

I am proud of my Chinese colleagues

By Dave Feickert

I am very proud of my Chinese colleagues and the other foreign advisers working to reduce coal mine accidents among China's five million miners. The number of fatal accidents in coal mines has fallen from a peak of 6,995 in 2002 to a provisional figure for 2008 of around 3,200. This figure is set to fall below 3,000 for 2009. This means that thousands more families have their men folk alive, earning a wage which often supports all three generations of a family.

China's coal output has increased hugely - from 998 million tonnes in 2000 to 2,720 million tonnes in 2008; so, expressed as a rate per million tonnes of coal produced, fatal accidents have fallen by over 70%, from 5.8 fatalities per million tonnes in 2000 to 1.18 per million tonnes in 2008. The overall rate is running at about 0.92 per million tonnes today. But this figure remains very much higher than the rates for developed countries - it is still 20 times higher than for US mines and around 40 times higher than those in Australia and New Zealand, whose large mines are the safest in the world. Recent mine disasters in China - such as the terrible gas explosion killing 42 and trapping 66 in Hegang City in China's North East in November - underscore just how much more work remains to be done.

In the US, the new Mine Safety and Health Administration (MSHA) assistant secretary, Joe Main, former United Mine Workers of America safety director, has said that a new target for the industry of zero fatalities is possible. He will also target a reduction in lung disease among miners, something which remains a huge problem in China.

But the story does not end here, of course. China is producing over 40% of the world's coal. It is the fossil fuel with the highest carbon content. Oil has 80% of the carbon of coal on an energy equivalent basis and natural gas has 60% that of coal. Consequently, China's carbon footprint is rising fast. In total, it has just overtaken the United States, which emits just over 6,000 million tonnes per year. China's energy demand is rising in line with its 8% annual economic growth rate. Other countries are asking China to maintain this so that they can sell China their goods. China's CO₂ emissions are likely to double to 12,000 million tonnes by 2030. It has been estimated that over 20% of China's carbon footprint is created by Western companies which have located their operations there for re-export to Western markets. This is an issue that affects other developing countries, too, and will be on the negotiating table at the Copenhagen post-Kyoto summit in December 2009. Developing countries are pressing the developed world to transfer cleaner technologies at a faster rate.

The earth quite simply cannot sustain such increases in carbon equivalent greenhouse gas. Consequently, the other part of our work in China is to help China to move towards a lower carbon economy - to first stabilize, then to reduce its emissions. This is no easy task. President Obama is one person who showed that he wanted to help when he visited China for talks, recently. He knows very well the US itself has a very great problem in

meeting its Kyoto CO2 reduction targets. During the G20 summit in the UK early in April, the US and China discussed these issues and a whole series of discussions have been taking place between the two on clean and renewable energy technologies.

China, itself has built 235 of the cleanest available coal fired power stations, based on supercritical boiler technology. In origin, a Western technology, it has been little used in Western countries, either in new plant or in retro-fits to existing plant. It can reduce greenhouse CO2 by more than 20%, compared with the many conventional stations operating throughout the world. The country is also the largest photovoltaic cells producer and thousands of solar water heating systems can be seen across the roof tops of every large city, these days. However, the demand for energy in China is huge, as the country industrialises and there is much work to be done.

New Zealand and others must help them succeed. Otherwise, the frequency of extreme climate events, like one in one hundred year floods in the Whanganui region, will increase. We have had two in recent years as our climate is becoming wetter and warmer. We have a direct stake in the outcome.

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Dave Feickert is a mine safety adviser, working in China with the government and the coal industry. He also works as an energy adviser in China and New Zealand and was previously energy adviser to the ETUC and TUC Brussels officer for 10 years. Before that he was head of research for the UK National Union of Mineworkers for 10 years. He is a New Zealander and is now based in Whanganui, his home town. In 2009 he was awarded the Friendship Prize for Foreign Experts, along with 99 others, during the National Day celebrations in Beijing. He has been a lifelong trade union member and chairs a charitable trust working on sustainable development - the Whanganui River Institute.