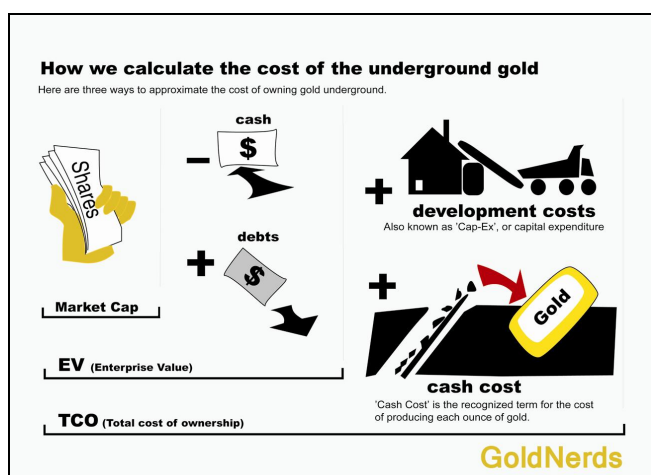


## INVESTMENT TOOLS FOR COMPARING GOLD STOCKS (PART 1)

As published in the July 2011 issue of Australian Resource and Investment Magazine. For anyone wanting access to a great mining publication (online version is free) I encourage you to register at: [www.australianresourcesandinvestment.com.au](http://www.australianresourcesandinvestment.com.au)

When investing in stocks, it pays to have a simple yet effective benchmark to help determine value for money. Whether you are looking at industrial or mining companies this principle stands. For instance, you might use a Price Earnings (PE) ratio to compare industrial stocks. Applying this benchmark to resource companies has its limitations, however, due to the finite nature of mining projects. As a general rule of thumb, the PE ratio should reflect the average life of a company's mines. This will obviously vary markedly from company to company, rendering PE ratios redundant for making value comparisons in extractive industries. When developing a useful benchmark there is no such thing as the perfect indicator. There are always deficiencies. The key is to minimize these deficiencies whilst maintaining an important degree of simplicity. At GoldNerds we developed the **Total Cost per ounce (TCO)** indicator to assist investors compare advanced stage gold and silver mining companies.

Many of you may have read or seen gold mining company presentations with charts comparing the **Enterprise Value (EV)** per ounce for different companies' reserves and resources. If you are not familiar with this indicator, it takes the market capitalization of the company and strips away financial related items (subtracts cash and adds debt) to arrive at the Enterprise Value (EV). This represents the value the market is attributing to the company's non-financial assets (namely its projects). It then divides this value by the company's gold reserve or resource ounces to calculate **EV per ounce**. Theoretically, the lower this number, the more attractively priced the stock is. The presenting company will usually promote a low EV per ounce as an attractive or compelling attribute and if half reasonable, its analysis will compare companies at similar development stages (many do not). This simplistic approach, however, is deeply flawed based on the premise that all gold ounces are not created equally. There is very little value in comparing an advanced stage exploration company with an established gold producer. For a start, the Enterprise Value per ounce for the producing company will usually be higher due to the significant sunk costs associated with building a mine. The Total Cost per Oz (TCO) indicator importantly accounts for this as well as the operational costs of extracting gold.



In summary, TCO estimates the **Total Cost per mineable ounce** an investor is paying when buying shares in a specific gold mining company. It calculates an **EV per mineable ounce** and adds an estimate of the **Future Cash Cost per ounce** along with any budgeted outstanding **Development Costs per mineable ounce**. Theoretically, the lower this number, the more attractively priced the company is. I will briefly run through each component before finishing off with a practical example.

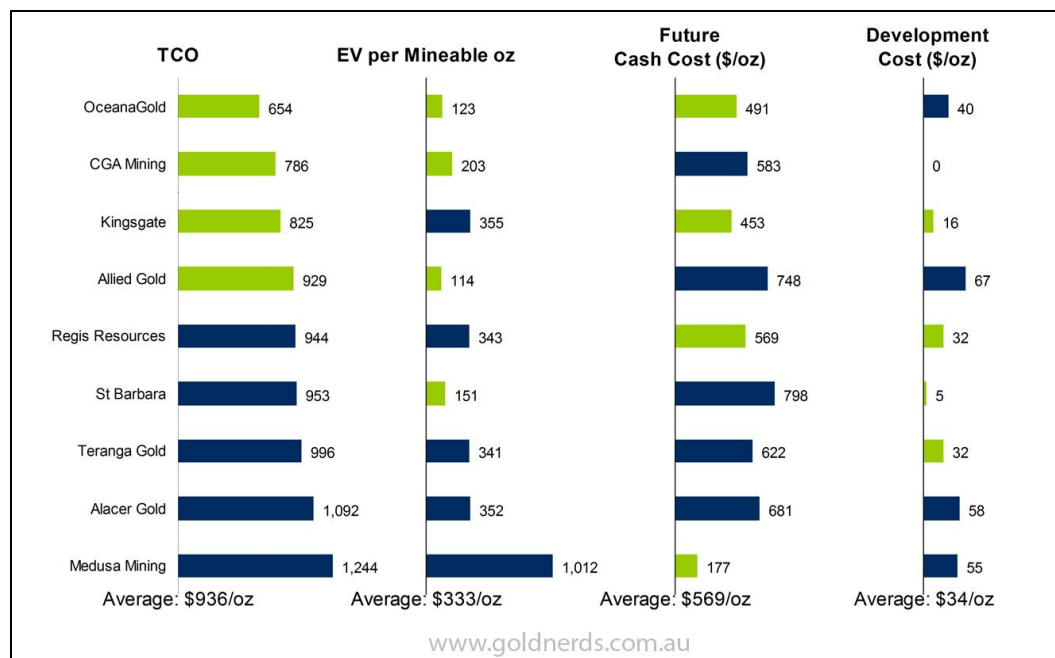
**EV per Mineable ounce:** The Enterprise value is divided by **Mineable ounces**, which is a customizable number allocating different weightings to a company's reserve, resource and potential in ground inventory. In our analysis, we like to concentrate primarily on reserves, counting 100%. We then count an arbitrary 20% of the resource over and above the reserve to recognize reserve upgrade potential (in reality this number varies depending on the deposit). Finally we count just 10% of any potential to remain ultra conservative. Potential ounces are defined as demonstrable conceptual targets (non JORC compliant resource). This proves handy for underground miners where it is not feasible to drill up the entire life of mine reserve.

**Future Cash Cost per ounce:** This is an estimate of what it will cost the company to mine their gold. If a company has no key development stage projects, this is typically a rolling 4 quarter average of their existing producing project(s). If a company has key development projects, the forecast cash cost for these assets is incorporated into an average with the existing producing projects.

**Development Costs per Mineable oz:** This represents any outstanding budgeted development costs on new projects or expansion plans on existing production projects divided by Mineable ounces. Producing companies, which have key development stage projects, often tend to trade at a discounted EV per Mineable ounce and TCO. This reflects the risks and uncertainty associated with bringing new projects online.

Each quarter we classify Australia's 60+ advanced stage gold and silver mining companies and generate the Australian Gold Stock Summary report. We compare TCOs along with other important indicators across 5 development stage categories. The following chart represents just one TCO extract from our latest March Quarter 2011 report.

## TOTAL COST PER OZ (TCO) (INTERMEDIATE PRODUCERS)



Source: Gold Stock Summary Report (Mar Qtr 2011 Issue)

The chart above provides a snap shot of Australia's intermediate gold producers (Market capitalization \$500 million to \$3 billion). They are sorted from lowest to highest TCO. The three columns to the right represent the three components of the TCO. The green bars represent better than average and the blue below average.

Note the relationship between the future cash cost and the EV per mineable ounce. **Companies with higher cash costs typically have a lower EV per mineable ounce** (Allied Gold and St Barbara). Alternatively, companies with lower cash costs generally enjoy a higher EV per mineable ounce (Medusa Mining). This makes sense. Better profitability theoretically implies higher valued mineable ounces. This highlights the gross deficiencies of the EV per Reserve and Resource oz charts many gold mining companies use. By their logic, companies like Allied Gold and St Barbara would be considered significantly undervalued. The simple introduction of a future cash cost, within the context of the TCO, reveals the flaw in reasoning.

**Another thing to consider is the discount a company's EV per Mineable oz and TCO typically demonstrate when owning key development projects** (OceanaGold). This may largely be attributed to the perceived development risk associated with pre-production/expansion projects. Our research indicates that the cash cost forecasts from a mining study can often miss by as much as 50%-100%. Mining studies often paint a best case scenario project assessment. It must also be said that engineering studies are not an exact science with many unforeseen variables and circumstances. The market in recognition of this attributes a discount. If a company achieves its mining study parameters, this will often translate into an upward re-rating of the EV per Mineable ounce. This in turn boosts the TCO closer to the category

average (A\$936/oz). Failure to realize mining study parameters will also see the TCO increase, but this time higher cash costs become the driving factor.

It is the EV per mineable ounce which is largely tied to the market capitalization and hence the share price of the company. The higher the proportion of the TCO made up by EV per mineable oz, the better the company's share price performance (all else being equal). Over the last 3 years, Medusa Mining has been a wonderful proponent of this with its Co-O project becoming one of the lowest cost gold projects in the world.

In summary, we prefer to focus on companies with a TCO significantly lower than the average and a better than average Future Cash Cost (A\$569/oz or less). This implies the market may be undervaluing the company's ounces, based on relative operational performance. In other words, the EV per Mineable oz is theoretically understated. It then becomes a game of patience to see whether the market will re-rate the company accordingly. There are of course other variables (such as development risk) which might explain a company's discounted TCO. We cover many of these variables using other simple indicators. They can include factors such as stubbornly high ongoing capital expenditure (not included in the cash cost), balance sheet weakness, not to mention poor share capital management. I would very much like the opportunity to cover some of these important topics in future articles. If you think the TCO concept along with the Gold Stock Summary report may be useful and you would like to find out more, I encourage you to visit [www.goldnerds.com.au](http://www.goldnerds.com.au)

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