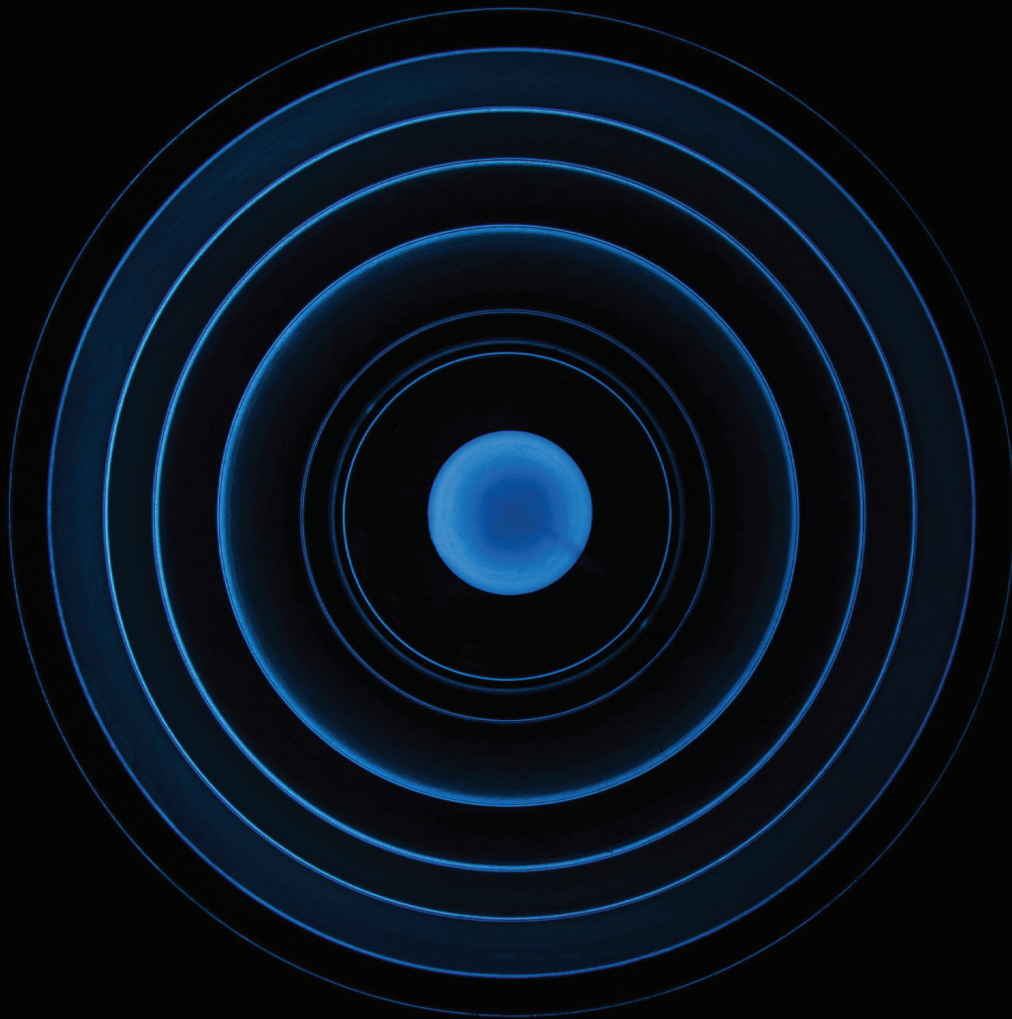
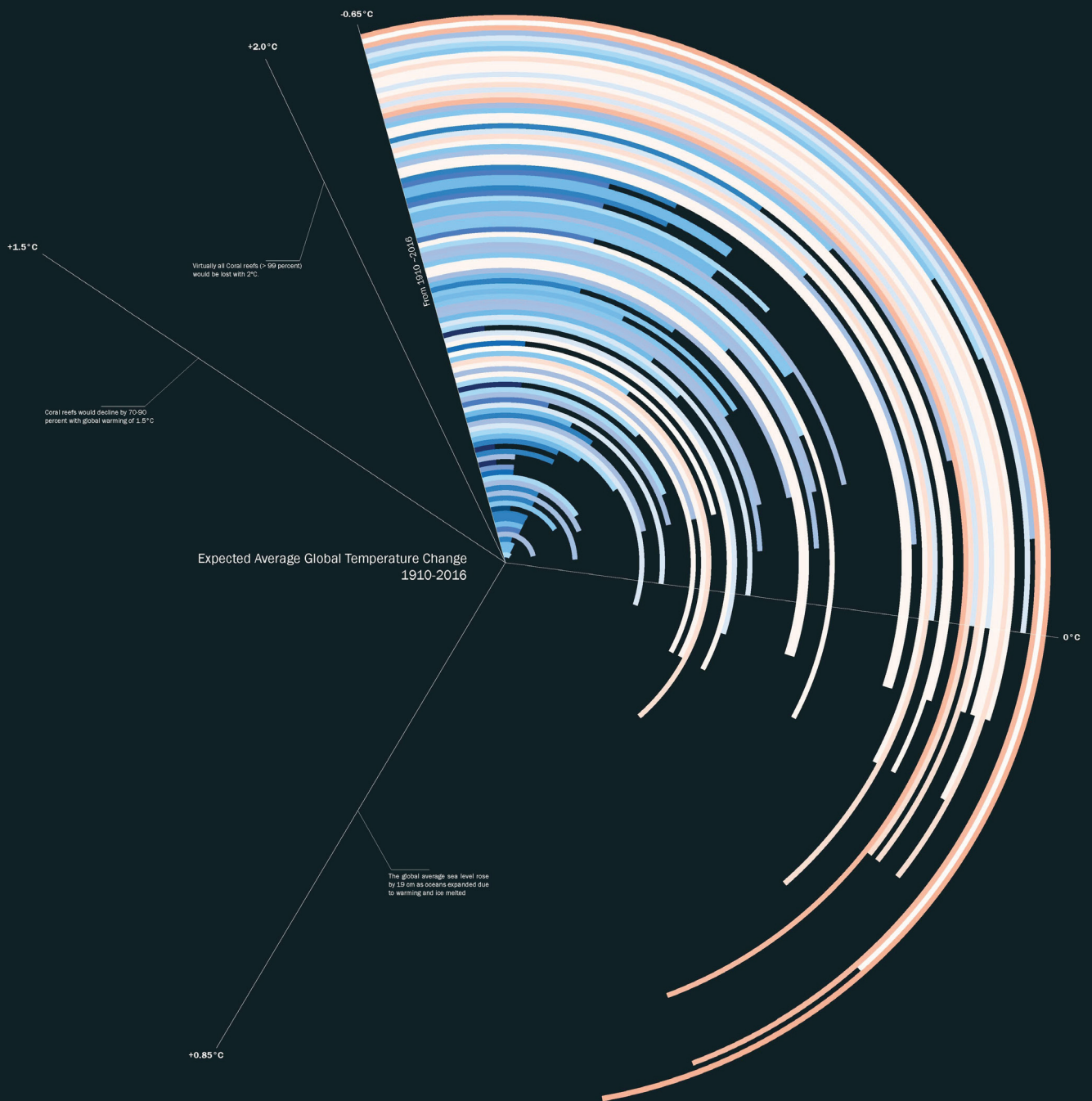


PV+ Journal

JULY/AUG
2026



ENERGY IS POWER



This is expected average Global Temperature change.
But the reality is different.

MOVING TOWARDS SUSTAINA- BILITY



Moving towards sustainable living is not just an ecological obligation; it's a passionate choice that benefits both us and our planet. Sustainability ensures that we leave a healthier, more harmonious world for future generations. By reducing our environmental footprint through responsible consumption, renewable energy, and mindful resource management, we can mitigate climate change, protect biodiversity, and foster resilient ecosystems.

Sustainable living also brings personal advantages. It promotes a healthier lifestyle, as it encourages fresh, locally sourced foods and active transportation. It fosters community connections and reduces stress, making us happier and more fulfilled. Moreover, it bolsters economic stability, as green industries create jobs and lower our energy bills.

#cleanenergy

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EDITOR'S NOTE

As I welcome you to this latest edition, I am filled with optimism about the future of Pakistan's solar industry. The momentum we are witnessing today is unlike anything before. Across our cities, industries, farms, and homes, solar energy is no longer viewed as an alternative—it has become an essential part of Pakistan's energy landscape. This remarkable shift reflects not only the growing demand for reliable and affordable electricity but also the resilience and innovation of an industry determined to power the nation's future.

This edition celebrates the people and organizations leading that transformation. From manufacturers, EPC companies, and technology providers to policymakers, investors, and renewable energy advocates, every stakeholder has a role in shaping a cleaner, more sustainable Pakistan. Through exclusive interviews, market insights, project features, and expert analysis, we strive to provide a trusted platform that keeps our readers informed and connected to the latest developments across the sector.

While challenges remain—from policy consistency and grid modernization to financing and infrastructure—they also present opportunities for innovation, collaboration, and long-term growth. I firmly believe that with the collective efforts of industry leaders and policymakers, Pakistan can unlock its tremendous solar potential and strengthen its energy security for generations to come.

With that I hope we see a brighter future ahead.

Local Scoop.

Here we bring you the latest updates on the green revolution happening in your region. Read about how your community is harnessing the power of renewables to shape a sustainable future and create positive environmental impact, one innovation at a time. We talk about breakthrough technologies, and local initiatives driving the renewable energy movement forward.



AIIB PLANS UP TO \$150 MILLION INVESTMENT IN PAKISTAN'S ENERGY SECTOR

The Asian Infrastructure Investment Bank (AIIB) is considering an investment of up to \$150 million to support the modernization and development of Pakistan's energy sector. The discussions were held during a meeting in Islamabad between Federal Energy Minister Sardar Awaiz Ahmad Khan Leghari and an AIIB delegation led by Konstantin Limitovskiy.

The proposed investment is expected to focus on renewable energy projects, transmission infrastructure upgrades, battery energy storage systems, and the digital transformation of Pakistan's power sector. During the meeting, Pakistan highlighted investment opportunities within the country's north-south transmission corridor while also sharing details of ongoing reforms aimed at improving the efficiency and

reliability of the electricity network.

The government further emphasized its phased rollout of nearly 10 million Advanced Metering Infrastructure (AMI) meters, with around 1.5 million already installed during the first phase. These initiatives are part of broader efforts to modernize the country's energy infrastructure and support the integration of renewable energy sources. AIIB expressed strong interest in expanding its investments in Pakistan's energy sector and confirmed that technical teams from both sides will continue working together to identify commercially viable projects. The potential investment reflects growing international confidence in Pakistan's energy transition and long-term infrastructure development plans.



Renewable Energy Association Calls for Solar Power Reforms in Kyrgyzstan

The Renewable Energy Association of Kyrgyzstan has proposed a series of regulatory reforms aimed at improving the integration of solar power into the country's energy system. The recommendations were presented during discussions focused on accelerating renewable energy adoption and strengthening the national power infrastructure.

According to the association, existing regulations and technical limitations continue to slow down the expansion of solar energy projects across the country. The organization emphasized the need for updated policies that would simplify grid connectivity, encourage private sector investment, and create more favorable conditions for renewable energy developers.

The proposed reforms also highlight the importance of modernizing the electricity network

to support growing renewable energy capacity. Industry representatives stressed that improving energy storage solutions, transmission systems, and regulatory transparency would play a key role in ensuring stable solar power integration.

Kyrgyzstan has been increasing its focus on renewable energy development as part of broader efforts to strengthen energy security, reduce dependence on traditional power sources, and attract sustainable investment into the energy sector.

The Renewable Energy Association believes that implementing these reforms could accelerate the country's transition toward cleaner and more reliable energy infrastructure while creating new opportunities for long-term economic growth.



Renewables Financing Environment Reshaped by Market Instability



The global renewable energy financing landscape is undergoing significant changes as ongoing market instability continues to affect investment strategies and project development across the energy sector. According to industry experts, rising interest rates, inflation, supply chain disruptions, and geopolitical uncertainty have created new financial pressures for renewable energy projects worldwide. These challenges are forcing investors, developers, and financial institutions to reassess risk models and adapt financing structures to changing market conditions.

Despite these challenges, renewable energy remains a key area of long-term investment due to increasing global demand for clean energy and decarbonization goals. Industry leaders noted that while financing has become more selective and cautious, strong renewable

projects with stable returns continue to attract investor interest.

The discussion also highlighted the growing importance of energy storage systems, grid modernization, and regulatory stability in securing future renewable energy investments. Experts emphasized that governments and financial institutions must work together to create clearer policies and supportive investment frameworks to accelerate the energy transition. As energy markets continue evolving, the renewable sector is expected to adapt through more resilient financing models, strategic partnerships, and increased focus on infrastructure capable of supporting long-term sustainability goals.

PACKAGES LTD IMPLEMENTS SAP SUSTAINABILITY SOLUTIONS

Packages Limited, in partnership with SAP Pakistan, has achieved a historic milestone as the first company in the country to sign a sustainability agreement with SAP. This initiative is set to drive the adoption of SAP sustainability solutions across Pakistan's export-related industries. By utilizing verified and actionable data, these industries can enhance their green credentials and improve their market positioning.

As the first company in Pakistan to implement SAP's Sustainability Control Tower

(SCT), Packages Limited demonstrates its commitment to monitoring and managing its carbon footprint. This deployment will allow Packages Limited to provide its international partners and importers with verified data on its adherence to global best practices for carbon reduction, carbon footprint management, and sustainable operations. This strategic partnership marks a significant step in Packages Limited's ongoing dedication to sustainability and ethical business practices.

OGDCL TAPS PAKISTAN'S FIRST-EVER TIGHT GAS PROJECT

Oil and Gas Development Company Limited (OGDCL) has successfully initiated early commercial production from Pakistan's first-ever tight gas project at Nur West Well-1, located in Sindh's Sujawal District. The well is currently producing 1.5 million standard cubic feet per day (mmscfd) of gas with a wellhead pressure of 1,050 PSI, contributing to the national gas supply via the Sui Southern Gas Company Limited (SSGCL) network.

Tight gas production, which was previously hindered by high costs and limited technology, became viable through the use of hydraulic fracturing—a cutting-edge technique used to enhance production. This marks a major milestone in OGDCL's efforts to leverage advanced technologies to boost

energy output and meet Pakistan's growing demand for gas.

OGDCL has developed a strategic plan for the continued exploration and development of tight gas reserves, emphasizing its commitment to national energy security and sustainable development. In April 2024, the company informed the Pakistan Stock Exchange (PSX) about the gas reserve discovered at a depth of 2,975 meters.

Under the recently approved Tight Gas Policy 2024, operators can sell gas at negotiated prices, with the government having the first right of refusal. The policy sets a wellhead price of \$7.5 per MMBTU and includes provisions for tax and royalty incentives.

LARGE PETROLEUM AND NATURAL GAS RESERVES DISCOVERED IN PAKISTAN

A major petroleum and natural gas deposit has been discovered in Pakistan's territorial waters after a three-year survey conducted in collaboration with a partner nation. According to a senior Pakistani security official, this find has the potential to significantly boost the country's economy.

The survey successfully pinpointed the location of the reserves, and relevant government agencies have been notified. These resources, located deep within Pakistan's waters, represent a crucial opportunity to develop what the official referred to as the "blue water economy."

While the discovery is promising for Pakistan's energy sector, exploration is still in its early stages, and extracting the oil could take several years. The official also highlighted the broader potential of the blue water economy, including the extraction of valuable minerals from the ocean, which could further benefit the economy.

Initial estimates suggest the reserves could be among the world's largest, possibly placing Pakistan as the holder of the fourth-largest deposit globally. However, Muhammad Arif, a former member of the Oil and Gas Regulatory Authority (OGRA), cautioned that while the discovery is promising, the size and recoverability of the reserves are not guaranteed. Offshore exploration alone could require up to \$5 billion in investment, Arif added.

US PLEDGES \$5 MILLION TO SUPPORT PAKISTAN'S RENEWABLE ENERGY PUSH BY 2030

The United States is supporting Pakistan in achieving its goal of sourcing 60% of its energy from renewable resources by 2030, according to US Ambassador Donald Blome. Speaking at an event organized by the Pakistan Institute of Parliamentary Services (PIPS), Blome noted that the US has contributed \$5 billion to the Green Climate Fund to help Pakistan pursue sustainable energy solutions.

At the "Recharge Pakistan" event, Blome emphasized the initiative's role in enhancing flood resilience and water security in vulnerable regions. He explained that the project's green infrastructure will restore floodwater channels, reforest wetlands, and improve groundwater absorption. Blome highlighted the broader partnership between the US and Pakistan, announcing an additional \$5 million pledge to Recharge Pakistan, which aims to cut carbon emissions by 52,900 tons of CO₂.



PAKISTAN ENSURES **UNINTERRUPTED FUEL** SUPPLY DESPITE GLOBAL ENERGY CRISIS

Federal Minister for Petroleum Ali Pervaiz Malik stated that Pakistan successfully maintained uninterrupted fuel supplies and market stability despite severe global disruptions affecting the energy sector. Speaking at the SDPI conference titled “Energy Debate: Way Forward for Fiscal Discipline,” the minister highlighted the government’s efforts in managing unprecedented challenges caused by rising oil prices, shipping disruptions, and soaring insurance costs.

According to the minister, the recent global energy crisis reinforced the importance of strengthening Pakistan’s energy security framework through greater resilience, diversification, expanded storage capacity, and infrastructure development. He emphasized that energy security is not only dependent on sourcing fuel from multiple regions but also on preparedness, coordinated response systems, and the ability to manage external shocks effectively.

Ali Pervaiz Malik revealed that Dubai crude prices surged to nearly \$170 per barrel during the crisis, while diesel premiums reached record levels. Additional complications emerged due to disruptions in the Strait of Hormuz, vessel shortages, and exceptionally high freight insurance costs, all of which placed immense pressure on global oil supply chains.

Despite these challenges, Pakistan managed to maintain seamless fuel availability across the

country and fulfilled all contractual commitments without causing disruptions to the market. The minister praised industry stakeholders and institutions for supporting the government’s coordinated response during the difficult period.

He further stated that Pakistan navigated the crisis without adding to the circular debt within the oil supply chain and also succeeded in preventing further accumulation of gas sector circular debt. Looking ahead, the minister noted that Pakistan would require an estimated investment of \$200–300 billion to build the infrastructure necessary for expanding renewable energy and strengthening long-term energy security.

AT UN, PAKISTAN CALLS FOR CONCESSIONAL FINANCING FOR TRANSITION

Pakistan has urged for supportive global policies to help financially constrained developing countries transition to clean energy, according to state media. The call was made at an event co-sponsored by Islamabad to mark the 'International Day of Clean Energy' at the United Nations headquarters in New York.

Observed annually on January 26, this UN-designated day raises awareness and promotes action for transitioning to sustainable energy for the planet's and humanity's benefit. The event was organized by the "Group of Friends of Energy," an informal coalition advocating for global sustainable energy initiatives. "Developing countries with limited fiscal space cannot invest in expensive energy

projects without greater financial access," said Ambassador Usman Jadoon, Pakistan's deputy permanent representative to the UN. He called for national and international action to achieve energy transition goals, highlighting Pakistan's commitment to increasing renewable energy to 60% of its energy mix by 2030, including adding 13,000MW of hydropower capacity. Pakistan's energy transition goals are estimated to cost over \$100 billion, while global efforts to cap warming at 1.5°C would require \$150 trillion by 2050. Pakistan, contributing less than 1% to global greenhouse gas emissions, remains one of the most climate-vulnerable countries, suffering deadly floods in 2022 that caused over \$30 billion in damages.

OVER 200,000 EMPLOYEES OF MINISTRY OF ENERGY CONSUME 441.5 MILLION UNITS ANNUALLY AT NO COST

According to official documents presented in the National Assembly, over 200,000 current and former employees of the Ministry of Energy collectively consume 441.5 million units of free electricity annually. Of this, 308.2 million units are allocated to serving employees, while 133.2 million units are consumed by retired staff.

The majority of beneficiaries are linked to Distribution Companies (DISCOs), where 149,000 employees — 78,000 serving and 71,800 retired — receive free electricity. Additionally, 26,000 individuals from the National Transmission and Despatch

Company (NTDC), including 20,000 serving and 6,000 retired staff, also avail the benefit. Meanwhile, 7,315 serving and 5,381 retired employees of the Water and Power Development Authority (Wapda) and 159 employees of the Power Information Technology Company (PITC) are also beneficiaries.

This practice has sparked debate in the National Assembly, with concerns raised over the financial burden it places on the national exchequer amid Pakistan's economic challenges. Critics have called for a reassessment of such benefits.

POWERGEN ESTABLISHES 120MW RENEWABLE ENERGY PLATFORM IN AFRICA

PowerGen Renewable Energy has partnered with international investors to launch a distributed renewable energy platform to scale clean energy access across Africa. The platform aims to deploy 120MW of renewable power solutions, including battery energy storage, across Africa. The collaboration involves PowerGen, the Private Infrastructure Development Group (PIDG), the Danish Investment Fund for Developing Countries (IFU), EDFI Management Company, and the African Development Bank's Sustainable Energy Fund for Africa (SEFA).

PIDG's anchor commitment was made via InfraCo, its project development unit, with concessional capital from PIDG Technical Assistance. Managed by the African Development Bank, SEFA offers catalytic finance for unlocking private sector investments in renewable energy and energy efficiency. The funds will support a 120MW portfolio of renewable mini-/metro-grids and commercial and industrial power solutions, including battery energy storage. PowerGen CEO Aaron Cheng said: "We are thrilled to announce this transformational next chapter to drive our vision of providing clean, reliable, and affordable energy across Africa. We are grateful to our terrific partners for their collaboration, and together, we look forward to contributing at scale to the energy transition and socio-economic growth across the continent."

Initially, the focus will be on Nigeria, Sierra Leone, and the Democratic Republic of the Congo, with plans to expand across the region.

The platform approach aims to connect the 570 million people in sub-Saharan Africa lacking electricity, according to data from the International Renewable Energy Agency (IRENA).

The first closing of the transaction was reached this month, with additional equity and debt finance expected later this year. PowerGen is poised to meet the energy requirements of over 68,000 households and reduce power costs for 7,000 businesses, enhancing business productivity and driving economic growth.

IFU investment director Henrik Henriksen said: "There is a tremendous need for enabling access to clean energy that can assist underserved households and businesses in Africa to become more resilient to climate change and to provide them with opportunities for better living conditions without further increasing greenhouse gas emissions. "Therefore, we are very proud to be a part of a joint investment enabling PowerGen to develop sustainable off-grid power solutions in sub-Saharan Africa. This aligns with our increased focus on supporting Africa's transition to be more climate resilient."

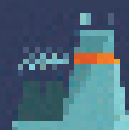


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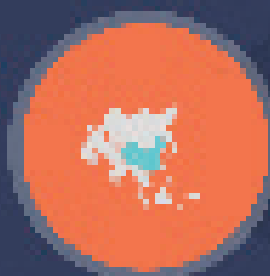
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ASIA IS KEY



35%

of climate-related financing is going to Asia, up from 28% in 2015. Asia's emissions are projected to rise by 40% by 2030.



75%

of climate-related financing is going to Asia, up from 28% in 2015. Asia's emissions are projected to rise by 40% by 2030.

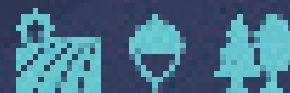
IMPACTS TO THE REGION



Sea level rise could displace 200 million people by 2100. The world's most vulnerable populations are in Asia, including 1.2 billion people in coastal areas.



By 2050, 60% of the world's population will live in urban areas. Asia is home to 60% of the world's population.



By 2050, 60% of the world's population will live in urban areas. Asia is home to 60% of the world's population.

DISASTER RISK MANAGEMENT

At least 100 million people are living in disaster-prone areas. Asia is home to 60% of the world's population.



At least 100 million people are living in disaster-prone areas. Asia is home to 60% of the world's population.



Russia says US risks global energy instability after fresh sanctions

Moscow on Saturday accused the United States of being ready to risk global energy instability with new sanctions on Russia's energy sector, including industry majors such as Gazprom Neft, which were announced earlier on Friday.

The U.S. and the U.K. on Friday announced new sanctions against Russia's energy sector, including oil giant Gazprom Neft, just days before President Joe Biden leaves office. Russia's Foreign Ministry said in a statement that on the eve of Biden's "inglorious time in power," Washington was trying to "cause at least some harm to Russia's economy even at the cost of destabilizing world markets." "Of course, Washington's hostile actions will not be left without reaction," it added. In reference to the California wildfires, Moscow accused Biden's administration of leaving behind "scorched earth," or total destruction, for incoming U.S. President Donald Trump since he cannot cancel the sanctions without Congress's approval. Kremlin spokesperson Dmitry Peskov earlier told reporters that the Biden administration was trying to leave Trump "as heavy a legacy as possible."

The U.S. Treasury Department said Friday it was designating more than 180 ships and Russian oil majors Gazprom Neft and Surgutneftegas, fulfilling "the G-7 commitment to reduce Russian revenues from energy."

At the same time, the U.K. government announced sanctions against the two companies, saying their profits were "lining (Russian President Vladimir) Putin's war chest and facilitating the war" in Ukraine. "Taking on Russian oil companies will drain Russia's war chest, and every ruble we take from Putin's hands helps save Ukrainian lives," U.K. Foreign Secretary David Lammy said in a statement.

"Putin is in tough shape right now, and I think it's really important that he not have any breathing room to continue to do the god-awful things he continues to do," Biden told reporters Friday at the White House. Gazprom Neft on Friday slammed the sanctions as "baseless" and "illegitimate," Russian state news agencies reported. "Gazprom Neft considers the decision to include its assets on the sanctions list as baseless, illegitimate and contrary to the

principles of free competition,” Russian state news agencies quoted a company representative as saying.

Oil prices rose on the news, with a barrel of Brent North Sea crude oil for delivery in March up 3.6% at \$79.68 at around 4:45 p.m. in Washington (21:45 GMT) on Friday. When asked about gasoline prices, Biden conceded that they could rise “as much as three or four cents a gallon” but stressed that sanctions would have a “more profound impact” on Russia.

‘Most significant yet’

Biden’s deputy national security advisor for international economics, Daleep Singh, called the sanctions “the most significant” yet on Russia’s energy sector, which he said was “by far the largest source of revenue for (President Vladimir) Putin’s war.”

On Saturday, the Russian ministry accused the U.S. of seeking to “hinder as far as possible or even make impossible any bilateral economic ties, including with U.S. business.” It said Washington was “sacrificing to this the interests ... of European allies,” which were “forced to switch over to more expensive and unreliable American supplies.” It also accused Washington of “ignoring” the views of its own population on rising energy prices once the presidential election was over.

‘Sweeping action’

Even before the sanctions were officially announced, rumors of fresh designations sparked condemnation from Peskov, who told reporters that the Biden administration was trying to leave Trump “as heavy a legacy as possible.” In total, the U.S. announced sanctions against almost 400 people and entities.

These include 183 oil-carrying vessels, along with Russian oil traders and oilfield providers, the two Russian oil majors, and more than two dozen of their subsidiaries, according to the Treasury Department.

Serbia impacted

Serbian President Aleksandar Vucic announced plans to speak with Putin about the sanctions, which also affect the petroleum industry of Serbia (NIS), which is majority-owned by Russia’s Gazprom Neft and its parent company, Gazprom. NIS is the only supplier of gas to Serbia and the majority owner of both gas pipelines that transport gas from Russia to households and industries in the country.

“Today, the U.S. imposed the most significant sanctions yet on Russia’s energy sector, by far the largest source of revenue for Putin’s war,” Singh, the Biden administration’s deputy national security advisor for international economics, said in a statement. Senior administration officials told reporters the measures were designed to give the United States additional leverage to help broker a “just peace” between Ukraine and Russia. Ukrainian President Volodymyr Zelenskyy praised the U.S. for introducing the sanctions. “These measures deliver a significant blow to the financial foundation of Russia’s war machine by disrupting its entire supply chain,” he wrote in a post on the social media platform X.

Strong economy influenced the timing

Friday’s announcement comes just 10 days before Biden is due to step down, which puts President-elect Trump in something of an awkward position given his stated desire to end the Ukraine war on day one of his presidency. Asked about the timing, National Security Council spokesperson John Kirby told reporters that oil markets were now in a “fundamentally” better place than they had been in the aftermath of Russia’s invasion of Ukraine in 2022 and that the U.S. economy was also faring better.

“We believe the moment was ripe right now to adjust our strategy,” he said.

Global Scoop.

Here we dive into the latest developments in the industry as we explore the remarkable strides countries are making towards sustainable power sources, highlighting groundbreaking innovations and initiatives that promise a greener future for our planet. From cutting-edge solar technologies to revolutionary wind farms, this is your gateway to staying informed on the global transition to clean energy.





NEW SOUTH WALES LAUNCHES LARGEST RENEWABLE ENERGY TENDER IN STATE HISTORY

The government of New South Wales, Australia, has launched the largest renewable energy tender in the state's history as part of its broader strategy to accelerate clean energy development and strengthen long-term energy security. The tender is expected to support major investments in renewable energy generation and large-scale energy storage projects.

Authorities stated that the initiative aims to attract developers capable of delivering reliable clean energy infrastructure while helping meet growing electricity demand across the region. The program forms part of New South Wales' long-term transition away from coal-fired power generation and focuses on expanding solar, wind, and battery storage capacity. Officials emphasized

that large-scale renewable projects will play a critical role in stabilizing the grid, reducing emissions, and supporting economic growth through new infrastructure investment.

The tender also reflects Australia's increasing commitment to renewable energy expansion as governments and energy providers continue investing in modernized electricity systems and storage technologies to improve reliability and support future demand.

Industry participants are expected to compete for contracts under the initiative, with successful projects contributing to the state's clean energy targets and broader decarbonization efforts.

LONZA EXPANDS RENEWABLE ENERGY USE AT BORNEM PRODUCTION SITE

Global life sciences company Lonza has announced further progress in its renewable energy transition by increasing the use of sustainable energy solutions at its production site in Bornem, Belgium.

The initiative forms part of the company's broader sustainability strategy aimed at reducing carbon emissions and improving energy efficiency across its global operations. By integrating renewable energy into its manufacturing infrastructure, Lonza aims to support long-term environmental goals while maintaining reliable industrial operations.

According to the company, the Bornem site will benefit from cleaner electricity sources and energy optimization measures designed to lower the facility's environmental impact. The move reflects growing efforts within the industrial and manufacturing sectors to adopt renewable energy solutions and accelerate decarbonization strategies.

Lonza emphasized that sustainability remains a key component of its operational development, with ongoing investments focused on energy efficiency, responsible manufacturing, and climate-focused infrastructure improvements.

The transition toward renewable energy at the Bornem facility highlights the increasing role of sustainable power solutions in supporting modern industrial production and long-term environmental responsibility.



Lonza



ROOFTOP SOLAR BOOM SAVES PAKISTAN \$12BN IN LNG IMPORTS

Pakistan's rapid rooftop solar adoption has saved the country an estimated \$12 billion in liquefied natural gas (LNG) imports, according to a study by UK-based energy think tank Ember.

The report said solar generation in Pakistan has surged sharply in recent years, placing it alongside hydropower and gas as one of the country's largest sources of electricity.

As a result, gas-based power generation declined, while demand for other fossil fuels also dropped significantly. The study noted that if fossil fuels had met the same increase in demand instead of solar, gas usage would have risen substantially, increasing import costs.

Ember said Pakistan's solar boom has been driven by rising electricity tariffs linked to reforms backed by the International Monetary Fund, prompting consumers to shift to rooftop solar systems.

The expansion has also been supported by net metering policies and the availability of low-cost solar panels, particularly from China. The shift has reduced reliance on imported fuels at a time of global price volatility, though the report warned that declining grid demand could increase electricity tariffs as fixed system costs are spread across fewer users.

It urged authorities to maintain a financially stable power grid to support continued solar growth, especially in the absence of large-scale battery storage.

Separately, Pakistan's Power Minister Awaiz Leghari said around 55% of the country's electricity generation currently comes from clean sources, with a target to exceed 90% by 2034. He added that about 74% of electricity generation is now based on local resources, with plans to increase this share to over 96% in the coming years.

OMNIA SIGNS \$2 BILLION RENEWABLE ENERGY DEAL FOR BYTEDANCE DATA

Omnia has signed a major renewable energy agreement valued at approximately \$2 billion to supply clean energy for a ByteDance data center project in Brazil. The deal represents one of the significant renewable energy partnerships supporting the growing global demand for sustainable digital infrastructure.

The agreement is expected to support the long-term energy requirements of ByteDance's expanding data operations while reinforcing the company's broader sustainability and carbon reduction goals. The project highlights the increasing role of renewable energy in powering large-scale technology infrastructure, particularly data centers that require stable and continuous electricity supply.

Brazil continues to attract significant renewable energy investment due to its strong solar and wind energy potential, making it an important market for international clean energy projects. Industry experts note that technology companies are increasingly turning toward renewable power purchase agreements to secure reliable energy while reducing environmental impact.

The partnership also reflects the growing intersection between the digital economy and renewable energy development, as global data consumption, artificial intelligence, and cloud infrastructure continue driving demand for cleaner and more resilient energy systems.

The project is expected to contribute to Brazil's renewable energy expansion while supporting sustainable infrastructure growth for the rapidly evolving technology sector.



WHAT IS RENEWABLE ENERGY?

The Answer is Blowing in the Wind

We hear a lot about renewable energy, but what is it, exactly?

It is an energy source that is perpetual ... inexhaustible... "to infinity and beyond!" Renewable energy has storage limitations, however, and some types are not available 24/7.

A FEW FACTS

- According to the University of Michigan (U-M) Center for Sustainable Systems, about 80% of the nation's energy comes from fossil fuels, 8.4% from nuclear and 11.4% from renewable sources.
- In 2019, renewable energy sources accounted for about 17% of energy generation, according to the U.S. Energy Information Administration (EIA).
- The EIA projects that the share of renewables used for U.S. electricity generation will increase from 21% in 2020 to 42% in 2050.
- Wind and solar are the fastest-growing renewable sources, but they provide just 3.8% of total energy used in the U.S., according to the U-M center.

THE MAJOR TYPES OF RENEWABLE ENERGY SOURCES ARE:



**BIOMASS,
INCLUDING
BIOFUELS**
(comes from plants
and animals)

WATER OR HYDROPOWER



GEOHERMAL
(comes from the heat
of the earth)

WIND



SOLAR

Happen- ings.

Get ready to immerse yourself in a comprehensive exploration of the dynamic world of renewable energy and beyond. Here we will uncover the latest trends, breakthroughs, and impactful events shaping the global transition to sustainable practices, empowering you with the knowledge and inspiration to be at the forefront of the green revolution.





GREECE INTRODUCES STRICTER RULES FOR RENEWABLE ENERGY PROJECTS

Greece has introduced a new regulatory framework aimed at imposing stricter controls on renewable energy development while balancing environmental protection, tourism interests, and the country's ongoing green energy transition. The new policy has been launched for public consultation by the Ministry of Environment and Energy.

Under the proposed framework, renewable energy projects such as solar and wind farms will face tighter location and development restrictions. New solar installations will be prohibited in protected Natura 2000 areas, forests, wetlands, natural reserves, cultural heritage zones, and coastal regions used for tourism and recreation. The government also plans to limit the land coverage of solar farms within each province.

The framework introduces even stricter conditions for wind energy projects. Wind farms will no longer

be allowed in certain high-altitude regions, densely populated areas, smaller islands, and major tourism zones. Additional restrictions will apply to environmentally sensitive regions and coastlines.

Greek authorities stated that the objective is not to slow renewable energy growth, but to ensure that future projects are developed in a more organized and sustainable manner. Officials emphasized the importance of balancing clean energy expansion with environmental preservation and local community interests.

The proposed policy forms part of Greece's broader strategy to modernize its energy infrastructure while addressing growing concerns regarding land use, tourism impact, and ecological protection as renewable energy investment continues to increase across the country.



CHINA MUST REFOCUS ENERGY INVESTMENT TO DISTRIBUTION FROM GENERATION: NATIXIS

China's power-equipment industry must redirect its investment focus from renewable energy generation to storage and distribution infrastructure to remain competitive in the face of excess capacity and increasing global protectionism, according to Natixis, a French investment bank.

"China's investment in green energy technology is so substantial that even under the worst energy transition scenarios, it will

be sufficient to meet domestic demand while maintaining its dominant position in the global renewable equipment market for a long time," said Alicia Garcia Herrero, Natixis' chief economist for the Asia-Pacific region, on Wednesday.

"There are other green technologies where China can expand, allowing the industry to continue investing without the risk of overcapacity," she added.

China's solar-panel output exceeded global

demand last year, leading to a surplus of inventory in the European Union, its largest market, according to Mu Haoxin, a Natixis economist.

Additionally, Beijing needs to double grid infrastructure's share of national fixed-asset investment to resolve power-grid bottlenecks that have reduced the utilization rates of wind and solar farms, Mu estimated.

While investment in power generation reached 1.2 trillion yuan (US\$165 billion) last year—doubling from 2021—spending on grid infrastructure lagged behind, creating a significant gap that must be addressed to reduce grid congestion, Mu said. According to China's National Energy Administration (NEA), solar farm installations surged by 27.8 percent last year, but grid bottlenecks caused unused solar energy to rise from 2 percent to 3.2 percent. Similarly, unused wind power increased from 2.7 percent to 4.1 percent.

"Shifting from equipment exports to domestic infrastructure investment could help alleviate external pressures from geopolitical tensions," Mu suggested. Since January 1, the U.S. has doubled tariffs on Chinese-made solar wafers and polysilicon—key components for solar panels—to 50 percent. Earlier this week, the Trump administration raised tariffs even further. In November, the U.S. introduced preliminary duties ranging from 2.9 to 30 percent on solar cells from Vietnam, Cambodia, Malaysia, and Thailand to curb imports of products assembled using Chinese-made

components.

A 2022 report by UK-based environmental think tank Ember estimated that China controlled 80–85 percent of global production capacity across multiple segments of the solar panel supply chain. UBS China utilities analyst Yan Yishu noted that by the end of 2023, China's solar panel manufacturing capacity had reached approximately 1,200 gigawatts—twice the global demand.

Widespread industry losses prompted Beijing to impose restrictions on new production facilities by increasing minimum capital requirements and limiting energy and water usage. Yan predicted that from 2024 to 2026, industry output would shrink by an average of 7 percent annually due to high inventory levels, a stark contrast to the 70 percent annual growth recorded between 2021 and 2023.

Official data indicates that China's industry has already accelerated investments in storage and grid infrastructure to resolve bottlenecks, though such projects often require years of planning. The NEA reported that China's installed energy storage capacity grew by 130 percent to 73.76 gigawatts at the end of 2023.

State Grid Corporation of China, which manages power grids across most of the country, announced last month that it would increase investment in grid and energy storage infrastructure by 8.3 percent this year to a record 650 billion yuan, following a 15.4 percent increase last year.



TURNING BUILDINGS INTO BATTERIES



Skidmore, Owings & Merrill LLP (SOM), the architectural firm renowned for designing the world's tallest tower, the Burj Khalifa, is now reportedly developing innovative methods to transform buildings into energy storage units. Currently, SOM is exploring techniques to lift massive blocks using motors, storing energy that can be converted to electricity when the blocks are lowered. This raises the question: could some of the world's most iconic skyscrapers generate their own power by harnessing gravity?

NOT A NEW IDEA

Harnessing gravity for energy storage is not a novel concept. The principle has been utilized for over a century, notably in pumped-storage hydroelectric (PSH) plants. These plants act like giant batteries by pumping water uphill during low-demand periods and allowing it to flow back down to generate power through turbines when electricity is needed. This method, which began in the 1890s, currently accounts for 97 percent of energy

storage and is both clean and renewable as the water is reused. Today, PSH plants contribute about 180 GW to the global energy generating capacity of 8.9 terawatts.

Now, imagine using solid materials instead of water as potential energy. Massive blocks of concrete or heavy iron pistons could be elevated using excess solar or wind power and then released in a controlled sequence to generate energy when needed. This approach means gravity power can be generated almost instantly and at any time.

GRAVITY BATTERIES: A MODERN TWIST

The future of energy storage seems to be taking a new direction with gravity batteries. In May 2024, a company named Energy Vault debuted its “gravity battery” near Shanghai. This colossal structure can store enough power to keep the lights on for hours. Energy Vault is not alone; other innovative companies are also exploring the potential of gravity in abandoned oil wells and mines, proving that green energy can be achieved by going up or down.

Modern gravity batteries offer greater flexibility and long-duration storage, ensuring a reliable energy supply even when the wind doesn't blow or the sun doesn't shine. Unlike PSH plants that require specific geographical features, gravity batteries can utilize existing infrastructure like high-rises or repurpose abandoned mines.

HOW GRAVITY BATTERIES WORK

The core principle of gravity batteries is to convert excess electricity into potential energy by lifting a mass, then converting it back into electricity by lowering the mass. Different methods include: Concrete blocks can be raised and lowered by cranes within a tower, as seen with Energy Vault, to store and generate energy. Water tanks can be filled at high points in buildings

using surplus energy and then released through turbines to produce electricity. Additionally, heavy weights can be lifted within abandoned mineshafts using winches, a method employed by companies like Gravitricity.

BENEFITS OF GRAVITY BATTERIES

Gravity batteries offer numerous advantages, including up to 90 percent efficiency compared to solar power's 25 percent, making them highly efficient. They are also clean and sustainable, with minimal environmental impact. These batteries can store large amounts of energy for extended periods, ensuring long-lasting storage. Additionally, they provide power during peak consumption periods in less than a second, showcasing their fast response capabilities. Their capacity can be adjusted to specific needs, demonstrating scalability. Moreover, they are cost-effective, with lower deployment and operating costs compared to lithium-ion batteries. Unlike PSH plants, gravity batteries are location-agnostic and can be deployed almost anywhere.

HIGH-RISE BUILDINGS AS BATTERIES?

This innovative concept uses the height of buildings for energy storage. One idea involves retrofitting elevators to lift heavy weights or water tanks during off-peak hours. These weights are then lowered during peak hours, converting potential energy back into electricity through pulleys and actuators, using regenerative braking systems.

FROM PROTOTYPES TO REALITY

The first commercially operational gravity battery system, built by Energy Vault, recently joined the Chinese power grid. Other companies like the UK's Gravitricity are testing prototypes in disused mines. However, challenges remain:



GREECE INTRODUCES STRICTER RULES FOR RENEWABLE ENERGY PROJECTS

Pakistan has announced the discovery of significant oil and gas reserves in Khyber Pakhtunkhwa, marking an important development for the country's energy sector and efforts to reduce dependence on imported fuel. The reserves were identified at the Baragzai X-1 exploratory well in the Nashpa block located in Kohat district.

According to reports, the discovery was made by Oil and Gas Development Company Limited (OGDCL), which described the find as one of the most important energy discoveries in recent years. Initial assessments suggest that the reserves could substantially strengthen Pakistan's domestic energy production capacity and support long-term energy security.

The discovery is expected to help narrow Pakistan's energy supply-demand gap by reducing reliance on costly fuel imports. Industry experts believe the development could improve economic stability, support industrial growth, and encourage further exploration activities across the country. Reports also indicate that the newly discovered reserves may contribute significantly to crude oil and natural gas production once commercial extraction begins. Further technical evaluations and testing are currently underway

to determine the full production potential and long-term commercial viability of the reserves.

The development comes at a time when Pakistan continues to face rising energy demand and global market volatility. Officials believe that strengthening indigenous energy resources will play a critical role in improving national energy resilience and reducing pressure on foreign exchange reserves caused by fuel imports.

PAKISTAN RESTRICTS DIESEL IMPORTS TO PSO FOR FISCAL YEAR 2026-27

The federal government has prohibited private oil marketing companies from importing high-speed diesel during the current fiscal year, assigning Pakistan State Oil exclusive responsibility for diesel imports.

The decision forms part of new fuel-supply and pricing guidelines approved by the federal cabinet to strengthen energy security and reduce the impact of rising international petroleum prices on consumers. The guidelines have been forwarded to the Oil and Gas Regulatory Authority for implementation.

Private oil marketing companies will still be permitted to import petrol, but their allocations will be determined by Ogra according to their previous market share and monthly fuel requirements. Each imported petrol shipment must carry at least 10,000 tonnes.

Companies that fail to meet an approved import commitment, delay deliveries or do not purchase the agreed quantities from local refineries may lose their eligibility for additional petrol import allocations for nine months.

Pakistan State Oil is also expected to enter into a long-term petrol supply agreement with Oman's OQ Trading. The proposed arrangement is intended to safeguard fuel supplies

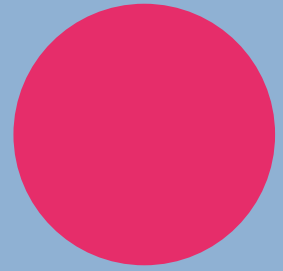
amid disruption to shipping through the Strait of Hormuz.

Under the revised pricing system, petrol and diesel import costs will be calculated using a seven-working-day rolling average of Platts Arab Gulf assessments. Ogra will calculate and publish ex-depot petroleum prices daily on its official website, without requiring approval from the federal government or prime minister.

Existing adjustments related to exchange rates, regulatory duties, fuel specifications, customs charges and inland freight will continue under the current mechanism.

The government has also directed that the petroleum levy must remain within the maximum limit approved by the cabinet. The Finance Division will determine the applicable levy rates for the fiscal year before their formal notification.



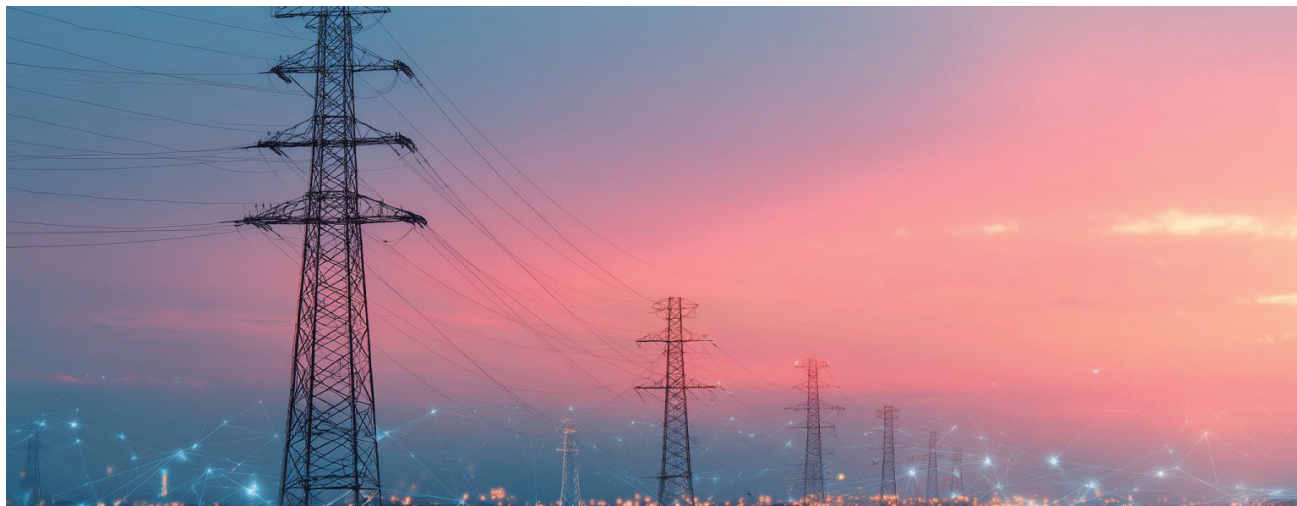


I FEEL THAT THERE IS A LACK OF
SERIOUSNESS
PERHAPS WORLD LEADERS DO NOT
REALIZE THE URGENCY
OF THE SITUATION.
WE HAVE A LOT OF IDEAS, BUT

**AS SOMEONE SAID,
IDEAS WITHOUT FUNDING IS
MERE HALLUCINATION,**

- IMRAN KHAN





CHINA'S RENEWABLE ENERGY MEGABASES REMAIN HEAVILY DEPENDENT ON COAL, REPORT FINDS

BEIJING, July 21, 2026: China is developing more large-scale wind and solar projects than the rest of the world combined, but inadequate transmission infrastructure and continued dependence on coal are limiting the delivery of clean electricity, according to a new report by Global Energy Monitor.

Wind and solar power currently account for only around 20% of the electricity transmitted through China's ultra-high-voltage direct-current network, while coal-fired power contributes approximately 42%. The share of renewable energy carried by the network has remained largely unchanged since 2021.

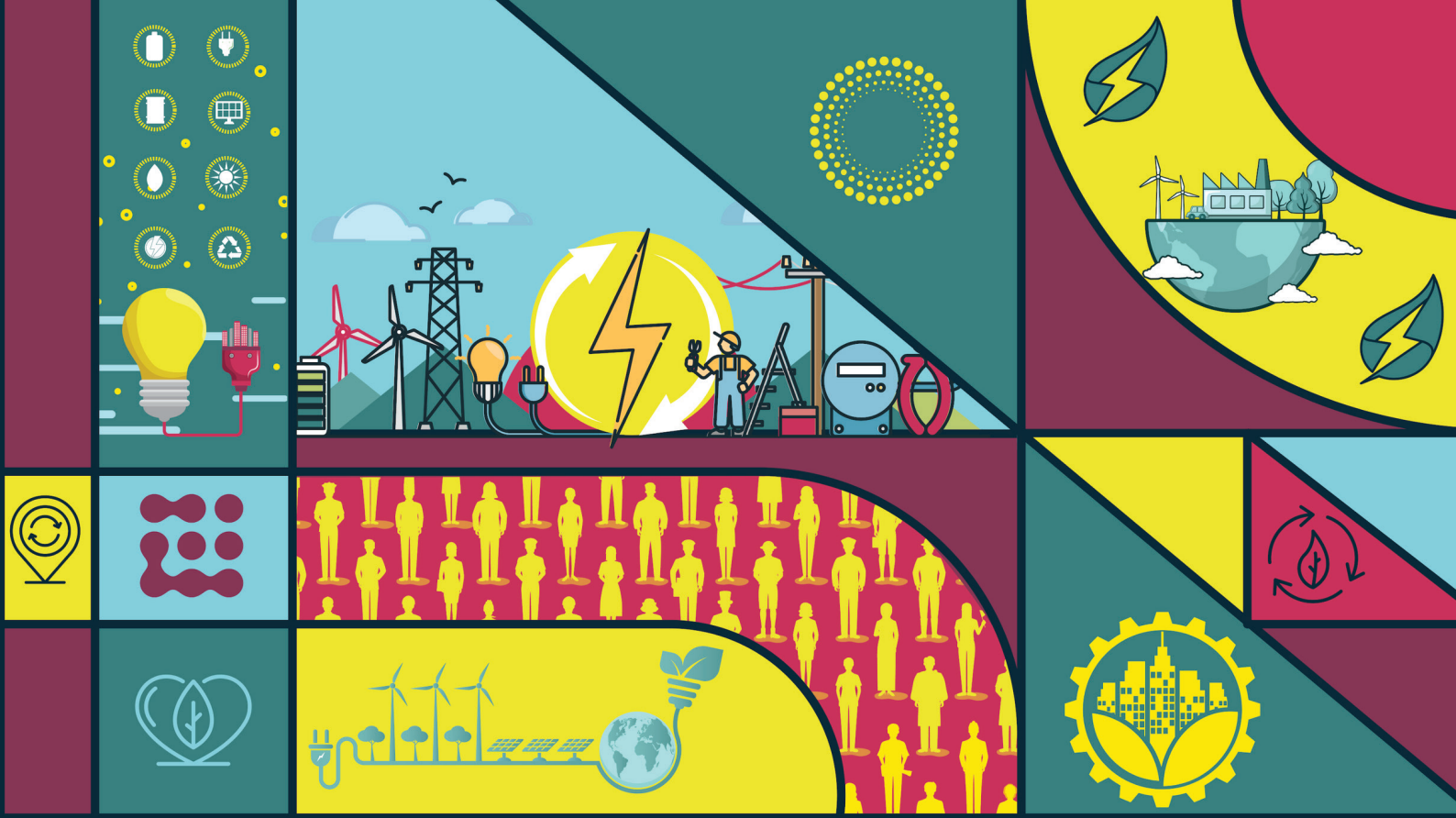
Under China's renewable "megabase" strategy, vast wind and solar projects are being developed in the country's sparsely populated northern and northwestern regions. Electricity generated at these facilities is then transmitted over long distances to industrial centres and major cities in eastern China.

However, the report warned that transmission development is not keeping pace with renewable-energy construction. Around 315 gigawatts of megabase capacity will require outbound transmission connections by 2030, which could require approximately 27 new ultra-high-voltage transmission lines. China's 2026–2030 five-year plan currently targets only 10 such lines. The 11 transmission projects currently proposed for renewable megabases would connect approximately 129GW of wind and solar capacity alongside 40GW of coal-fired generation. Despite the higher installed renewable capacity, the

electricity ultimately carried through the lines is expected to be divided almost equally between coal and renewable sources.

Global Energy Monitor said the continued use of coal as a major electricity source conflicts with government statements that coal will serve only as a supporting fuel in China's future power system. The report recommended greater investment in battery storage and other energy-storage technologies to manage the intermittent nature of wind and solar power, rather than relying heavily on coal plants as backup.

One proposed transmission project connecting Inner Mongolia's Kubuqi region with Shanghai has been described as a positive step. Renewable energy would provide more than 60% of its planned electricity supply, supported by 9,000 megawatt-hours of energy storage and a smaller coal component than many comparable projects. As of June 2026, China had approximately 664GW of planned or under-construction solar capacity, representing about one-third of the global total. It also had around 698GW of proposed wind capacity, accounting for roughly one-quarter of planned global wind development. The findings highlight that while China continues to lead the world in renewable-energy expansion, additional transmission infrastructure and energy-storage investment will be essential to reduce coal dependence and deliver more clean electricity to high-demand regions.



WHY YOUNG PEOPLE SHOULD CARE ABOUT INVESTING IN CLEAN ENERGY

For younger generations, investing in clean energy is one of the most impactful ways to shape a better future—both for the planet and for their own financial well-being. As the climate crisis intensifies, clean energy offers a practical and forward-thinking investment option that supports innovation, job creation, and global sustainability.

Renewable energy sources like solar, wind, and hydropower are no longer niche technologies—they are rapidly becoming the backbone of modern energy systems. The clean energy sector is one of the fastest-growing industries in the world, offering vast opportunities in technology, engineering, finance, and entrepreneurship. For young people entering the workforce or beginning their investment journey, this sector represents growth, resilience, and long-term returns.

Investing in clean energy also reflects values that matter to many young people. Climate change, environmental justice, and sustainability are priorities for this generation. By choosing green investments—such as sustainability-focused

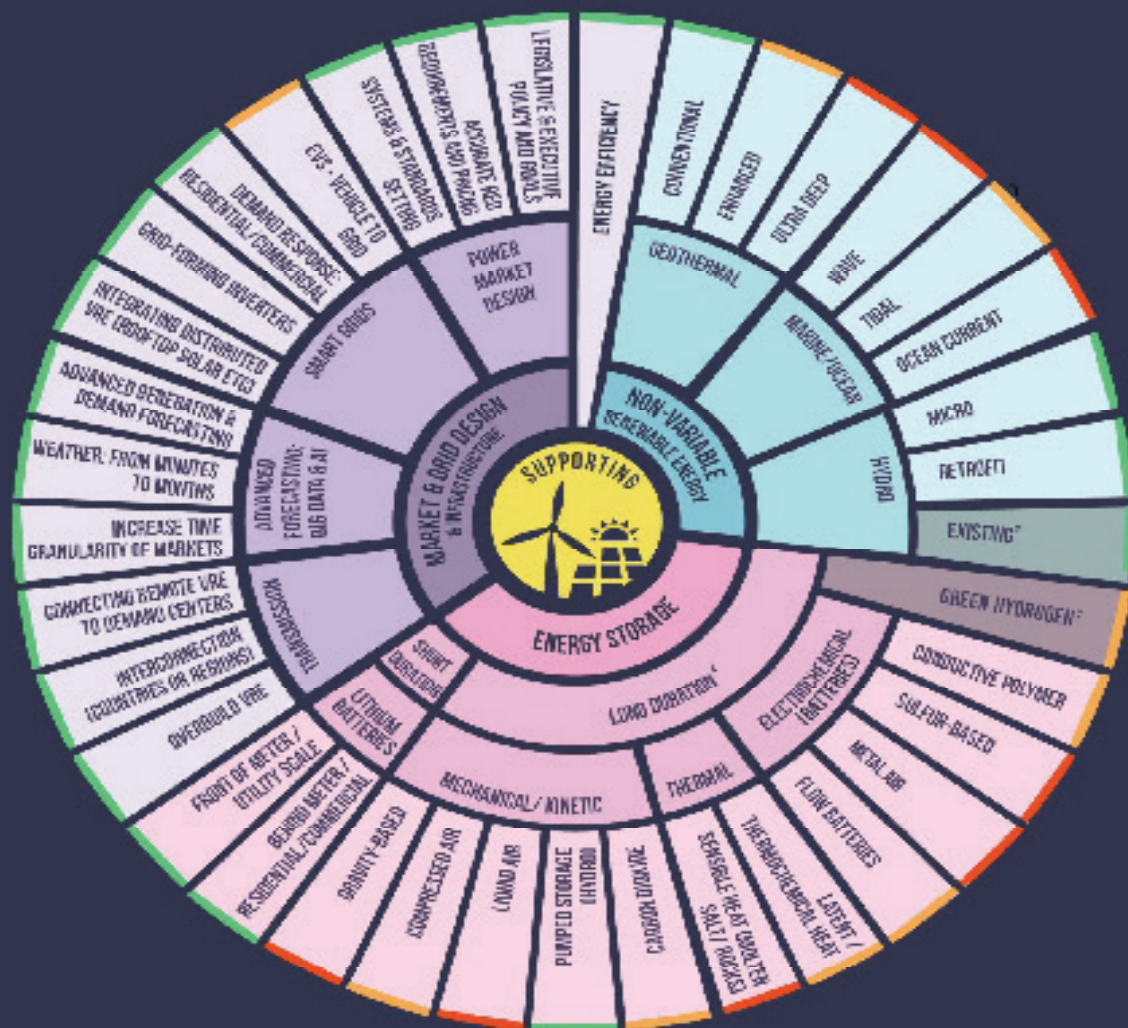
mutual funds, green bonds, or shares in renewable energy companies—young investors can align their financial choices with their personal beliefs, contributing to positive environmental and social impact.

Moreover, clean energy is a more stable and secure alternative to fossil fuels, which are prone to price volatility and geopolitical risks. Renewable technologies offer decentralized, low-cost, and increasingly reliable energy solutions. As demand for electric vehicles, energy storage, and smart grids grows, so does the potential for clean energy to deliver strong financial performance.

Thanks to digital investment platforms, getting started is easier than ever—even with small amounts. For young people looking to build wealth while supporting the planet, clean energy offers a powerful and accessible opportunity. It's more than an investment—it's a step toward a cleaner, smarter, and more sustainable world they'll inherit.

Achieving Fossil-Free Electricity¹

Policies, Tools and Technologies for Supporting Wind and Solar



Key: Market Readiness

■	Commercial
■	Newly Commercial
■	Demo/Pilot

Footnotes:

1. Infographic shows the many choices available for supporting wind & solar to achieve reliable, dispatchable fossil-free energy. There is no one silver bullet. Not all are necessary, although most Market & Grid Design reforms are. List is not exhaustive.
2. No new large hydropower dams should be built. Existing projects should be operated in a way that minimizes impact on vulnerable communities.
3. Converting electricity to hydrogen and back again is inherently inefficient but may make sense in some contexts. Hydrogen should be manufactured, stored, and converted back to electricity, all at the same location, in order to limit inefficiencies and leakage risks.
4. Long Duration storage is mostly not needed until over 50% VRE penetration.

GOLDMAN SACHS WARNS OIL PRICES COULD EXCEED \$120 IF HORMUZ DISRUPTIONS CONTINUE

July 21, 2026 — Global oil prices could rise above \$120 per barrel later this year if disruption in the Strait of Hormuz continues, according to a warning from Goldman Sachs. The investment bank said Brent crude could cross the \$120 mark during the fourth quarter of 2026 under a severe and prolonged supply-disruption scenario. Oil prices have already climbed sharply from their early-July levels as concerns grow over restricted shipping movements through the key waterway.

The Strait of Hormuz is one of the world's most important oil-shipping routes, carrying a significant share of global crude and fuel exports. Any prolonged closure or reduction in tanker traffic could tighten global supplies and increase energy costs worldwide.

Goldman Sachs said Brent crude could average around \$100 per barrel in 2027 if the disruption continues.

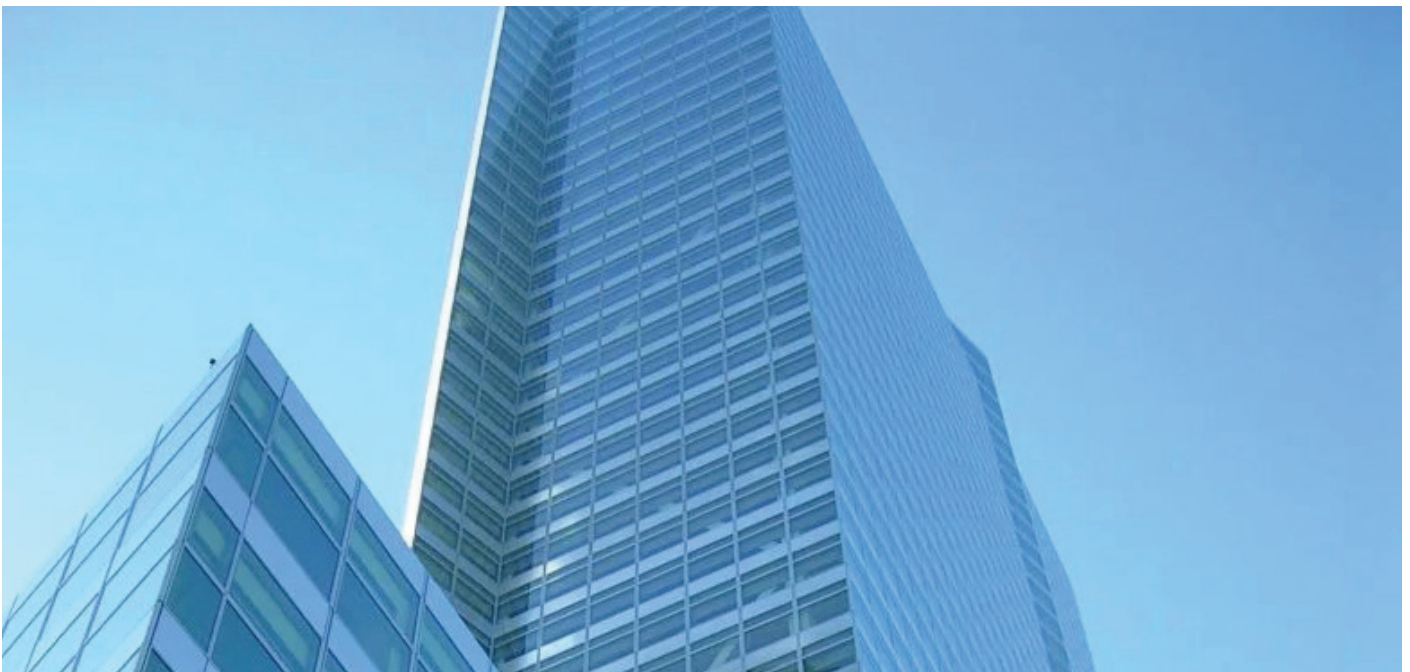
However, the bank stressed that this is not its main forecast. Under its base-case scenario, which assumes tensions ease and oil flows gradually recover, Goldman expects Brent crude to average approximately \$80 per barrel in the fourth quarter of 2026 and around \$75 per barrel in 2027.

Diesel markets may face additional pressure due to reduced Russian refinery exports, raising concerns about higher transportation, industrial and power-generation costs.

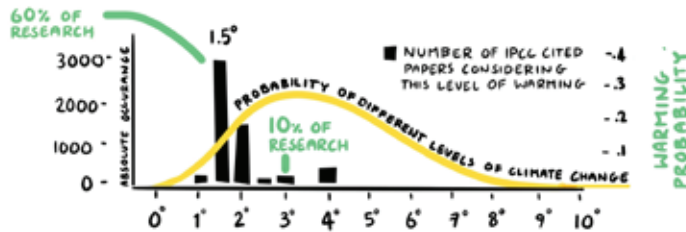
Shipping activity around the Strait of Hormuz has reportedly declined significantly, with fewer large tankers crossing the

route compared with previous weeks.

The outlook for oil prices will now depend heavily on whether shipping routes reopen, regional tensions ease and Gulf oil exports return to normal levels.



CLIMATE CHANGE



ARE WE BETTING ON THE BEST CASE

THERE IS A 60% PROBABILITY CLIMATE CHANGE WILL EXCEED 3°C OF WARMING AND A 10% PROBABILITY IT WILL EXCEED 6°C.

YET 60% OF RESEARCH CITED BY THE IPCC CONSIDERS WARMING OF 1.5°C OR LESS, WHILE ONLY 10% CONSIDERS 3°C - AND NONE OF THIS RESEARCH USES COMPLEX RISK ANALYSIS

WHAT ARE THE WORST CASES?

RISKS FROM CLIMATE CHANGE INCLUDE



THE MORE THE CLIMATE CHANGES THE WORSE THESE BECOME.

EVEN IF HOTTER TEMPERATURES AND RISING SEAS ONLY DIRECTLY KILLED MILLIONS, NOT BILLIONS, THESE INDIRECT AND GASCADING IMPACTS COULD KILL MANY MORE AND CONTRIBUTE TO REINFORCING FEEDBACK LOOPS LIKE THE ONE OPPOSITE.

* CORRUPTION
* EXPLOITATION
* GOVERNANCE FAILURES

ECOLOGICAL SYSTEMS

LOSS OF BIOSPHERE INTEGRITY

* LOSS OF ECOSYSTEM SERVICES
* DEGRADATION OF BIOGEOCHEMICAL CYCLES

POLITICAL SYSTEMS

* RISING CONFLICTS

AMPLIFICATION

* LOSS OF LIVELIHOOD
* FORCED MIGRATION
* STATE FAILURE

FOOD SYSTEMS

* RISING FOOD INSECURITY

SOME PEOPLE THINK WE COULD USE CLIMATE ENGINEERING TO REDUCE THESE IMPACTS. HOWEVER, THIS IS ALSO RISKY, INVOLVING:

* DIRECT HARMS TO HUMANS AND NATURE

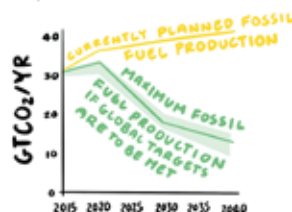
* FURTHER DESTABILIZING CRITICAL SYSTEMS

* INTERACTION WITH OTHER THREATS

* LATENT RISKS THAT COULD ACTIVATE LATER

HOW CAN WE LOWER THE RISK FROM CLIMATE CHANGE?

A SYSTEMIC APPROACH TO REDUCING CLIMATE CHANGE REQUIRES COORDINATED ACTION BY POLITICIANS (LAWS AND REGULATIONS), COMPANIES (PRODUCTS, SERVICES, AND INVESTMENTS), INTERNATIONAL BODIES (TO COORDINATE ACTION AND MAKE IT FAIR), AND INDIVIDUALS (AS AGENTS OF ACCOUNTABILITY AND CHANGE). GSR IDENTIFIES KEY LEVERAGE POINTS FOR INFLUENCING ALL THESE GROUPS, FROM LARGE ASSET OWNERS TO PROTEST MOVEMENTS



WE HAVE TO STOP EXTRACTING AND BURNING FOSSIL FUELS, YET A MODEST NUMBER OF COUNTRIES AND COMPANIES ACCOUNT FOR MOST EMISSIONS. WE MUST HALT EXPLORING FOR NEW FOSSIL FUEL RESOURCES AND BUILD NO NEW HIGH-EMISSIONS INFRASTRUCTURE THAT COULD LOCK IN EMISSIONS FOR DECADES.

HOW CAN WE ADAPT TO EXTREME CLIMATE CHANGE TO REDUCE VULNERABILITIES AND EXPOSURES? EMPOWERING NATURE CONSERVATORS AND REGENERATORS (ESPECIALLY INDIGENOUS COMMUNITIES), REDUCING INEQUALITY, PROMOTING RESILIENT AND DIVERSE FOOD SOURCES, RESOLVING CONFLICTS AND GEOPOLITICAL TENSIONS, AND MAKING GLOBAL MIGRATION EASIER AND FAIRER COULD ALL LIMIT CLIMATE CHANGE'S CATASTROPHIC POTENTIAL.

AMAZON CLAIMS TITLE OF “LARGEST CORPORATE PURCHASER OF RENEWABLE ENERGY GLOBALLY” FOR FIFTH YEAR



Amazon announced that it retained its position as the world's largest corporate purchaser of renewable energy in 2024, according to Bloomberg NEF data, marking its fifth consecutive year in this leadership role. The company revealed that it now supports over 600 wind and solar projects, an increase from around 500 the previous year. These projects are expected to generate enough energy to power 8.3 million U.S. homes.

This milestone follows Amazon's recent achievement of powering its global operations entirely with renewable energy, reaching the goal seven years ahead of its original 2030 target. Amazon initially set this clean energy objective in 2019, aiming to match all electricity consumption across its global operations—including data centers, corporate buildings, stores, and fulfillment centers—with renewable energy. At the time, the company had achieved 42% renewable energy.

In addition to aligning its operations with renewable energy production, Amazon highlighted its strategy to place projects on energy grids reliant on carbon-intensive sources to maximize impact. The company has invested in over 40 utility-scale solar and wind projects in regions with high fossil fuel dependency and emissions, such as Australia, China, Greece, India, Indonesia, Poland, South Africa, and U.S. states like Louisiana and Mississippi.

Amazon also emphasized its efforts to accelerate the adoption of energy storage and firming technologies, addressing the intermittent nature of wind and solar power. These efforts include investments in solar and battery storage projects and recent agreements to support nuclear energy development.

GLOBAL EVENTS



SOLAR PAKISTAN
Date: 17 - 19 April, 2026
Venue: Lahore Expo Centre



SNEC
Date: 3 - 5 June, 2026
Venue: Shanghai, China



Intersolar Europe Exhibition
Date: 23 - 25 June, 2026
Venue: Messe, München



SOLAR PAKISTAN
Date: 09-11 Oct, 2026
Venue: Karachi Expo Centre

Global Events



RE+
Date: 16 - 19 Nov 2026
Venue: Las Vegas, NV



WETEX & DSS
Date: 20 - 22 Oct, 2026
Venue: Dubai World Trade Centre (DWTC)



WORLD BATTERY & ENERGY STORAGE INDUSTRY EXPO
世界电池、储能产业博览会

WBE
Date: 16 - 18 Sep, 2026
Venue: Guangzhou, China

THE COMPLETE JOURNAL ON ALTERNATE ENERGY



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