



US SME Foundation launches campaign to help solve some of the key challenges facing the mining industry

With a reported attendance of over 7000, the SME Annual Meeting & Exhibit 2012, which took place last month in Denver, Colorado, was among the most successful ever held – despite a blizzard that kept many away from the early stages of the show. As well as a technical programme comprising 96 sessions, the conference began with a keynote session focused on the conference's tag line – "Mining: It's About The People" – with presentations from speakers from the National Academy of Sciences (NAS), Caterpillar and Newmont Mining Corp. all looking at the impending skills shortage in the mining industry.

Part of this session was a preview of a recent study by the NAS's National Research Council entitled: "Emerging workforce trends in the US energy and mining industries". This study included input from the SME, which concluded that it is unlikely there will be sufficient skilled workers to satisfy demand in the US mining industry over the next 20 years. This will mean that, for a period of time, the US mining industry will have a workforce comprising very young and very senior workers. The full report is expected to be released soon.

In response to the growing challenges surrounding skills, leadership and education, the SME Foundation launched a new initiative at the conference. Creating Global Prosperity: The Campaign For Mining will "help build stronger global leadership with a growing pipeline of future leaders and better relationships with our communities," according to a press release. It will do this by focusing on four key challenges:

- Meeting the global need for expertise.
- Training the next generation of global leaders.
- Educating the world about mining.
- Sustaining excellent mining education programmes.

Meeting the need for global expertise

The first strand of the new campaign will focus on meeting the skills gap endemic in the mining industry. This will include three strategies:

- **Create a global lecture series.** This will build on the Henry Krumb Lecture Series in the US, which helps to bring speakers from the SME Annual Meeting to the SME's local sections around the country. As part of the Creating Global Prosperity campaign, SME will create a larger programme of global presentations, symposiums and workshops.
- **Provide support for young and midlevel mining professionals.** The campaign will help young and midlevel mining professionals to participate in leadership training programmes.
- **Expand the Miners Give Back programme.** Building on the success of the rescue of 33 Chilean miners who became trapped after a cave-in in 2010, the Miners Give Back programme uses SME member's expertise to help solve systemic global challenges, such as infrastructure, education, health and safety, and waste disposal.

Training the next generation of leaders

The forthcoming retirement of babyboomers and a dearth of engineers and mining professionals in the pipeline will create a leadership gap in the mining industry. To counter this, the Creating Global Prosperity campaign will take the following measures:

- **Invest in the professional engineer (PE) licensure programme.** PE is a recognised credential that helps to distinguish capable mining leaders, regardless of where they work.
- **Invest in scholarships** to encourage more talented students to pursue mining-related subjects at all levels of study.

Educating the world about mining

The mining industry often suffers from bad PR in the communities in which it works. The Creating Global Prosperity campaign will aim to build on the SME Foundation's existing Minerals Education Committee (MEC), which aims to build understanding of mining in communities across the US:

- **Reach more students, teachers and schools** with education programmes that teach the positive side of the mining industry.
- **Expand the MEC beyond the school system** to enable SME members to engage and educate communities with support from technology, conferences, publications and media outreach.

Sustaining excellent mining education programmes

The number of university mining programmes has decreased around the world. By some counts, the US mining industry rests on only 69 faculty members, with 14 vacancies unfilled. Similarly, in the US last year, there were 500,000 graduates in science, technology, engineering and mathematics (STEM) subjects, but only 200 of those were mining engineers. The Creating Global Prosperity campaign will aim to help tackle these challenges:

- **Invest in the Accreditation Board for Engineering and Technology (ABET).** ABET is the organisation that accredits over 3100 applied science, computing, engineering and technology programmes at more than 660 institutions in 23 nations. By investing in ABET as a member society, SME aims to ensure the future of high-quality programmes in mining disciplines, creating a worldwide standard for engineering excellence in a rapidly globalising industry. ABET also seeks to publicly promote and advance education in the applied science, computing, engineering and technology disciplines.
- **Provide faculty career transition grants** to encourage more industry leaders to complete PhDs and choose careers in university-level teaching.

Sharing the responsibility

In opening the campaign, co-chairs Red Conger, president of Americas at Freeport-McMoRan, and Rick Whiting, former CEO of Patriot Coal, said: "Even as our industry transforms, we are fortunate in that we can count on SME and the SME Foundation to support us in every way. That is why we are proud to lead [this campaign]."