



# GAS, OIL & mining SECTOR

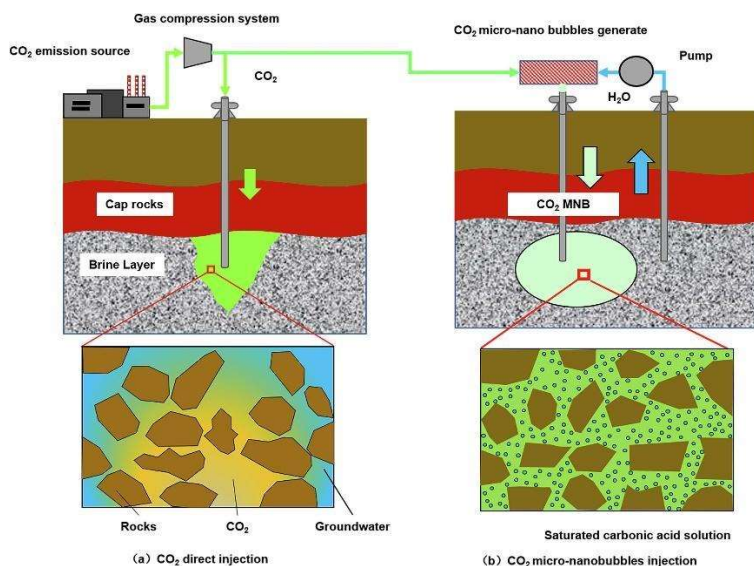
## Virat Nanobubble Generators 1000 m<sup>3</sup>/hr) and above

Oil industries produce massive volumes of oily water. A typical oil mining operation produces a huge volume of water per day which contains 0.5-3% of oil. Nanobubble technology provides cheaper and scalable solutions for oil-water separation.

Our nanobubble technology provides a promising solution for enhanced oil recovery and by reducing the capillary force, expanding the sweep efficiency, and increasing the CO<sub>2</sub> dissolution rate.



### Enhanced oil recovery



### Enhanced flotation

The enhancement of flotation efficiency for different minerals in the presence of large-scale trials has been extensively confirmed in the literature. The probability of a particle colliding with a bubble increases at the micro scale when the size of the bubble decreases. Nanobubble offers higher probability of attachment and thus the flotation efficiency.

### Advanced oxidation

Nanobubbles possess inherent ability to oxidise iron and sulphides, resulting in elevated levels of treatment efficiency compared to conventional aeration methods. Nanobubbles offer superior gas transfer efficiency, making them a cost-effective solution for enhancing generated water management and aeration operations without the need for extensive system modifications.