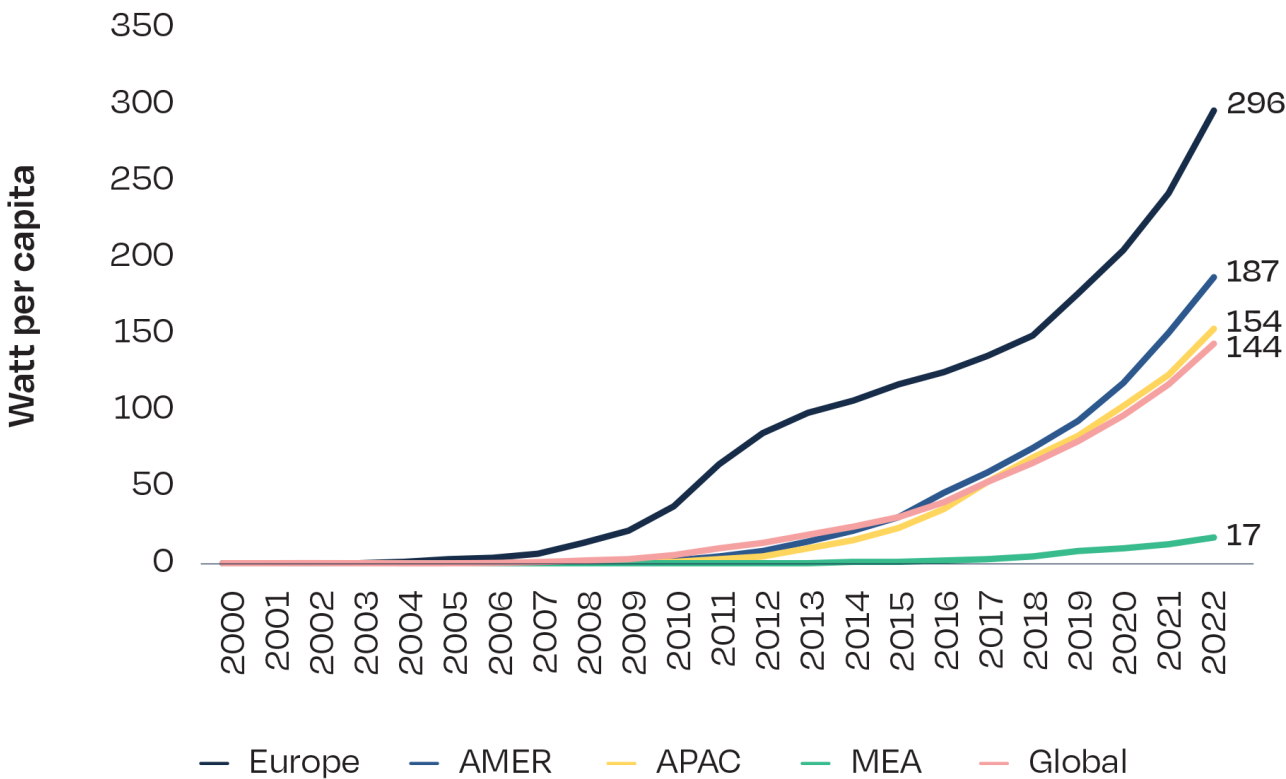
TOTAL SOLAR PV INSTALLED CAPACITY 2000-2022



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Global cumulative solar capacity growth increased to 26% in 2022. While the TW-level was surpassed in the first half of that year, the total solar power fleet reached 1.2 TW by the end of 2022.

SOLAR PV WATT PER CAPITA BY REGION, 2000-2022



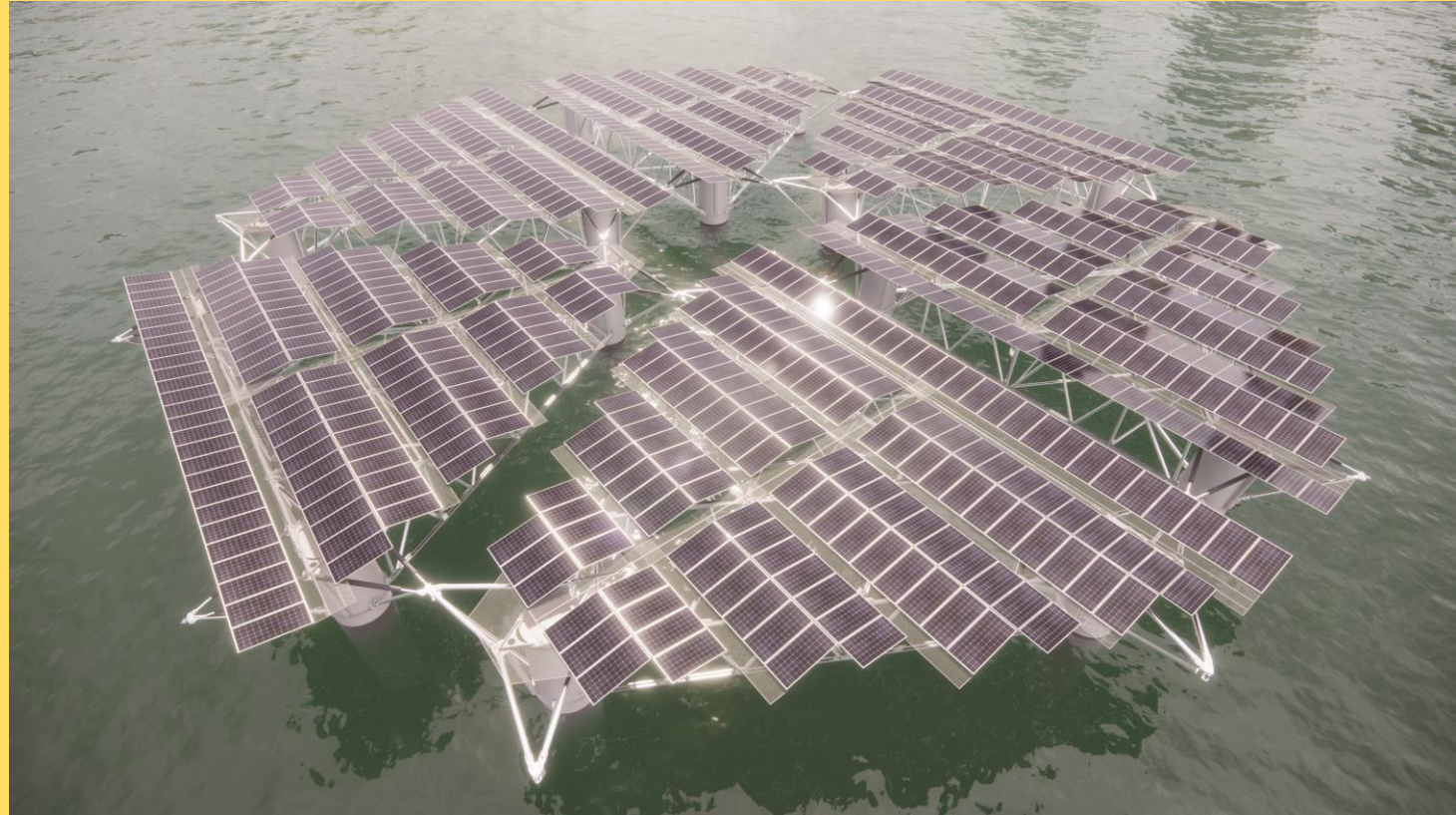
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When it comes to installed PV capacity per capita, Europeans in average have nearly twice as much solar power operating than people in Asia-Pacific.



# Global Solar Market Outlook

Update 2023 - 2027

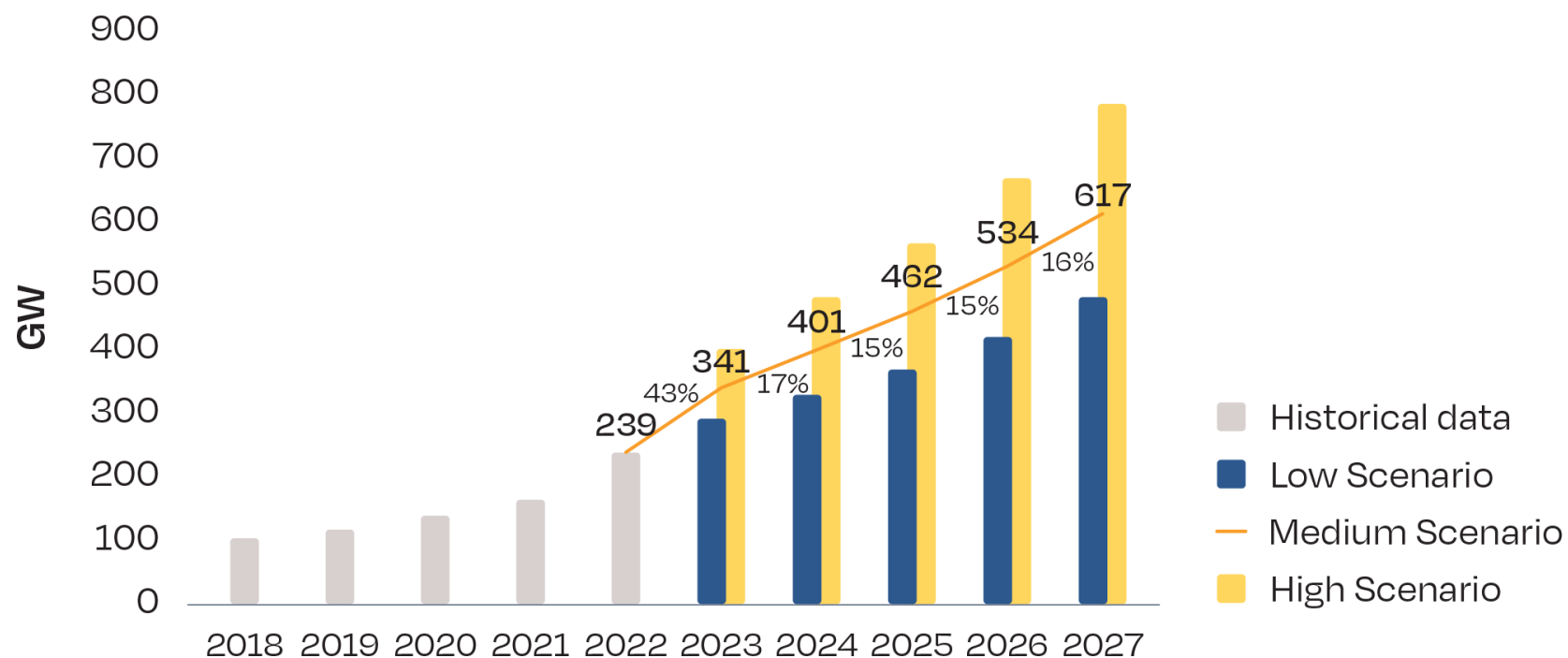


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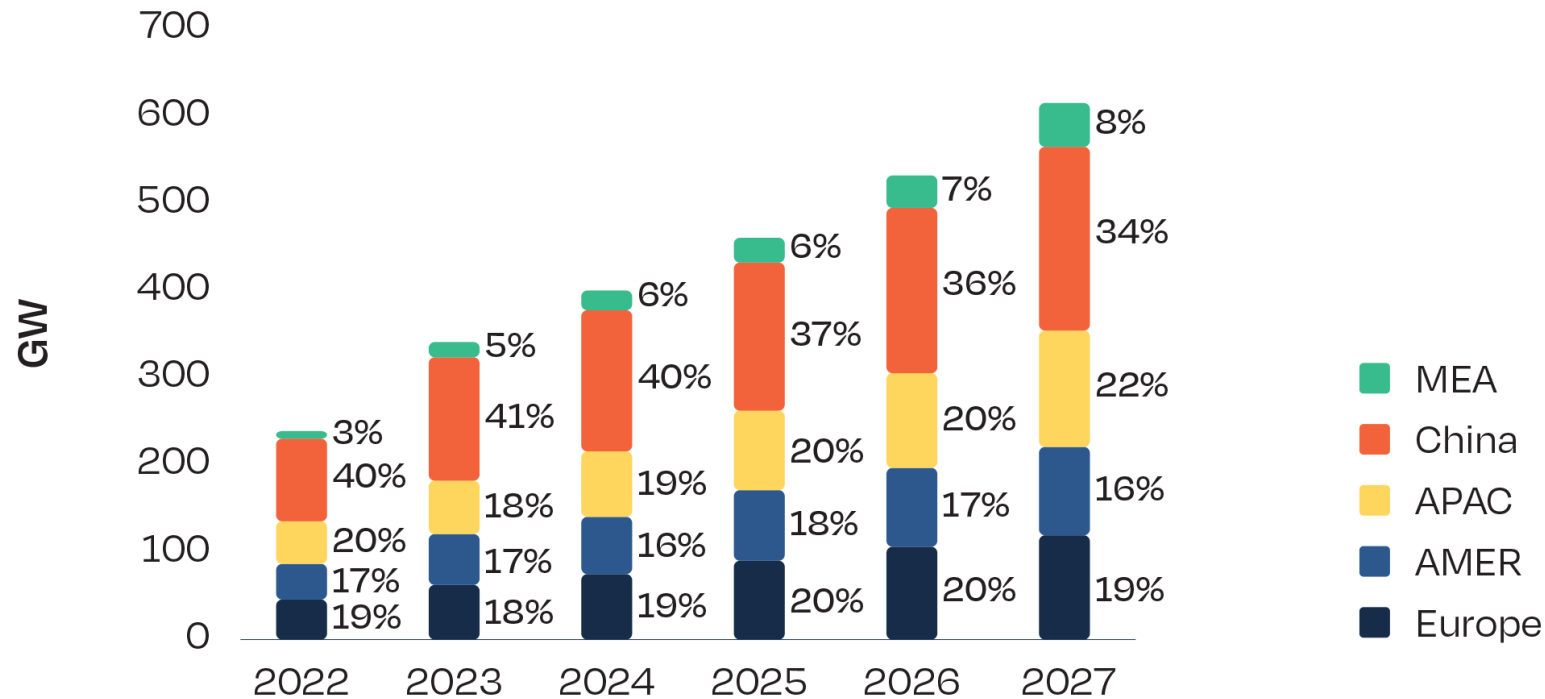
## WORLD ANNUAL SOLAR PV MARKET SCENARIOS 2023 - 2027



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As supply chains stabilized, product prices now decreasing with looming manufacturing overcapacities, installations in our medium scenario are set to grow by 43% to 341 GW in 2023, and up to 615 GW in 2027 with potential to nearly 800 GW by end of 2027.

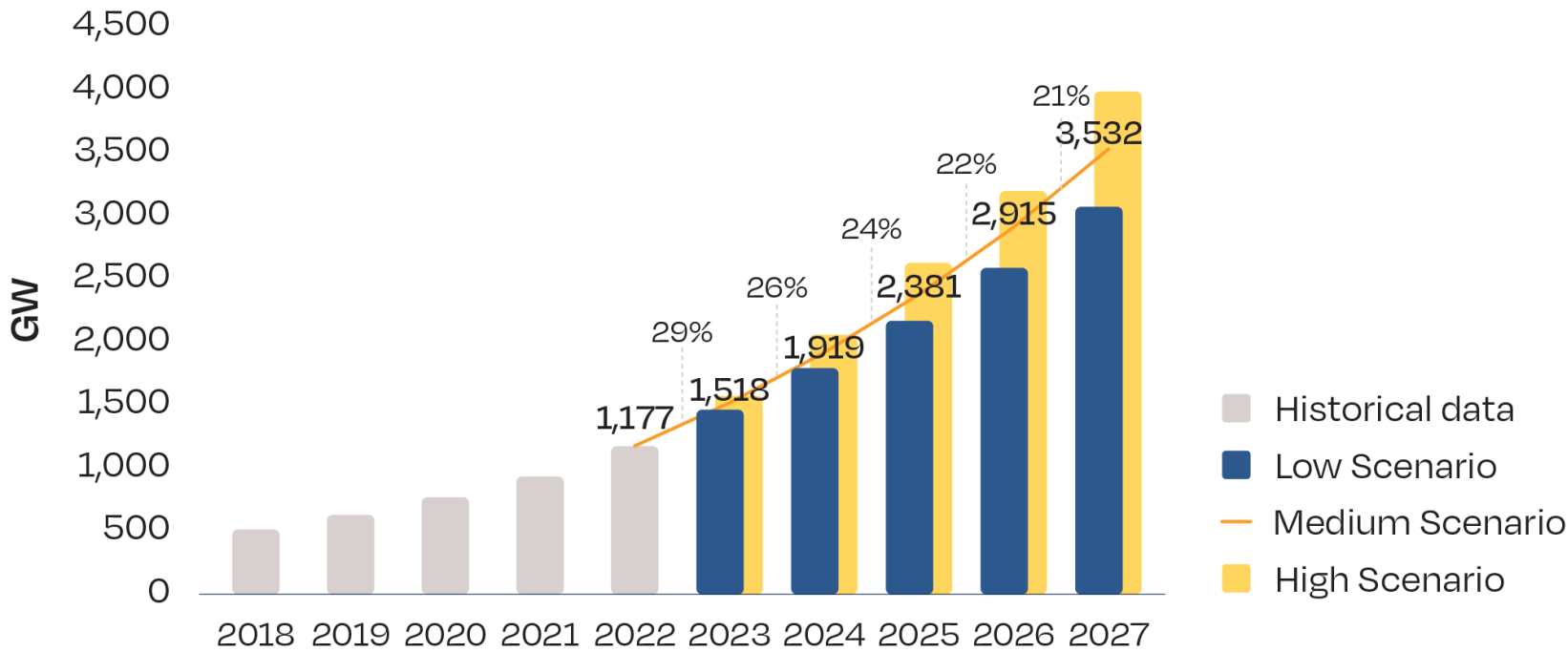
## EVOLUTION OF GLOBAL ANNUAL SOLAR PV MARKET SHARES UNTIL 2027



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Expected to peak this year, China's market shares will likely decrease until 2027, still responsible for 1/3 of demand. While Europe and the US will grow basically inline with the global market, the non-Chinese Asian part will gain shares as well as Middle East and Africa.

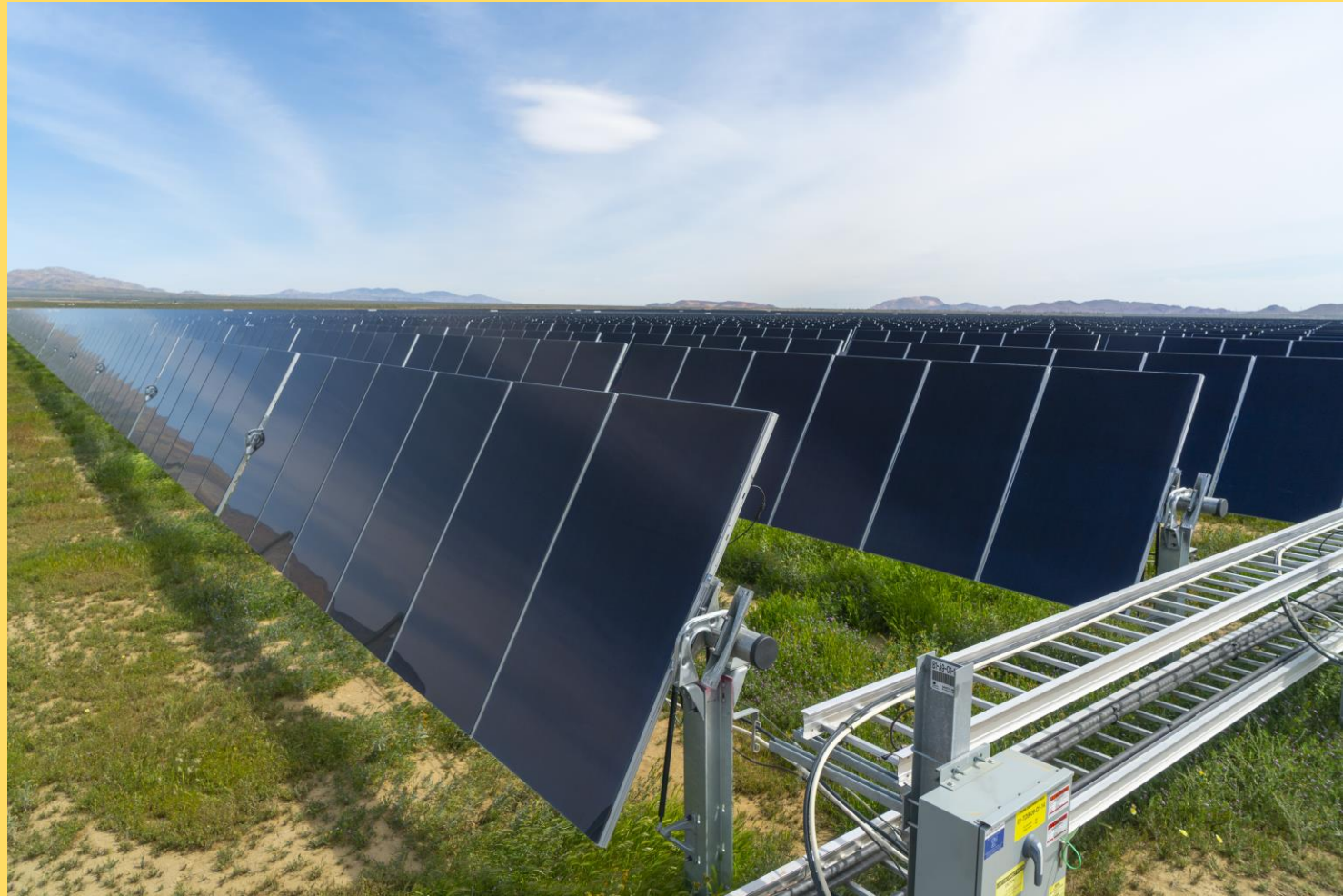
GLOBAL TOTAL SOLAR PV MARKET SCENARIOS 2023 - 2027



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After the global solar power fleet passed the TW-threshold in 2022, it will double to 2.4 GW by end of 2025, and exceed 3.5 GW of total installed capacity in 2027.

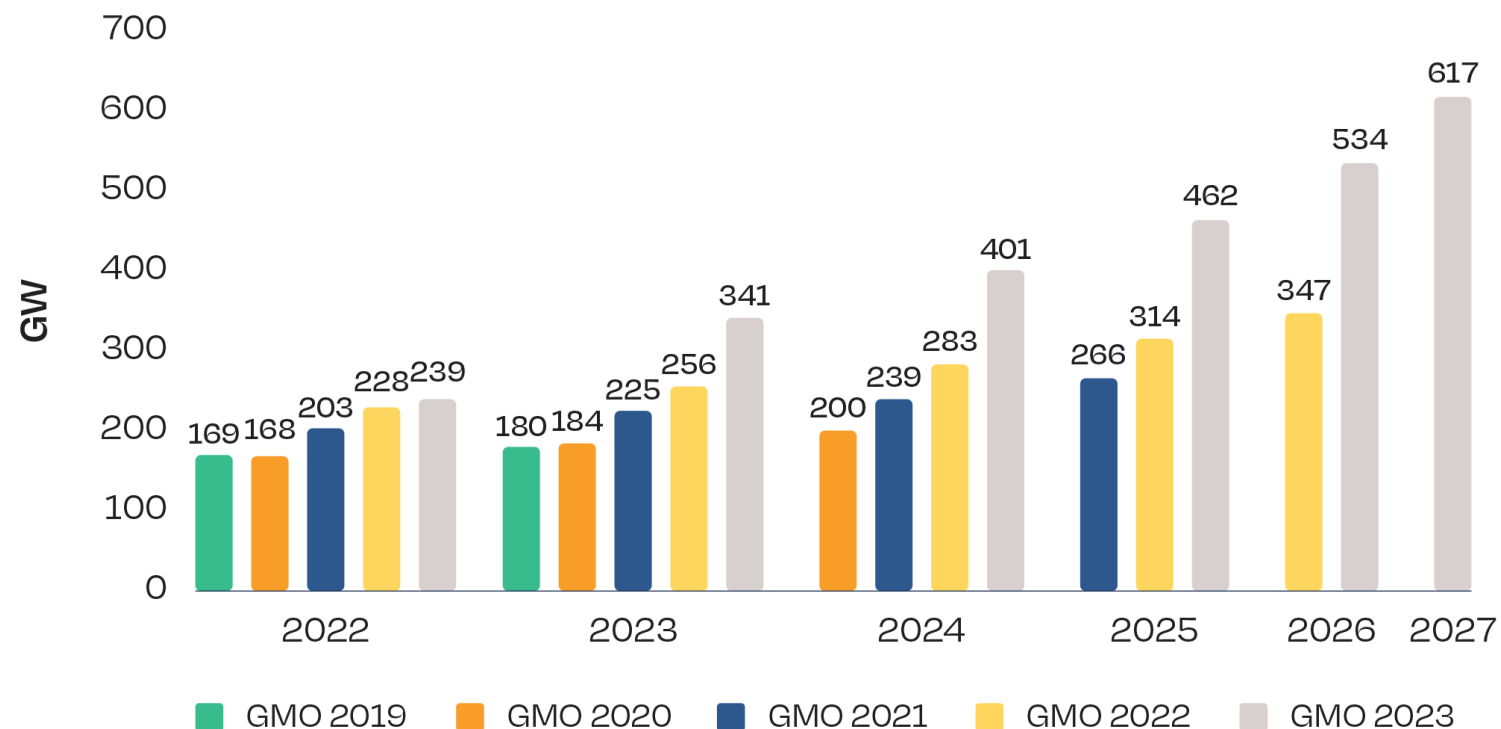
# Takeaways



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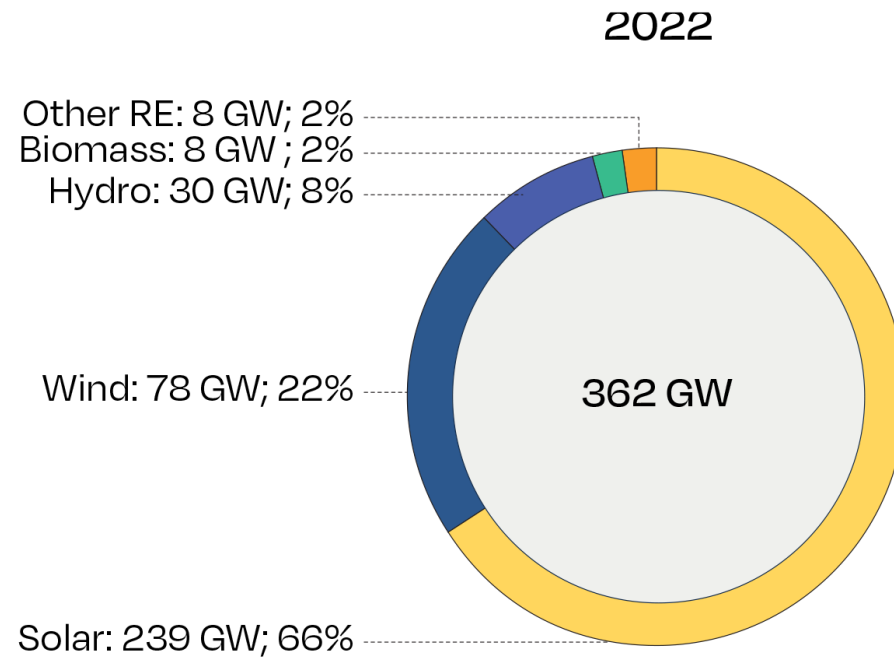
## COMPARISON MEDIUM SCENARIO GMO 2023 VS PREVIOUS GMO EDITIONS



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Similar to the previous Global Market Outlook, the growth rate predicted in this year's report is larger compared to the previous edition's projections. For 2023, we foresee a deployment rate that is 33% higher than predicted in GMO 2022

## NET RENEWABLE POWER GENERATING CAPACITY INSTALLED IN 2022

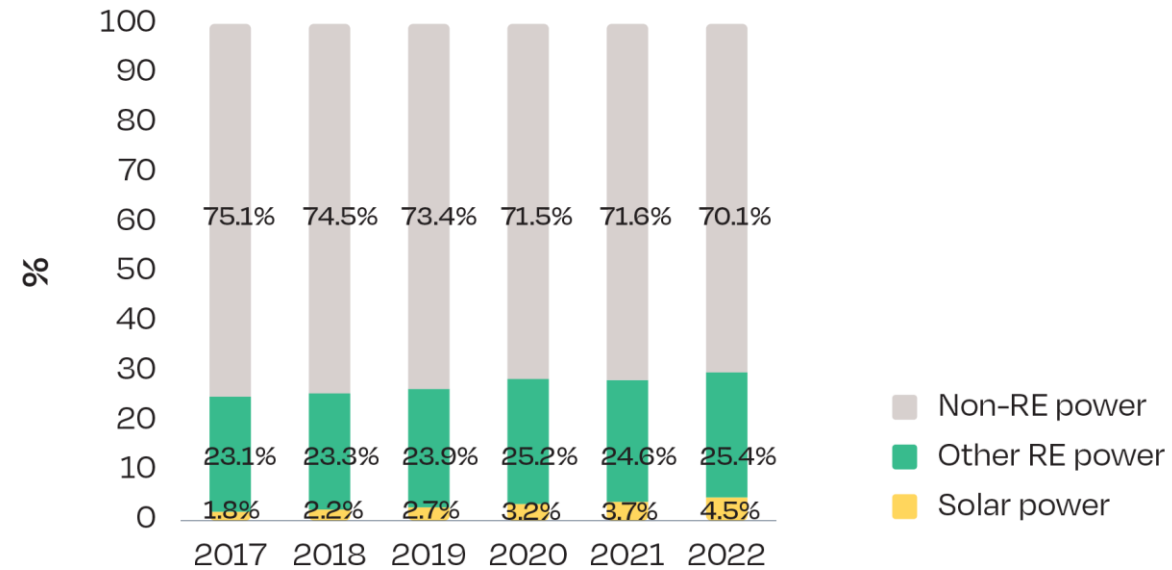


SOURCES: GWEC (2023), IRENA (2023).

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2022 was another year when solar maintained its dominance among all newly installed power generating technologies. Among renewables alone, it had a 66% share, growing significantly from 56% in 2021.

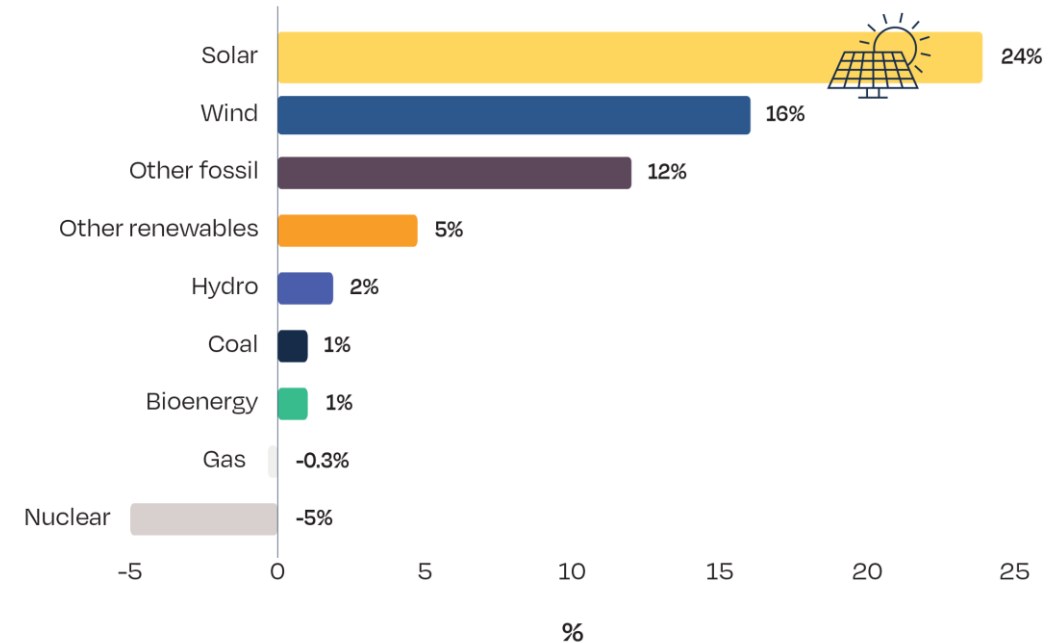
## SOLAR AND RENEWABLE POWER AS A SHARE OF GLOBAL POWER 2017-2022



SOURCE: Ember (2023).

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## ELECTRICITY GENERATION GROWTH RATE FROM 2021 TO 2022, BY TECHNOLOGY



SOURCE: Ember (2023).

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Much potential: Solar's total power generation share increased by 0.8% points to 4.5%. While other renewables slightly increased as well to 25.4%, over 70% is still sources from fossil fuels and nuclear.



# Global Market Outlook for Solar Power 2023-2027

The report is available at our booth (B3.109)  
and on our website:

<https://www.solarpowereurope.org/>

