

MONTHLY AUGUST 2025 ISSN 2309-6578

# ENERGY UPDATE



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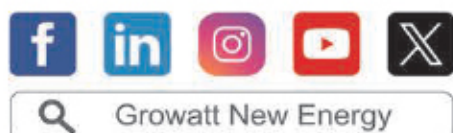
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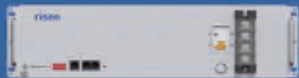


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# FROM THE Editor's desk...

## ENERGY UPDATE

Managing Editor  
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### Privatization must for public relief

As Pakistan is facing a huge and frightening burden of internal and external loans of Rs76.045 trillion, more than the country's four budgets, privatization of loss-making organizations has become mandatory to rid people of rising price hikes of goods and services, particularly fuel rates and power tariff.

Some argue privatization as a necessary tool to reform the country's inefficient organizations, while others fear it could increase inequality and benefit only a select elite. But the need is to provide relief to people from inflation anyway as this will improve economic efficiency, reduce fiscal burden, and enhance service delivery. Unfortunately, this reform process remains too slow due to political hindrances. The continued delays in privatizing the country's cash-eating organisations has put a heavy burden on middle and lower class people.

Time has come to immediately sell loss-making Power distribution companies, Pakistan International Airlines, Pakistan Steel Mills, Utility Stores Corporation, Railways and others to save people and businessmen from economic destruction.

Every new government promises privatization but fails to implement it due to political opposition, labor union resistance, and fear of public backlash. Successive governments lacked a consistent privatization roadmap. Policy reversals, insecurity, and bureaucratic hurdles have discouraged both domestic and foreign investors from purchasing the organizations. Furthermore, delays in valuation of organizations, due diligence, and regulatory clearances stall the sale process.

Additionally, several privatization attempts have been challenged in courts, causing years-long delays. For instance, attempts to privatize PIA and Steel Mills faced litigation and injunctions, freezing the process.

To overcome this impasse, Pakistan must empower the Privatization Commission and insulate it from political interference, explain benefits to citizens to build public support, and use Public-Private Partnerships (PPP), where full privatization is unfeasible.

Delays in privatization are costing Pakistan heavy economic loss. Without urgent action, these state-run entities will continue to eat up public resources. The country needs to treat privatization as an urgent necessity to reduce the impact of loans and inflation on people so that they could take a sigh of relief.



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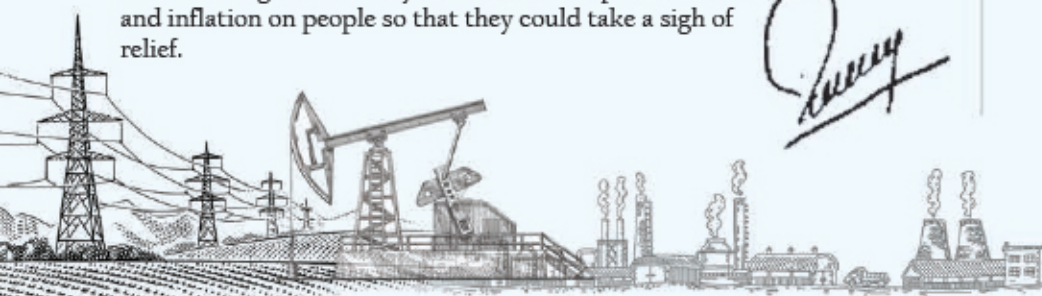
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# US-Pakistan Oil-Trade Deal: Risk Ahead

## Beijing perceives this new deal as a direct counter to its strategic foothold

**M. Naeem Qureshi**

Writer is Managing Editor  
Energy Update

**T**he recently signed oil and trade agreement between Pakistan and the United States has sparked widespread interest across diplomatic, business, and public spheres. Experts believe this partnership could reshape Pakistan's economic trajectory, bolster its energy security, and recalibrate strategic alignments in South Asia. However, the benefits are accompanied by substantial challenges and risks.

### Key Economic and Strategic Gains

Under the agreement, the United States will invest in Pakistan and provide technical assistance to develop the country's largely untapped oil reserves, especially in Balochistan. These reserves, if explored

effectively, could significantly reduce the country's dependence on imported oil.

A major breakthrough of this deal is the significant reduction in tariffs imposed on Pakistani exports to the US. Previously, tariffs as high as 29% caused an estimated annual loss of \$1.1-1.4 billion to Pakistan's export sector, a burden now considerably eased.

Beyond oil, the deal encompasses cooperation in areas such as information technology, digital infrastructure, minerals, and even emerging sectors like cryptocurrency. Pakistan-US bilateral trade stood at \$7.3 billion in 2024. With this new agreement, trade volumes are expected to rise substantially, benefiting both economies.

The deal is also seen as a geopolitical maneuver by Washington to increase its presence in South Asia and counterbalance China's growing influence. Analysts suggest that this deal may even pave the way for Pakistan to eventually export oil

to India, further enhancing its regional significance.

As domestic oil production grows, Pakistan's reliance on imported fuel will decrease. This would conserve foreign exchange reserves and strengthen the country's economic fundamentals.

### Challenges and Risks Ahead

Despite its potential, the deal brings a set of critical concerns that cannot be overlooked:

Balochistan and parts of Khyber Pakhtunkhwa face ongoing security challenges due to insurgency and terrorism, which could delay or sabotage oil exploration and infrastructure projects.

The growing geopolitical competition between the US and China places Pakistan in a delicate position. As China is Pakistan's largest strategic and economic partner, this deal could trigger diplomatic discomfort and strain ongoing China-Pakistan Economic Corridor (CPEC) projects.





Frequent changes in Pakistan's political landscape raise concerns about the continuity of international agreements. History suggests that political transitions often bring renegotiations or reversals, potentially discouraging long-term foreign investment. Pakistan's oil and energy sector is plagued with red tape and complex regulatory frameworks, often causing delays and inefficiencies in project execution.

Pakistan's oil reserves are largely unexplored and may require advanced, expensive technologies to develop. This could lead to extended timelines and cost overruns. Local communities and provincial governments may resist projects over concerns related to environmental degradation, resource allocation, and lack of benefits to the local populace.

### Geopolitical and Diplomatic Implications

Analysts warn that any future shift in US leadership—particularly a return of Donald Trump or a divided Congress—could lead to policy reversals. Trump's administration was known for unpredictable trade decisions and unilateral withdrawals, casting doubts over the long-term viability of this agreement.

The US may attempt to position this deal as a tool for fostering economic ties between Pakistan and India, especially as tensions between the US and India rise over trade tariffs and defense relations. However, such outcomes remain specula-

tive at this stage.

Pakistan will need to navigate a fine line between strengthening ties with the US and preserving its deep-rooted economic and political relationship with China. There is cautious optimism among the public and policymakers in Pakistan.

The government is celebrating this deal as a landmark economic achievement, highlighting its potential to create jobs and stabilize the energy crisis.

Opposition parties, however, have urged caution, citing America's history of inconsistent commitments and warning against alienating China. Experts stress the need for transparent implementation and sustained diplomatic balance.

Dr. Moeed Yusuf, former National Security Adviser, called the agreement a 'revolutionary step' in Pakistan's energy policy. However, he emphasized the importance of preparing for potential political volatility in Washington and recommended developing alternative partnerships to safeguard national interests.

They regard the deal as a 'golden opportunity' for Pakistan but stress the need for transparency, sustainability, and continuity. Pakistan must prioritize its interests and ensure that China's role is not undermined, as Chinese investment remains critical to its economic survival.

**China's Reaction:** Beijing has

expressed visible concern over growing US influence in South Asia. With CPEC under its belt, China perceives this new US-Pakistan deal as a direct counter to its strategic foothold. Chinese officials have advised Pakistan to maintain strategic balance and not risk jeopardizing long-term economic ties.

Beijing has described the US initiative as an 'unwelcome intrusion' and warned that it could disrupt regional stability. Chinese spokespersons have advised Pakistan to act with strategic maturity and avoid actions that may upset long-term bilateral cooperation.

Security experts highlight internal stability, anti-corruption safeguards, and community participation as vital components for the success of large-scale projects.

**Conclusion:** The US-Pakistan oil and trade deal holds enormous potential to transform Pakistan's energy landscape and uplift its economy. However, it also presents a complex web of geopolitical, security, and diplomatic challenges. Success will depend on Pakistan's ability to maintain policy consistency, ensure transparency, and strike a delicate balance in its international partnerships. If managed well, this deal could indeed be a game-changer—but only with strategic foresight and national unity. ■



# Imported Fuel Drains Big Share of Income Power Sector Haunts Whole Pakistan As Billions Burned

Over 20 hours of loadshedding is being carried out in rural areas with fake claims of reducing outages; there is no thing of shame as people's power share is given to industrialists of choice; circular debt monster crosses Rs 2.4 trillion; capacity payment turns forced tax being paid in darkness

## Special Report by Mansoor

**U**nder IMF agreements, government requires to gradually eliminate power subsidies; Power crisis is not just a technical or financial problem; it is a governance and policy flaws

Despite continuous discoveries of oil, gas, and huge coal reserves, Pakistan is facing crippling power shortage while its people are slapped with heavy electricity bills accompanied by several taxes. Over 20 hours of loadshedding is being carried out in rural areas with fake claims of reducing outages; there is no thing of shame as people's power share is given to industrialists of choice. The circular debt monster has crossed Rs 2.4 trillion, while capacity payment has become a forced tax being paid in darkness.

The power sector in Pakistan is marred by chronic mismanagement, mounting circular debt, inflated electricity prices, and a heavy reliance on imported fuels. Despite significant investments over the past two decades, the country remains trapped in a vicious cycle of inefficiency and unaffordability. The consequences are dire — from stunted industrial growth to unbearable inflationary pressures on the common citizen. While global economic dynamics have played a role, the deeper issues lie within domestic policy flaws, elite interests, and external financial dependencies, especially on institutions like the International Monetary Fund (IMF).

Over the last decade, Pakistan has built more generation capacity than it currently needs. However, the expansion was not matched with reforms in transmission and distribution. As a result, large por-

tions of this power cannot reach consumers.

Latest data shows the total installed electricity generation capacity stood at 46,605 MW, with a progressive shift toward cleaner energy sources. Hydel, nuclear, and renewable sources collectively accounted for 44.3 percent of the installed capacity, up from previous years, while the share of thermal power declined to 55.7 percent. In terms of electricity generation, Pakistan produced 90,145 GWh during July-March FY 2025, of which 53.7 percent was contributed by hydel, nuclear, and renewable sources, reflecting a welcome transition toward indigenous and environment-friendly energy sources. Sectoral consumption patterns highlight the continued dominance of the household sector, accounting for nearly half of national electricity usage.

One of the most pressing issues is the ballooning circular debt, which exceeds Rs 2.4 trillion. This debt arises from inefficiencies at every stage — from generation to bill collection. Power producers are not paid by distribution companies (DISCOs) on time, which in turn delays payments to fuel suppliers and results in blackouts or reduced generation.

Pakistan relies heavily on imported fuels — LNG, coal, and furnace oil — which makes the power generation costly and volatile in terms of pricing. In FY2024, imported fuel accounted for 45–50% of the total generation, making the sector vulnerable to global oil price shocks and exchange rate depreciation.

Frequent changes in energy policy have created confusion for investors and hindered long-term planning. While some policies aim to promote renewables, others continue to incentivize fossil-fu-



el-based IPPs (Independent Power Producers), locking the country into expensive long-term capacity payments.

Under IMF agreements, the government has been required to gradually eliminate power subsidies and make cost-reflective pricing a core principle. While economically justified, this has led to unprecedented increases in electricity tariffs — with base tariffs now exceeding Rs 50 per unit in many slabs, excluding taxes and surcharges. The removal of cross-subsidies further burdens the poor.

Pakistan's contracts with IPPs, particularly under the 1994 and 2002 policies, guarantee capacity payments regardless of electricity usage. These payments are dollar-indexed and add an estimated Rs 1.3 trillion annually to the cost base. Even if zero electricity is drawn from these IPPs, the government must pay them.

DISCOs in regions like Hyderabad, Sukkur, and Quetta face losses due to technical inefficiencies and theft. Instead of addressing the root causes, these losses are often passed on to paying consumers across the country.

As the Pakistani rupee continues to depreciate, the cost of imported LNG and coal rises. Since most power contracts are dollar-denominated, even minor changes in exchange rates significantly increase consumer tariffs.

Policies have historically favored generation over distribution and efficiency. Investors were encouraged to build power plants without any requirement to invest in grid improvement or integration. Most IPP contracts were awarded without competitive bidding, leading to non-transparent pricing and highly favorable terms for producers. These contracts still form the backbone of the country's energy liabilities. Although Pakistan has immense solar and wind potential, the National Electric Power Regulatory Authority (NEPRA) and the Alternative Energy Development Board (AEDB) were slow to finalize net-metering regulations and utility-scale renewable incentives. This hindered solar and wind penetration at a time when global costs were falling.

Energy policy is split among multiple departments — the Power Division, NEPRA, AEDB, and provincial energy departments — leading to coordination failures. Bureaucratic hurdles also delay new projects and discourage private sector participation.

Many government officials lack incentives to innovate or disrupt the status quo. Reform efforts, such as privatization

of DISCOs or restructuring of the Central Power Purchasing Agency (CPPA), have stalled repeatedly. While the IMF promotes macroeconomic stability, its prescriptions often ignore ground realities in fragile states. In Pakistan's case, harsh upward tariff revisions, without concurrent reforms in governance or accountability, have disproportionately affected the lower-income population.

DISCOs should be corporatized and privatized through public-private partnerships. Provinces should be given more autonomy in managing their energy needs, with a clear mandate to reduce losses and improve recovery. Digitalization of the power sector through smart meters, remote monitoring, and AI-based demand forecasting will increase efficiency, reduce theft, and empower consumers with real-time consumption data.

A two-part tariff system — separating energy charges from capacity charges — can help consumers understand their bills better and reduce peak-load pressure. Subsidies should be better targeted using digital databases such as BISP and Ehsaas. Encourage rooftop solar by simplifying net metering approvals, eliminating anti-solar taxes, and offering low-interest financing schemes. A nationwide campaign should promote solar adoption in schools, mosques, hospitals, and offices. Independent audits of all DISCOs, publication of real-time performance data, and citizen oversight mechanisms must be instituted. Boards of public energy companies should include experts rather than bureaucrats or political appointees.

A National Energy Council should be established to harmonize policies between the federal and provincial governments. This council must align generation targets with transmission capabilities and evolving demand patterns. Resolving Pakistan's power crisis requires a multi-pronged and sustainable strategy. The first step is renegotiating expensive contracts with Independent Power Producers (IPPs), especially those guaranteeing capacity payments in dollars. These payments are a major burden on public finances. Second, the country must transition away from imported fuels by investing heavily in indigenous resources like solar, wind, hydro, and Thar coal.

Pakistan's power crisis is not just a technical or financial problem; it is a governance and policy challenge rooted in decades of misaligned priorities,

vested interests, and external dependencies. The rising power prices are symptomatic of a larger rot — one that requires bold leadership, public accountability, and a shift in national energy philosophy. With coherent reforms, a transition to renewable energy, and people-centered policies, Pakistan can not only reduce power bills but also ensure a clean, secure, and affordable energy future for all. The time to act is now — before the lights go out for good.

Resolving Pakistan's power crisis requires a multi-pronged and sustainable strategy. The first step is renegotiating expensive contracts with Independent Power Producers (IPPs), especially those guaranteeing capacity payments in dollars. These payments are a major burden on public finances. Second, the country must transition away from imported fuels by investing heavily in indigenous resources like solar, wind, hydro, and Thar coal.

Privatizing loss-making power distribution companies (DISCOs) is crucial. These companies should be made accountable for reducing theft and improving bill recovery. Simultaneously, smart metering and grid automation must be prioritized to cut technical losses and increase transparency. Tariff reform is also necessary. Instead of blanket price hikes, subsidies should be targeted to protect low-income consumers while eliminating cross-subsidization that punishes honest payers.

Additionally, the government must streamline energy policy by establishing a single, empowered regulatory body to coordinate federal and provincial efforts. Public awareness and incentives for rooftop solar and net metering can also play a significant role. Lastly, political will is essential. Without strong leadership and transparency, technical solutions alone will not fix a system plagued by inefficiency and elite capture. A people-focused, reform-oriented approach is the only way forward. ■







# Evaluating US Crude: Is Oil Import from the US a Viable Path for Pakistan?

Usama Qureshi Vice Chairman Cnergyico explained on Pakistan's First US Crude Shipment and Beyond

**M. Naeem Qureshi**



Cnergyico

Pakistan is set to receive its first-ever oil shipment from the United States in October, marking a potential shift in the country's crude sourcing strategy. In an exclusive interview with Energy Update, Cnergyico Pk Ltd Vice-Chairman Muhammad Usama Qureshi said the initial West Texas Intermediate (WTI) cargo is purely a commercial trial — one that, if successful, could pave the way for 1 million barrels of US crude imports every month starting later this year. The following are key takeaways from our discussion for readers seeking clarity on this development.

**1) Is this a test WTI cargo? And if successful, will Cnergyico consider importing around 1 million barrels of WTI per month from the US starting end of this year?**

**CPL:** Yes, this is a test cargo. If it continues to remain commercially viable from a Gross Refining Margin (GRM) standpoint, we are open to scaling up imports to around 1 million barrels per month.

**2) Was the decision to import WTI influenced by the recent 29% US tariff on**



**Pakistani exports?**

**CPL:** Not directly. While the tariff situation is concerning, the decision to explore US crude was part of a broader initiative by the Government of Pakistan to strengthen bilateral trade with the United States. The government had advised all refineries to evaluate the economic feasibility of US crude. We had been assessing this for several months and once it became financially viable for us, we proceeded with the deal.

**3) Is WTI actually cheaper for Pakistan compared to Middle Eastern crude?**

**CPL:** At present, the GRM of WTI is broadly at par with Middle Eastern crude. However, the economics can vary based on global pricing, freight and product spreads. For now, it makes commercial sense.





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# Go Hybrid: Get a more satisfying ride



**Faizan S Syed**

The writer is Founder and CEO, East River

Pakistan has yet to develop a sufficiently robust EV ecosystem; high costs keep EVs off Pakistani roads

I have always had a passion for all types of cars. Yet, when the electric vehicle (EV) fad started, I was a non-believer. The world was hailing EVs as the future of transportation, promising cleaner air and freedom from costly fuel imports. However, in Pakistan, the electric dream faces a harsh reality. Despite ambitious government targets and the global hype, a drive through Pakistani streets shows that EVs remain a rarity. Even with the recent influx of Chinese vehicles, the price points are prohibitive for most buyers. This suggests that hybrids – cars that use both fuel and battery power – may actually be a more practical stepping stone. Let's take a detailed look at why.

Here, it is essential to understand the three types of automotive powertrains that drive most cars: conventional internal combustion engine vehicles (ICEVs), hybrid electric vehicles (HEVs), and fully electric vehicles (EVs).

**ICEVs:** These vehicles are powered solely by a gasoline or diesel engine. They rely on fossil fuels for energy, emitting greenhouse gases and pollutants during operation. ICEVs are the most common vehicle type in Pakistan, due to their affordability and established fuel infrastructure.

**HEVs:** They combine a conventional internal combustion engine with an electric motor. The battery is charged through regenerative braking and the engine itself, so no external charging infrastructure is needed. HEVs are more fuel-efficient than ICEVs and emit fewer pollutants, making them a practical middle ground in regions where charging stations are scarce.

**Vs:** They are exclusively powered by an electric motor, drawing energy from a large rechargeable battery pack. EVs produce zero tailpipe emissions and are considered environmentally friendly, but require charging stations and reliable electricity. Their batteries are usually made of lithium-ion, the mining and transportation of which are largely dependent on fossil fuels.

**EV Hype vs Pakistan's Reality:** Pakistan's government rolled out its first National Electric Vehicle Policy in 2019 with lofty goals: 30% of all vehicles running on electricity by 2030 and transforming 3,000 CNG stations into charging points. Since then, there have been multiple revisions of the policy as the targets proved overly optimistic, and we are nowhere close to achieving them, and Pakistan has only a tiny fraction of vehicles on the road that are electric. The vast majority of EV models launched in Pakistan cater to a wealthy niche – costing upwards of Rs 20 million, well out of reach of the average consumer. Recently, there has been an influx of small EVs like the Honri and Rinco Aria under the four million price point,



which would be an economical choice for people looking to buy either the Suzuki Wagon R or Alto at a similar, if not lower, price point.

**Sparse Charging Infrastructure and Range Anxiety:** The reason the Honri or Rinco will have a hard time competing with the combustion engine Alto is the lack of charging infrastructure. Few public charging stations are available, and not all apartment buildings or homes would be able to install charging points for all residents. At a national level, projections to install 3,000 stations have fallen flat – as of 2024, the total number of public charging stations is less than the number of members of the Pakistan cricket team. This scarcity is not just a minor inconvenience. Imagine planning a road trip from Karachi to Islamabad, only to realise that charging points are virtually nonexistent along the route. Even within cities, long queues at the few available stations are common, leading to frustration among the few EV owners. This lack of infrastructure feeds ‘range anxiety’ – the fear of running out of power mid-journey with nowhere to plug in.

**The Affordability Gap:** EVs are expensive, and with GDP per capita hovering around \$1,500, even a moderately priced EV (\$25,000 or eight million rupees) is out of reach for most people, and the electric cars currently on sale skew heavily towards luxury models. The other challenge is that most people don’t understand the math and the cost savings, given how new this market is. Say a buyer for an Alto is comparing whether the cost of ownership of an Alto over five years would be the same or more than an Honri or a Rinco Aria. The biggest saving is the fuel bills and maintenance, which is easy to calculate and compare to the charging cost. But what is unpredictable is the resale value of the EV after five years – and this could completely destroy any financial gains for the owner, making it useless to purchase such a vehicle. If the Audi e-tron and Porsche Taycan resale values are any benchmark, then there is proof that EVs do not hold value at the high end because of concerns about battery life and replacement costs. Does the same hold true for the low end of the market?

**An Unreliable Grid and Load Shedding:** Even if one can afford an EV and find a charger, there is another problem. Will there be electricity available to charge it, given that chronic load shedding is a part of life? Charging an EV at night can be problematic if power cuts hit, leaving the

battery far from full by morning. In cities like Karachi and Lahore, load shedding can last up to eight hours, and voltage fluctuations are common. This means that even if a charging station is available, it might not work consistently. Wealthier homeowners might install backup generators or solar panels, but that is not a practical solution for most.

**Fuel Subsidies and Convenience:** Fuel at the pump has often been kept relatively cheap due to government intervention. When petrol is, say, Rs 250 per litre and electricity is costly, the incentive to switch to an electric car for fuel savings is weaker. This pricing disparity makes conventional fuel more attractive for mainstream consumers. Moreover, Pakistan’s vast network of petrol stations (found even in remote areas) ensures that drivers need never worry about where to refuel, even if that fuel has been smuggled in through our borders. In contrast, charging points for EVs are clustered in a few urban areas, making long-distance travel daunting.

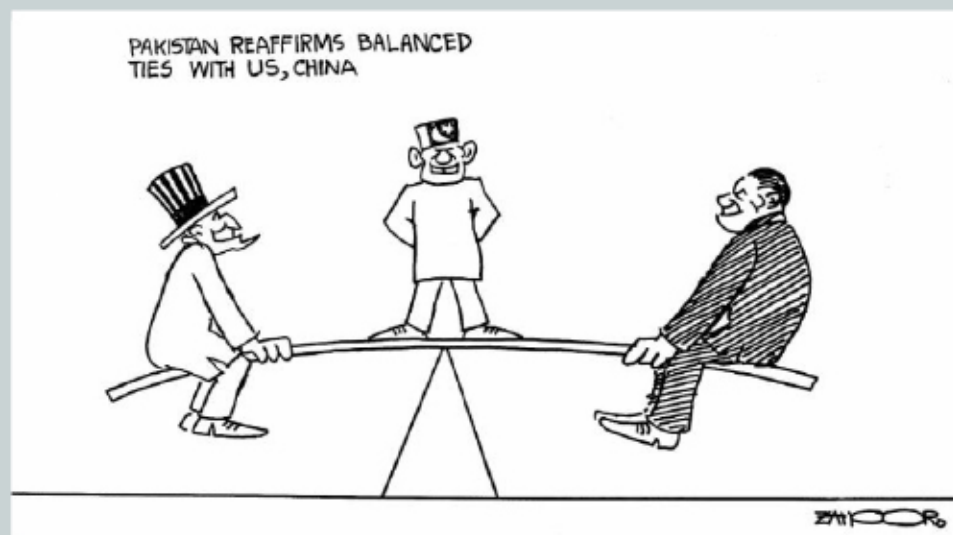
**A Missing Local EV Ecosystem:** Pakistan’s auto industry is geared toward assembling traditional cars from imported kits. For EVs, the critical components – batteries, electric motors, and power electronics – are not made domestically at any scale. This reliance on imports increases costs and dependency on global supply chains. For example, lithium-ion batteries are primarily imported from China. Any disruption in trade or increase in import duties can significantly affect pricing, making EVs even less affordable for consumers. Localisation is a big part of the domestic auto industry’s strategy to stay competitive; however, it will be hard at the onset to localise for the kind of electronics EVs require.

**A More Realistic Bridge to Sustainability:** Hybrid vehicles combine a gasoline engine with an electric motor, dramatically improving fuel efficiency compared to standard cars. Crucially, they do not require a charging infrastructure. Hybrids can reduce fuel consumption immediately without waiting for charging stations to become widespread. Unlike EVs, hybrids do not require drastic changes in driving habits or infrastructure. Today, a number of new entrants in both the car and SUV segments, like the Corolla Cross, the Hyundai Santa Fe and Kia Sorento offer new hybrid alternatives that can offer the peace of mind of a gasoline engine with savings close to those of an EV minus the hit of depreciation and concerns of battery replacement costs. If you look at the used imported car market, the options increase tenfold.

### Policy Recommendations:

Prioritise hybrid incentives in the short term and offer tax breaks or incentives on imports. Support local assembly and manufacturing of hybrid and EV components. Build EV infrastructure step-by-step, focusing on urban centres and motorways. Strengthen the power grid. Focus on two- and three-wheeler electrification, which offers quick wins in fuel savings.

Public awareness campaigns to build confidence in hybrid and EV technologies. Mobility and transportation remain a major challenge across Pakistan, even if the recent developments of Lahore and Islamabad are the exception. The population needs cost-effective and fuel-efficient solutions to stretch their monthly income as much as possible. Today and for the foreseeable future, the hybrid electric vehicle is the one that offers the best middle ground and the one I would bet on. ■





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Chief Minister Sindh Syed Murad Ali Shah addressing on the occasion.

Conference on Sindh's Energy Diversity Hosted in Karachi

## 30 million tonnes of Thar coal supplied to IPPs in six years: CM

Nasir Shah says free solar systems are being distributed across province; Thar coal provides the cheapest electricity in Pakistan, tells SECMC CEO

**Mustafa Tahr**

The Sindh Energy Diversity Conference, jointly organised by the Sindh Energy Department and the Energy Update magazine, emerged as a compelling platform that strongly criticised the federal government's policies for obstructing the full utilisation of Sindh's immense energy resources—particularly in renewables—and called for urgent structural reforms to transform Pakistan's energy landscape.

Sindh Chief Minister Syed Murad Ali Shah, addressing the event as chief guest, delivered a powerful critique of the prevailing federal framework, which he said continuously hinders the exploitation of Sindh's vast fossil fuel and renewable energy reserves for the benefit of the entire nation.



Minister Energy Sindh Syed Nasir Hussain Shah addressing at Sindh Energy Diversity Conference.



He warned that while Sindh remains energy-rich—with abundant natural gas, oil, coal, solar, and wind potential—federal inertia, policy bottlenecks, and institutional constraints have turned this national advantage into a missed opportunity.

Held in Karachi, the day-long conference attracted energy experts, policymakers, private sector leaders, foreign investors, and government officials, all aligned in their call for federal cooperation to unlock Sindh's full energy potential. The event underscored the province's commitment to building a decentralised, self-reliant, and inclusive energy framework centred on sustainability and affordability.

The Sindh CM reaffirmed that over the past six years, Sindh has already supplied 30 million tonnes of Thar coal to Independent Power Producers (IPPs), generating 31 gigawatts of electricity—powering three million homes. He termed Thar coal a transformative national resource and announced a new 105-kilometre railway project to connect it with global markets—a development he described as “game-changing”.

Despite these milestones, Shah expressed frustration at recurring hurdles—citing past investor withdrawals due to regime changes and federal opposition to wind and solar initiatives. He pointedly criticised the rejection of Sindh's offer to supply 100 megawatts from the Nooriabad power plant to the Hyderabad Electric Supply Company (Hesco), which claimed it already had enough electricity. “We created the Sindh Transmission and Dispatch Company (STDC) to overcome these hurdles,” he added, reaffirming the government's resolve to act independently where necessary.

The CM also announced the establishment of the Sindh Electric Power Regulatory Authority (SEPR), a significant move towards regulatory autonomy, enabling direct business-to-business (B2B) electricity supply, especially from clean energy



CEO SECMC Amir Iqbal, Chairman Organizing Committee M. Naeem Qureshi, COO Sindh Energy Holding Co Tufail Khoso, CEO TCEB Tariq Ali Shah, Director Admin and Finance Ruqiya Naeem and Secretary General OCAC Nazir Abbas Zaidi addressing on this occasion.

projects to industries.

He highlighted the achievements in solar energy, including a Rs2.5 billion budgetary allocation for off-grid solutions and initiatives to pay power bills for 200 units for deserving households in Thar under PPP Chairman Bilawal Bhutto Zardari's guidance.

Sindh Energy Minister Syed Nasir Hussain Shah echoed these sentiments, outlining a series of solar projects underway across Karachi, Manjhand, Sukkur, and Larkana. He confirmed that free solar systems are being distributed across the province and reiterated that industries are now transitioning to green energy. He called for complete federal backing to ensure that surplus clean energy in Sindh—particularly from the Gharo-Jhimpir wind corridor—is effectively utilised rather than wasted.

Participants at the conference unanimously demanded the removal of transmis-

sion bottlenecks that have long restricted the evacuation of renewable power from Sindh. They stressed that it is irrational for renewable power plants to sit idle while the country suffers from high industrial tariffs, economic stagnation, and recurring blackouts.

A key recommendation from the forum was the urgent need for the federal government to provide an investor-friendly environment for foreign firms—especially Chinese companies—exploring opportunities in renewable energy. Ensuring security and long-term policy consistency were identified as critical enablers for sustained foreign direct investment in Pakistan's clean energy sector.

Experts also called for a supportive tax regime and targeted incentives to promote the local manufacturing of renewable energy components—solar panels, inverters, wind turbines, and batteries—to reduce



Syed Murad Ali Shah Presenting Sponsorship Shield to COO PPL Sikandar Ali Memon.

CM Sindh Presenting Sponsorship shield to CEO SECMC Amir Iqbal





**CM Sindh Syed Murad Ali Shah presenting Sponsorship Memento to M. Zakir Ali CEO Inverex Solar Energy.**

**CM Sindh Syed Murad Ali Shah presenting Sponsorship Memento to Khaliq Jaffrani Chairman SOGO**

import dependency and create skilled jobs. This localised value chain would not only support Pakistan's energy independence but also bolster economic resilience and innovation.

Amir Iqbal, CEO of Sindh Engro Coal Mining Company (SECMC), underlined the transformative impact of Thar coal, currently providing the cheapest electricity in Pakistan after hydropower and nuclear. He praised the Thar initiative as the most successful public-private partnership in the energy sector and a model for national replication.

He noted that 30 million tonnes of coal have been extracted from Thar and used by IPPs, and reaffirmed that Thar's reserves are enough to meet Pakistan's electricity needs for decades.

Importantly, the conference urged that the Thar Foundation's work in uplifting local communities—through education, health care, and skill development—should be adopted as a national benchmark for Corporate Social Responsibility (CSR) across Pakistan's energy sector. The model of inclusive development, where community uplift goes hand-in-hand with industrial progress, was endorsed as the ideal way forward.

Muhammad Zakir Ali, CEO of Inverex Solar Energy, made an emphatic plea for maintaining investor confidence, especially among Chinese partners. He stressed the need for robust policy



**Murad Ali Shah presenting sponsorship memento to CEO STDC Saleem Shaikh**

continuity and institutional support to encourage clean energy uptake at both residential and industrial levels.

Earlier, Naeem Qureshi, Chairman of the organising committee, applauded the Sindh government's pioneering work in developing Thar coal and harnessing the province's clean energy resources under strong public-private partnerships. He credited the effective implementation of the 18th Constitutional Amendment for enabling Sindh to exercise vital autonomy in its energy policies for the benefit of end-consumers.

Qureshi emphasised that Sindh's wind corridor alone could produce thousands of megawatts of clean electricity, and if fully harnessed, could lead Pakistan to energy self-reliance. He called upon regulators, ac-

ademics, technocrats, and investors to join forces in formulating a long-term, sustainable roadmap for Sindh's energy future.

Engr. Irfan Ahmed, Energy Expert, Khaliq Jaffrani, Chairman, SOGO Group, Ms Ayesha Ahmed, Tariq Ali Shah MD Thar Coal & Energy Board, Khawaja Nizam Ud Din Mir, Manager Business Development, FFC Energy, Tufail Khoso COO Sindh Energy Holding Company, Dr. Nazir Abbas Zaidi Secretary OCAC, Muhammad Imtiaz, Director, Applied Systems Analysis Directorate, Yasir Hussain, Climate Action Plan, Abdur Rehman, Chief Trade Officer, Inverex EV, Rizwan Jafarani, Director - SOGO GROUP, Yasir Bhambhani, CEO, ADM Group China, Noman Alvi EVEC, Osama Shaikh CEO, E-Turbo and others also spoke on this occasion. ■



**Group Photo of Panelist of EV Ecosystem Development in Pakistan**

**Group of Panelist with Guest of Honor Secretary Energy Sindh Mushtaq Soomro**





**Murad Ali Shah presenting sponsorship memento to Representative of E-Turbo**



**Ms. Ruqiyah Naeem presenting memento to CM Sindh Syed Murad Ali Shah**



**CM Sindh presenting memento to Syed Nasir Hussain Shah**

## Energy Update marks 19 Years of powering Pakistan's energy dialogue



**S**indh Chief Minister Syed Murad Ali Shah cut a cake to celebrate the 19th anniversary of Energy Update magazine. Sindh Energy Minister Syed Nasir Hussain Shah and Local Government Minister Saeed Ghani were also present on the occasion.

Launched in 2006 as a dedicated monthly publication, Energy Update remains Pakistan's only print magazine focusing exclusively on energy, renewable power, and sustainability. At its inception, the country faced severe power shortages, and green energy was yet to gain attention in policy and industry circles.

Over the years, as the national energy sector evolved from heavy reliance on fossil fuels towards cleaner energy solutions, Energy Update also transformed its editorial focus to highlight renewable technologies, sustainability, and climate-friendly practices.

Today, Energy Update has expanded beyond print to organise conferences, policy dialogues, and international forums while maintaining an active digital presence through its website and social media platforms. These initiatives serve as vibrant platforms for energy experts, policymakers, and stakeholders to debate challenges and share viable solutions for the sector.

With a continued commitment to the nation's energy transition and sustainability goals, Energy Update pledges to remain a trusted forum for constructive dialogue and innovation for the betterment of Pakistan.

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## Powering Education with Intelligence and Sustainability



### EU Report

In the heart of Peshawar, the City of Flowers, a quiet revolution is reshaping how education is powered. At Hadaf Group of Colleges, learning has always been about unlocking potential, but now, that mission extends far beyond textbooks and classrooms. Thanks to Huawei's groundbreaking Battery Energy Storage Systems — first with the LUNA2000 200 kWh 2H1 and now with the newly launched LUNA2000 215 kWh Liquid Cooling BESS — the college is writing a new chapter in resilience and sustainability.

It began with a challenge all too familiar in Pakistan: unreliable power. For an institution dedicated to uninterrupted learning, even a brief outage could disrupt lectures, lab experiments, and digital coursework. That's when ZeroCarbon, a trusted clean energy partner, stepped in with a solution that was as forward-thinking as the college's vision itself.

The LUNA2000 200 kWh 2H1 proved to be more than just an energy storage unit — it became a smart guardian. With lithium iron phosphate technology at its core, it offered unmatched safety, efficiency, and longevity. Its modular architecture meant it could grow with the college's needs, while Huawei's Smart String Energy Storage System ensured every watt was monitored, optimized, and protected. It stored excess energy during off-peak hours and delivered it when demand

peaked, keeping lights on, labs operational, and learning uninterrupted. Building on that success, the ecosystem has now embraced Huawei's latest innovation, the LUNA2000 215 kWh BESS, a next-generation system with advanced liquid cooling technology. This hybrid cooling approach intelligently combines liquid and air cooling, optimizing energy use, reducing auxiliary consumption, and extending battery life. With a high round-trip efficiency of around 91.3%, full C2C dual-link safety architecture, and TÜV Rheinland certification, it represents a leap forward in safety, performance, and project feasibility.

Each 215 kWh cabinet houses LiFe-PO<sub>4</sub> cells and supports scalable configurations — up to 20 units in parallel — enabling flexible expansion from hundreds of kilowatt-hours to multi-megawatt-hour systems. Compact dimensions, a robust IP55 enclosure, and the ability to operate in extreme temperatures make it ideal for demanding environments. The sleek, modern design is not only technologically advanced but also aesthetically pleasing, saving valuable space and fitting seamlessly into smaller installation areas without compromising capacity. And with a design that requires minimal maintenance for over a decade, it delivers long-term value without inflating operational costs.

For the students, these advancements remain invisible — but now the power stays steady, the equipment works flawlessly, and their studies continue without pause. Behind the scenes, the upgraded system works tirelessly, further reducing diesel generator usage, cutting carbon emissions, and making the campus even greener and more future-ready.

ZeroCarbon's role has been pivotal at every stage. From the first technical assessment to the final commissioning, their team ensured that each upgrade integrated seamlessly with the campus infrastructure. The result is a solution that feels like it has always been part of the college — quiet, reliable, and indispensable.



This installation, one of the first of its kind in the region, now stands as a beacon of what is possible when vision meets technology. For Huawei, it's another example of innovation empowering communities. For Hadaf Group of Colleges, it's a deepened commitment to progress. And for the students walking its halls, it's a renewed promise: their pursuit of knowledge will never be dimmed by the flicker of a light. ■



# Experts seek policy for solar manufacturing base

Study proposes roadmap for 100MW solar PV plant; stakeholders call for data-driven reforms, tech upgrades

## EU Report

Experts at a high-level consultative session stressed that Pakistan must urgently develop a comprehensive policy framework to strengthen its domestic solar manufacturing ecosystem amid rising energy demands and growing reliance on imports.

The session was hosted by the US-Pakistan Centre for Advanced Studies in Energy (USPCAS-E) at NUST. The event marked the launch of a study titled 'Crafting a Sustainable Business Model to Drive Indigenous Solar PV Panels Manufacturing in Pakistan,' presented by Dr Nadia Shahzad, Associate Professor at NUST.

The study provides a roadmap for establishing a 100MW solar PV panel manufacturing plant in Pakistan, with scalability up to 1.0GW. Developed through site visits and stakeholder consultations, the model is seen as a practical starting point

for local production.

Welcoming the participants, Dr Adeel Waqas, Dean and Principal at USPCAS-E, underscored the need for a self-reliant solar manufacturing sector to meet the country's energy needs and reduce import dependency. The session brought together policymakers, academics, and industry leaders, all echoing the urgency to build a strong domestic solar base.

Maud Osman Mohammad of LONGi Solar praised the study's clarity and urged aligning policy with market realities. Similarly, Muhammad Basit Ghauri from Renewables First noted that battery imports exceeding Rs90 billion in just three months reflect the market's potential. He emphasised the need for data-driven planning and integration of storage solutions behind the grid.

Dr Omais Abdur Rehman supported a role for the Engineering Development Board, while Dr Noor ul Huda Khan of BUITEMS advocated for alignment with next-gen solar technologies such as Per-

ovskite modules.

On the technological front, Sohaib Asif Sipra, CEO of SkyElectric, warned that nearly half of Pakistan's solar installations remain informal, risking quality and safety standards. He called for the formation of a dedicated think tank to drive standardisation and innovation in battery and inverter manufacturing.

Representing local battery production, Mansoor Jamil Khan of Atlas Battery highlighted their joint venture with Japan's GS Yuasa and advocated for lithium-ion safety protocols alongside continued dominance of lead-acid batteries.

Policy-level recommendations were reinforced by M Umer Khan of the Private Power and Infrastructure Board (PPIB), who proposed targeted subsidies and strategic import duties to promote indigenous manufacturing. Hasnat Khan of the Pakistan Solar Association detailed their training and certification drive in partnership with institutions like TEVTA, NUTECH, and PPIB to ensure quality assurance in solar installations. ■



# Inverex, Bank Islami to Launch 0% Markup EV Installment Plans



## EU Report

**I**nverex and Bank Islami Partner to Launch 0% Markup EV Installment Plans. In a major step toward clean mobility, Inverex has signed a strategic MoU with Bank Islami to provide electric vehicles (EVs) on easy 0% markup installment plans. This landmark collaboration aims to make sustainable transport more affordable and accessible to the masses.

"Our partnership with Bank Islami is a step toward transforming Pakistan's transportation landscape. We're committed to making EVs accessible, affordable, and eco-friendly for every household," said Mr. Zakir Ali, CEO Inverex EV.

# Neelum-Jhelum project to stay offline



## EU Report

Pakistan's flagship 969-MW Neelum-Jhelum Hydropower Project in Muzaffarabad will remain offline for at least two more years due to a severe rock burst fault that happened last year, the National Electric Power Regulatory Authority (NEPRA) was told on Wednesday, extending an outage that has already drained hundreds of millions from the national exchequer and deprived consumers of low-cost electricity. The project's contract, awarded in July 2007, was completed in 10 years at a cost of Rs500 billion (\$4.7 billion at the then exchange rate of Rs105.3 to the dollar) and commissioned in August 2018. It has been shut since May 2024 after a structural fault (rock burst) crippled its underground tunnel system and its absence from the Grid will continue for two more years. Its absence continues to push up generation costs and exacerbate the country's circular debt crisis too. The project management had informed the government about this delay, an official said.

The disclosure came during a NEPRA hearing on a petition by the Central Power Purchasing Agency (CPPA) seeking a Rs0.65 per unit reduction in June's fuel cost adjustment – a cut that could save consumers about Rs8 billion if approved. CPPA cited cheaper fuel prices that brought generation costs down to Rs7.68 per unit compared to a reference cost of Rs8.33.



# KE getting cheaper power from solar parks: Shah

## EU Report

Sindh Minister for Energy, Planning, and Development Syed Nasir Hussain Shah has said that K-Electric is being provided low-cost electricity from the Nooriabad Power Plant and other hybrid and solar parks in Sindh, with plans for further supply in the future. Despite this, KE continues to raise concerns over fossil fuel costs, which he termed 'regrettable.' Speaking at a special session of the FPCCI Standing Committee on Energy, Shah emphasized that the Sindh government opposes the imposition of taxes on solar energy, calling it a clean, affordable, and sustainable source that should be widely promoted. He revealed that a mechanism is being developed to address consumer grievances over K-Electric's overbilling. "The company is receiving cheaper power and can no longer deny it," he added. The minister urged the federal government to ensure full representation of Sindh in the National Electric Power Regulatory Authority (NEPRA). "We demand three representatives from Sindh - one each from the provincial government, the business community, and consumer rights.FPCCI Senior Vice President Fayyaz Mago said electric vehicle (EV) charging stations represent the future of Pakistan and urged the government to prioritise investment in this sector.



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# Let's not waste carbon levy

Pakistan stands at confluence of glacial melt, erratic monsoons, urban flooding

**Dr Khalid Waleed**

The writer has a doctorate in energy economics and serves as a research fellow in the Sustainable Development Policy Institute (SDPI)

Pakistan is no stranger to climate catastrophes. Each monsoon seems to write its own obituary of human life and infrastructural integrity. This year has been no exception. In a span of just a few days, torrential rains across Punjab have claimed more than 200 lives, including dozens of innocent children – crushed under collapsed roofs, drowned in rising waters, or electrocuted by exposed wires. Entire communities in Rawalpindi, Chakwal and surrounding districts now resemble war zones, with boats replacing buses and helicopters circling above like modern-day messengers of state mercy. This is not a freak accident of weather but the grim handwriting on the climate wall.

Pakistan now stands at the confluence of glacial melt, erratic monsoons, urban flooding and creaking governance, making it a sitting duck in the global climate roulette. Amid this tempest, the recently negotiated Resilience and Sustainability Facility with the IMF, the government's decision to impose a carbon levy – expected to raise Rs14 trillion in FY26 – is a Rubicon moment. The question is no longer whether this tax is necessary but whether it will be used justly.


The carbon levy, rooted in the logic of Pigouvian taxation, wears the garb of elegance in economic theory. It seeks to make polluters pay, to internalise environmental damage and to nudge the economy toward cleaner pastures. But in the lived reality of a developing country like Pakistan – where inequality runs deep, energy poverty is widespread and institutional trust is hanging by a thread – this tax must be judged not by textbook diagrams but by whose pockets are picked and whose wounds are healed.

Without a sharp equity lens, the levy risks becoming yet another regressive fiscal hammer, striking hardest those who lit the fewest fires. Climate justice demands that we tax not the vulnerable for surviving, but the powerful for polluting. In this light, the recycling of carbon revenues is moral restitution.

To walk this path of justice, every rupee collected through the carbon levy must be ring-fenced and parked in the Pakistan Climate Fund – a statutory vehicle already envisioned but not yet meaningfully empowered. Let it be said plainly: these funds should not, under any fiscal sleight of hand, be blended into the consolidated fund or used to plug budget deficits. That would be akin to pouring clean water into a leaky cauldron.

Pakistan's past habit of treating environmental levies as fungible slush funds has not only blunted their impact but poi-





soned the well of public trust. It is time to break this vicious cycle. The carbon levy represents a rare alignment of fiscal, environmental and international priorities. But it can only bear fruit if insulated from the gravitational pull of bureaucratic inertia and the all-too-familiar rent-seeking culture that haunts our budgetary corridors like a ghost of missed opportunities.

Equally important is the necessity to resist the short-sighted temptation to pour carbon revenues into the Public Sector Development Programme (PSDP), a programme whose sheer size often masks its inefficacy. The PSDP, as it stands, is a patchwork of legacy projects, political giveaways and administrative silos that serve more to keep the wheels of patronage turning than to solve real problems. It is, to borrow a phrase, a monument to misplaced priorities. Using climate revenues to inflate this machinery would be like trying to fight a wildfire by pumping water into a rusted pipeline. Worse still, it would reinforce the same developmental model that leaves Pakistan exposed to every climatic nudge.

Instead, carbon revenues must be recycled with scalpel-like precision and surgical intent, flowing towards communities that sit on the frontline of the climate crisis. Let them fund flood-resilient infrastructure in peri-urban slums and riverine belts; let them subsidise rooftop solar and clean cooking solutions for low-income households; let them build electric public transport corridors that unclog our choking cities; and let them seed nature-based solutions like urban forests and watershed restoration.

A portion of the funds must also be earmarked for 'just transition' programmes, retraining workers as we wean off fossil fuels, because no climate plan worth its salt throws people under the bus in the name of progress.

To translate this vision into institutional practice, Pakistan must broker a new fiscal compact among the Ministry of Finance, the Ministry of Climate Change and key development partners, such as the IMF. A jointly administered Revenue Recycling Component, backed by the Climate Change Authority and overseen by parliament, should be established to track, audit and disclose how carbon revenues are spent.

Transparency is the currency of public legitimacy. Alongside, a serious rethink of the National Finance Commission (NFC) Award is overdue. It is time we moved from a static formula based on population and

inverse development to a climate-smart NFC – one that allocates resources based on climate exposure, mitigation capacity and resilience needs. Let us stop treating provinces like identical puzzle pieces and start recognising that those who bear the climate burden deserve more from the federal purse.

However, climate justice cannot be built on a foundation of policy contradictions. On the one hand, we impose a carbon levy; on the other, we slap an 18 per cent GST (even if later revised) on imported solar panels –, rippling the very transition we claim to champion. This is like feeding a patient vitamins with one hand and poison with the other. If the goal is to support domestic solar manufacturers, that can be achieved through smarter, targeted subsidies or zero-rated taxation on local panels. Blunt instruments like import GSTs hurt the very constituencies, middle-class homeowners and small businesses, that are poised to be drivers of Pakistan's clean energy future. Carbon pricing must walk its talk, not limp with policy contradictions.

As for the IMF, it must look beyond carbon arithmetic. Yes, it has rightly supported carbon taxation under the RSF, but it must now insist on equity safeguards and transparent recycling as non-negotiables. Climate finance must not become another tool of austerity disguised in green robes. Instead, it should serve as a platform for restorative justice and fiscal innovation. Pakistan, despite its many challenges, has the opportunity to lead by example: to demonstrate how a nation from the Global South can fulfil its macroeconomic commitments while championing a rights-based transition.

The carbon levy is revealing the essence of our fiscal system. Implemented with vision, it could rewrite the state-citizen relationship from one of extraction to one of empowerment. Squandered, it will cement public cynicism, deepen inequity and squander a moment of alignment between crisis and opportunity. Pakistan's floods have already made climate change terrifyingly real.

The carbon levy must now make climate justice palpably visible. Every rupee raised in the name of mitigation must flow back as a shield of protection, a ladder of opportunity, and a promise of dignity – especially to those who sleep tonight on soggy floors and shattered dreams. Because, at the end of the day, justice – much like water – must flow towards the lowest first. ■



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# SSWMB drives waste recycling revolution in urban Sindh

## EU Report

**I**n a groundbreaking move to tackle Sindh's urban waste crisis and build a sustainable future, the Sindh Solid Waste Management Board (SSWMB) has unveiled an integrated plan that combines cutting-edge recycling technology, renewable energy and community-driven initiatives.

This multi-pronged strategy aims not only to manage the daily avalanche of municipal waste but also to turn it into valuable resources for urban development, energy production and public safety.

Prior to the establishment of the SSWMB around a decade ago, Karachi relied on an outdated garbage lifting system that managed to collect only 3,000 to 4,000 tonnes of municipal waste per day. Today, under the SSWMB's modernised approach, up to 14,000 tonnes of municipal waste is handled daily with the aid of mechanised sweeping machines deployed on major roads, modern transfer stations, and scientific disposal methods that replace decades-old manual systems. These advancements have earned the SSWMB the Annual Environment Excellence Awards 2025 in recognition of its sustainability-driven municipal services.

At the 22nd Annual Environment Conference organised by the National Forum for Environment & Health (NFEH),

SSWMB Managing Director Tariq Ali Nizamani announced a pioneering plastic recycling facility in Hyderabad that will commence operations on 1 August 2025. The World Bank-backed facility will process 25 tonnes of low-grade polyethylene waste each day to produce up to 100 high-strength manhole covers. Each cover will

weigh 50 kilogrammes and withstand up to 18 tonnes of pressure, replacing traditional metallic covers that are often stolen for scrap, leading to dangerous open manholes and accidents. "This eco-friendly solution not only addresses the plastic waste menace but also prevents life-threatening hazards caused by open manholes," said Nizamani.





The facility will employ about 80 people, many of them transitioning from informal recycling work to structured employment with safety measures and benefits.

Karachi's waste management strategy has been further strengthened with campaigns encouraging households to separate organic and recyclable waste at source. Nearly half of Karachi's municipal waste is organic and can be converted into compost. To promote this concept, training workshops are being launched to teach residents how to turn kitchen waste into compost at home, which can then be used to increase green cover in their surroundings and reduce the pressure on landfills. The SSWMB has partnered with the Sindh Education Department to integrate waste segregation awareness into schools and will extend similar campaigns to universities to engage young people as environmental ambassadors.

Already, three recycling, composting and biofuel production plants are operational in Karachi. Among them is a pilot biogas facility at the Karachi Metropolitan Corporation's Nishtar Road workshop, which processes 14 kilograms of food waste daily to produce three kilograms of raw biogas and 10 kilograms of compost. The biogas is used to fuel an on-site kitchen, while the compost nurtures city gardens and green belts. "This pilot demonstrates that up to 50 per cent of Karachi's municipal waste can be transformed into valuable



products like compost and clean cooking fuel," said Nizamani, adding that the board is now scaling up operations with a 1,500m<sup>3</sup> biogas plant in the Cattle Colony on three acres of land allocated for this purpose.

Senior environmental consultant Saquib Ejaz Hussain hailed the biogas initiative as a "landmark milestone" for sustainable development in Pakistan. "This initiative not only demonstrates the power of renewable energy but also reflects the provincial government's firm commitment to environmental stewardship. Biogas technology aligns perfectly with global sustainability goals: it enhances energy security, reduces dependence on fossil fuels and improves the health of urban ecosystems," he said.

Supporting infrastructure development is also being prioritised, with two

new garbage transfer stations (GTSs) being built this year under the World Bank-funded Solid Waste Emergency & Efficiency Project, and two more scheduled for completion next year. In parallel, two private companies are preparing to construct waste-to-energy plants expected to be operational within 18 months, converting non-recyclable waste into electricity and reducing the need for traditional landfill dumping.

For decades, informal waste pickers in Karachi collected recyclable materials while recklessly discarding non-recyclable waste into drains and open spaces, worsening urban sanitation and flood risks. The SSWMB now plans to regulate this sector with strict penalties for unsafe practices, ensuring recyclable materials are recovered scientifically and safely. ■

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# 22nd Annual Environment Conference and Awards 2025

## Speakers urged to ensure Provincial Autonomy to Effectively Tackle Environment Degradation



Group Photo of 22nd Annual Environment Excellence Awards 2025 award winners with Chief Guest MNA Mehtab Akbar Rashdi, Guest of Honor Advisor to Governor Sindh Syed Tariq Mustafa and Team NFEH.

### Ruqiyah Naeem

Pakistan urged to ensure provincial autonomy to effectively tackle environmental degradation; federal interference in devolved subjects described as a bid to hamper progress in protecting forests, coastal resources, and natural landscapes

Speakers at the Annual Environment Conference 2025 strongly urged full provincial autonomy to effectively tackle environmental degradation, calling upon the federal government to stop legislating and enforcing policies in constitutionally devolved areas such as climate change, ecology, forestry, agriculture, food security, livestock, and wildlife.

The conference, themed “Environment, Climate Change, Corporate Leadership – Towards a Sustainable Pakistan”, was organised by the National Forum for Environment and Health (NFEH) and attended by corporate leaders, environmentalists, policymakers, journalists, and community representatives.

Speakers unanimously pointed out that federal interference in devolved subjects continues to hamper progress in protecting forests, coastal resources, natural landscapes, and overall ecological health.

MNA Mehtab Akbar Rashdi, a key-note speaker, shared her experience from the 1990s when she served as the Director-General of the Sindh Environmental Protection Agency (SEPA). Despite capacity and manpower shortages, SEPA managed to impose a province-wide ban on black polythene bags within three months of its establishment, persuading traders and retailers to abandon carcinogenic plastic. Rashdi also highlighted

SEPA’s collaboration with industrialists to regulate emissions and effluents and praised the role of Karachi’s commissioners in tackling vehicular and rickshaw pollution during her six-year tenure.

Managing Director of the Sindh Solid Waste Management Board (SS-WMB), Tariq Ali Nizamani, announced new initiatives for waste segregation and household food waste composting to promote urban greenery. “Around 50 per cent



Glimpse of Panel Discussion includes Moderator Afia Salam, Abdul Rahim Soomro, Lubna Panjwani and Rashid Azeem.



of urban waste is organic and can easily be converted into compost or biofuel,” he said. Plans include establishing modern waste transfer stations, recycling plants, and scientifically managed landfill sites to reduce open dumping. He also revealed that a new plastic waste recycling facility in Hyderabad will start operations in August 2025. Supported by the World Bank, the facility will recycle 25 tonnes of inferior-quality polyethylene daily, producing 100 high-strength manhole covers weighing 50 kilograms each and capable of withstanding 18 tonnes of pressure. Employing 80 workers previously from the informal sector, the facility will also help prevent theft-prone metallic covers from causing fatal road accidents. Earlier, SSWMB had successfully launched three recycling, composting, and biofuel plants in Karachi, further demonstrating the potential of circular economy practices to reduce the burden on landfill sites.

Musarat Jabeen, Executive Director of the Securities and Exchange Commission of Pakistan (SECP), presented SECP’s sustainability guidelines for listed companies. She emphasised the importance of accurate climate data to attract foreign financing and assured continued awareness and capacity-building efforts to make the corporate sector climate-resilient.

Abdul Rahim Soomro, Member Sindh Local Government Commission, criticised the federal government for not contributing even 25 per cent towards Karachi’s combined effluent treatment plants, despite Sindh’s offer to bear 75 per cent of the project cost. He said this feder-



MNA Mehtab Akbar Rashidi addressing on the occasion.

al reluctance had stalled essential industrial wastewater treatment initiatives.

Veteran journalist Afia Salam urged compliance with the 1991 Water Apportionment Accord to release 10 MAF of water downstream of Kotri Barrage to sustain the Indus Delta’s mangroves and marine biodiversity. She also called upon corporations to adopt environmental regulations voluntarily rather than under external pressure.

Senior ecologist Rafiul Haq advocated large-scale plantation drives, while Tariq Mustafa, Adviser to the Sindh Governor, highlighted the Governor House’s year-long tree plantation campaign and awareness sessions involving universities, NGOs, and community groups.

The Adviser to the Governor also conferred the Annual Environment Excellence Awards-2025 on more than 70 companies for their environmental contributions. Eleven organisations re-

ceived special awards for their outstanding participation in urban plantation campaigns.

Other notable speakers included Engr Nadeem Ashraf, Vice-President NFEH; Rashid Azeem, Divisional Head (ESG) at United Bank of Pakistan; and Lubna Panjwani, Environmental Educator, who sought continued corporate responsibility and youth engagement in climate action.

NFEH President Naeem Qureshi, in his welcome address, called for collective responsibility to meet sustainability goals, particularly through plantation drives and waste management initiatives. He reaffirmed NFEH’s commitment to holding regular forums for multi-sectoral dialogue on climate change.

Ruqiya Naeem, NFEH General Secretary, delivered the vote of thanks, pledging ongoing efforts to connect corporate leaders, regulators, and environmentalists for practical solutions. ■

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### EU Report

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customer expectations. We envision a future where clean, accessible, and affordable energy is available to all.

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Over the past decade, Greaves Solar has collaborated with clients to reduce their carbon footprints, offering high-value design and innovative construction of solar energy facilities. Notable installations include Feroze 1888, IFFCO Pakistan (Pvt) Ltd., Mehran Plastic Industries (Pvt.) Ltd., and Naveena Steel Mills.

In addition, more than 2,000 companies, small businesses and residences across Pakistan are now powered by Greaves Solar. The company has delivered solar energy systems and equipment with a combined generation capacity exceeding 300 MW nationwide. It has also installed solar-powered water pumps throughout the country. Greaves Solar's success in this competitive market is driven by its commitment to delivering superior products and reliable after-sales support.



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# Mythical oil reserves just tip of the iceberg

**Aasim Sajjad Akhtar**

The writer teaches at Quaid-i-Azam University, Islamabad.

In typically sensational fashion, Donald Trump pronounced on social media earlier this week that the US and Pakistan had concluded a deal to explore the latter's "massive oil reserves". The agreement was later confirmed by Pakistan's finance minister after negotiations in Washington.

Predictably, neither side provided details about the coveted black gold. Trump simply stated that he is in the process of deciding which oil company will "lead the partnership". Much to the delight of Pakistani officialdom, Trump also added a backhanded comment about a future in which Pakistan sells oil to India. Who cares about facts when the purpose is to engage in mutual back-slapping?

Almost as an aside, it was also announced that the US had agreed to reduce tariffs on Pakistani exports to the US. Again, no concrete figures were provided but because of Trump's parallel post about the imposition of a 25 per cent tariff rate on India we should presumably be celebrating.

Trump's methods are now old news, dramatic effect and personal interest taking precedence over actual substance. Pakistan's hybrid government appears to have jumped on the same gravy train, with little concern for various political, economic and ecological impacts in the medium to long run.

Let's start with the question of whether Pakistan actually possesses large oil reserves. Beyond what is already being extracted from prominent sites like Sui (gas) and Ghotki, preliminary data indicates oil and gas deposits in and around the coastal districts of Sindh and Balochistan as well as some ways inland. There are reportedly also offshore deposits south of the Makran coast in the so-called Murray Ridge zone, but these are as yet, just estimates.

The Trump deal signals intent to not only verify what actually lies beneath the surface but also to start drilling as soon as possible. Perhaps unsurprisingly for the particular nexus of state and multinational capital that is implicated here, no one seems to be concerned with a number of red flags, including the raging insurgency in Balochistan, already devastated coastal ecologies and the increasingly sparse flows of water in the lower Indus basin. Trump's climate denialism explains his desire to shout the words 'drill baby, drill!' at every opportunity. But the government in Pakistan has, since the 2022 floods, advertised itself as a major change agent in the global political economy, especially the so-called energy transition away from fossil fuels.

The contradictions don't end there. Over the past few months, the Pakistani commentariat has spent a lot of energy insisting that there are qualitatively new political and economic alignments taking shape in our region and the world at large.

During the military exchange between India and Pakistan in





May, for instance, state-nationalist sloganeering was accompanied by dreams of a new geopolitical formation in which Pakistan aligns clearly with China against the troika of the US, Israel and India. This imagery was propagated further during the Zionist aggression against Iran, when Pakistani officialdom was said to have stood steadfastly with its neighbour to the west in opposition to the troika.

But beyond wishful thinking, there is little reason to believe that our militarised ruling class is concerned with principles, let alone any kind of substantive anti-imperialism. The oily deal with Trump only confirms that this hybrid regime, like almost all that have preceded it, continue to think of Pakistan's territory and resources as auctionable to the highest bidder. Whether the resource in question is oil, gas or minerals that can be pitched as central to the renewable energy transition, local communities that are the only rightful owners continue to be denied their due, even punished for demanding it. Alongside the criminalisation of Baloch youth, 'counterterrorism' operations have been launched in resource-rich Pakhtun regions.

Celebrating a shady oil exploration deal with the Trump White House that would only deepen the alienation of the peripheries and contribute nothing to the welfare of working people in metropolitan areas confirms that the regime couldn't care less about the masses and fragile ecologies. Indeed, the fine print of the deal mentions mineral exploration and cryptocurrency, making clear that the till now mythical oil reserves are just the tip of the iceberg.

The problem is identifying the political constituency to chart an alternative future. The PTI remains the largest mainstream party but is in internal disarray and faces continuous repression. Progressive forces outside the mainstream should eschew wishful thinking and unproductive echo chambers so as to coalesce around an anti-regime programme, else Trumpism will remain the only game in town. ■

# Fuelling hope with shale and tight gas

**Ammar Habib Khan**

Writer is macroeconomist and assistant professor at IBA

Pakistan and the US unveiled a trade-and-investment accord in July 2025 that links lower US tariffs on Pakistani exports to large-scale American participation in the country's oil and gas reserves, which can potentially be Pakistan's untapped shale and tight-gas frontier.

Although there is no clarity regarding the scope of investment, there has been a signal to jointly develop Pakistan's massive oil and gas reserves, potentially shale and tight gas.

According to the US Energy Information Administration, the Indus Basin holds 105 trillion cubic feet of technically recoverable shale gas and nine billion barrels of shale oil, concentrated in formations such as the Cretaceous-age Sembar and Palaeocene Ranikot shales. By comparison, Pakistan's remaining conventional gas reserves are barely 18 trillion cubic feet. Unlocking even a fraction of this could significantly reduce energy imports.

Although the specifics of the investment are unclear, initiating a healthy appraisal programme is necessary to get started. This programme may involve

50 wells or a similar number, requiring an investment capital of approximately \$1.5 billion. Its success would potentially result in more investment. However, there are no clear details and any investment would potentially be contingent on longstanding issues in Pakistan's energy sector, including circular debt.

Pakistan has already learned how expensive shale can be. OGDCL's KUC-1 pilot well near Hyderabad, drilled vertically and now slated for horizontal fracking, has cost \$25 million to \$30 million, five times the price of a US Permian well. However, as more wells are drilled, and production levels scale up, the cost would significantly reduce. The resource exists, but how it is extracted economically at scale is what matters, and this is where American expertise would be essential.

If all goes well, and something actually happens and investment materialises, Pakistan would be able to reduce its import bill and start exploring shale and tight gas at scale. However, a lot more needs to be done on the policy front, and it remains to be seen what kind of investment package is offered, and how the policy framework evolves to facilitate the same.

The resource is there, and so is the demand – what matters now is how we work out the pricing and execution. ■

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# Top Meeting held to Review Progress on Thar Coal Projects



Officials briefed about converting the Jamshoro Power Plant to Thar coal; Sino Sindh Resources granted permission for its 7.8 million tonnes per annum capacity project in Thar Block-1; Thar railway link project achieves 35% completion and is expected to be finished by January 2026

## EU Report

**T**he 29th meeting of the Thar Coal and Energy Board (TCEB) was chaired by Sindh Chief Minister Syed Murad Ali Shah at the CM House to review the progress of ongoing Thar coal projects and make key decisions to strengthen the province's energy sector.

The meeting was attended by provincial ministers Syed Nasir Hussain Shah, Syed Sardar Shah, Jam Khan Shoro, MNA Shazia Marri, Chief Secretary Asif Hyder Shah, relevant provincial secretaries, and board members.

The board approved the proposed tariff orders submitted by Sindh Engro Coal Mining Company, paving the way for a reduction in coal prices and electricity generation costs.

Sino Sindh Resources Pvt. Ltd. was granted Commercial Operation Date (COD)

permission for its 7.8 million tonnes per annum capacity project in Thar Block-1. The board also approved the COD stage tariff for the project.

To attract further investment, the board decided to offer financial protection to current and potential investors. The meeting also discussed the potential industrial use of Thar coal in fertilizer and cement production.

The board appreciated research conducted by Fauji Fertilizer Company (FFC) on utilizing Thar coal for fertilizer and cement manufacturing.

A detailed briefing was given on the plan to convert the Jamshoro Power Plant to Thar coal, further supporting local resource utilization. The Thar railway link project has achieved 35% completion and is expected to be finished by January 2026, significantly enhancing coal transportation infrastructure.

Speaking on the occasion, Chief Minister Murad Ali Shah stated, "Thar coal has become a pillar of energy self-sufficiency for Pakistan. We are committed to ensuring affordable electricity using indigenous resources."

Energy Minister Nasir Hussain Shah added that the extension of the profitability scheme will help maintain investor confidence. According to Tariq Shah, electricity from Thar coal is being delivered to millions of households at only Rs. 4.8 per kilowatt-hour, compared to Rs. 19.5 per unit from imported coal.

TCEB Managing Director highlighted that Thar coal projects have helped save the country \$1.3 billion in foreign exchange. ■





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# Energiewende and power democracy

**Afaf Ali**

The writer is a research fellow at the Energy and Climate division at the German think tank, Öko institute

**A**gainst the odds, a solar revolution has unfolded in an economically unstable and climate vulnerable country. Pakistan's 'bottom-up' solar revolution gained international recognition when a highly exponential peak in solar panel imports was achieved, proportional to the equally persistent rise in electricity prices and inflation.

Pakistan was the third-largest importer of solar panels in 2023 that has continued to grow in 2024, reaching 17 GW in direct imports from China. After decades of enduring power outages and price hikes in electricity, citizens — driven by despair and necessity — finally took control of their electricity needs.

The surge was only possible by the fact that solar photovoltaic (PV) technology is now the most inexpensive source of electricity. Amid this solar rush, thought leaders and experts have begun invoking the term 'Energy Democracy', a concept rooted in the empowerment of citizens to become active players in the energy market. Just as Germany transformed its

electricity sector via energy democracy, could this grassroots energy movement be the beginning of Pakistan's own 'Energiewende' (energy transition)?

About 25 years ago, Germany launched its Renewable Energy Act, introducing democratic energy reforms. It offered fixed feed-in tariffs for 20 years, often above retail rates, to incentivise renewable energy production. This policy played a key role in accelerating the adoption of renewables. Another aspect to achieve Energiewende was made possible largely through 'citizen energy cooperatives' that empowered individuals to own and invest in renewable energy assets, making them a core of energy transition. It was a successful approach to democratise energy transition by legally and financially empowering citizens.

As for Pakistan, customs data shows that the country imported 36 GW capacity of solar panels (78 per cent of the total installed electricity generation capacity of 46.5 GW). So, if all imported solar PV capacity were brought online simultaneously, it could generate an estimated 56.4 TWh of electricity (18pc capacity factor) annually which is roughly one-third of the electricity produced in 2024.

Energy democracy demands that citizens lead the way, guided by the best practices in implementation

But why the big solar import spree

by Pakistan? The answer lies with its long-term ally, China — the world's leading solar PV manufacturing hub, accounting for over 80pc of global production capacity for PV panels. China has an aggressive, export-oriented industrial policy, which massively scaled up solar PV manufacturing and drove down global prices by achieving rapid economies-of-scale. It is worth mentioning that it has made solar technology remarkably affordable for developing countries. Pakistan also benefited from strong trade relations and a business-friendly environment, both of which played a key role.

Pakistan's solar surge is gargantuan when compared to its predominantly fossil fuel-based centralised electricity mix that produces merely 4pc of its electricity from renewables. Historically, the country has grappled with chronic mismanagement of electricity resources and a lack of strategic planning. For years, recurring power outages, commonly known as load shedding have been a normal feature of life highlighting the unreliability of the grid.

In recent times, repeated failures of mass scale projects such as 'fast-track solar auctions of 600 MW' and delays in launching the Competitive Trading Bilateral Contract Market (CTBCM) aka the country's intended wholesale electricity market, highlights the urgent need to reassess the proposed electricity reforms.





Though the CTBCM did receive positive response from the businesses, activities around it remained sluggish.

With citizens now taking charge, a few challenges will emerge for both consumer and the authorities. First, the ramp-up of solar PV installations need to be ensured so that there is no hoarding of solar panels. It is being suggested that mostly the household sector is being solarised, but there is a difference of opinion. Some analysts suggest the capacity may be off-grid, but the volume of imported battery storage remains significantly lower than that of solar panels ie 1.65 GWh till January 2025.

Second, the aging transmission and distribution infrastructure, which already experiences transmission losses of 15-20pc, might not be able to cater the capacity if it comes live. Revamping the grid is becoming increasingly important, as it may soon need to accommodate up to 35pc more renewable energy.

Thirdly, consumers tied exclusively to the central grid are at risk of higher electricity costs — a consequence of expensive Power Purchase Agreements with other generation sources, mostly thermal.

In response to current circumstances, the government plans to tighten net-metering regulations and has introduced import duties on solar panels. While these measures may aim to manage short-term fiscal concerns, they risk undermining citizen-led solar adoption.

Imposing import duties serves as a disincentive for private investment in renewable energy, potentially stalling the solar uptake. Such reforms may further reinforce public perception that the government lacks genuine commitment to resolving the country's electricity challenges, particularly when it seems to be progressing democratically. ■



## GAS SECTOR BAILOUT

# Plan to clear Rs2.8tr gas circular debt without burdening consumers

## Task force assigned responsibility of tackling gas sector's mounting circular debt

**Khalid Mustafa**

**A** task force on power, which previously played a key role in addressing issues in the electricity sector, has now been assigned the responsibility of tackling the gas sector's mounting circular debt, which has reached Rs2.8 trillion. However, the task force is yet to unveil its detailed plan for resolving the crisis.

To develop an initial strategy, the Petroleum Division had engaged KPMG, a well-reputed consulting firm, to formulate a roadmap to address the debt that has rendered the gas sector financially unsustainable. In its proposals, the KPMG suggested that end consumers would need to absorb the cost of retiring Rs2.8 trillion circular debt. The firm recommended imposing a special levy ranging between Rs3 and Rs10, similar to the debt service surcharge currently applied to electricity bills, to raise funds for debt servicing through commercial bank loans. This debt would then be gradually retired over a 6 to 7-year period.

Additionally, the firm proposed a further increase in gas prices and elimination of the existing Rs160 billion cross-subsidy, to be phased out completely by January 2027. This combined approach of new levies, tariff hikes and subsidy removal formed the core of KPMG's recommended strategy for addressing the gas sector circular debt.

The task force on power held an important meeting in Rawalpindi with senior officials of the Petroleum Division some days back but didn't share its documented working and plan of resolving the gas sector circular debt except for some salient features.

However, The News has learnt through well-placed official sources that the task force comprising Advisor to PM on Privatisation Muhammad Ali, Lt-General Zafar Iqbal and experts from SECP, CPPA and NEPRA have carved out a plan based on dividends of the state-owned

companies in the oil and gas sector trapped in the circular debt. "Under this plan, the end gas consumers will not be burdened at all."

The official sources said that the Task Force may not subscribe the options prepared by the Petroleum Division with an input of the reputed firm under which a special levy on petroleum products has been proposed to retire the debt to be attained from banks to erase the stock of Rs2,000 billion; IMF will not allow the government to extend the sovereign guarantee to be required for getting the required loan.

In the case of power sector circular debt, Rs1,275 billion has been arranged from commercial banks without sovereign guarantee against the genuine receivables but in the case of gas sector, the situation is quite different. In the gas sector, E&P companies like OGDCL, PPL, GHPL are state-owned entities. Likewise, Sui gas companies (SNGPL, SSGC) that owe Rs1,500 billion to E&P companies are also state-owned utilities. The PSO, victim of the circular debt trap because of LNG, is also with majority government shares. "So in this particular case, the federal government has promised that it will pay amount from the budget on behalf of Sui companies to E&P firms and PSO in the head of receivables which the said companies will show them in the shape of government dividends. This is how the government will pay and receive the same in the form of dividends and this is how the balance sheets of inter-corporate circular debt in gas sector will be cleared without passing any hike to the end consumers."

The top officials said that the task force has almost completed its work on its plan which is being kept under the wraps. When attention was drawn to the fact that in the past, IMF did not buy such proposal to end the gas circular debt when the same was proposed by Ishaq Dar, the officials said that their plan has been made in such a way that the IMF would not raise objection as the previous flaws in the plan has been done away with amicably.

*Courtesy The News*



# Outsourced power: How aid agencies engineered energy bureaucracy?

**Nadeem ul Haque |  
Shahid Sattar | Absar Ali**

**I**n Pakistan's power sector, aid doesn't just fund wires and transformers—it writes policy, births institutions, and designs governance frameworks. From WAPDA's unbundling to today's regional micro-hydro initiatives, foreign donors and multilateral lenders have played a decisive role in shaping the country's entire energy architecture.

What looks like a domestic public sector is, in fact, a landscape engineered through external influence often with little sustained success.

It began in the 1990s, when the World Bank, Asian Development Bank (ADB), and USAID launched structural adjustment programs that led to the fragmentation of WAP-

DA. This was no organic reform.

Under pressure from lending conditions, Pakistan was pushed to carve out the power sector into new corporate entities: generation companies (GENCOs), distribution companies (DISCOs), a transmission company (NTDC), and a regulatory authority (NEPRA). These institutions were seeded, shaped, and staffed under the watchful eyes of international consultants and donor-funded technical assistance.

The Pakistan Electric Power Company (PEPCO), too, emerged not from local institutional need, but from the ADB's desire to create a transition vehicle to oversee the corporatization process. NEPRA, established in 1997, was designed with heavy influence from the World Bank and USAID, importing global regulatory frameworks that were alien to Pakistan's administrative and legal culture. Its tariff formulas, licensing structures, and oversight roles mirror donor templates more than they reflect local energy realities.

This donor-led architecture didn't stop at institutional birth. ADB funnelled nearly a billion dollars into its Power Distribution Enhancement Investment Program, modernizing grid infrastructure and financing smart metering initiatives. The World Bank launched its own \$195 million effort in 2021 to improve governance and efficiency in HESCO, MEPCO, and PESCO. JICA upgraded NTDC's load dispatch systems. IFC and OPIC helped design frameworks to attract private investment in wind, solar, and K-Electric.

Even the electricity market itself—the Competitive Trading Bilateral Contract Market (CTBCM)—was conceived, drafted, and piloted through World Bank technical assistance.

And when Pakistan recently attempted to unilaterally renegotiate renewable energy con-





tracts signed with private investors, it was the IFC, ADB, and Islamic Development Bank that issued a sharp warning: don't undermine the sanctity of contracts or risk the collapse of \$2.7 billion in clean energy investment.

At the provincial level, the pattern repeats. Punjab and Sindh's DISCOs were granted \$200 million in January 2025 by ADB to upgrade infrastructure and adopt smart systems. Sindh also benefited from the Sindh Cities Improvement Program, which coupled power and sanitation reforms under multilateral guidance.

In Khyber Pakhtunkhwa and FATA, the EU-funded PEACE program and USAID-backed Sarhad Rural Support Programme have installed hundreds of micro-hydro plants in off-grid areas. Balochistan, too, saw GIZ and other donors support rural electrification and local governance models through BRSP.

These efforts, while not without local champions, largely owe their scale, structure, and sustainability to external designs. Even post-18th Amendment devolution hasn't insulated the provinces from donor penetration. Technical assistance programs by WHO and ADB continue to shape provincial energy planning and system governance.

The story is similar, and in many ways worse, in the gas sector. During the mid-1980s to late 1990s, the government agreed with the World Bank to link gas prices to oil; the international market price for fuel oil became the benchmark for domestic consumers and the landed cost (including duties, taxes and other import charges) for all other consumers.

The balance between consumer prices linked to international oil prices and revenue requirements of the Suis accrued as fiscal revenues to the government, allowing full-cost-recovery and providing signals to consumers about the true value of gas, thereby encouraging efficiency.

However, in 2006, again on advice of the World Bank the government established a ceiling price for gas, effectively delinking it from oil and politicizing the commodity, which caused producers to lose out on significant revenue when oil prices rose sharply in 2008.

The use of gas for power generation had been promoted, both for captive generation by industries and in the grid energy mix. The landmark 1994 Private Power Policy, which allowed and incentivized industries to invest in captive power generation was designed with World Bank support and advisory from the IFC and IBRD and implemented under

a PPP framework via the newly created Private Power and Infrastructure Board, again established under the World Bank supported Second Private Sector Energy Development Programme (PSED II).

Following drying up of investment and activity in E&P and rapidly depleting domestic gas reserves, DFIs provided full support for development of LNG import infrastructure.

The USAID's Energy Policy Project, alongside World Bank, IFC and ADB feasibility studies, conducted the technical and financial analyses and PPP structuring that advised Pakistan to develop LNG import capacity. ADB and IFC provided over \$160 million in financing and equity to set up the Port Qasim LNG terminal.

The Planning Commission's proposals to enter long-term LNG SPAs were based on feasibility studies and policy advice funded or co-commissioned by USAID's Energy Policy Project and the World Bank/IFC and ADB teams. They stressed that only 15–20-year SPAs could unlock commercially-viable financing for both the import terminals and the downstream power plants, otherwise investors could not recover the billions in upfront liquefaction and shipping assets.

Enter 2025, it was decided that the fundamentally unsustainable power sector could only be saved by putting to waste years of policies and billions of dollars of gas-related investment and infrastructure. At the behest of the IMF, the government imposed a "grid transition levy" on gas consumption for captive power generation to force industries to the national grid.

An Ordinance was rushed to meet the January 31st structural benchmark deadline, and the calculation methodology passed into law yielded a negative levy—because in fact gas-fired captive generation is more expensive than the grid at RLNG prices.

A Rs. 791/MMBtu levy was then made up purely to show compliance to the IMF, while captive power plants in the fertilizer and other favoured sectors are being supplied with gas through a private monopoly under Third Party Access without any levy.

Meanwhile, captive gas consumption on the Sui infrastructure is down by up to 90 percent YoY and the power sector is refusing to honour its RLNG offtake commitments. This has left the country with 400 MMcf/d of surplus RLNG, forcing \$12/MMBtu cargoes to be diverted to domestic consumers at just \$4/MMBtu and inflicting up to \$378 million in losses on the E&P sector due to curtailment of domestic gas

production.

In addition, industries' billions of dollars investments in captive power plants, and the entire ecosystems built around them, have gone to waste. The grid infrastructure also isn't equipped to support the extra load, with frequent fluctuations and disruptions that make any kind of manufacturing impossible and is demanding billions for new connections that won't be energized for three years. The grid tariff of 12 cents/kWh — among the highest in the world — is only the cherry on top.

This puts everyone, except the foreign buyer, at the losing end of the stick. Even the Minister for Petroleum has publicly opposed this levy, only to be shut down by a Finance Ministry evidently subservient to international lenders.

As part of the same commitments, a carbon levy has been imposed on motor fuels and furnace oil, starting at Rs 2.5/litre in FY26, ostensibly to incentivize EV adoption with the goal of 30% new passenger vehicle sales being electric by 2030. Never mind, however, that a decent EV in Pakistan costs \$35,000 against a GDP per capita of \$1,400, and that there is little local EV production or charging infrastructure to support this goal.

We end up with agencies answerable to donors, not the people. We get complex legal regimes no judge understands, regulatory bodies mimicking western models with no local enforcement, and energy contracts vulnerable to global investor backlash rather than domestic public scrutiny.

Pakistan's power bureaucracy, like much of its state, is not homegrown. It is a child—intellectually, legally, and operationally—of DFIs, born of externally driven mandates and orphaned shortly thereafter, only to be replaced with yet another donor-crafted framework.

With little organic buy-in or local ownership, each new regime is an experimental sandbox for outside agencies, perpetuating a cycle of pilot projects and policy reinventions rather than sustainable, homegrown reform. And until the people reclaim the space to design, govern, and evolve its institutions based on indigenous knowledge and public accountability, Pakistan's energy landscape will remain trapped in cycles of reform without results.

The irony is that while billions have been spent on institution-building, power theft, system losses, and circular debt continue to cripple the sector. Maybe it's time to ask: are the institutions failing because they're Pakistani — or because they never truly were? ■





# Why can't we bring ourselves to conserve water?

## Shahzad Sharjeel

The writer is a poet. His latest publication is a collection of satire essays titled *Rindana*

Initiated by India in 2007, Pakistan objected to the construction of the Kishanganga Dam on the Jhelum by submitting a case to the Permanent Court of Arbitration at The Hague in 2010. The court stayed the project for three years but vacated the order in 2013, declaring it a run-of-the-river project and not violative of the Indus Waters Treaty (IWT). As construction resumed, Pakistan cited technical violations and, in 2016, requested that the World Bank establish a court of arbitration to review the designs of the Kishanganga and the Ratle Dam on the Chenab tributary. The Bank looked busy doing lending till India unilaterally held the treaty in abeyance, and the countries had another limited war.

Whether between sovereign states or federating units within a country, trust or confidence-building measures are required; however, water is too incendiary an issue to be the entry point for these. The long and arduous process to address the trust deficit between the contending parties will have to start with equally important but less contentious issues. For instance, in domestic matters, let the issue of missing persons be the entry point. Let the courts provide relief; bolster confidence in the state's goodwill, and in the process, build back the image of the judiciary. Similarly, focus on the social sector and human resource development to rebuild citizens' confidence in the system, and then one can move on to issues related to water and the newfound Trumpian

obsession with mineral resources.

Riparian rights and obligations don't begin and end with nation-state boundaries, ie India is the upper riparian on the Indus, Pakistan is the lower. Once it enters Pakistan, Gilgit-Baltistan is the upper riparian, Khyber Pakhtunkhwa is the lower riparian, and so on, until Sindh. Here, we are faced with a previously overlooked aspect: once the Sindhu enters its namesake province, the party in power decides who among its constituents gets water. Smallholders in the Nara canal command area, at the tail-end of the irrigation system, have pined for irrigation water for as long as successive generations' memory stretches; now they thirst for drinking water. Their lack of trust in the state does not stop at water scarcity; whenever there are floods, countrywide or local, they get inundated. Floods from all around are diverted toward them both by breaching canals and due to illegal constructions on natural waterways, with full backing of the authorities.

No party with its power base in Punjab or KP can resolve the problems of the subset of lower-riparian stakeholders within Sindh. The constituents must look toward their representatives and their parent party to address grievances. Stop wasting your vote on jobs, transfers, and postings, and instead of using it to get relief in local police and subordinate judiciary matters, make it count for something substantive.

Why can't we, the people, bring ourselves to conserve water?

Water management, encompassing both irrigation and drainage, should be a top priority for all constituents, regardless of their political affiliation. The rural-urban divide should not stand in the way, as

urban dwellers are not just stakeholders in what happens to Sindh's agriculture, but are also not immune to similar challenges, such as access to drinking water and sanitation. Inhabitants of large metropolises like Karachi have been asking, to no avail, where the hydrant operators, both public and private, obtain their water. Why can't the same water be piped through the supply networks, metered, and charged according to consumption? If gas and electricity tariffs could have slabs and provisions for lifeline users, why not water?

Leaving the government aside for a moment, why can't we, the people, bring ourselves to conserve and manage water better? Why cannot we install sectioned flush tanks? Why can't we incorporate greywater tanks and rainwater harvesting systems into our building plans? Why cannot individual homeowners and commercial builders use greywater for construction? There is significant potential for installing simple, low-cost treatment systems at sewerage junctions through public-private partnerships.

Just like we all care whether India, the regional upper riparian, sticks to the IWT and lets Pakistan's share of water flow unhindered, once it enters Pakistan, the local upper riparian must ensure that their fellow citizens downstream get their share.

This shared responsibility does not end at the interprovincial level, but continues to the district, taluka, union council, and neighbourhood level. Growing climate challenges are making it impossible for tail-end farmers to continue demanding that the IWT be honoured by the upper riparian country without its rivulets trickling down. ■



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# Time to save the country's economy

Pakistan today stands safely away from its dangerous outlook

**Farhan Bokhari**

The writer is an Islamabad-based journalist who writes on political and economic affairs

**A**s Pakistan began another financial year this month, amid widespread scepticism, the country's rulers presided over a sharp contrast between the mood on the streets and their self-proclaimed accomplishments.

On the bright side, Pakistan today stands safely away from its dangerous outlook just two years ago, surrounded by warnings of an upcoming default on foreign debt repayments while the rupee faced volatility. However, a subsequent return to another IMF loan programme has helped Pakistan regain solvency – albeit temporarily.

However, the gap between the mood on the streets and the corridors of power highlights a major dilemma. While Prime Minister Shehbaz Sharif and members of his cabinet claim to lead Pakistan towards

greater prosperity, there is no shortage of cynics presenting powerful counter-arguments. Pakistan's successive rulers have repeatedly failed to heed the warning signs. In a country where almost 40 per cent of the population, or approximately 100 million people, live below the poverty line, leading Pakistan with a 'sub achha-hai' or all is well mantra can well trigger a miscalculation over the future.

In tandem with this powerful reality lies the profound challenge of climate change, widely illustrated by the ongoing rain-related disasters across Pakistan. In this widening trend, it is hard to find a region where monsoon rains haven't created an unexpected effect. The changing weather patterns have been a powerful reminder that Pakistan's food security is increasingly in question.

The recent downturn in Pakistan's agricultural output, which grew by a meagre 0.6 per cent during the last financial year (July 2024-June 2025), deserves close attention for more than one reason. The continuing losses in agriculture immediately raise compelling questions over the future of Pakistan's crop-related cycles, dating back many centuries. It is a pertinent question in view of the devastating consequences that are certain to flow, in case issues related to food insecurity remain unresolved.

Closely related is the sizeable employment and/or income generation opportunities tied to agriculture, which make this a crucial sector for Pakistan's economy. Unless the incomes of the poorest farmers are lifted and effectively protected, Pakistan may be forced to brace for a potentially widespread social and economic upheaval in the years to come. Simply put, Pakistan must do all it can to protect those who are already living in abject poverty with no hope for the future.

Pakistan's industrial sector is also surrounded by compelling questions, notably as large-scale manufacturing contracted by 1.6 per cent during the





last financial year. For the moment, the improvement in Pakistan's current account was mainly facilitated by remittances from expatriate Pakistanis living worldwide. It is a continuing trend that has helped the country remain afloat.

Yet, a guarantee to protect Pakistan's ability to meet its foreign currency obligations must eventually be tied to a robust rise in exports backed by a variety of sources. In this journey, diversification of exports ranging from surpluses in agriculture to the industrial sector is an absolute must.

And finally, this week's official fanfare behind the launch of a simplified tax filing system for salaried individuals deserves a closer scrutiny. The biggest hole surrounding tax collections lies not with Pakistan's already burdened salaried class. Instead, it surrounds key sectors of the economy that either do not contribute to Pakistan's national income tax or contribute significantly below their dues.

Time and again, Pakistan has been reminded of such gaps, driven mainly by the failure of the country's leaders to tightly enforce the writ of the state. But given the multi-faceted challenges on Pakistan's economic front, it is now essential to change the past in favour of a more progressive future. Ultimately, Pakistan's ability to overcome its current economic challenges lies in its capacity to undertake long-overdue reforms vigorously. These reforms will succeed when Pakistan's leaders establish a clear path forward and lead by example. Presiding over a bloated public sector, the government has overseen two recent cases that sent an unfavourable message.

First, the cause of reviving the state-owned Pakistan International Airlines (PIA) was akin to bringing a dead horse back to life. Even if it is eventually privatised, PIA's large debt reportedly will remain on the government's account as a liability. It is a case that instantly reminds one of a recommendation by well-known businessman Mian Mohammad Mansha. Years ago, he publicly called for the immediate privatisation of PIA, even for a single US dollar, provided its new owner assumed all of its liabilities, including the debt. Second, the recently unveiled plan to revive the Karachi-based Pakistan Steel Mills with Russia's backing is yet another case that marked a U-turn. Should Pakistan expand its footprint in the public sector, given the way its economy has deteriorated under the weight of government-owned companies? To that compelling question, the answer must clearly be in the negative. ■

## Soaring petroleum prices threaten economic survival of lower-income families

Pakistan's federal government has once again hiked fuel prices—raising petrol by Rs5.36 and high-speed diesel (HSD) by Rs11.37 per litre—despite stable global oil trends and no major supply shocks. This is the third consecutive increase in just over a month, with the cumulative impact being a staggering Rs 18.54/litre for key petroleum products since mid-June. For millions of ordinary Pakistanis already trapped in a relentless cycle of inflation, the latest price hike is more than just a financial blow—it's a threat to their very survival.

As of July 16, 2025, the price of petrol has surged to Rs 272.15 per litre and HSD to Rs 284.35, squeezing households, commuters, and small businesses alike. The repercussions of such increases are immediate and severe: higher transport fares, soaring food prices, and increased production costs across all sectors of the economy. The hardest hit, once again, are Pakistan's salaried class and daily wage earners, who already struggle to manage household expenses amid skyrocketing utility bills and the escalating cost of essential items.

Despite claims that the hike follows OGRA's fortnightly pricing mechanism—based on currency fluctuations, international oil prices, and local levies—the reality paints a bleaker picture. Global oil prices remain largely stable, with Brent crude around \$69 per barrel. Analysts and opposition voices argue that the recent surge in domestic fuel prices is primarily driven by internal fiscal pressures rather than any external shocks.

One major factor is the Petroleum Development Levy (PDL), which continues to increase under IMF conditionalities. Although there is currently no GST on petroleum, the steadily rising PDL has effectively become a hidden tax on an already overburdened public. Additionally, the depreciation of the Pakistani rupee and unchecked freight and dealer margins

are exacerbating the situation.

Critics from across the political spectrum have raised alarm bells. The Grand Democratic Alliance (GDA) has termed the repeated hikes as “anti-people” and accused the government of pushing the population deeper into a quagmire of inflation. MQM Pakistan, part of the ruling coalition, expressed deep concern over the rising pressure on the salaried and middle classes. They demanded an immediate review of the decision and the introduction of a fuel relief package. Jamaat-e-Islami, meanwhile, condemned the government for implementing IMF-driven, anti-poor economic policies and warned of public protests if the price hikes are not reversed.

These are not mere political statements—they reflect the grim realities faced by millions. Many families can no longer afford daily transportation, let alone sustain other basic needs. When diesel becomes costlier, food becomes costlier. When petrol prices soar, so do electricity costs and inflationary pressures across the board.

The cumulative impact of these decisions is dangerously unsustainable. The government cannot justify further delays in announcing targeted economic relief measures. It must:

Immediately reconsider the recent hike and reduce petroleum levies.

Introduce a fuel subsidy for public transport, agriculture, and essential commodities. Ensure price control on utilities and basic food items.

Stabilise the currency and limit exchange rate pass-throughs.

Fast-track the shift to indigenous, clean energy sources to reduce import dependence.

Above all, the government must recognise that this is no longer just an economic issue—it is a humanitarian one. Middle- and low-income families are being priced out of survival. Without swift, sincere, and structural interventions, these relentless fuel hikes may ignite not just inflation but public unrest, instability, and deeper societal breakdown.





# OGDCL discovers new oil reserves in Sindh

## EU Report

Oil and Gas Development Company Limited (OGDCL), as the operator of the TAY Exploration License with a 95% working interest, along with its joint venture partner, Government Holdings (Private) Limited (GHPL), which holds a 5% carried interest, has announced an oil discovery

at the Chakar-1 exploratory well located in the Tando Allah Yar district of Sindh.

The Chakar-1 well was spudded on June 2, 2025, as an exploratory well under the Tando Allah Yar Exploration License and drilled to a total depth of 1,926 meters into the Upper Shale of the Lower Goru Formation. Based on the interpretation of wireline logs and Reservoir Evaluation Services (RES) log, a Drill Stem

Test (DST) was conducted in the B-Sand, followed by testing with an Electrical Submersible Pump (ESP).

The well produced 275 barrels of oil per day (BOPD) through a 32/64" choke at a wellhead flowing pressure (WHFP) of 400 psi. Furthermore, during formation testing using RES, the Lower Ranikot formation also showed the presence of oil. ■

# Audit uncovers Rs244bn electricity bill fraud by eight Discos

## EU Report

An official audit has exposed massive overbilling and financial fraud by eight power distribution companies, draining hundreds of billions from unsuspecting consumers already crushed by inflation and low incomes and high tariffs.

According to the Auditor General of Pakistan's latest report, these companies overbilled consumers by Rs244 billion, allegedly to hide inefficiencies, line losses, and electricity theft.

The audit names Islamabad Electric Supply Company (Iesco), Lahore (Lesco), Hyderabad (Hesco), Multan (Mepco), Peshawar (Pesco), Quetta (Qesco), Sukkur (Sepco) and Tribal Areas Electric Supply Company (Tesco) among those involved. Five of the companies reportedly over-

billed 278,649 consumers by Rs47.81 billion in a single month, the report states.

Over 900 million extra units were billed to customers during the 2023-24 financial year, with no action taken against officials responsible, the audit reveals. In some cases, companies claimed to have refunded billions of rupees, but audit authorities said no evidence was provided and demanded records for verification.

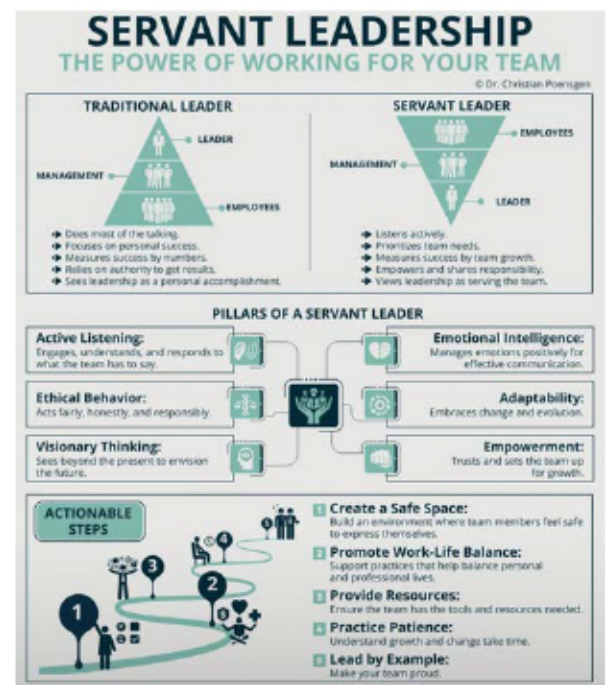
A separate finding shows Rs22 billion worth of extra billing was carried out in the name of "adjusting load" to cover technical losses. The report highlights Qesco as the worst offender, with Rs148 billion in overbilling to agricultural consumers. It alleges that Qesco inflated tube well bills

to mask poor performance.

Meanwhile, 1,432 feeders across the companies were used to send inflated bills totalling Rs18.64 billion. Despite repeated requests, relevant records were not shared with audit teams. Some consumers did receive refunds — including Rs5.29 billion for incorrect meter readings, and Rs2.18 billion in credit adjustments from Pesco. ■

## Pakistan to get first US oil shipment

Pakistan's largest refiner Cnergyico will import 1 million barrels of oil from Vitol in October. The West Texas Intermediate light crude cargo will be loaded from Houston this month and is expected to arrive in Karachi in the second half of October. The deal follows months of multiple negotiations, which first began in April, he said, after US President Donald Trump threatened to impose 29pc tariffs on imports from Pakistan. Pakistan hailed a trade deal struck with the US, its top export market, and said the agreement would increase investments. The White House said on Thursday the US will charge a 19pc tariff on imports from Pakistan.





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## PM seeks plan to make EVs accessible for all

### EU Report

Prime Minister Shehbaz Sharif has directed to formulate a comprehensive government-level strategy to make electric vehicles (EVs) more accessible to the common citizen, according to the Prime Minister's Office said. Presiding over a meeting in Islamabad, PM Shehbaz emphasised that encouraging electric vehicles in Pakistan would result in billions of dollars saving on fuel import costs, ensure environmental protection, and boost local industry. He announced that the federal government, including the federal educational board and all other educational boards across the country, would provide electric bikes to top-performing students. The prime minister further stated that the government would prioritise employment generation by providing electric rickshaws and loaders vehicles to unemployed individuals.

He also called for third-party validation of the EV distribution process and government support mechanisms, ensuring transparency and efficiency. He ordered the launch of a public awareness campaign about the EV subsidy scheme and ensured that the electric bikes, rickshaws, and loaders distributed through the initiative meet high-quality and safety standards.

The meeting was briefed on current industrial capacity and the government's ongoing steps to ensure affordability and accessibility of EVs through low-cost loans and flexible terms. More than 100,000 electric bikes and over 3,000 rickshaws/loaders will be made available under easy conditions through government support. Additionally, it was shared that top-performing intermediate students across boards, including the federal board, will receive free electric bikes under the scheme. A 25% quota has been reserved for women, with remaining provincial quotas to be distributed based on population. The PM directed to increase Balochistan's quota by 10%. ■

## Denmark to launch power sector programme with Pakistan

### EU Report

Denmark will initiate a three-year Strategic Sector Cooperation (SSC) programme with Pakistan's power sector, starting January 1, 2026, to enhance technical expertise and accelerate the country's energy transition. Danish Ambassador Jacob Linulf confirmed that the initiative—spearheaded by the Danish Energy Agency (DEA)—will focus on long-term energy planning, integration of variable renewable energy (VRE), and improving industrial energy efficiency. The SSC aims to support Pakistan in developing a more efficient, reliable, and sustainable power system.

To formally launch the program, a high-level Danish delegation led by Carl-Christian Munk-Nielsen, Director of Global Cooperation at DEA, will visit Pakistan from August 18 to 22, 2025. The delegation will engage with key stakeholders and energy institutions to align the SSC objectives with Pakistan's current energy reforms and institutional restructuring. Ambassador Linulf highlighted the importance of collaborating with newly unbundled entities from the National Transmission and Despatch Company (NTDC)—namely, the National Grid Company (NGC), Independent System and Market Operator (ISMO), and Energy Infrastructure Development & Management Company (EIDMC)—which are viewed as central partners in the cooperation.

The Danish Embassy has requested Pakistani authorities to arrange meetings with the leadership of NGC, ISMO, and EIDMC on August 18. These engagements will help present the SSC program framework and gather insights to tailor future training and workshops under the partnership. "This collaboration reflects Denmark's commitment to supporting Pakistan's clean energy goals through institutional capacity-building and knowledge exchange," said Ambassador Linulf. ■

## Power production cost goes down

### EU Report

Pakistan's power generation reached 127,159 gigawatt-hours (GWh) in financial year 2024-25, remaining almost unchanged as compared with previous year's production of 127,059 GWh, according to a report.

The stability in power generation came following a decline over the past two years. Year FY25 could be divided into two parts – in the first nine months (July-March), power generation fell 2% to 90,147 GWh while in the fourth quarter (April-June), the generation increased

7% to 37,012 GWh. The recovery in the latter part of the year helped offset the earlier decline, said Toplevel Research in its report.

The uptick in 4QFY25 was led by the diversion of captive power plants to the national grid after the government imposed an off-grid levy on captive power users, effective from February 2025. Furthermore, the government also announced a reduction in the overall unit cost in the April-June quarter after using savings that stemmed from tariff negotiations with the independent power producers (IPPs) and the reallocation of petroleum development levy (PDL).

In the first three quarters, the report mentioned, the electricity generation

declined as bulk buyers largely relied on their own captive power production by using furnace oil, gas and other fuel sources. Hydel electricity contributed the most to total production, having a 31.44% share in FY25 compared to 31.38% in FY24. It was followed by re-gasified liquefied natural gas (RLNG)-based power production, which accounted for 17.48% of total production against 18.70% a year earlier.

Local coal-fired plants contributed 12.23% in FY25 vs 12.51% in FY24 while imported coal-run plants had a 7.13% share compared to 3.40% in FY24. Nuclear, gas, wind and furnace oil-based generation contributed 17.66%, 8.82%, 3.02% and 0.41%, respectively. ■



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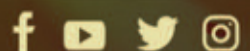
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A Group Photo of Exide team with Director Altaf Hashwani, Saleem Khan & others at ISME Expo



Hammad Arora Director Marketing Ziewnic Naeem Qureshi ME Energy Update and Engr Nadeem Ashraf are seen in group picture at ISEM Expo Karachi



Naeem Qureshi, Yunus Dhaga & Razzaq Pardesi inaugurated 6th IHRI Centre at Gulshan e Iqbal, Karachi



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# Climate governance hurdles in Pakistan

**All Tauqeer Shelkh**

The writer is a climate change and sustainable development expert

**T**he preventable deaths of about a dozen tourists in River Swat have shown how Pakistan continues to grapple with the devastating impact of climate vulnerabilities.

Climate risks are interprovincial and multi-sectoral. There is a disconnect between well-intentioned policies and their effective implementation oversight by apex institutions, largely due to coordination and operational bottlenecks. Our climate governance architecture encompasses at least six apex councils, in addition to several commissions, authorities, boards and autonomous bodies. These institutions collectively

form the backbone of our administrative state, designed to ensure coherent climate policy implementation and democratic oversight.

Infrequent institutional meetings: At the heart of our climate governance difficulties is insufficient coordination and the infrequent convening of vital policymaking bodies. Many institutions, despite constitutional or statutory mandates for regular meetings, struggle to maintain a consistent schedule. For example, the Council of Common Interests, crucial for interprovincial climate policy coordination, meets far less often than constitutionally required. Similarly, the National Economic Council (NEC) frequently misses its mandated bi-annual gatherings, hindering the alignment of economic planning with climate targets.

A closer look reveals direct impediments to sectoral progress. The National Security Council, despite acknowledging



non-traditional threats in its National Security Policy (2021), has primarily focused on conventional security issues, neglecting crucial decisions on climate-induced risks and threats. This oversight prevents the systematic integration of climate security into national planning.

In water management, the Pakistan Water Council's single meeting since its inception in 2018 means crucial opportunities for a unified approach to the nation's severe water crisis are missed, leaving Pakistan without cohesive climate-integrated water strategies. Even more striking, the Pakistan Environmental Protection Council, despite its coordination mandate, has convened just twice in four decades, leaving a significant void as Pakistan faces escalating environmental challenges. It has not convened stakeholders since the 18th Amendment was passed. The Pakistan Climate Change Council, designed to spearhead climate action across sectors, has also met far less often than its required biannual schedule since its creation in 2017.

Addressing climate action gaps is fundamental to transforming our aspirations into action.

Despite our extreme vulnerability, climate considerations and coordination remain virtually absent across the six councils, hindering comprehensive planning to address climate threats. Some national commissions grapple with similar dilemmas. For disaster management, for example, the National Disaster Management Commission's infrequent meetings since its inception in 2010 prevent inter-provincial coordination and the systematic integration of climate science into disaster risk management.

**Approval bottlenecks:** Many other institutions face delays due to required formal approval for key appointments. Frequent delays in leadership appointments at the Pakistan Agricultural Research Council, Pakistan Council for Research on Water Resources and the Pakistan Council for Science & Technology have routinely hindered development in climate-resilient agriculture, water and scientific research. Examples abound where the lack of high-level engagement has compromised the integration of climate into national development strategies, leading to critical climate decisions being delayed or overlooked.

These challenges have tan-

gible consequences for climate commitments. For example, the ambitious 60 per cent renewable electricity goal by 2030 is hindered by lack of provincial coordination. Similarly, the National Adaptation Plan needs strong cross-sectoral coordination, but dormant key bodies leave adaptation efforts fragmented.

**Pathways to reform:** These are chronic challenges, yet opportunities exist to address them. The prime minister can convene a joint meeting of the six apex councils, along with the planning and other commissions, to craft a shared vision. It will boost coordination of the national climate agenda, and not only help clear the existing backlog but also inject renewed vigour into languishing institutions. The latter include the National Commission for Science & Technology — Pakistan's apex body for science and technology development and the National Commission on the Status of Women (NSCW) — a marginalised institution mandated to promote gender equity. Such a collaborative approach is vital for revitalising institutional effectiveness and accelerating Pakistan's climate action.

There are at least two examples where the PM's powers are effectively delegated. The finance minister has become the de facto head of the NEC. The Planning Commission has historically been managed by the deputy chairman. Can this functioning model be replicated to appoint deputy chairmen of all the six councils as well as commissions for managing routine functioning? The delegated authority arrangements with prime ministerial oversight could significantly enhance operational continuity.

Streamlining appointment processes is crucial for preventing prolonged leadership vacancies. Some professional bodies have successfully elected chairmen — the Pakistan Engineering Council has had at least 12 chosen since its inception in 1976. Pakistan has also experimented with parliamentary committees partially overseeing chairperson selections.

Finally, a systemic challenge arises from the fact that the concerned ministries are not always prompt in initiating the necessary summaries for meetings. This presents the potential for a conflict of interest when the ministry itself is responsible for driving discussions that might involve critical self-assessment or policy adjustments. To address this, an independent cell, potentially housed within the PM's office, could proactively maintain a roster of upcoming meetings and help the executive office clear backlogs, thereby enhancing whole-of-government coordination and efficiency.

After all, Pakistan's journey towards climate resilience is intrinsically linked to the effectiveness of its apex institutions. While the nation has articulated climate policies and commitments, the present challenges stem from institutional shortcomings. Addressing these governance issues, leadership gaps and coordination failures is not merely an administrative task; it is fundamental to transforming our climate aspirations into tangible action.

The path forward requires sustained political commitment to reform, recognising that robust institutional effectiveness is the bedrock upon which successful climate action is built. The urgency of this endeavour cannot be overstated as the costs of inaction continue to mount. ■



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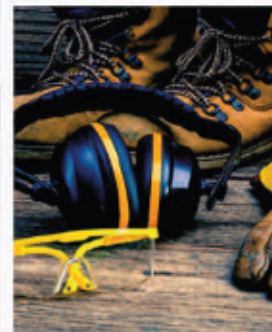
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