

ARTICLES

[△BACK TO HOMEPAGE](#)

Is this the panacea for renewables in mine projects: commodity price-linked PPAs?

October 04

15:272015

[□ Print This Article](#) [□ Share it With Friends](#)



by Andrew Slavin



Reaching financial close with renewable energy projects for mining companies is one of the biggest challenges for the growing sector of renewables for mines. Voltiq, a financial advisory firm specializing in renewable energy and transmission, is developing an innovative financial instrument for renewables for mines that offers price flexibility for mine offtakers while delivering price certainty for IPPs to help projects reach bankability.

This week Manuel Cabrerizo a Partner provides an informed view on lenders, miners and developers views on bankability challenges and the necessary market maturation that needs to take place to facilitate transactions. Cabrerizo is presenting at this month's [Energy and Mines Toronto Summit](#), Oct 22-23.

Q: Firstly, how would you describe the main barriers for financing renewable energy projects for mining operators?

Renewable energy projects typically require «revenue stabilization» to variable extents to reduce or even eliminate price risk in their power sales. I've said "typically" because there are exceptions. In fact, there are recent examples of very large deals that have been financed on a fully merchant basis, like Project Laberinto in Chile.

However, much as I agree that merchant financing structures will become increasingly popular, the fact today is that most transactions need contracted power sales to mitigate price risk in variable degrees to reach financial close. We think this will evolve – in fact, is evolving already – but it will still take some time until a large number of lenders are ready to consider merchant financing again.

Yes, lenders did generally close project finance deals for merchant conventional power projects in a rather distant past, but burnt their fingers in a combination of regulatory changes and fuel price volatility. With no fuel price risk and regulatory risk limited to market mechanics, banks and other lenders will sooner or later concede that renewables in the post-feed-in-tariff world look much safer than the last generation of conventional merchant power deals they financed. In the meantime, and that may be quite a while, we believe contracted deals are the answer.

Q: Can you tell us about the work Voltiq is doing to try to address these challenges by offering price flexibility to the mines while delivering price certainty for IPPs?

A: That is exactly the problem now. Mining offtakers have only recently started to incorporate renewables to their power mix. Naturally, they have compared prices in the renewable PPAs they have been offered to those in the conventional PPAs they know, and have been satisfied with what seemed significant price reductions.

In some of the first transactions, however, terms have turned out not to be as competitive as they could have been. It's understandable because, the same as merchant lenders in my previous answer, miners are also starting the transition from fossil to renewable sources. Pricing will be much tighter in forthcoming deals.

But it's not only miners who are learning. Normally, developers also have quite a superficial knowledge of the miner's concerns beyond price. There's a big gap there.

Further, it is difficult for the average renewable project developer to understand the implications that the terms of the PPA will have in the financing. So there's a second gap between developers and lenders. What we do at Voltiq is to bridge those two gaps. The solution we have come up with is a series of synthetic structures that range from commodity-indexed PPAs in which the power price moves with the commodity price, up and down, therefore hedging a certain margin for the mine, to more aggressive structures with stable or decreasing power price PPAs, all long-term and with bankability in mind.

Q: Why are you focusing firstly on copper pricing and the Chilean mining market – can you tell us more about the business case for this commodity and the energy dynamics in Chile which make this work?

A: Regulatory risk in Chile is minimal and mainly limited to market functioning mechanics. Then, Chile has the best solar resource in the world, which, added to PV's LCOE and technological reliability, makes it unbeatable. Third, Chile has a strong mining sector, mainly in copper, with an enormous need for cheaper power. And last, the complementary copper hedge works over the longer tenors required for the underlying project finance debt package. We think copper and Chile is the right combination to test and develop these synthetic PPA techniques.

Q: Can you share some of the responses you have had from mining operators?

A: Risk perception is very diverse in the current context. We have had mines saying they're interested in the indexed PPA, so they can lock in their margin by paying less for energy as long as copper prices remain depressed and more when they start picking up. Others don't want to give up their upside and are interested in more stable price levels.

Finally, there are players who prefer to protect their downside by working with power prices that decrease over time. We think we have the flexibility to accommodate most of these responses by adapting the derivative solutions around PPAs over 10 years or longer which are tailored to each mine's specific conditions.

Q: Could this work with other commodities and energy markets? What dynamics need to be in place for success?

A: It can certainly work in different conditions, but it's important to mention that there's no standard solution. Each transaction is different and requires a significant structuring effort in understanding each other's business and bridging the two gaps I've mentioned before.

Q: What are you looking forward to at the 3rd annual Energy and Mines' Toronto Summit on October 22-23?

A: Our main target is to be able to discuss these synthetic PPA solutions with a broader number of potential mining offtakers. Secondly, we are there to learn more and more about mining, listen to the miners' concerns and see what we can do to respond to their needs.

To download the brochure for the Toronto Energy and Mines summit [click here](#)

For more details of the Toronto Energy and Mines Summit visit www.energyandmines.com/toronto