

## A Session on Coal Power



through a dedicated subsidiary, Engro Powergen Thar Private Limited (EPTL) which successfully demonstrated proof of concept and realized the dream of Thar coal by injecting 660MW of electricity in July 2019. In addition, Engro Energy also owns Engro Energy Services Limited (EESL) which manages two 50MW wind power projects at Gharo, Sindh.

### EU: How was the experience of Engro Energy to do the project of That coal for the first time for power generation?

**AZY:** For Engro Energy, the Thar coal mining and power projects have been in the making for almost a decade and there are very few private sector organizations which have the patience and the bench-strength to develop such megascale, multi-billion dollar projects over such time periods. When we first started the Thar coal power and mine projects, we took a leap of faith and embarked on developing this indigenous resource whilst taking on the burden of hope of the nation. This was a unique and neverbeen-done before project and hence had a number of risks and unknowns associated with it.

Government of Sindh played a catalytic role in the development of the project by providing all necessary support for the execution of the project including provision of infrastructure and ancillary services such as road network; water schemes; and airport amongst others. Similarly, the Federal Government also extended support for the project to ensure that it reached its successful culmination.

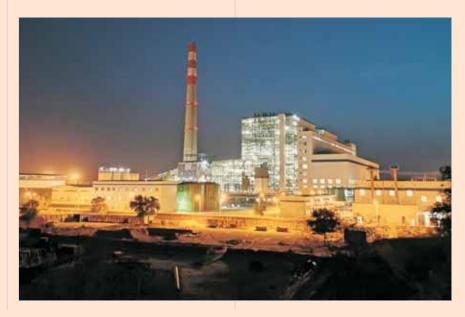
The reason why these projects are important for the entire country is primarily because the Thar coal mining and

power projects have the potential to produce affordable, low-cost and economical energy for the country. Since its commercial operations date (COD) on July 2019, Sindh Engro Coal Mining Company (SECMC) - a majority owned Company of Government of Sindh and managed by Engro Energy - unearthed and supplied a total of approximately 4 million tons of coal to Engro Powergen Thar Limited (EPTL) which generated approximately 4,305 GwH of electricity powering 1 million households and benefitting around 7 million Pakistanis across the country. In addition, if you compare it with RLNG and imported coal, the project has resulted in saving approximately USD 142 million and approx. USD 90 million respectively. However, the aspect that sets the Thar coal project apart from similar scale projects is its inherent focus on social work and inclu-

sive development. Throughout the project the Thari community has been kept at the centre of project planning, where meaningful initiatives and interventions that offer increased and better socio-economic opportunities to the Thari communities have been implemented. These interventions have been undertaken by SECMC through its CSR win the Thar Foundation – a dedicated foundation to help and improve the communities in Thar. The Foundation works in line with the United Nation's Sustainable Development Goals Framework (SDG) and has been operational since before commencement of commercial work on the project. By focusing on high impact areas - such as education, health, livelihood opportunities, drinking water availability – Thari communities continue to flourish with access to improved quality of life based on fundamentals of selfreliance and self-empowerment.

### EU: What is your viewpoint as to how the energy sector can be revived and the government's focus areas in this regime?

**AZY:** Engro Energy has a deep domain expertise in the energy vertical and we have leveraged this competency to develop insights and recommendations on how to improve the performance of Pakistan's energy sector. At the forefront, there is a critical need to relook and reevaluate decade long policies and decisions that have impacted our energy sector overall and a careful analysis tells us that there are five core challenges that the industry faces. These include circular debt, excess capacity, low demand, high



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cost, and forex drain.

However, of all these issues currently faced by the sector, circular debt remains a chronic problem and a critical challenge for the entire sector. To give you an understanding the circular debt as of June 30, 2018 was Rs1.2 billion which has increased to Rs. 2.2 billion as of June 10, 2020. It is important to understand that circular debt grows because of four root causes, the most critical of which is DISCO (distribution companies) inefficiency. Other factors that compound this issue includes the time-lag taken in tariff adjustments, failure of the government to timely disburse subsidies, and the high servicing costs of existing debt and late payments. Given that the DISCOs continue to lose substantially more power than their tariffs allow, they result in loss-making institutions for the government, thereby adding on to the overall stock of circular debt. Infact, if DISCO operations are not improved the inefficiencies will add an additional PKR 1.5 trillion to the stock by 2025 - taking the total circular debt to approximately PKR 4 trillion by 2025. However, we can turn this around by focusing on key fundamentals such as involving the provinces in the turnaround process and in DISCO ownership & management; investing in infrastructure; improving technical and organizational capabilities and lastly providing regulatory support.

The second critical challenge faced by the power sector is that of excess capacity. Even if Pakistan was to witness reasonable growth rates in the next few years, we have adequate supply present till at least 2025. Given the deflated demand in the country, the economy will remain relatively depressed through the years and consequently, the electricity demand to GDP would also remain low thereby causing excess capacity. This issue stems directly from lack of proper and independent power planning which should focus on both the supply-side and demand-side parameters which unfortunately in our case has not been done effectively.

This brings us to the third challenge of the sector which is somewhat linked to excess capacity - the issue of low demand. The demand of power in Pakistan has lagged behind the GDP growth rate, whereas it is supposed to be the other way round. In our case the growth in electricity demand has come primarily from household consumption and increased activity of the services (tertiary) sector – unlike the growth in industrial activity. Consequently, the increased demand, led by sluggish growth in industrial sector, and followed by a significant captive generation base (almost 50% of the total industrial demand) in the large manufacturing industries in the country have not induced the required growth in our power demand - further deteriorating the issue of excess capacity. Therefore, the need of the hour is to shift industrial captive power generation to the grid; encourage gas-to-electricity substitution for non-industrial heating segment; and take measures to increase industrialization so we can stimulate growth in electricity demand.

The fourth issue faced by the sector is the high cost of electricity. Electricity prices in Pakistan are the highest driven primarily due to capacity payments. Therefore, to safeguard against uncontrolled increases in the power tariffs, we recommend that the IPP debt should be restructured from 10 to 20 years followed by ensuring competitive bidding for all future projects.

Lastly, it is important for Pakistan to make use of its indigenous resources and renewables to diversify its energy mix and reduce forex drain. Going forward, it is recommended that the government evaluates using Thar coal blend with imported coal to increase indigenization and all future capacity additions should also be based exclusively on indigenous fuel and renewable energy.

By working on these areas and the recommendations, I just highlighted I am confident that we can execute a turnaround in the energy sector. By effectively and efficiently working on reduction in circular debt, lowering power cost, increasing power demand and reducing the forex drain we can ensure that the power industry becomes competitive and plays an effective role in the growth of the country and its citizens.

#### EU: What are the plans of Engro Energy to explore the option of renewable energy production in Pakistan?

**AZY:** As I mentioned earlier Engro Energy is focused on providing effective solutions to the energy vertical of the country and through its services arm already manages two 50MW wind power projects at Gharo, Sindh.

However, in the field of renewables, we feel that Balochistan is the next big frontier and will be the energy capital for renewables in the country. The provinces' coastal belts along with its solar and wind corridors provide a sizable renewable generation potential to Pakistan. According to experts Balochistan houses three of the world's best wind corridors in the world alongwith 04 of the world's best sites for solar radiation including Kuchlak, Panjgur, Khuzdar and Chagai.

Given this abundant potential, Engro Energy continues to scope and seek out opportunities in the renewables domain with a specific focus in Balochistan. To this effect, EEL had earlier secured LOIs for a 500MW wind power farm in Balochistan and we have already initiated wind data collection for the development of the 500 MW wind power project with two wind masts currently commissioned in Chagai, Balochistan. Similarly, LOIs have also been secured for 350MW solar power projects in Balochistan. Going forward we will continue to maintain focus and evaluate the renewables sector to make investments whenever and wherever feasible. .