

# Mining company of the future; Anglo American CEO joins group to open discussion

by William Gleason, Senior Editor

The mining industry is at a crossroads. Currently, there is an estimated \$25 billion worth of projects around the world that have been stopped as the consequence of a dispute or disagreement with their communities, the government or some other stakeholder.

Anglo American chief executive officer Mark Cutifani is one who sees the mining industry in need of change and on Dec. 12, he gave the keynote address for the launch the Kellogg Innovation Network's Mining Company of

future that we are confronting," Cutifani said. "Industry institutions, companies and individuals are doing good work, but it's not enough. I think we need to reach out well beyond ourselves and build partnerships with our most critical observers, because in the end, I think they will help us find the pathway forward in the way to articulate who we are, but, more importantly, to help us find a pathway and approach to better connect with the societies in which we serve to deliver sustainable businesses beyond just delivering products. The way we deliver those products is where we can make the most significant change," Cutifani said. "Unless we change the dialogue, my concern is these types of disruptions (project delays) will become more prevalent."

To change the dialogue, Cutifani began working with Peter Bryant, senior fellow at the Kellogg Innovation Network, to chair the Mining Company of the Future effort. They were joined by Ray Offenheiser from Oxfam America (a rights-based, anti-poverty NGO); Mark Podlasly, senior advisor, First Nations Energy and Mining Council and member of Niakapamux Nation and Rev. Seamus P. Finn, OIP Investment Trust (Catholic) and chair of the board of the Interfaith Center on Corporate Responsibility.

Each person represents a different stakeholder group that is directly affected by mining operations, and, in many cases, groups that are affected in a negative way. From these groups, Cutifani was able to glean a better picture of how the mining industry is viewed from the outside, and these groups were able to learn about the mining industry from Cutifani and contributors from other mining companies.

"Society's expectations of the mining industry continue to increase and there is a growing recognition in the industry that incremental improvements to how we run our business are not enough," said Cutifani. "Our aspiration is to fundamentally change the extractive business model of the mining industry from insular and reactive, to an integrated and proactive development partner, delivering on economic, environmental and social shared purpose."



**Anglo American chief executive officer Mark Cutifani delivers the keynote address for the launch of the Kellogg Innovation Network's Mining Company of the Future Initiative's Development Partner Framework.**

the Future Initiative's Development Partner Framework (DPF). The launch was held at the Ford Foundation building in New York City.

The DPF seeks to inspire and support the mining industry to adopt a new way of thinking and a new approach to how it secures, nurtures and revitalizes its social license to operate.

Working with a diverse group of people from faith-based organizations, nongovernmental organizations (NGO) and other stakeholders, Cutifani often had the rather uncomfortable position of representing the mining industry in a room full of people who are far from the industry's biggest fans.

"As the leader of a major mining company and a mining guy with 38 years of experience from the shop floor up, I cannot sit comfortably with the

In a call to action paper, Cutifani and Bryant write that “the mining industry is failing to live up to its promise to society by not supplying sufficient quantities to support the world’s growth, projected to be 3 percent year-on-year. Rising costs, community activism, government intervention, resources that are more difficult to reach and lower grade ores, infrastructure challenges and the industry’s poor image are all playing a role in the struggle to meet demand.”

Still, the industry is essential. In 2010 the mining industry represented 11.5 percent of the world’s GDP as measured by revenues and products sold. However, when the industry’s payments to services and support industries are taken into consideration the direct contribution to global economic activity rose to 21 percent. On a broader sense, when considering the products produced because of mining and the contributions mining makes to industries that are reliant on the materials produced by the world’s mines (such as fertilizer used in the agricultural industry), it can be argued that the industry drives more than 45 percent of the world’s measured economic activities. All of this is done while disturbing just 1 percent of the earth’s surface.

These numbers, though, have done little to squash opposition from those who live near the 1 percent of land where mining companies often want to operate. And mining faces increased scrutiny and opposition that has become more influential than ever before. Thanks in part to the power of social media, these efforts to stop a project can quickly grow from grassroots protests into global movements with support coming from around the world.

The highest profile example, and one that accounts for about \$8.5 billion worth of the estimated \$25 billion in stalled projects, is Barrick Gold’s Pascua-Lama project. Straddling the border of Chile and Argentina, the project is one of the largest gold and silver resources in the world, but one that has yet to launch. In 2012 Barrick estimated that it would produce 24.9 to 26.4 t/a (800,000 to 850,000 oz/year) of gold and 1.08 t/a (35 million oz/year) of silver in its first five years of the mine.

However, during the fourth quarter of 2013, Barrick announced the temporary suspension of construction activities at its project, except for those activities required for environmental and regulatory compliance. Construction on the Chilean side had already been halted in the second quarter of 2013 after a court injunction was filed by indigenous communities concerned about potential water supply contamination as a result of the project’s construction activities.



**Rev. Seamus P. Finn speaks to about 100 attendees at the launch of the Kellogg Innovation Network's Mining Company of the Future Initiative's Development Partner Framework.**

In 2004, Barrick Gold estimated production costs of \$2.8 to \$3 billion with a planned start in 2009. However, the company raised this estimate by around 40 percent to between \$4.7 to \$5 billion in 2011 as a result of rising labor, material and energy costs. The company further raised estimated construction costs to \$7.5 to \$8 billion in July 2012 as a result of the decision to manage construction in-house rather than hiring external contractors, which was originally expected to save costs but ended up raising project costs. The estimated project cost was again pushed up to \$8-8.5 billion in November 2012 as a result of construction delays and higher project management costs. Barrick had spent around \$5 billion on the project by the time it decided to suspend construction activities.

Barrick recently signed a memorandum of understanding with a group of 15 indigenous communities in Chile. This marks the first step in a dialogue process with an important stakeholder group, which is an essential step if the project is to be restarted.

“We no longer have the luxury of choice about how to react and respond to our environment. Our external environment has taken charge and we must accept that if we want to survive and be a profitable, meaningful industry in the long term, wholesale change is necessary and fundamental,” said Cutifani.

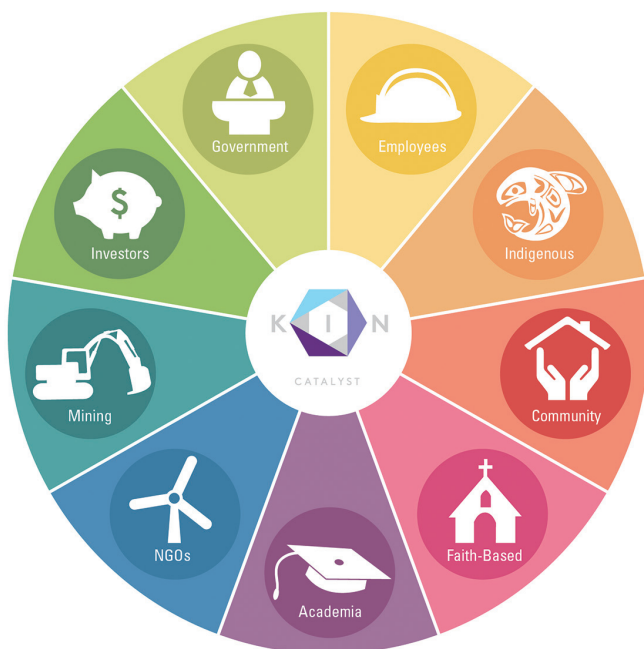
### Creating change

The Mining Company of the Future initiative began in 2012 with a meeting in Brazil. Since then, the group of stakeholders has had many discussions, including a day of reflection at The Vatican and one at the Church of England, and more than 20 faith-based leaders have toured mine sites, creating a platform for open and honest discussions about the mining industry.

“There is a very small group of people who would want the (mining) industry shut down, and when you talk with them it is clear they don’t understand what the industry does and what our products are used for,” Cutifani told *Mining Engineering* following the launch. “But the



# Mining Company of the Future



**The Kellogg Innovation Network developed a model for the Mining Company of the Future that incorporates all stakeholders in a mining operation.**

majority of people will listen and what they are saying is that 'we are not suggesting that you stop mining, but what we are looking for is a different approach to mining,' and that is a conversation that I think we can have."

Rev. Finn has been a member of the Justice/Peace and Integrity of Creation Ministry team of the Missionary Oblates of Mary Immaculate since 1986. The office is responsible for the Faith Consistent Investment/Socially Responsible Investment program for the United States. He said of the Catholic Church's position on mining, "Human society cannot continue to evolve without it and without the products it provides. So, I think that under the guiding principles of respect for creation, respect for human rights, doing things properly, respecting workers, paying good wages and respecting the environment, then I think it's like any other human activity and the church looks at it favorably."

Yet, there remain issues at the ground level, and it is on those issues that this initiative is focused.

According to Podlasly, the vision for the Development Partner Framework comes "from a deep sense of shared purpose to promote healthy relationships with local communities, flourishing ecosystems and sustainable economic growth. We believe this can be a catalyst for economic sustainability and promote a healthy planet for all."

The change that needs to come about, according to the panelists, will come with open, honest and sometimes uncomfortable engagement with people and groups who do not see eye-to-eye on many issues.

"The mining industry is telling good stories about itself, but it's when others begin telling good

stories about the mining industry, that is success," said Bryant. "The only way to achieve that is through a process of engagement. The mining industry has to become way more curious about what is happening outside."

Finn said that, while every situation is different, engagement with a community in Latin American is vastly different than working with a community in Africa, there are some general principles that can be followed.

"I think the most important thing is engagement at the local level as soon as possible," Finn told *Mining Engineering*. "As soon as a company begins to think about bidding on a plot, someone needs to be thinking about what communities are there, realizing that they are not all the same. Being very detailed about mapping the communities and understanding what their origins are, what their relationship to the land is. I think that is upstream and it is very important."

"Then open a conversation, and this can be difficult, but identify who are the leaders. Who are the government leaders, the civil leaders, indigenous leaders that you can actually talk to and can bring into a conversation," said Finn. "There are some things in these communities that are very important — they don't want you to touch that hill, or that river and you have to identify what those priorities are and to be able to engage along those lines. And be willing to do the education."

For their part, Finn said that religious leaders, no matter the faith, have a responsibility to be good brokers for "what is in the best interest of the community in spite of our doctrinal differences or religious beliefs. That is a challenge to faith leaders as well."

What Cutifani found from the discussions is possible solutions to complex problems do not have to be complex or costly.

"At The Vatican, most of the suggestions were not high-cost suggestions, they were simple things about how you engage the people in the communities in which you work or where you want to work. And finding solutions to help them deal with the problems they have on a daily basis or the problems that you will create by moving into the area," said Cutifani, whose company works on projects around the world. "It's pretty straightforward about people engagement and problem solving. When you put everything aside and start from the point of our common humanity it becomes a different conversation."

## Technological innovation

Bryant, who is co-chair of the Mining Company of the Future initiative, will also moderate the keynote address at the 2015 SME Annual Conference and Expo on Feb. 15 in Denver, CO.

That session, “The Mine of the Future: Forecasting opportunities and challenges for the global mining industry” will bring together industry leaders including Richard Adkerson, vice chairman, president and CEO, Freeport-McMoRan; Brian Conlin, president and CEO, Golder Associates; Christopher Curfman, vice president mining sales and support division, Caterpillar; John Eaves, president and CEO, Arch Coal; Barry Hudson, director of aggregates Northern Europe, Heidelberg Cement and Daniel Moncino, vice president, filtration and performance additives Business Group, Imerys. The session will take a look at what the industry needs to do to operate in the future.

“This is a call for a transformational innovation effort at a company and an industry level. Whether you look at the physical effort of mining, the trucks and shovels, or the social aspect of mining, there needs to be innovation,” said Bryant. “Physically, there are certain orebodies that cannot be mined, it doesn’t matter what the price is, the orebodies are just too deep, and it’s just going to get worse. As an industry, we have resisted technology innovation, I think, for a long time. And on the business model side of things, it’s the same thing. The way we obtain our social license to operate and the way we think about the way we do business needs to change.”

“The future for the mining industry is bright and demand for mineral products will continue to grow worldwide,” said SME 2014 President John O. Marsden. “But success requires more than dedication and resilience; it hinges on keeping up-to-date with the latest trends and technologies.”

The KIN Catalyst Mining Company of the Future initiative is built on 12 pillars, one of which is innovation and is the initiative supported by a number of companies involved with the mining industry. Some, like Anglo American, are large players in the sector, while others are not traditional mining companies, but have something to offer.

“I think the innovation is going to come from the non traditional guys, if you look at who sponsors this, 3M, Schneider Electric, Baker Hughes — mining is strategic to them and these guys have innovation in their DNA,” Bryant told *Mining Engineering*. “We are talking about using less water and less power and that is going to take new technology to resolve these issues. As companies are having to commit more and more to their social license to operate, technology had better be behind that, otherwise the industry will make promises and not be able to deliver or not be able to promise at all, and that will shut the industry down in the way we know it today.”

3M was founded with mining as one of its core principles more than 100 years ago. It has

since ventured into many industries, but remains committed to mining. Henk Th. Beukman, global business director mining and metallurgy solutions, oil and gas solutions is a key member of the Mining Company of the Future initiative.

“I think that 3M can help indirectly through production methodologies and through improved safety,” Beukman said. “We are obviously leading the personal safety and side safety area and, in that sense, we will continue to do that but there is also the bigger sense of looking at the innovation for the industry to the future and how do we move forward. Not so much of the convention but that of invention.”

Diego Areces of Schneider Electric and Derek Mathieson of Baker Hughes are other key industry members contributing to the effort.

## Spreading the message

The overriding message during the launch of the DPF was that of engagement and communication with all stakeholders.

“We believe there is the transparency revolution on the way that includes the free, prior and informed consent that is part of Dodd Frank that has been replicated in the European Union, and industry needs to move on that,” said Oxfam’s Offenheiser. “Among the major (mining companies), we have found that this is good for the industry and it is not necessarily a threat to the industry. It evens the playing field and that’s where we think it is in industry’s interest to invest in that principle, so at the end of the day we will get better governance.”

“What we have done here is about trying to connect,” said Cutifani. “If we get enough early momentum and support how do we create a broader coalition? Do we put a think tank together that explores different ways of doing things? From there do we connect with groups like in International Council on Mining and Metals and other groups that are developing standards? That will all be worked out. This is meant to provide a way to deal with the challenges that society has with mining in a constructive way and I think we are off to a good start.” ■

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