

Cyanide-free gold goes into production

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Australia is leading the charge towards greener and safer gold production with an environmentally-superior alternative gold recovery process technology, dispensing with toxic cyanide and mercury currently used in most gold production processes worldwide.

On the back of successful industry trials and the first [gold](#) pour last year, Australia's national science agency, CSIRO, will transfer its "Going for Gold" process [technology](#) to Australian company, Clean Mining Limited.

CSIRO Research Program Leader, Dr. Chris Vernon, believes the technology not only overcomes a significant environmental hazard, it also opens the door for Australian and international gold miners and end users to capitalise on demand for sustainable processes and products.

"Cyanide is used in about 75 percent of global gold production, and while the industry works to manage the associated risks, there have been recent toxic spills overseas that have caused great concern to communities," Dr. Vernon said.

"Developing an alternative process, which eliminates [hazardous chemicals](#) while maximizing gold recovery, meets industry and consumer demands for more sustainably-produced gold."

The CSIRO-developed "Going for Gold" process replaces cyanide with a [reagent](#) known as thiosulphate, creating a relatively cost-effective, non-toxic and safe alternative to conventional cyanide-based gold recovery process.

Clean Mining will deliver the new technology solution to a global market of gold producers, offering technology products and licenses as well as turn-key processing plant options, plus equipment and product support throughout the mine life.

Clean Mining Managing Director, Jeff McCulloch, says the technology is suitable for new greenfields mines, locations where [cyanide](#) cannot be used or is banned, as well as in existing mines looking to upgrade and transition to the new technology.

"This technology provides gold miners with an opportunity to proactively evolve their environmental, social and governance (ESG) standards," Mr McCulloch said.

"This new technology literally delivers a new gold standard for the global gold industry.

"The technology is scalable and cost effective, and the process has been tested and proven at an industrial-scale to deliver commercially viable results."

Clean Mining are currently in negotiations with ICA Mining Services Pty Ltd in the Northern Territory of Australia to commission the first commercial plant to process gold using this technology, and with Nu-Fortune Gold to commission a plant in the Goldfields of Western Australia.

Provided by CSIRO

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