

# The New Era of Mining

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**In 2014, the mining industry experienced a variety of changes. More changes are on the horizon for operators in 2015 as new geographic markets emerge.**



The year 2014 gave rise to notable changes and new trends across the mining industry. These new developments will continue to reverberate in 2015 and beyond, greatly impacting how mining companies will conduct business in the foreseeable future. As we approach the end of the year, it's time to revisit the biggest trends and examine them in detail.

## **Emerging Markets**

The idea that emerging markets would represent the majority of the growth occurring in the mining industry is certainly not a new one. In fact, the 2014 PwC Report for Mining stated that the combined profits from all emerging markets mining companies was actually lower in 2013 (\$24 billion) than it was in 2012 (\$39 billion), suggesting that emerging markets are still going through some growing pains. However, these numbers provide a clear illustration of just how dominant emerging markets companies have become: mining companies from developed countries posted a collective \$4 billion loss in 2013.

What is new is the increased market presence of the emerging market companies. The year 2013 marked the first time that emerging markets companies made up a majority of the top 40 largest mining companies in the world. In the future, these companies will continue to pursue growth opportunities in order to prove that their current dominance is sustainable. The PwC report also predicted that future years will see even more emerging markets companies break into the top 40.

## **Emphasis on Social Responsibility**

The year provided plenty of indicators that financial profitability is no longer the only factor mining companies take into consideration when planning a new mine. Mining companies have realized the importance of ensuring the sustainability of their operations, and an important part of sustainability is considering the effect that the mines will have on the community.

Past instances like the Mount Polley tailings pond breach have inspired local community groups like the First Nations tribal council in British Columbia to set stronger rules for mining within its territory. These past instances and the regulations that arose as a result have required mining companies to reconsider their thoughts on what a “successful” mine is. In 2015 and beyond, building a successful mine will require a company to think about a number of different sustainability issues that they may not have considered important in the past.

### **Higher Energy Costs**

According to Mining.com, the Chilean mining industry, which accounts for about 1/3rd of all copper output in the world, is facing an energy crisis that could see demand double by 2015. In a country where energy costs already represent 14 percent of the operation, an increase of this level would be very difficult to overcome.

Chile is just one example of a country where high energy costs seem ready to hit mining especially hard. The Chilean government is working hard to pursue new energy generation opportunities and to connect the country’s two electricity grids, but the high costs look to be here to stay. While other countries may not experience a situation that is as extreme as the one occurring in Chile, energy will continue to be a huge expense that the mining industry will have to overcome in many different parts of the world.

### **Automation and Software**

In many ways, the mining industry is at a crossroads: mineral resources are more of a challenge to find, and the need to ensure sustainability and responsible behavior toward local populations has created a lot of new complexity for mining companies. However, these concerns are in many ways offset by the new opportunities available to mining companies. In 2014, many companies started to realize how important technology can be for the mining industry, but this is most likely just the tip of the iceberg. According to industry experts, mining companies are set to quintuple their investments in IT over the next three years.

The reason behind this new interest in technology is clear: with mine planning software such as the one we have created at Promine, mining companies can pull from new sources of data to make

smarter decisions about how to run their businesses, keep productivity up and make the mining environment safer and more efficient for everyone involved. With the benefit of these new tools, the challenges facing the mining industry no longer seem so daunting. The problem now is the over-complication of this software, which is why Promine's mine planning and geology software in particular, focuses on simplicity and user-friendliness.

### **What's Next**

This year has been a year filled with opportunities and challenges for the mining industry. Going into 2015 and the future, mining companies will have to continue adapting to do business in a changing world. Mining companies that can make the most of the new opportunities around them, including new tools and technologies, will be the ones that are in the best shape to continue succeeding going forward.

***Yvan Dionne** is the founder and president of PROMINE, a geological modeling and mine planning software. As one of the mining industry's leading experts and an innovator with a brilliant knack for software development, Dionne applies his thorough knowledge of AutoCAD programming to create useful mining tools for his industry peers. For more information, visit [www.promine.com](http://www.promine.com).*