

Fuel for Thought

Innovation in QER

Lately, there's been a lot of talk in the media about the important role of innovation for Australia's future. As a parent and now a grandparent, I'm heartened by recognition that, as a country, our future jobs will depend on us staying on the leading edge of technology.

Innovation has always been a fundamental part of the way we've done things at QER. We know that while the processes we are using are well established and proven, in order ensure our project remains viable and sustainable in the future, we have to draw on and adapt the best technologies the world has to offer, and where necessary develop our own.

Some of our proudest achievements to date have been:

- Adapting and demonstrating a clean, safe, and highly energy efficient retorting process;
- Finding, adapting and implementing world's best practice in efficient, odour-free drying;
- Finding an innovative way to process fine ore as briquettes, so that nothing is wasted;
- Developing sophisticated gas and water cleaning and recycling circuits;
- Adapting and demonstrating the application of new mining technology – wireframe modelling and laser guided continuous surface mining, to get the most out of the resource, maximise efficiency and minimise emissions;
- Developing an innovative retort feed system to improve the retort performance even further. We are currently commissioning a \$1m test unit to demonstrate this technology, proudly designed by QER, and built by skilled Gladstone workers, from Australian steel.

There are many other examples. In the course of all this work we've sent our engineers, scientists and process operators all over the world – to the US, Canada, Europe, Asia and South America. We've visited mines, process plants; laboratories and fabrication facilities. We've even visited shipyards to learn more about their incredibly efficient construction methods. Those visits have helped generate many ideas and enable us to integrate cutting edge technologies into our flow sheet and our project approach.

QER's innovation efforts are continuing. We are strongly focussed on improving the energy efficiency of our process and continuing to reduce greenhouse gas emissions. One exciting project we are currently working on is testing the viability of supplementing process energy requirements with renewable energy. We are considering development of a demonstration plant which could show how evacuated tube solar thermal technology might have application within our process. If it goes ahead it will be a very exciting project and a first for Gladstone.

Keep watching this space!



Bruce Andersen
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Creating new fuels for Australia

www.qer.com.au

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