

THOUGHT LEADERSHIP



**POSITIONING RENEWABLES
FOR BOOM DAYS IN MINING**



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Rob Lydan
Global Director for Solar and
Wind Renewable Power,
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The prolonged downturn in minerals and metals commodity prices and the generally sluggish outlook for the mining industry are having a profound effect on how keen mining companies are to move from study to adoption of renewable energy, says Rob Lydan, global director for solar and wind renewable power at Hatch in Mississauga, Ontario. “The commodity outlook is the oxygen that the mining business breathes,” he explains.

Until commodity prices start to rebound out of their current slump, Lydan is convinced that most mining companies will proceed cautiously toward adopting solar PV, wind, or other alternative forms of energy within their operations. “At the top of the boom, people’s sole interest is how much more they can get out of the ground and how fast they can process it,” he says. “During a bust, their singular priority is avoiding cost. Commodity prices are the beginning and ending of this business.”

Although renewable energy providers may find the current situation frustrating, now is the time to position for an uptick in commodity prices. “The ramping in between booms and busts—be it down or up—is when innovative ideas are likely to experience more adoption,” says Lydan. He therefore predicts that

“African mining companies need affordable base load and they’re not prepared to give their national governments a pass on providing reliable and affordable energy.”



wind, solar, and other renewable energy options will begin to see greater adoption when the commodity depression ends and prices climb again.

Faltering Grids in Africa

Given that commodity pricing plays such a disproportionately large role in the fortunes of mining companies, other macro-economic issues, such as the decline in oil prices and energy shortfalls and transmission problems within many African electricity grids, are having little effect on renewables adoption, says Lydan.

He emphasizes that renewables projects have been stalled for no other reason than that commodity prices are so low and there’s widespread uncertainty about when they might begin to climb again. With commodity prices having tanked, mining companies have postponed capital expenditures and mandated staff layoffs in massive numbers. These staff reductions mean that there are fewer individuals available to explore wind or solar solutions.

Lydan emphasizes that a strong grid is necessary

for the adoption of renewables in African mining companies simply because the grid-tied mines have based their entire business models around an operable grid. “You can’t power a platinum mine entirely from solar panels. You need an affordable baseload,” he says. “And if there’s no affordable base load, there’s no mine to connect renewables to.” Off-grid mines, says Lydan, are severely curtailed until commodity prices recover.

“The irony is that some people perceive a broken grid as an enabler for renewables, but it is quite the opposite,” says Lydan. “If you see the largest and most sophisticated penetration of renewables, it’s not coincidentally in the same locations as have the most robust grids.”

Lydan has always emphasized that renewable developers should strive to interact with mining companies honestly and forthrightly, resisting the urge to sugarcoat problems or downplay negatives. In the current situation, it’s difficult to make an optimistic case until commodity prices begin to trend higher.

“African mining companies need affordable base

load and they’re not prepared to give their national governments a pass on providing reliable and affordable energy,” says Lydan. Off-grid mines are naturally less concerned with grid stability but are just as reliant on commodity prices.

Advancing the Renewables Conversation

Although mining companies are acting cautiously on renewable energy adoption during the commodity slump, they are researching various solutions and considering how they might power their mines when gold, copper, nickel, and other commodities recover.

Lydan points out that financing for renewables projects is also curtailed by low commodity prices. Banks and other financial institutions look to the balance-sheet strength of the off-taker when funding projects. And, of course, mining companies’ balance sheets look far shakier when commodity prices have been disappointing for quite some time. “There are financing opportunities out there, but they’re not the best,” he says.

One bright spot in the outlook for renewables is that



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Renewable energy now looks increasingly affordable for mines, the cost curve for wind and solar has flattened.

That said, Lydan has detected at least one wholly positive trend: mining executives are now actively exploring renewable energy. At many renewable energy conferences, for instance, he's seeing "more of a business crowd than a corporate sustainability crowd." For this reason, he believes that renewable energy has evolved into "a commercial concept," rather than just an environmental concept.

Lydan is looking forward to the Renewables and Mining Summit & Exhibition in Johannesburg on July 1st and 2nd because Hatch wants to gain "a better understanding of what's unique to the African market." While Lydan has worked with African clients for many years now and knows most of the players, he underscores that "we want a better understanding of the things that are regionally affecting Africa as a whole."

Above all, Lydan is pleased for an opportunity to continue the process of educating the mining industry on the possibilities of renewable energy. "This commodity slump is unnerving," he says. "When you don't know what's going to happen next, you wait and see. We've been in the wait-and-see phase for quite a while."

Even though new renewables projects in Africa are few and far between, Lydan characterizes this as an important time for mining companies and renewable-energy providers to explore scenarios for the future.

"Right now, the environment requires an enormous amount of patience, but [renewable energy companies] can't start educating mining companies when commodity prices begin to recover," he concludes. "You have to start much earlier."

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wind and solar technologies are gaining acceptance. "The general socialization of these concepts is coming along well," says Lydan. "People understand that using renewable energy is a viable thing to do. And when we come out of the slump, that socialization will perhaps be behind us, to some degree."

While there have been few technological changes within renewable energy, the costs have come down considerably. Here, too, the news is mixed. While re-