

Polluters Getting Paid: An Update on the ADB's ETM in Kazakhstan

Photo: Dana Yermolyonok

Kazakhstan is the latest pilot project for the ADB's Energy Transition Mechanism, a scheme designed to accelerate coal plant retirements. But without fundamental changes, the ETM may fuel further climate damage by backing companies that are still investing in coal and fossil gas. Civil society organizations are warning that the mechanism, as currently implemented, contradicts its own purpose and increases the risk of fossil fuel lock-in.

Background ETM

According to the Asian Development Bank, the Energy Transition Mechanism (ETM), launched at COP26 in 2021, is a flagship initiative to support Just Energy Transition Partnerships across Asia. The scheme aims to accelerate the early retirement of coal-fired power plants by offering financial incentives to companies that shut down coal plants 10 to 15 years ahead of plan. Indonesia and the Philippines were the first pilot countries; Vietnam, Pakistan, and Kazakhstan followed. Under the ETM, government and industry players pick coal plants for compensation, ostensibly to fast-track their decommissioning. Indonesia's Cirebon 1 and the Philippines' Mindanao were selected as showcase projects in the pilot phase.¹

Critique from Civil Society

Urgewald and the NGO Forum on ADB's research shows the ETM contradicts the "polluters pay" principle by compensating coal operators that lack phase-out commitments.²

It allows major polluters to receive compensation without acknowledging their responsibility for environmental and health damage.

In Indonesia, all four companies involved in the Cirebon 1 joint venture are also owners of Cirebon 2, a new coal plant built just 1.5 kilometers away. Two of the companies have no coal phase-out plans. The other two have made phase-out announcements for 2050—two decades too late—which they only plan to achieve by selling their coal assets or converting them to fossil gas. Two of the companies operate large coal mines, including one in Australia responsible for 20% of the country's methane emissions, and another that ranks as Indonesia's third-largest thermal coal mine. Similarly, in the Philippines, the majority shareholder of the selected Mindanao plant, Aboitiz, has no plans to phase out coal. Despite these facts, such companies stand to benefit from ETM funding. The result is that the ETM is channeling public finance to actors that fuel the climate crisis.

¹ https://d2qx68gt0006nn.cloudfront.net/sites/cif_enc/files/meeting-documents/agenda_item.b-philippines_act_investment_plan.pdf;

² https://www.urgewald.org/sites/default/files/media-files/urgewald_ADB_ETM_Paper.pdf

Kazakhstan: The Latest ETM Pilot Country

Civil society organizations have raised concerns about the pilot projects in the Philippines and Indonesia on numerous occasions. However, their input has not been included meaningfully in the project selection and design. Kazakhstan is the latest ETM pilot country. At COP29, a Memorandum of Understanding (MoU) was signed to initiate a feasibility study on the early retirement of coal-fired power plants under the ETM, which is supposed to identify a suitable pilot project in Kazakhstan.

So far, very little information is publicly available on the progress of the selection process. A pre-feasibility study has already been conducted to identify coal plants that could be retired early. The study's results have not been officially published, but a presentation held in October 2023 identified ten potential plants for early closure (Table 1).³ Background discussions suggest that the pilot

project may be one of the ten plants, or the feasibility study may be broadened to include other potential coal power plants.

The ten coal plants included in the ETM pre-feasibility study were ranked according to four broad criteria:

Energy Security, Financial Viability, Environment, and Just Transition. Experience from the pilot projects in Indonesia and the Philippines shows that this approach is inadequate. For this reason, clear bottom-line criteria are urgently needed. In our analysis of the ten shortlisted plants, we identified several cases that raise significant concerns. Past mistakes should not be repeated. We strongly urge the ADB to take these concerns seriously and adopt the criteria we propose as it moves forward with the selection and design of the ETM pilot project in Kazakhstan.

Name of Power Station (ADB)	Other Name	Capacity (MW)	Owner	Parent	Commission	Remaining Plant Lifetime ⁴
Tekeli CHP II		24	Tekeliysky Energy Complex LLC		1959	
Arcelor Mittal CHP PVA	Qarmet steel plant	192	Qazaqstan Investment Corporation		1960	5
Kentau CHP 5		13	City of Kentau		1952	
Pavlodarenergo Pavlodar CHP 2	Pavlodar-2 power station	110	Pavlodarenergo JSC	Central Asian Electric Power Corporation JSC	1963	5
Karaganda GRES-1 power station		84	Bassel Group LLS LLP		1942	5
Kazakhmys Corporation Balkhash CHP/Kazakhmys Balkhash power station		145	Kazakhmys Energy LLP	Kazakhmys Holding LLP	1963 and 2002	5 and 18
Zhegzazgan CHP	Zhegzazgan power station	252	Kazakhmys Energy LLP	Kazakhmys Holding LLP	1959	2
Stepnogorsk CHP		180	Stepnogorskaya TETS LLP		1969-1989	5
Sogra CHP/Sogrinsk power station		75	Sogrinskaya TETS LLP	Sogra Energy GmbH	2012	28
6.343	Astana-1	22	Astana-Energy JSC			

Key Criteria That Must Be Included in the Selection Process and Project Design

1. Exclude Companies that Expand Their Coal Operations

Power plants under scrutiny: Zhegzazgan CHP; Kazakhmys Balkhash power station, Akmola CHP 1

ETM funding should only support companies genuinely committed to phasing out coal. By working with companies that are still expanding their coal operations, the ETM funds would effectively subsidize the growth of coal rather than its phase-out. This would undermine the entire purpose of the mechanism by prolonging coal dependency instead of accelerating the transition to

clean energy. Therefore, any company that expands its coal operations must be barred from ETM consideration.

Our assessment of the 10 proposed pilot projects has revealed that some of the companies involved may still be expanding their coal operations.

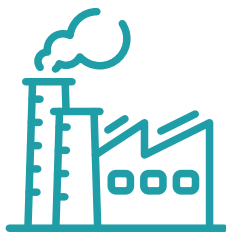
One such case is the Kazakhmys Balkhash power station, which appears to be increasing its coal capacity. In November 2024, a press release announced the construction of a new 50 MW boiler and turbine unit,⁵ which a government source confirmed was an expansion

³ <https://www.adb.org/sites/default/files/event/906146/files/17-00-bekzhan-george-adb-pre-fs-etm-rev.pdf>

⁴ According to data from Global Energy Monitor.

⁵ https://www.gem.wiki/Kazakhmys_Balkhash_power_station

of the plant.⁶ Kazakhmys Balkhash is owned by Kazakhmys Energy LLP, a utility company that supplies cities and industrial sites throughout Kazakhstan. It is a subsidiary of Kazakhmys Corporation, one of Kazakhstan's largest mining companies. Kazakhmys Energy LLP also owns Zhezhgazan CHP, another coal plant on the list of proposed pilot projects. As long as Kazakhmys Energy LLP continues to expand its coal operations and lacks a credible plan to phase out coal, the company and both power plants should be ineligible for ETM funding to ensure the mechanism genuinely supports the transition away from coal.



Another example is Akmola CHP 1, also known as Astana 1, which is owned by Astana-Energy JSC. The company's second power plant, Astana 2, is undergoing modernization that is increasing its capacity and extending its operational lifetime. The Astana 3 project has been under construction at the site for over a decade, initially proposed as a coal-fired plant. Since 2018, the project has shifted to a gas-fired power station, with coal as a backup fuel.

The ADB emphasized that a core principle of the ETM is to collaborate with companies that are genuinely committed to phasing out coal. A minimum requirement for demonstrating this commitment would be to refrain from building new coal-fired power plants, which should serve as a clear red line for ETM consideration. An expert on Kazakhstan's coal transition noted that some coal power fleet owners are genuinely committed to phase down coal and have already begun investing in renewable energy. This demonstrates that the ETM could partner with companies that are genuinely committed to phasing out coal.

2. No Support for Gas Switching and Other False Solutions

Power plants under scrutiny: Akmola CHP 1; Zhezhgazan CHP; Tekeli CHP II

For the ETM to drive an energy transition aligned with the 1.5°C limit, coal-generated power must be replaced with an equivalent or greater amount of renewable energy.

Even if methane leakage is kept to a minimum, switching from coal to fossil gas would fail to reduce emissions enough to meet this target. Since 2016, fossil gas has been responsible for 50% of the global growth in greenhouse gas emissions, making it a major contributor to climate change.⁷ Moreover, any investment in gas infrastructure risks creating long-term fossil fuel lock-ins, making future decarbonization efforts far more costly and difficult. Kazakhstan has immense wind and solar potential that far exceeds its current electricity needs.⁸ A full transition to renewable energy is entirely achievable. Therefore, the ETM must exclusively support projects that replace coal-fired power with renewable energy capacities, ensuring a transition that fully aligns with climate goals.

However, half of the companies presently considered for the ETM pilot in Kazakhstan have plans to expand their fossil gas operations. In August 2023, Kazakhmys Energy signed a contract to build a 100-MW combined-cycle gas-fired unit at Zhezhgazan power station, with completion expected by 2026.⁹ Additionally, proposals are being considered to convert Akmola CHP 1 to a gas-fired facility,¹⁰ while Tekeli CHP II is slated for expansion with combined-cycle gas plants.¹¹ These developments directly contradict the ETM's purpose and risk undermining its credibility.

To be effective, the ETM must not become a vehicle for fossil gas expansion but instead remain a catalyst for a true energy transition towards renewables-one that delivers real, long-term emissions reductions in line with the 1.5°C limit.

3. No Compensation for Inevitable Plant Closures

Power plants under scrutiny: Tekeli CHP II; Arcelor Mittal CHP PVA; Kentau CHP 5; Pavlodarenergo Pavlodar CHP 2; Karaganda GRES-1 power station; Zhezhgazan CHP; Kazakhmys Balkhash power station, Stepnogorsk CHP; Soginsk power station

Additionality is a key Quality Assurance Principle of the Verified Carbon Standard. It requires projects to demonstrate that carbon reductions exceed what would have occurred under business-as-usual scenarios.¹² This standard is widely accepted in the private sector carbon market. At the bare minimum, public development banks should hold their projects to the same standards as the private sector. ETM projects must ensure that plant

⁶ <https://primeminister.kz/ru/news/parlam/modernizatsiya-energetiki-kazakhstana-vyzovy-i-perspektivy-29421>

⁷ <https://static1.squarespace.com/static/62e211040c9b6758fb1d3467/t/636f503f9b084867049ec7eb/1668239696064/Fossil+Fuelled+Fallacy+Report+-p.47>

⁸ <https://www.undp.org/kazakhstan/stories/kazakhstans-path-clean-energy-and-climate-resilience>

<https://www.iea.org/countries/kazakhstan/electricity>; <https://www.trade.gov/energy-resource-guide-kazakhstan-renewable-energy>

⁹ https://www.gem.wiki/Zhezhgazan_power_station

¹⁰ https://www.gem.wiki/Astana-2_power_station#cite_note-12; https://www.gem.wiki/Astana-3_power_station

¹¹ <https://tekelinews.kz/news/cat-25/17283/>; https://www.gem.wiki/Kazakhmys_Balkhash_power_station

¹² <https://verra.org/programs/verified-carbon-standard/vcs-quality-assurance-principles/>

closures directly result from ETM funding and would not have occurred otherwise, thereby ensuring the mechanism drives real and additional emissions reductions.

However, five of the proposed plants and one additional unit have fewer than five years of remaining operational life.¹³ Six plants are over 60 years old, with one dating back to 1942. Only one plant and one unit were built after 2000. Many plants are in poor condition, making their closure likely even without the ETM. For example, due to severe deterioration, Tekeli CHP II was rated “red” in a World Bank report.¹⁴ The recommended action plan for such “red” plants is to phase out units in the medium term.

The ADB must ensure that the ETM does not reward coal plant operators for closures that would have occurred regardless.

The ETM must furthermore result in real decarbonization of the energy sector and not lock the countries in a fossil-fuel-dependent energy system for decades to come.

4. Address Past Violations Through Remedy and Just Transition Plans

Power plant under scrutiny: Arcelor Mittal CHP PVA

The ETM must ensure an energy transition that is not only fast but also just. This includes addressing environmental and social harms caused by the plant’s operations.

Until December 2023, Arcelor Mittal CHP PVA was owned by ArcelorMittal Temirtau. In 2023, it was fully sold to the state-owned company Qazaqstan Investment Corporation.¹⁵ ArcelorMittal Temirtau reverted to its historical name, Qarmet JSC.¹⁶ The plant’s history has been marked by violations of workers’ rights and environmental destruction. The severity of these issues led former Kazakh Minister, Yuri Ilyin, to state in 2021

that systematic safety violations were widespread at ArcelorMittal Temirtau.¹⁷ Between 2004 and 2010, more than a hundred miners lost their lives in multiple accidents.¹⁸

The air pollution from ArcelorMittal Temirtau’s operations is estimated to have contributed to approximately 3,000 premature deaths in the surrounding area.

It resulted in \$4.2 billion in health-related damages over 25 years of coal-based steel production.¹⁹

The transfer of ownership does not erase the plant’s record of environmental and human rights violations. A just transition plan for the plant’s closure must include measures to address and remedy the environmental and human rights harms that were caused.

Conclusion

The analysis highlights the need for the ADB to adopt essential minimum standards for the ETM. Past mistakes should not be repeated.

The ETM should not reward companies that are still expanding coal,²⁰ shifting from coal to fossil gas, or benefiting from the inevitable closure of aging plants.

It must also ensure that historical environmental and human rights violations are properly addressed. Clear exclusion criteria, strong safeguards against false solutions, and genuine civil society involvement are urgently needed. If the ADB wants the ETM to serve as a climate solution rather than a lifeline for coal, it must fundamentally change course and prioritize people and planet over polluters’ profits.

¹³ According to the information researched by the Global Energy Monitor.

¹⁴ i.e. chimneys were physically deteriorated; Gas ducts have significant ash accumulation; Rust on several metallic structures; Corrosion in concrete pillars supporting the conveyor; Ineffective fly ash separation and combustion systems. <https://documents1.worldbank.org/curated/en/099120123032522626/pdf/P18020904c0bd3052083be048479896c1b7.pdf>

¹⁵ <https://corporate.arcelormittal.com/media/press-releases/arcelormittal-completes-sale-of-arcelormittal-temirtau>

¹⁶ <https://qarmet.kz/en/>

¹⁷ https://total.kz/ru/news/bezopasnost/narusheniya_v_arcelormittal_temirtau_viyavlyautsya_postoyanno_mchs_date_2021_11_12_11_51_39

¹⁸ <https://bankwatch.org/project/arcelormittal-temirtau-kazakhstan>

¹⁹ <https://steelwatch.org/press-releases/arcelormittal-given-golden-handshake-left-kazakhstan-with-multi-billion-dollar-health-costs/>

²⁰ Detailed information on company-level coal expansion plans can be found in the Global Coal Exit List: <https://www.coalexit.org/>

