



Jayanta Bhattacharya
Hony. Chief Editor

MINNOVATION™

Financing the monetization of unworkable mine and oilfield assets

Background

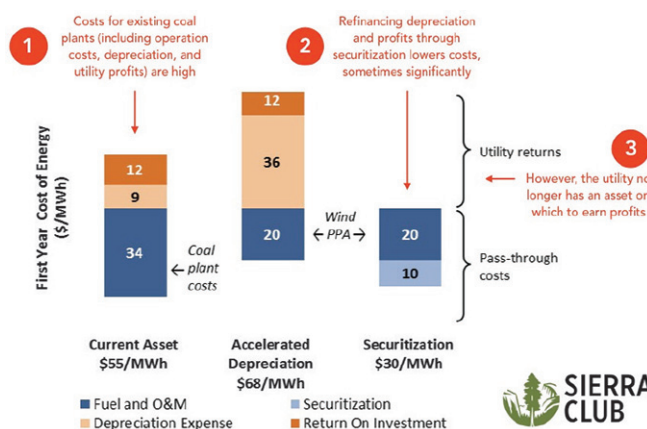
Unworkable mine and oilfield assets dot various parts in many countries. They are old abandoned assets as well as running but economically unviable assets. Moreover, in the operational mines and fields too, there could be assets that are no longer operable profitably. Under the climate change protocol, such unworkable and inoperable assets can be converted to solar power fields by monetizing the assets as well as using the money to set up solar panels or wind turbines. Such assets can include land, building, plant and machinery, licenses and leases, intellectual property rights and even trademarks. Understandably, these assets come with various risks and uncertainties due to aging and degrading, contamination, labour issues and local politics to name a few. As a result they are not generally attractive to the investors, and particularly to the retail investors. In such cases promoters, investors, insurers as well as the government come into help securitize the investment so that the investors are fairly treated. The benefit is for everyone: creditors, lenders, the holding company, community, - as the stuck asset gets a new lease of life.

Securitization

In securitization, the company holding the assets – known as the originator – gathers the data on the assets it would like to remove from its associated balance sheets. For example, if it were a mining company, it might be doing this with a variety of closed and inoperable mines that it does not want to service anymore and want to get them removed from the balance sheet. This gathered group of assets is now considered a reference portfolio. The originator then sells the portfolio to an issuer who will create tradable securities. Created securities represent a stake in the assets in the portfolio. Investors will buy the created securities for a specified rate of return-securitized by a government, public or private organization. Often the reference portfolio – the new, securitized financial instrument – is divided into different sections, called tranches. The tranches consist of the

individual assets grouped by various factors, such as the type of loans, their maturity date, their interest rates, and the amount of remaining principal. As a result, each tranche carries different degrees of risk and offer different yields. Higher levels of risk correlate to higher interest rates the less-qualified borrowers of the underlying loans are charged, and the higher the risk is, the higher will be the potential rate of return.

HOW SECURITIZATION LOWER COSTS

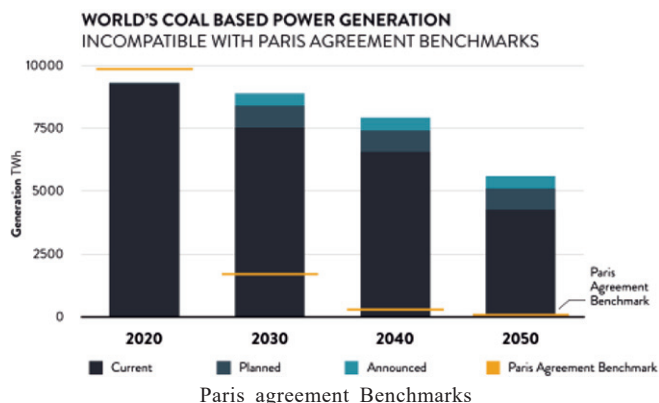


Source: Sierra Club (annotations by ILSR)

Climate change reversing goal

Any viable pathway to 1.5°C before 2030 as under COP-26 requires a rapid decline in coal emissions. Coal transition needs to be completed in OECD countries before this decade is over and in the rest of the world by 2040. At the same time, economic viability of operating coal plants is declining rapidly: by 2025, 78 per cent of coal plants globally will be more expensive to operate than building new renewable energy with storage. And yet, global coal transition within the next 30 years is far from a foregone conclusion. Nearly 60 per cent of operating coal across developed countries has either retired since 2010 or is scheduled to retire by 2030. President Biden recently announced that the United States should have 100 per cent clean energy by 2035. In the EU, 15 countries

have made coal phaseout announcements, 14 of which occur before 2030. Peru committed to complete coal phaseout by 2022. Canada has had a coal-free-by-2030 commitment since 2018. Pledge disbelievers, however, think many of these commitments are politically-timed but everyone agrees that the climate danger is real.



Coal phaseouts

BY SECURITIZATION

Colorado State of the USA used securitization to address parallel issues: replacing dirty, uneconomic coal plants and building communities, while also handing out savings to ratepayers as green alternatives became cheaper than incumbent coal-powered electricity.

CARBON FINANCE APPROACH

IDB Invest, a member of the IDB Group, provided a \$125 million financial package to ENGIE Energía Chile, a subsidiary of the ENGIE Group, with the aim of accelerating the decarbonization of the country's electricity matrix to retire coal plants and replace them with clean energy. The funds, with a tenor of up to 12 years, will be used to build, operate and maintain the Calama wind farm with an installed capacity of approximately 151 megawatts (MW), which will be located near the city of Calama, in the region of Antofagasta. The project is part of ENGIE's energy transformation plan, which, in addition to the successive closure of its coal-fired units, includes building more than 1,000 MW of wind and solar initiatives in Chile over the next few years. The innovation in the deal comes from the structuring of a pilot financial instrument to accelerate decarbonization activities in Chile, by monetizing the displacement of greenhouse gas emissions (GHG) when closing thermoelectric coal plants early and replacing them with clean technology projects.

The financial package consists of a \$74 million senior loan from IDB Invest, \$15 million of blended financing from the Clean Technology Fund (CTF) and \$36 million from the Chinese Fund for Co-financing in Latin America and the Caribbean. The financing structure establishes a minimum price for the offset GHG emissions by lowering the financing cost in CTF's loan tranche. To calculate the cost of the

displaced GHG emissions, IDB Invest developed a methodology tailored made to the project. It is expected that this will serve as a model and be replicable in other projects in Chile and in Latin America and the Caribbean, with the goal of accelerating the energy decarbonization of the region. In the event that a regulated carbon market is created during the life of the loan, both the CTF and ENGIE would share any increase in the minimum carbon price. The agreement to develop this instrument was announced during the United Nations Climate Change Conference (COP 25/26) in 2019, and will potentially contribute to two Sustainable Development Goals: Affordable and Clean Energy (SDG 7) and Climate Action (SDG 13). Through its Investing in Reversing strategy, IDB Invest joins efforts with private sector actors, financially innovating to help the countries in the region meet their Paris Agreement targets, including Chile's decarbonization goal calling for the gradual closure of its 28 thermoelectric plants between 2019 and 2040. These plants, which will be replaced by others that use renewable energy, represented 35 per cent of the country's electricity production in 2020. Eight of them will be closed in the first five years of the plan, which will reduce emissions by 20 per cent.

Coal transition investment programme

The growing role of the multilateral development banks (MDBs) in coal phaseout in developing countries builds on the theory that new renewable energy will not be sufficient to meet our climate objectives, without acceptable coal phaseouts on the existing and sunk investments.

The multilateral development banks (MDBs) have a critical role to play in assisting countries to meet domestic climate-related targets, by securing affordable, reliable, and sustainable energy access for all. Based on the MDBs' experience in supporting coal regions in their energy transitions, a dedicated investment programme could assist countries and their coal regions to achieve their defined energy and socio-economic transitions. The main objective of the accelerating coal transition (ACT) investment programme would be to address funding gaps leading to the successful implementation of national coal transition strategies and associated kick-start projects; building support at the local level to reconsider the development of new coal plants and accelerate retirement of existing coal assets together with new economic activities supported by new sources of energy. The programme would look to support both public sector utilities as well as private sector operators with the relevant toolkit necessary to affect the transition, as appropriate and consistent with national priorities.

While domestic political and regulatory considerations must factor prominently in the design of the optimal transition financing solution for any given country, certain overarching design principles should be considered. These include, but are not limited to; • Supportive macro-economic and fiscal

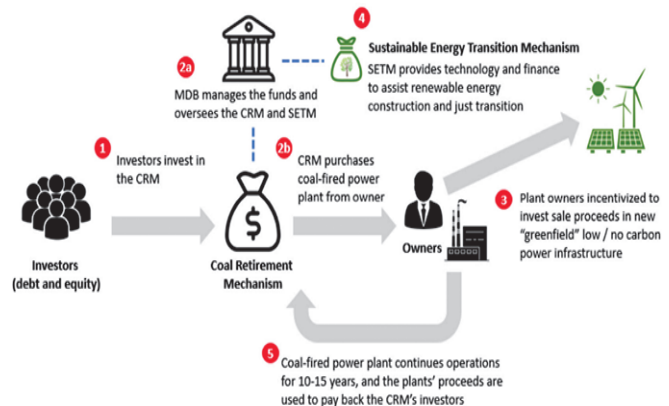
environment • Minimizing the use of public subsidy per tonne of CO₂-eq abated; • Maximizing “additionality” and/or avoiding “deadweight costs;” including considering perverse incentives e.g. paying for closures that would have occurred anyway, or environmental remediation that would need to have been provisioned before; • Maximizing speed of transition toward cleaner energy solutions; as appropriate, and, • Optimizing the simplicity of the financing solution as a means of increasing its replicability for other countries and regions.

Conclusions

A new financing order is developing in the liquidation of old and unusable assets. The mining sectors that are used to getting government finance for their projects and protection should awake to the new reality of private – public hybrid finance. It is multilateral fiancé where multiple parties including the sovereign governments are playing their part from infancy till maturity of the funding instruments.

Source acknowledgement

1. <https://rmi.org/financing-the-transition-from-coal-to-clean-energy/>



Multilateral Development Bank's coal transition investment programme .Picture courtesy: World Economic Forum

2. <https://idbinvest.org/en/news-media/idb-invest-and-engie-chile-debut-worlds-first-pilot-project-monetize-cost-decarbonization>
3. https://www.climateinvestmentfunds.org/sites/cif_enc/files/meeting-documents/joint_ctf-scf_tfc.23_6_cif_accelerating_coal_transition_investment_programme_proposal_1.pdf

LONG-DISTANCE GAS PIPELINES AND TAPI: LOOK BEFORE YOU LEAP

(Continued from page 424)

5. Operating a pipeline is more complicated than it used to be. Two businesses, merchant and transportation, must be run through the same pipe. Balancing many different customers' inputs and deliveries has become much more difficult. Certain traditional operating risks remain, for example, extremely cold weather which could cause equipment to freeze, curtailing throughput and deliveries. There are also newly recognized risks, e.g., the possible costs of cleaning up PCBs or other environmental hazards.

Intentional attacks on the rise

Intentional attacks on energy supply systems may result in more severe consequences. In Nigeria, a total of 15,718 deliberate attacks on oil pipelines occurred during 1993-2008. Deliberate attacks have been an obstacle to the sustainability of pipelines and the petroleum industry in Nigeria. Most recently, the Abqaiq oil plant was attacked by drones on September 14, 2019, leading to a 50% reduction in Abqaiq's oil production and a nearly 15% increase in the crude oil price. Due to the essential role in the sustainability of energy supply chain, modern society and economy, pipelines may be attacked by adversaries (e.g., terrorist attackers, thieves and criminals), resulting in economic losses, casualties, environmental pollution, public panic, etc.

Structural problems

Any attempt to combine active competition and tight rate of return regulation will generate conflicts and inconsistencies.

First, the time patterns of competitive returns to capital do not match patterns assumed in regulation. Second, competition creates downside risks, but regulation limits upside potential. A business subject to competitive as well as regulatory discipline gets the worst of both worlds. This is a longer-run, structural risk facing gas pipelines.

This structural risk shows up in two major ways.

1. Capital charges do not match over time. Capital recovery may be impossible for firms facing both regulation and competition.
2. Regulation creates asymmetric risk. The upside potential created by competition is cut off, but the downside risk remains. In other words, competition offers both a carrot and a stick; adding tight rate of return regulation takes away the carrot.

Ending words

As it seems the TAPI project will be sovereign guaranteed and funded by the large state-sponsored funding agencies like World Bank and IMF, etc. The private capital will be, if used, little. And so, the commercial feasibility will be in doubt for some time, before the project is opened for private investors. Let us keep the fingers crossed.

Acknowledgments: The materials for the write-up have been gathered from various sources; author gratefully acknowledges the authors' contributions but regret not being able to name them individually.