How to Make Money Investing in Small Cap Stocks
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Foreword

Small cap stocks are tiny, early stage ASX listed companies, many in resources, energy or technology that have potential for 1,000%-plus gains.

It’s a corner of the market that the team at nextinvestors.com has been investing in for years.

Along the way we have developed a system to select the next small cap winners, because, while 10x gains sound great, without a strictly adhered to and proven strategy it can all quickly take a turn for the worse.

Our system has been ironed out after repeated trial and error — it didn’t come easily and included a lot of expensive lessons... along with some major wins.

This e-book outlines each of the steps we take in making an investment decision, including our 20 point checklist to identify small cap stocks with the best potential for large returns.

You will learn:

- What NOT to do when investing
- Our investment strategy
- Stocks we are currently invested in and why
- Introduction to investing in resources stocks
- Our 20 point checklist for investing in small caps
- How to deal with hype on social media, chat rooms and internet forums
- Tips and exercises to help you analyse your own investments
- Psychological tricks your brain will play on you

In this e-book we also reveal exactly which stocks we are invested in that made the cut into our investment portfolio.

You can read more at nextinvestors.com, where you can also join our free mailing list to be amongst the first to be alerted when a new stock is added to our portfolio.

Again, we invest in small, early stage resource, energy and technology stocks — those with potential to increase by at least 1,000%. These are very high risk, early stage investments. Many will fail, so only invest money that you are prepared to lose.
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Introduction

Investing in small cap stocks is the best game in town if you know how, and the quickest way to lose all your money if you don’t.

This book will help you acquire the knowledge and tools needed to objectively analyse small cap stocks. You will learn how to identify quality companies with the highest chance of long-term success, formulate an investment strategy, implement an exit plan, and ensure you don’t get caught up in the hype on social media groups and stock market chat forums.

We will also share the all the stocks we are currently invested in if you just want to copy what we are doing — however please always remember this is general advice only. We will never tell you exactly what to buy and what to sell. We don’t know what your particular financial situation is or your risk appetite. If you want that kind of advice, there are plenty of stockbrokers and financial advisors out there that can help you.

Above all, remember when it comes to small cap stocks – these are all risky investments, and you must only invest what you can afford to lose.

The team at nextinvestors.com have been successfully investing and trading in small cap stocks for many years. We have learned plenty of expensive lessons at the stock market school of hard knocks – lessons that will be shared with you in this book, in an easy to understand and interactive format.

What exactly are you going to learn in this book?

First, we explain what NOT to do when investing in small cap stocks. There are common rookie mistakes made by inexperienced investors that break the golden rules of investing.
After you know what NOT to do, take a good hard look at your current investing strategy. If you find yourself making any of these rookie mistakes... stop right now.

We share our investment strategy to identify opportunities, including our 20 point checklist to analyse potential investments.

It’s important to have a clear plan of when and what to buy, and a predetermined exit strategy.

In addition to our in-depth guide on how to analyse small cap stocks, we are opening up our own investment portfolio, sharing exactly which stocks we are invested in, when we invested, and how they are performing to date.

Our target return for each of our investments is 1,000% appreciation in share price.

These kinds of gains do happen in the small cap market, but always remember that investments can also go to zero. These are highly speculative investments — only invest what you can afford to lose. That said, the potential loss is only ever 100%, while the upside potential is many multiples of that.

We specialise in researching and investing in early stage energy, resources and technology stocks. In this edition we will focus on resource and energy stocks. The next edition we will add how we analyse our early stage tech investments.

This intro to resource and energy stocks provides an overview of investing in resource companies, the “lifecycle phases” they go through, and how these phases correlate to share prices.

Don’t worry, nothing too complicated, just the basics you need to understand how resource companies operate and make money.
With an understanding of the general value cycle of resource companies, you will be ready to evaluate a specific company you are interested in, or to evaluate multiple companies to identify which one will make the best investment.

Our crucial “Pre-Investment Check List” explains what to look for in a resources company before you invest and how to find that information. This includes guided research exercises for each checklist item.

Armed with our Pre-Investment Check List, you will have all the tools needed to confidently research and identify stocks small cap mining and energy stocks to invest in.

Next we will share some key learning’s around how Social Media and internet chat rooms can potentially disrupt your well laid investment strategy and provide the tools to identify and neutralise the various types of chat room characters you may encounter. It is important to stay cool when the internet is hyping up a stock.

As a bonus, we identify some of the tricks your brain will play on you when investing in stocks, especially during times of volatility and share price fluctuations. Your brain can start doing funny things when there is money on the line… you need to get your brain under control.

We have also prepared for you a Glossary of Terms – a list of terms that you will encounter when researching or monitoring your investments– explained in a way we can all understand.

Finally, you can practice everything you have learned in this book by completing the exercises provided. These exercises are a chance to implement step by step the methods learned in this book, for any resource stock you choose.

Let’s get started on the first chapter “What NOT to do (Rookie mistakes list)”.
What NOT to do
(Rookie mistakes list)

Before we get into the details of our investment criteria, let’s quickly check that you are not breaking any of the common sense golden rules of investing in small cap stocks.

If you are making any of our “rookie mistakes”, stop it NOW, no matter how good a stock looks to you. The scariest thing about the rookie mistakes list is that to the novice investor they all seem like smart ideas!

Here is our “What NOT to do list” …

Are you taking investment advice from social media and the internet?

This is a HUGE mistake. Investment decisions must be based on your own research, or that of a professional adviser, with a full understanding of why you are invested.

Taking hot tips from Facebook or anonymous chat room posters — such as claims of “big news coming that will triple the share price in a week” — is a surefire way to lose money.

If you are reading about a stock recommendation on the internet, always scroll to the bottom of the page and to see if the site is operating under an Australian Financial Services License – this means they are regulated and must follow rules designed to protect investors like you. If you don’t see an AFSL, leave straight away
Are you “in love” with an investment?

Falling in love with a stock leads to irrational decision making and will only end in tears.

Your most loved stock may be massively underperforming, its share price dropping day after day, but you still think it’s the best thing in the world... get a grip!

This is an investment and should be treated ruthlessly. You need to expand your horizons and look objectively at some other stocks (at least 10... more like 30) and stop treating stocks like your first high school crush. A healthy dose of skepticism goes a long way in this game.

Does one single small cap stock make up more than 20% of your portfolio?

Another HUGE mistake often made by new investors. Small cap stocks are speculative investments and can experience significant volatility resulting large losses quickly.

Some people even have their ENTIRE wealth invested in one stock. Even worse, some use CREDIT to fund the purchase.

This is a recipe for disaster. If this is you, do something about it NOW. The same newbie that breaks this rule is usually the same one who is in love with their stock.

A person who is in love with their stock and is 100% invested in it, will become so emotionally attached they will never sell.

Even if the share price goes up significantly...and then drops and stagnates, they will hang on for dear life. A pragmatic and realistic exit strategy should be your number one priority.

An exception to this rule is if a stock that initially made up just a small proportion of your portfolio gains so much that it now exceeds 20%, you can make the decision to continue to
hold if its prospects are still positive. You may wish to pull out your initial investment amount at this time to protect your capital.

Do you think there is a “conspiracy” to hold your stock down?

Another side effect of “stock love” is the conspiracy theories. The stock lover who is “all in” AND in love with their stock will find any excuse to defend their poor investment decision:

“The price is being held down by big bad brokers or price manipulators,” they say, even after months and months of stagnation.

Here is a reality check – your favorite stock isn’t performing, and the market is not afraid to tell it to you.

Do you get angry when people on the internet say your stock is a bad investment?

Why is that? If you are confident in your own research, it shouldn’t matter what people say. Especially not people on the internet.

If you get frustrated when the seeds of doubt are planted in your mind by a negative social media post, then you probably haven’t done enough research. If you got angry at any of the above points you definitely need to make some changes in your investment strategy.
Our Investment Process

Before we get into how to research your own investments and make money in the small cap market, here is our process for selecting our investments for the nextinvestors.com portfolio.

We invest in around 15 high potential small cap stocks each year and share our investment analysis for free.

Our mission is to use our experience in the markets to build a high performing ASX small cap portfolio and share our research with our readers.

We only make money when our investments rise in value. We don’t charge subscription fees or management fees — everything at nextinvestors.com is free.

Our Investing Process

1. Our industry network introduces us to prescreened investment opportunities.
2. Our trusted advisors and sector experts help us assess the investment.
3. We conduct regular meetings with company management to build trust and a relationship.
4. Our inhouse team of analysts conduct due diligence and analysis using our 20 point check list.
5. Our investment committee makes the final investment decision.
6. We aim to increase our investment as the company delivers over time.
7. We aim for “free carry” within 24 months of investing (free carry means to sell your initial investment $ amount and leave the profit invested for the long term)
We put a lot of work into our portfolio companies and we want as many people as possible to find out about them.

When entering any investment, you must have a plan. Many new investors buy a stock without any kind of exit strategy and are therefore more likely to take premature profits, or worse, let run losses.

- How long do you plan on being invested for?
- At what price will you sell out and take some profit?
- At what point will you reassess the investment, sell out and choose another stock?

These are the questions you must ask yourself prior to entering an investment.

Unfortunately, not every stock will increase by 1,000% and be a ‘ten bagger’. There are a lot of success stories of people having huge windfalls by choosing the right stock, but the odds are stacked against you.

That said, given the potential for large returns from one single investment, not all of your stocks have to rise to get a good return. This just relies on each stock making up only a small percentage of your portfolio (no more than 20%), and on not falling in love and cutting your losers early.

Investors need to know what exits are available to them and know how to create an exit strategy that will help minimize losses and lock in profits.

It is imperative, due to the high-risk nature of investing in small cap stocks, that you ‘only invest what you can afford to lose’, and don’t invest using credit.

Top Slicing and getting ‘Free Carried’
We invest in carefully selected companies that we think will perform well over many years. In the meantime, share prices will go up and down. A lot.

We try and take some profit when prices go up, take back our initial investment amount when they go up a lot, and hold the remainder for the long term.

“Top slicing” involves taking some money off the table once a stock price has risen a certain amount. Ideally, you can recoup your initial investment amount, leaving the remainder invested in the stock to be ‘free carried’ (or as a ‘free bet’).

We generally aim to sell enough of a stock to take back our original investment amount within 24 months, after the stock has risen by 200% or more. This leaves us cash to invest in other opportunities and a significant amount still invested in the original stock.

Only you can decide what your tolerance to risk is, how big a loss you are willing to take, how much profit you are intending to make and what your exit strategy is.

Again, it is imperative to know this prior to entering an investment.

Have a clear strategy, stick to it and you will be a much more successful and disciplined investor.

Also, always remember to consult a financial advisor before implementing any investment strategy.
Our Pre-Investment Check List

Before we launch into our Pre-Investment Check List, you will need to know where to find information to research each Pre-Investment Check List item.

The following resources are the best way to find this information, and they’re readily available on the internet:

- Company presentations
- Company announcements
- Annual report and quarterly reports
- Internet chat rooms (be careful of rumors, see our section on Dealing with Internet Stock Chat Rooms)
- Stockbroker research reports
- Google, Google, Google

And of course, our own articles at nextinvestors.com – now that you have subscribed to our site, we will email you when we release content on material news about one of the companies that are in our portfolio or that we are following. Our articles provide lots of links to external information sources that we have found useful to research one of our investments.
Company presentations

Companies often release presentations when going on ‘broker road shows’, or when presenting at a conference. These usually provide an updated summary of the company’s operations, financial position, near-term plans and objectives.

Company announcements

Stock exchanges around the world require different kinds of disclosure by companies to keep the market informed. Market sensitive information must be disclosed via stock exchange releases. These include updates of resource/reserve figures, feasibility study results, takeover bids etc. For the ASX, see ASX.com.au.

Annual, half-yearly and quarterly reports

Standard releases by companies include:

*Annual report* - All resource companies are required to release their full year financial results and provide an annual report to shareholders which summaries the company’s activities, financial performance and corporate objectives.

*Half-yearly report* - All resource companies, except pure exploration companies, are required to provide half yearly financial results.

*Quarterly report* – Each quarter, all resource companies are required to provide a report which details the previous quarter's exploration (and if applicable) production figures. Exploration companies are required to provide a working capital report showing current cash and debt on hand, and the next quarter's estimated outgoings.
Internet Chat rooms

Use Twitter, Facebook Groups, and internet chat forums only to gauge sentiment of other holders and find leads to research. You will find all sorts of characters online and we will run you through them in the chapter ‘Dealing with internet stock chatrooms’.

Stockbroker research reports

Stockbroking firms usually employ research analysts to analyse companies and give their opinion on a stock’s credentials. Often companies will provide these research analyses on their corporate website under ‘analyst reports’.

We recommend having a look at these 'analyst reports' prior to investing. However, it is prudent to be wary of the analyst’s recommendations and price targets. Lots of assumptions are made when an analyst presents a price target – markets and the world moves quickly, and the price targets rarely eventuate. Nothing is ever certain when plugging numbers into a spreadsheet model.

Always do your own analysis before investing in a stock and read the 'analyst reports' for information purposes only.

Google, Google, Google

We spend days researching companies using the internet. The internet is the greatest tool for research. Those that take advantage of the plethora of information which the internet offers, and are savvy enough to filter quality content from internet chatter, will do very well.
Pre-Investment Check List: 20 Crucial Investment Guidelines

Here is a preview of the checklist.

We present our list of exactly what to look for, prior to making any investment in a small cap resource stock.

Each Pre-Investment Check List item has been carefully considered and put together by our team that has been successfully investing and trading in small cap stocks for many years.

Later in this book are interactive exercises for readers to ‘check off’ your potential investments against our Pre-Investment Check List. For the purpose of completing these exercises, you will have to first select a company of your choice.

Once you learn and understand the Pre-Investment Check List it will help you quickly assess a potential new small cap investment. This list is designed for small cap RESOURCE stocks:

1. **Business Plan:** What is the company’s business plan?
2. **Assets:** What assets do the company own? Which asset is most important? Is the asset base diversified?
3. **Market Cap:** Does the company have a small market capitalization (<$200 million)? How many shares are on issue? Are there any options or warrants?
4. **Market Sector:** Is the company operating in an up and coming (or underappreciated) market sector?
5. **Infrastructure:** Is the company’s asset close to infrastructure: roads, rail etc?
6. **Political Risk:** What is the political risk of the country the company is operating in?
7. **Company Lifecycle Stage:** In what stage of the ‘resource company life cycle’ is the company in? Is the company a pure explorer or in development stage? Do they have resources or reserves? Have any feasibility studies been undertaken?
8. **Cash**: Does the company have cash in the bank? What is the rate of cash burn? Does the company have debt?

9. **Management**: What is the track record of management? Does management own stock in the company? Are they buying on market? How much are directors and management being paid? Is the company a 'lifestyle company’?

10. **Liquidity**: What is the liquidity of the stock?

11. **Capital Raising**: Will the company need to raise capital imminently?

12. **Backers**: Are there any high profile investors or backers?

13. **Price Catalysts**: Are there upcoming catalysts?

14. **Takeover potential**: Is there takeover potential? Does the company have a Joint Venture? Is there “nearology”? Who is operating in the surrounding area?

15. **Production**: How long will it take until first production? How much capital is required to get the project up and running? What are the projected cash costs?

16. **Future Plans**: What is the long term future and price forecasts of the commodity the company is operating in?

17. **Environmental, Social and Governance**: Is the company taking reportable action to reduce ESG risk and create ESG benefits”?

18. **Strategy**: What is the long term company strategy?

19. **Change**: What if there is some sort of material change after you have invested?

20. **[BONUS] Chat Room Hype**: Is there social media and internet chat room hype?

A full explanation of each checklist item and worked exercises to help you do your own analysis can be found in Chapter 7.
Stocks we are currently invested in

OK here it is.

The select number of high potential small cap ASX listed stocks we are currently invested can be viewed on the page below.

Our portfolio is regularly updated, and on this page you can check the performance of these stocks.

https://www.nextinvestors.com/portfolio/

Click on any of the companies in our portfolio for a detailed explanation of why we invested and to read all our historical analysis and commentary.

Bookmark this page on your browser and keep checking it to see how our portfolio is going.

And remember to keep an eye out for new emails from us, where we update you with breaking news on our portfolio stocks, and new additions to the portfolio.
Introduction to Investing in Small Cap Resource Stocks

At nextinvestors.com we specialise in investing in resource, energy and technology stocks. In this book we focus on how to analyse resource and energy investments.

Before we tell you about how to analyse a junior resource stock using our Pre-Investment Check List, you need to gain a basic understanding of how resource companies operate, and the key events you will encounter when watching them.

Basically, a junior resource company’s journey from being worth “not very much”, to hopefully being “worth a lot” can be summarised in in the following steps:

1. Explore for a resource deposit;
2. (Hopefully) find a resource deposit, then figure out how big and valuable it is;
3. Work out whether it is worth investing money to extract the resource from the ground;
4. If yes, design and construct all the stuff required to extract the resource and ship it to market;
5. Find somebody to buy it – “sign an offtake agreement”
6. Start extracting and shipping. This is called “production”, in other words… making money!

In this chapter you will learn about the life cycle of a resource company from exploration through to production and everything in between. By “resource company” we mean any
company exploring for minerals or oil with the intention to pull it out of the ground and sell it. We will be using examples from mining and energy sectors to explain the concepts.

At the end of this chapter, you will also be well aware of the risks to look out for when investing in junior resource stocks.

**Resource Company Life Cycle**

The following diagram illustrates a resource company’s life cycle, from exploration through to production, with more formal names for each phase:

![Resource Company Life Cycle Diagram](image-url)

**Exploration: Explore for a resource deposit**

This is the first phase in the life of a resource company. We really should be calling it a “resource exploration company” at this stage.

Generally, the company needs to raise a bit of money (YOUR money if you invest!) to fund the exploration of a mining lease or an oil exploration permit in search of deposits.

The exploration phase is where the biggest share price gains are likely to be made, but also
the biggest losses. Successful exploration and discoveries can result in dramatic increases in a company’s share price. On the flipside this is the riskiest stage of a company’s life.

**Definition: Found a resource deposit? Time to figure out how big and valuable it is.**

Let’s say that the exploration phase has been successful and a discovery has been made (if you were invested at this point you would have made some good gains). The company will now need to figure out exactly how big (and valuable) this discovery is. This is known as the definition phase.

Discovered deposits can be classified as **resources** or **reserves**. The difference being how confident the company is that the deposit is valuable and extractable. In summary, reserves are better than resources… and here is why:

**Resources** are potentially valuable, with reasonable prospects for eventual economic extraction. Resources can be classified as inferred, indicated or measured for miners. For oil and gas companies, resources can be classified as either contingent or prospective.

**Reserves** are valuable, and legally, economically and technically feasible to extract. Reserves can be classified as proven or probable for Miners. For Oil & Gas companies, reserves can be proven, probable or possible.
How to Make Money Investing in Small Cap Stocks

Mining Companies

Mineral resources

- Inferred
  Tonnage, grade and mineral content estimated with low level of confidence

- Indicated
  Tonnage, grade, shape, physical characteristics and mineral content estimated with reasonable of confidence

- Measured
  Tonnage, grade, shape, physical characteristics and mineral content declared acceptable at a high degree of confidence

Mineral reserves

- Probable
  Can be mined in an economically viable fashion
  Sufficient quality to be a basis for decision on further deposit development

- Proven
  Can be mined in an economically viable fashion
  Represents highest confidence category of reserve estimates

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Finding a deposit is only the first step. Defining exactly how big the deposit is and the probability that it can be extracted is also very important.

**Feasibility Studies: Work out whether it is worth investing money to extract the deposit from the ground.**

Once the company has established the size and quality of the deposit, they need to figure out whether it is worth investing the massive amounts of cash it will take to build the infrastructure required to extract and ship the stuff.
Building a mine or processing plant is not cheap. The company needs to be 100% certain that investing all that money is going to get them (and YOU, the shareholder) a return on investment.

This is where a feasibility studies comes in.

A feasibility study is an evaluation of a proposed project to determine whether the discovered and defined deposit can be extracted economically (and profitably!)

There are four types of feasibility studies (let’s use Mining as an example):

<table>
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<tr>
<th>Study Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>Scoping Study</td>
<td>Early stage study based on the economics of a mining project</td>
</tr>
<tr>
<td></td>
<td>Used for development planning</td>
</tr>
<tr>
<td></td>
<td>Generally based on assumptions and estimated costs</td>
</tr>
<tr>
<td></td>
<td>Not as detailed or reliable as a PFS</td>
</tr>
<tr>
<td></td>
<td>May also be called a “Preliminary Economic Assessment”</td>
</tr>
<tr>
<td>Preliminary Feasibility Study (PFS)</td>
<td>Comprehensive study of the viability of a mining project where the mining method has been established</td>
</tr>
<tr>
<td></td>
<td>Includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating and economic factors</td>
</tr>
<tr>
<td></td>
<td>May also be thought of as a “reality check” to identify areas within the project that require more attention</td>
</tr>
<tr>
<td>Definitive Feasibility Study (DFS)</td>
<td>Most detailed and will determine definitively whether to proceed with the project</td>
</tr>
<tr>
<td></td>
<td>A comprehensive study in which all geological, engineering, legal, operating, economic, social,</td>
</tr>
<tr>
<td>Bankable Feasibility Study (BFS)</td>
<td>Represents a base case for financiers if a project requires bank financing</td>
</tr>
<tr>
<td></td>
<td>Provides all of the information necessary for the bank and its engineer to determine if risks are acceptable, and that the project is viable</td>
</tr>
</tbody>
</table>

Development: Design and construct all the stuff required to extract the deposit and ship it to market for sale.

Let’s assume all of the feasibility studies justify the construction of the required infrastructure to extract the deposit and confirm that it will be profitable to do so. This is good news for the company because it means they are one step closer to actually making some money.
To start making money, access to the deposit is required. In Mining this will be achieved by open cut or underground mining methods; and in the case of Oil & Gas, through production wells.

Construction requires a great deal of capital investment, so the sooner production starts, the sooner the company will finally start earning money after having spent millions of dollars over years of exploration, planning and feasibility studies.

This development phase is where many share prices lag as there is less ‘excitement’ being generated by news flow. The objective for a company is to complete development and construction on schedule and within budget. Delays and cost overruns will often cause negative sentiment and reduction in the share price of a developing company.

**Production: Start extracting and shipping (making money!)**

Once construction has been completed and everything has been tested to verify it functions according to its design specifications, improvements in the share price should occur as value of the company becomes fully realised.

Teething problems can be quite common during the testing stages. Those shareholders who have unrealistic expectations of a seamless transition, from development to production, may panic and sell out of their position when problems arise during this stage.

Production is what every exploration company sets out to achieve, and essentially it means they are pulling stuff out of the ground and selling it. Investors at this stage should be very closely watching production rates (how much is being produced, and how fast, for how much profit).

In a producing company’s quarterly report, you will find details on the company’s production for that quarter.
We use a gold producing company as an example here, but a similar process follows for iron ore, base metals and oil & gas companies.

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
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<tbody>
<tr>
<td>Ore Mined</td>
<td>Early stage study based on the economics of a mining project</td>
</tr>
<tr>
<td>Grade of Ore Mined</td>
<td>The grade of ore mined for the quarter</td>
</tr>
<tr>
<td>Ore Processed</td>
<td>The amount of ore that goes through the mill for the quarter (also known as throughput)</td>
</tr>
<tr>
<td>Head Grade</td>
<td>The grade of ore delivered to the mill</td>
</tr>
<tr>
<td>Recovery</td>
<td>The proportion of the commodity obtained in the processing of the ore</td>
</tr>
<tr>
<td>Gold Recovered</td>
<td>The amount of metal recovered for the quarter</td>
</tr>
<tr>
<td>Gold Produced</td>
<td>The amount of metal produced for the quarter</td>
</tr>
<tr>
<td>Ore Mined</td>
<td>$/oz cash costs for the quarter</td>
</tr>
<tr>
<td>Gold Sold</td>
<td>The actual amount of gold sold for the quarter</td>
</tr>
</tbody>
</table>

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**Cash costs**

Let’s take as an example at an oil company that has started producing. You need to look at all the costs it takes to get the oil out of the ground and sold to the market. If it costs $40 per barrel to produce the oil, then it is sold for $90 per barrel – you get $50 profit per barrel.

I bet this oil plant wouldn’t be such an exciting investment if the oil price dropped to $25 per barrel…
This is where “cash costs” are important. You need to keep an eye on your companies cost per unit of production, and make sure they aren’t in danger of becoming unprofitable from commodity price swings.

A lower cash cost company is generally preferred as the company has a greater ‘buffer’ should commodity prices move lower. A lower cash cost company is likely to remain profitable (and in operation) should commodity prices reduce.

A higher cash cost company is more sensitive to commodity prices, and so are its margins (and profitability). The share price is likely to be more sensitive to movements in the underlying commodity the company is exposed to.

**Permitting**

The entire life cycle of a company is laden with permits. Explorers must get permits to explore a piece a land, permits to extract resources from the land, and permits to construct a production facility.

When applying for a permit, the Mining / Oil & Gas company will present to the required agencies a comprehensive document that outlines the proposed impacts, and how these impacts can be mitigated. Delays to permitting or at worst case, rejection, can have a significant effect on the share price of a resource company.

**The Environmental Impact Study**

An Environmental Impact Study (EIS) must be completed before a company can receive approval to build a production facility. The EIS addresses the possible environmental, economic and social impacts, both positive and negative, that would result from extracting the discovered resource.
In the EIS, all potential impacts are addressed including but not limited to: impacts on wildlife, aquatic and terrestrial habitats, socio-economics (disruptions to local communities including first nations land), noise and air and water pollution.

The EIS has to show that the benefits of building the production facility outweigh all the possible negatives. Otherwise, the government is unlikely to grant permission for construction. The EIS is disclosed to agencies involved in making decisions on the project. Whether or not a company is granted a permit on a project is dependent on the information contained in the EIS. If all or parts of the EIS are rejected, the proposer is usually given a chance to make adjustments and reapply.
Typical Risks

Mining and Oil & Gas projects have many different risks and an investor in junior resource stocks must be aware of these risks involved prior to an investment.

Typical risks include:

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration Risk</td>
<td>The risk that exploration will not encounter significant mineralisation, impacting on the company's ability to increase resources beyond those already defined or to be defined.</td>
</tr>
<tr>
<td>Commodity/Currency Risk</td>
<td>Exposure to an underlying commodity and currency price will produce fluctuations in earnings. For mining and oil and gas companies, this translates into fluctuations in investor sentiment and hence stock price volatility.</td>
</tr>
<tr>
<td>Financial Risk</td>
<td>For explorers and developers, there is the risk that funding will not be achieved to finance a project, particularly if debt and equity markets are tight.</td>
</tr>
<tr>
<td>Geological Risk</td>
<td>This involves issues associated with geology (size of grade of the mineable proportion of an orebody) and how the deposit can be economically mined.</td>
</tr>
<tr>
<td>Permitting Risk</td>
<td>The risk that government permits to mine / drill / construct may not be granted.</td>
</tr>
<tr>
<td>Metallurgical Risk</td>
<td>How much of the metal can be recovered? Are there any impurities or associated minerals that could affect the preferred recovery method?</td>
</tr>
<tr>
<td>Country/Sovereign Risk</td>
<td>Changing political environment, particularly with reference to the resources industry could have an impact on resource equity prices. The introduction of a mineral/ resources rent tax or mineral nationalisation are examples of this. Potential changes to taxation policy, royalty rates, environmental policy, the possible displacement of native and Indigenous groups and corruption all come under Country Risk.</td>
</tr>
<tr>
<td>Operational Risk</td>
<td>The risk of delays in a company’s operations due to events out of the company’s control. Examples include inconvenient weather, difficult or remote terrain, difficulty in sourcing staff and equipment, mechanical problems with equipment, etc.</td>
</tr>
<tr>
<td>Infrastructure Risk</td>
<td>Impeded access to infrastructure can lead to delays in the sale of products to international and local markets, and can eventually increase operating costs.</td>
</tr>
</tbody>
</table>
Learn to Use Our Pre-Investment Checklist

1. Business Plan: What is the company’s business plan?

Every company has a business plan. Make sure you know what it is. Are they intending to produce gold in Australia, copper in Chile, or oil in Kenya?

You will be amazed at how many shareholders don’t even take 15 minutes to articulate (in their own words) the exact business plan of the company in which they are investing.

**Exercise**

Write a three sentence summary of your chosen company’s business plan.

**Handy Tip**

Check the company’s investor presentations and website.

2. Assets: What assets do the company own? Which asset is most important? Is the asset base diversified?

A company may be focusing its efforts on only one asset; or have a ‘flagship asset’ with other less important assets; or have multiple assets with equal importance.

You need to know the asset names, the location of them, the percentage of assets owned by the company (company’s often have joint ventures), and whether any resources or reserves exist.
Diversification in small cap junior stocks is an interesting topic – too much or too little diversification can be a bad thing.

A company that only has one project may be very risky, as the whole success of the company is tied to the one project.

On the other hand, a company may have all sorts of projects at various stages of development, in various different countries. This amount of diversification introduces a complexity discount to the stock price, and the shares may trade lower than their intrinsic value.

The chance of a takeover is reduced if a company’s assets and structure is too complex. This is a double-edged sword as highly diversified companies that are trading below intrinsic value generally only realize their true value when a takeover is announced.

Highly diverse companies will generally have to sell off their assets one at a time to realise true value. The sale of an asset can be a price catalyst event if expected by the market (see Pre-Investment Check List item 13).

Generally, our preference is to choose a company with a strong strategy and focus on a particular sector or geographical location. Too much complexity is to be avoided.
3. **Market Cap**: Does the company have a small market capitalisation (<$200 million)? How many shares are on issue? Are there any options or warrants?

We aim to identify companies with the highest potential for growth or take over — small and microcap companies. Check the market capitalisation and see if the company falls between $5 million and $200 million (AUD in our case). These companies are high risk, but have the best potential for growth and hence the best chance to have significant price appreciation if chosen correctly.

When looking at a company’s market cap you need to look at the fully diluted market cap. This includes any options or performance shares that may come in to play in the near term or are already ‘in the money’. As these options or performance shares are exercised it is likely that there will be pressure on the sell side of a stock as these holders crystallise their profits.

It is widely said that if a company has hundreds of millions of shares on issue (or even billions in some cases), that the potential for significant price spikes is reduced, and any spike that does happen is subdued.

We tend to agree.

4. **Market Sector**: Is the company operating in an up and coming (or underappreciated) market sector?

You will need to “read, read and read some more” and identify global market trends. If you find the business section in the newspaper boring, you had better start finding it interesting.
or you will lose your money. Know what is going on in the world and the most effective places to invest. Also know when to get out of a dying industry.

5. **Infrastructure**: Is the company’s asset close to infrastructure: roads, rail?

This is an important consideration. A stranded asset is much less likely to reach production than a deposit that is close to roads/ports etc. and will require much more capital to get into development. We prefer to invest in companies that have a clear infrastructure solution, or that is located in a geographically strategic location with access to existing infrastructure.

6. **Political Risk**: What is the political risk of the country the company is operating in?

Country/sovereign risk is the risk that an investment’s returns could suffer as a result of a changing political landscape or instability in a country.

Instability affecting investment returns could stem from a change in government, legislative bodies, local ownership, other foreign policy makers, or military control. Even the mention
of a possible introduction of a ‘mining tax’ or the introduction of ‘local equity ownership’ can have a very detrimental effect on a junior miners’ share price.

We recommend doing your research and finding out about the local ownership conditions and mining tax rules and the possibility of the introduction of mining nationalism prior to investment.

**Exercise**
Identify the country or countries in which the company operates and where they rate on the sovereign risk ladder. See if you can find news articles about potential sovereign risks (tax rises, regime changes, etc...)

**Handy Tip**
The Fraser Institute (a Canadian Think Tank) conducts an annual survey of metal mining and exploration companies to assess how mineral endowments and public policy factors (such as taxation and regulation) affect exploration investment. Survey results represent the opinion of executives and exploration managers in mining/consulting companies operating around the world. Survey results and data are available for free on https://www.fraserinstitute.org/

7. **Company Lifecycle Stage:** In what stage of the ‘resource company life cycle’ is the company in? Is the company a pure explorer or in development stage? Do they have resources or reserves? Have any feasibility studies been undertaken?

Before attempting this exercise make sure you read Chapter 6, Introduction to Investing in Small Cap Resource Stocks.
You will remember from our Introduction to Investing in Small Cap Resource Stocks chapter that Mineral deposits can be classified as resources or reserves with varying classifications, depending on the confidence level in the ore body/oil field.

**Resources** are potentially valuable, and reasonable prospects exist for eventual economic extraction. Resources can be classified as inferred, indicated or measured for miners. For Oil & Gas companies, resources can be classified as either contingent or prospective.
**Reserves** are valuable, and legally, economically and technically feasible to extract. Reserves can be classified as proven or probable for miners. For oil and gas companies, reserves are proven, probable or possible.

<table>
<thead>
<tr>
<th>Category</th>
<th>Tonnes</th>
<th>Ag</th>
<th>Contained Oz Ag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured</td>
<td>2,151,000</td>
<td>80</td>
<td>5.5</td>
</tr>
<tr>
<td>Indicated</td>
<td>6,152,000</td>
<td>44</td>
<td>8.7</td>
</tr>
<tr>
<td>Inferred</td>
<td>1,045,000</td>
<td>51</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>9,348,000</td>
<td>53</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Table 1: Mineral Resource – 26.5g/t Ag cut-off

<table>
<thead>
<tr>
<th>Category</th>
<th>Tonnes</th>
<th>Ag (g/t)</th>
<th>Contained Ag MOz</th>
<th>Recovered Ag MOz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proved</td>
<td>1,860,000</td>
<td>82</td>
<td>4.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Probable</td>
<td>3,690,000</td>
<td>45</td>
<td>5.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>5,550,000</td>
<td>57</td>
<td>10.2</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Table 2: Ore Reserve

In our Investing in Small Cap Resource Stocks chapter, we discussed the different types of feasibility studies which may be used to evaluate a proposed mining project, to determine whether the resource can be mined economically.

If you paid attention, you will remember that there are four types of feasibility studies used in mining, namely:

- Scoping Study
- Preliminary Feasibility Study (PFS)
- Definitive Feasibility Study (DFS)
- Bankable Feasibility Study (BFS)
8. **Cash:** Does the company have cash in the bank? What is the rate of cash burn?

   Does the company have debt?

The more cash the better (obviously). However, a lot of cash in the bank does not mean much if the company is burning through mountains of cash on a monthly basis.

You say you don’t like reading through pages of financial information? Skip over the “boring stuff” in the annual report? Well start reading and understanding it because it is one of the most important tools in your research arsenal.

The consolidated financial statement should be your best friend when running the ruler over these companies. It is a short, one page summary of the key categories the company was spending YOUR money on.

How much are directors getting paid? How much is spent on travel, office space, administration, and other expenses such as third party consultants? The more of these reports you look at, the better idea you will have of what is generally reasonable.

A company’s debt position is also something you need to look at. Although most juniors under $200m market cap don’t have a lot of debt, excessive debt has clearly gotten a lot of companies in trouble in recent times.

A company’s enterprise value (EV) is seen as the true value of the company in the market. It is calculated as market cap plus debt, minority interest and preferred shares, minus total cash and cash equivalents.
In the event of a buyout, an acquirer would have to take on the company’s debt, but would pocket its cash. Thus, EV provides a much more accurate takeover valuation because it includes cash and debt in its value calculation.

Exercise
Find the cash on hand for your chosen company, including cash burn rate and runway (in months or years) at the current burn rate.

Handy Tip
Refer to the company’s financial reports and or financial statements which can be found in the company’s Annual and Quarterly Reports.

9. Management: What is the track record of management? Does management own stock in the company? Are they buying on market? How much are directors and management being paid? Is the company a 'lifestyle company'?

A few questions should be answered here, namely:

- Who is managing the company? What does their CV look like?
- Who is on the board of directors?
- Who is the executive management?
- What is the board's area of expertise and what happened to the companies they ran in the past?
- Has the board or any of the board members successfully overseen a takeover or a sustained increase in stock price?
- Has the board or any of the board members been involved with companies that have gone into dilution or administration?
- Was the CEO a Founder of the company? Were they involved in the asset before it was listed?

This is one case where past performance is DEFINITELY a good indication of future performance. Know your directors – this is very important.
If management believes in the company and the company strategy, they will own stock.

The stock may be buried deep inside trust accounts or nominee accounts, but it is a legal requirement of any good stock exchange for directors to disclose any beneficial ownership of stock in the company they are running. You can find this out by checking out company announcements on the company website.

Directors and executives are often given stock, stock options or warrants as part of their remuneration package. Don’t get too excited about these, they are freebies. The best indication of the value of a stock is whether a director is buying on market with their own cash.

We often come across $5 million market cap companies where the managing director is paying him/herself in excess of $500k per annum. This is not ideal in our opinion and is what is called a ‘lifestyle company’. We avoid these companies.

We much prefer management being incentivised via options or performance shares, rather than someone taking a huge salary from a small market cap company. There is clearly less
incentive in performing by taking a huge salary from a small market cap company, than being incentivised and paid by growing a company’s market cap.

10. **Liquidity:** What is the liquidity of the stock?

There is a saying in the stockbroking industry about illiquid stocks. They are called “lobster pots”. Once you are in it is very hard to get out! So, loading up on a completely illiquid stock is ill advised. We want to be able to sell at a profit after all. If there is no buyer, well, you can’t sell now, can you?

So, it is important to look at the weekly/daily/monthly volume of a stock to determine whether it will be easy enough to sell out of a stock once invested.

On the flip side, if a major catalyst occurs and people can’t get enough of a stock and it is illiquid, well, then you are sitting in an advantageous position.

In general, we prefer liquid stocks.
11. Capital Raising: Will the company need to raise capital imminently?

Capital raisings are part and parcel of junior resources companies. Companies will need to raise money to fund drilling programs, working capital requirements etc. often at discounted rates to market. This is not a bad thing, but it is something you will need to be aware of nonetheless.

A capital raising will affect the value of your shareholdings by diluting the value of each share and may suppress the stock price in the short term, particularly if the market can see it coming from a mile away.

If a capital raising is oversubscribed, this is a reflection of the investor demand for that stock. People want in. If a capital raising is undersubscribed, this means the investor demand for that stock is low.

Refer to the company’s financial reports and/or financial statements which can be found on the company’s website and investor presentations. Keep an eye out for company announcements either via the stock exchange website (eg. https://asx.com.au/) or the company’s website.
12. Backers: Are there any high-profile investors or backers?

This is usually a bit harder to find out and can involve a bit of detective work or so-called “joining the dots” and (surprise, surprise) more reading.

Look through the key investors, top 20 shareholder lists, and companies that took large stock placements in your company of interest. Run a Google search of holding companies and profile the associates of directors. If you can identify any high profile investors who have had successes in the past, this is a huge plus.

13. Price Catalysts: Are there upcoming catalysts?

There will be situations where the stock price will spike up, or even just gradually creep up based on a genuine upcoming event that is expected by the market. These events are called price catalysts.

An example of a catalyst can be the approaching target depth when drilling for oil, or an approaching forecast date for a joint venture with another company.

Although the market expects these announcements, the price will still creep up as the forecast date approaches. The price might then spike up when the news is announced and will usually
Catalyst events offer a great opportunity to reclaim some or all of your initial investment by selling a portion of your stock at a profit. Make sure the company you are looking to invest in has an upcoming catalyst event. The market usually knows about it, so check out chat rooms and company presentations.

**Exercise**

Find out the upcoming catalysts for your chosen company.

**Handy Tip**

Refer to the company’s investor presentations and pay a visit to some chat rooms to see if you can uncover (and verify) anything interesting. Company announcements on the stock exchange websites and company websites could also provide an indication of key upcoming events.

**14. Takeover potential:** Is there takeover potential? Does the company have a Joint Venture? Is there “nearology”? Who is operating in the surrounding area?

The holy grail of our investment strategy is the takeover or acquisition, while we try and top slice at 100% to 200% price gain.

When looking at a potential investment, it is always important to identify if there is potential for a takeover by a bigger player. This is quite difficult to do, but when considering the oil and gas or resources sector, a small company will generally take the risk to drill an exploration well\(\text{hole}\) and if a discovery is made, a bigger player (with deep pockets) will come in to develop the discovery to commercial production.

This is when a takeover offer may be made by the bigger company, and a substantial stock price increase on the target company will follow. The idea would be to have already “top sliced” during the higher risk exploration phase, and the stock left for the takeover will be majority “free carry”.

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Almost as good as a takeover is teaming up with a bigger company in a joint venture. This will usually involve farming out a percentage of the project and having a portion of future or past costs paid for. This also will usually result in a price spike and a good chance to top slice if you have not already done so.

A good joint venture will involve an experienced operator who takes over running the asset so that the small company can happily take a back seat and watch them do all the hard work and spend all the money!

Have you seen companies with operations surrounding nearby discoveries share price rise on the back of these discoveries? This is called “nearology”; the potential that a similar discovery will be made due to the company’s proximity to a precious discovery. Although a similar discovery is potentially unlikely, it is something that the experienced players look at. We will generally look straight away at who the neighbors are of a company, and whether these neighbors have made a recent discovery.

**Exercise**

Find out who is operating in the same area as your chosen company. Is there a major company operating in the area with potential synergies? Who would be a likely suitor for partnership?

**Handy Tip**

Refer to the company’s investor presentations, pay a visit to some chat rooms, and Google, Google, Google!

**15. Production:** How long will it take until first production? How much capital is required to get the project up and running? What are the projected cash costs?

This is something that you need to know but is not super important for exploration or ‘blue sky’ companies relying on drilling results. Generally, companies that we invest in are in the pre-development stage as the biggest gains are made in this stage of a company’s life cycle.
If the company is in development, this is important as delays to construction or production will affect the share price. It is often the case that a company’s production schedule is pushed back as delays can occur for various reasons, some out of the company’s control.

The costs of constructing a mine or developing a hydrocarbon field and associated infrastructure can be far ranging. There are many projects out there that require huge upfront capital expenditure that runs in the billions of dollars, whereas the actual market cap of the company is less than $200 million.

Unless a partner comes in to assist funding the project, this is obviously going to be very difficult to get the project into development. We prefer low capital intensive projects with lower capital expenditure required to get into production.

Cash costs and margins are key. High cash cost companies are clearly more reliant on the underlying commodity price than lower cash cost companies. If a gold company is running
at $1500/oz cash costs, it will become unprofitable to run if the gold price falls below this level. A $400/oz cash cost gold operation is in a better position and will be able to maintain their operation if gold falls to $1500/oz. We prefer stocks that are less susceptible to shocks in the underlying commodity.

**Exercise**

What is the company’s predicted cash costs?

**Handy Tip**

Refer to the company’s investor presentations and Annual Reports. Company announcements on the stock exchange websites and company websites could also provide an indication of key upcoming events.

**16. Future Plans: What is the long-term future and price forecasts of the commodity the company is operating in?**

With our preference in investing in developing companies, one has to think about the long-term future of the commodity that the company is involved with.

We make sure we read commodity reports from several investment banks. We also keep up with industry reports for supply and demand dynamics and price forecasting.

For instance, the economic impact of the COVID-19 pandemic could see a reduction in demand for construction. If you are investing in an iron ore company, be aware that a demand is forecast to drop in the near and medium term. This could have downward pressure on the iron ore price. Hence the reason why we would prefer to invest in iron ore companies with lower cash costs.

**Exercise**

Find out the long-term future and price forecasts of the commodity in which your chosen company is operating.
It is important to note that these price factors are generally factored into professional analyst reports and are widely expected by such people. However, due to the short term and immediate nature of the market, rises/falls in underlying commodity prices in the immediate or near term are important to consider.

**17. Environmental, Social and Governance:** Is the company taking reportable action to reduce ESG risk and create ESG benefits?”

Trillions of dollars per year are now flowing into companies with Environmental, Social and Governance focus - also known as ESG.

**Why is ESG important for small listed companies?**

Companies with true ESG at their core are able to:

- **Access ESG funds** - There is currently more ESG money than there are ESG investment ready opportunities.

- **Secure top tier customers** - Top companies are conscious of ESG in their supply chain - think Tesla, Apple, Governments etc

- **Attract the most talented teams** - Smart people do not want to work for non-ESG companies.

- **Positive community perception** - Doing business at all levels is just easier when the community wants you to exist.
- **Shareholder returns with positive impact** - Be proud they are creating a positive change in the world while providing outsized returns to shareholders.

There is essentially zero downside to driving your company to truly exceed in ESG.

ESG is no longer a fringe pursuit. It is fast becoming basic corporate hygiene. Companies will be left behind if you are not focusing on it.

**Exercise**

Find any publicly made statements by the company about ESG risk, start with the company’s Annual Report.

**18. Strategy: What is the long-term company strategy?**

This is pretty simple. The company may be doing something you agree with today, but make sure to check out their long-term strategy, which can be found in company presentations, annual reports and management discussion and analysis.

Now the fun part! Let’s say you have used our criteria to identify a little known, well-managed company, with enough cash for the next year in an up and coming market sector. You identified a looming price catalyst and managed to top slice 40% on a price spike and reclaim some of your initial investment, while others held on after the news was released. You now have a near “free” investment in the stock AND most of your money back – so what now?

It is important to have chosen a company that has a clearly identified path for the next few years. There is no point holding a free carried investment in a company that will wither away over the medium term due to lack of strategy or poor management. If this is the case, you may as well sell out completely instead of just top slicing.

Make sure you can picture where the company will be in 5 years, and don't just say “it’s going to go up five fold” when it starts producing and selling oil, or gold or whatever.
Here’s what we have to consider in a 5-year plan:

- Is the resource easy to extract?
- Who will pay for mineral to come out?
- Is it located close to infrastructure? How much will it cost to transport it?
- Is there a processing facility to bring it to a sellable product?
- Who will pay to build for this plant? Are there other nearby producers who will need a to use it?
- Is the processing plant and transportation in the same country, or will there be negotiations with other governments who will take a huge cut?
- How much are nearby producers selling the product for?
- Will it be sold domestically or internationally?
- Which net importing countries are close by?
- How are the relationships between the governments?

These are just a few of the questions to be asked when considering the long-term viability of developing a resource project into production. If the answers to these questions are not immediately obvious, it might be wise to consider selling out entirely on discovery, especially when you throw political instability into the mix.

No matter what the industry of the small cap stock you are analysing, make sure to take a good hard look at the realities of bringing the product to market.

**Exercise**

Look for the company’s five year plan and develop a list of questions to consider.
19. **Change:** What if there is some sort of material change after you have invested?

Many things can happen while you are waiting to top slice your investment. For example, these include (but are not limited to) a surprise capital raising, a new director appointment, or a problem with one of the company assets.

When a surprise material change occurs, re-evaluate the change against ALL of the investment guidelines set out here.

**IF IN DOUBT – GET OUT!**

If invested and the circumstances change and it breaks your confidence in any of the guidelines, it is time to get out.

Look to management and the company’s major shareholders for guidance. Are they sticking around as investors? Or are they reducing their shareholdings?

20. **[BONUS] Chat Room Hype:** Is there social media and chat room hype? Are shareholders advised to “HODL”, or seen 😬😭😭? 😱

This is one of our personal favorites. Have you ever noticed how some stocks popular on social media and chat forums receive hundreds of posts, while others have barely any posts in a whole month?

The "Smart Money" (experienced investors) invest in a stock BEFORE the stock becomes active on stock chat forums. When the price is spiked up on eventual social media hype and promises of massive profits and big news, the smart money comes out at a profit and is replaced by “Dumb Money”.
“Dumb Money” refers to those inexperienced investors who read about big promises on the internet and buy in on the price spike. They will often be left holding on to a falling stock for months praying that it will recapture its highs.

You will find all sorts of characters on social media and chat forums when hype is in full swing. Learn to identify them and you will be able to see the true agendas of posts with a new clarity and avoid getting caught in the hype. Or, at least, use over hyped phases to top slice and take back some of your initial capital. Our next section gives detailed analysis on dealing with social media and chat rooms without getting caught up in the hype.
Dealing with Internet Hype

The rise of social media groups and internet stock chat rooms have added a whole new dimension to investing in small cap stocks. Internet hype is great if you know how to react to it, just DO NOT get caught up in it.

Stick to your own research and use internet chatter only to gauge sentiment of other holders and find leads to research. Ignore what people on the internet tell you to do.

Chat rooms are also useful to gauge the general sentiment around a stock and whether there is too much hype around a stock. If there is way too many posts on a particular stock, the chances are you missed the boat to get in at the right time.

There are eleven main types of internet posters to look out for, and we will discuss them in detail. Once you know what to look out for, you will be easily able to identify exactly what you are dealing with.

Sometimes chat groups can erupt in overly positive hype. This gives the inexperienced investor the impression that the stock price is going to increase significantly at any moment, and they will miss out by not buying immediately.

With many posters predicting massive price rises at any moment, some very articulate and convincing posts start coming out. The feeling of missing out is very difficult to resist, and many will invest based on chat room hype alone. NEVER invest on information from a chat room or social media.
The best strategy if you find one of your investments caught up in a period of hype is to go against the herd and sell some of your stock at a profit during the hysteria. The price will generally creep back down after they move onto the next hot stock — this can provide a great opportunity to buy back in.

It can be hard to sell when all of Twitter or a chat room is in hysterics about a huge imminent price rise. Learn to recognise it for what it is.

You will find all sorts of characters on social media groups and stock chat forums when hype is in full swing. There are a few key types to look out for. Learn to identify them and you will be able to see the true agendas of posts with clarity, and be able to avoid getting caught in the hype, and hopefully play it for profit.

**The Lurker**

A Lurker will not contribute any information to an internet stock forum, but rather observe the activities of all other poster types. This is our recommended behavior to engage in when attempting to gain information from social media and internet chat rooms. Lurkers are by far the most common type of chat room participant.

**The Mysterious Insider**

This poster will give an air of inside knowledge and can influence a lot of readers. Conveying their message is usually done using implication. Or they provide information that encourages the reader to infer a message that could be construed as inside information if spelt out directly. Expect unrealistic price predictions from this poster. DO NOT listen to this poster.
Desperado\Clearly in Over Their Head

This poster has clearly invested too much money with no research. They will desperately beg for information from the perceived insiders, often resorting to tactics like setting a deadline when they have to sell (wedding, credit card bill, etc.) to try and gain information. The information they get from the “Mysterious Insider” will be a complete guess.

If this poster type has somehow found out about and invested in your stock, it is a pretty good indication that the level of hype is high around your stock. It may be time to consider taking back some of your initial capital if the price has risen significantly.

The Dumb Attack Dog

This poster will aggressively defend their stock to the death by attacking and aggressively ridiculing any perceived negativity. They will NOT constructively argue the point. Avoid engaging this poster at all costs.

The Smart Attack Dog

This poster will defend their stock to the death by aggressively defending any perceived negativity. They will however constructively argue their point, but with an overly optimistic base and unrealistic expectations. It is also advised not to engage this poster type.

Dangerous Influencer

The Dangerous Influencer is a pro-active version of the Smart Attack Dog. The dangerous influencer generally has above average intelligence and will have been successful in a field other than investing in resource stocks (their day job for instance).

The Dangerous Influencer is usually very articulate and convincing and will post seemingly well researched content as to why the stock is a good investment. The problem is that they
are “in love” with the stock, and the written research created by them is generally an attempt to convince themselves as to why they have invested, and then shared in the chat room.

Their well-researched posts will be extremely optimistic and come with extreme valuations based on flawed, over optimistic logic, but presented very articulately. Because of their above average intellect, the Dangerous Influencer is very confident and truly believes their investment decision is correct and will work very hard to convince themselves and others.

Their behavior is not malicious or devious in any way, they truly believe in their mind what they are writing, and it is unfortunate that many others get convinced too.

After a period of declining stock price, the Dangerous Influencer will generally realise that their investment is not working and turn into a “basher”. The time it takes to fall out of love with the stock varies from a few months to years, and the degree of subsequent bashing will vary.

**Head of the cheer squad**

This poster will somehow take any negative information and paint it as a positive for the company. Some posters will proudly state they are in love with the stock, that they are invested 100% in the stock. They are not capable of seeing any downside to a stock – this is very dangerous.

Use this poster as an example of exactly how NOT to invest.

**Influencer Basher**

The Influencer Basher will post overly negative analysis on a stock, thinking that their actions will somehow cause a drop in the stock price. This may be because they are trying to purchase stock and want to buy in cheaper, or that they have sold out and want to validate their decision by seeing the share price drop.
It is extremely unlikely that overly negative or positive posts online will have any effect on a stock price, unless the stock is highly illiquid.

**Troll Basher**

The Troll Basher posts overly negative information in order to get a reaction from other posters. This is usually done purely for amusement purposes. The most prone to react to the Troll Basher’s posts are the “Dumb Attack Dog” or the “Leader of the Cheer Squad”.

We suggest you sit back and enjoy the fireworks.

**Paid Basher**

In some rare instances, a person will be paid to go onto a stock forum to post negatively about a stock. This is unlikely in most cases, but the accusation gets thrown around by “Dumb Attack Dogs” and “Leaders of the Cheer Squad” at the “Influencer Bashers” and “Troll Bashers”.

**Conspiracy Theory Nut**

The Conspiracy Theory Nut is so convinced that the stock price should go up, that they try to explain why the stock price is NOT going up using a number of different conspiracy theories. Usually, the stagnant share price is blamed on “stock price manipulation” by brokers or institutions.

Manipulation has been known to happen, but there is very little chance that a share is not rising due to being held down deliberately, especially not for months on end. Claims of share price manipulation usually start after a few months of poor share price performance and is happily accepted as the truth as it conveniently explains to them why THEIR predictions of massive stock price rises have not come true; rather than the admission that they got it wrong.
If you go on any chat room where there is a significant amount of posting activity and the stock price hasn’t moved for a few months, nine times out of ten the cheer squad will be shouting about manipulation to justify the poor performance.

**See if you can categorise the posters you see everyday.**

Now that you know the different types of chat room denizens, see if you can categorise the local posters on your Twitter feed or favorite stock chat room.

Never ever trust anyone on a chat room or get caught up in the hype. If you spot chat room hype, pick a point and top slice as soon as you see a decent profit. You can then chuckle to yourself as all the above poster types scratch their heads and claim manipulation when the hysteria subsides and the price goes back down.
Psychological Traps: How your own Brain will Try to Trick You

In this chapter, we’ll show you how to detect some of the tricks your brain will play on you when you are investing in small cap stocks. You will come to understand the funny things that your brain gets up to when there is money on the line in high risk high reward investments. Armed with this understanding, you will be better equipped in keeping emotions and irrational thoughts under control, to start investing smarter.

Can you relate to any of the following?

**The Sunk Cost Fallacy - Why do you become emotionally tied up in a stock, or reinvest in a losing stock?**

What would watering weeds in your garden get you? Bigger weeds!

When an investor has invested more than just money in a stock, but also time and energy, this investor is likely to have more difficulty in disposing of the stock.

The more patience an investor invests in waiting for a stock price to turn, or the more attentive he is to company activities and announcements that may influence the stock price, the more emotionally attached this investor becomes to the stock.

The “sunk cost fallacy” is manifested when an investor has a greater tendency to continue holding on to a losing investment, *after* money effort and time has been thrown into the mix.
Rather than realising the loss of capital and coming to terms with a point of no return for the losing stock, the investor is persuaded that it is important to "stick it out to the end" and to stay loyal to the stock until its value makes a historic come-back to break-even point.

The sunk cost fallacy is also sometimes referred to as the Concorde Fallacy, so named after the retired supersonic turbojet-powered airliner. The demise of the Concorde is in part attributable to unsustainably high costs and major marketing problems. There were low passenger uptakes and low orders for the airliner. However, even though it became obvious that there was no way the jet could make anyone any money, France and Britain kept throwing in more money on the premise that they already had too much invested.

You certainly would not get a beautiful garden if you keep watering those weeds.

The Confirmation Bias - Why are you so sure your stock is bound for success when all other fact and reasoning point otherwise?

In psychology, “confirmation bias” is manifested by a tendency to seek out information in a way that confirms one's preconceived ideas and notions. Confirmation bias drives willful ignorance.

Willfully ignorant people are fully aware of facts and reasoning but at the same time, refuse to acknowledge these facts and reasoning because they go against their beliefs and preconceptions.

Some investors may be so emotionally attached in a stock that they allow themselves to be ignorant to negative chatter and information that brings into question the potential of that stock.
The Momentum Bias - Why do you feel driven to invest or buy a stock when it has recently soared?

Investors have a tendency to believe that what occurred in the recent past is likely to reoccur again in the near future. Investors tend to be overly optimistic when markets are bullish and pessimistic when they are bearish. Greater importance is placed on recent information that has come to light during a given trading week, rather than laws of probability or historical average returns of a share price.

Humans have an intrinsic tendency to spot recent trends, and to project these as assumptions for future occurrences.

A **positive momentum bias** is one where everything goes our way and we experience a string of good luck. As a result, we become overconfident. This overconfidence is dangerous, as it is developed on the flaky premise of positive events that have been driven by coincidences outside our control. If we let overconfidence get into our heads, we will be even more deflated when our stock falls from grace.

A **negative momentum bias** is one where we let a series of bad luck occurrences affect our personal confidence and future assumptions. Not all relationships work out, and not all investments bring great returns. We all get knocked down sometimes in life. As with positive events, we may come to internalise these negative occurrences and feel that the world is against us. As a result, we sell may prematurely sell our investment if having a bad run on the market.

Both positive and negative momentum biases can distort the way we make rational and logical decisions. Therefore, either savor your humble pie when you triumph… or learn from the school of hard knocks and remain resilient when you face setbacks.
Don’t let overconfidence or deflated egos get into your head. The share market is not a place for that.

The False Consensus - Why do you expect every other investor to see things your way?

The “false consensus effect” is where individuals overestimate how much other people agree with them. Indeed, there is a tendency (more so in the Western culture) for people to assume that their own opinions, beliefs and values are "normal" and that other people should feel the same way too.

An investor with tunnel vision, whose attention is solely focused on his own preferred position, is more likely to fall victim to the false consensus effect. This investor will overestimate the popularity of his position and make unfounded decisions on this basis.

The “false consensus effect” is a phenomenon that could either be exploited or avoided in the business scene. For instance, if an investor has doubts around investing in a particular company, such doubts can be broken down by merely suggesting that "everyone else" is in on the action...so why not him?

The Gambler's Fallacy - Why do you expect a stock price to go down after it has been consistently going up?

The “gambler's fallacy” (also sometimes referred to as the Monte Carlo fallacy) is the belief that the onset of a particular random event is less likely to happen following a series of events.

For instance, say in a series of 10 coin flips I consistently landed with the "heads" side up. Under the “gambler's fallacy”, you might decide to bet that my 11th coin flip will land with the "tails" side up. This line of thinking is incorrect because past events do not change the
probability that certain events will occur in the future. The likelihood of a typical coin turning "heads" or "tails" up will always be 50%.

In the stock market, some investors have a tendency to believe that they should liquidate a position after it has gone up in a consecutive or consistent series of trading sessions; only because they do not believe that the position is going to continue going up.

On the flipside, investors may choose to buy a stock at bargain basement prices after it has consistently been going down, because they think this stock should get its break soon (anytime now) and is likely to rebound in the other direction (anytime now).

**The Optimism Bias - Why do you focus more on the potential for wins than the potential for losses in an investment?**

The “optimism bias” is when a person believes that they are less at risk of experiencing a negative event compared to others. Psychological observations and experiments have shown that humans tend to exaggerate their optimism when it comes to fate and life changing decisions (unless of course you are a chronic pessimist with anxiety problems and a whole bunch of other issues).

Being optimistic (or overly optimistic) can distort your perception of probability, which is very important when investing. Investors tend to get too excited and overly optimistic about the potential gains they stand to achieve and lose sight of potential (probable!) losses. Most investors will think along the lines of “What will I do with all this money when the stock price goes up?” when they should give equal thought to “what will I do if the stock price goes down”.
The House Money Effect - Why do you take more risk after a windfall?

The “house money effect” predicts that investors will be more likely to purchase risky stocks after completing a profitable trade.

Investors who have had the luxury of a gain or profit are often willing to take more risk. Gamblers call this "playing with the house's money". Since gamblers and/or investors do not yet consider their winnings to be their own, they are willing to get creative and take more risk with it. Make sure you are conscious of this.

The Snake-Bite Effect - Why do some people completely avert risk after experiencing a financial loss?

After experiencing financial loss, some people may become much less willing to take any more risks. This is known as the “snake-bite effect”.

When losing money in the stock market, some people may choose to walk away... for good.

New or conservative investors may decide to give the stock market a go. However, as soon as the stocks in their portfolio fall in price, the inexperienced investor may feel “snake bitten” and decide to prematurely sell out of their position.

In the long term, it can be very harmful to your portfolio (and wealth!) if a few "snake bites" here and there stir up fears and doubts... causing you to become "too afraid to get back into the market". As the saying goes, when you fall off a horse, be sure to jump back on before it's too late.
Dispos**ition Effect - Why do you hold on to losing stocks for too long and sell winning stocks too soon?**

In 1979, Kahneman and Tversky presented the “Prospect Theory”, which suggests that people value gains and losses differently and as such, will be more likely to base their decisions on perceived gains rather than perceived losses.

For example, most people think it’s better getting a single gain of $50, rather than a gain of $100 and then losing $50; even though the end result for both scenarios is a net gain of $50.

The “Prospect Theory” explains the disposition effect, which is the tendency for investors to hold on to losing stocks for too long and sell winning stocks too soon. The most logical course of action is of course to hold on to your winning stocks and to get rid of the poor performers to avoid further losses.

Unfortunately, your brain has a way of persuading you to settle for a lower guaranteed gain, compared to choosing a riskier option that either yields nothing or a larger gain. Investors seek to cash in on the amount of gains that have already been guaranteed by selling their winning stocks too soon.

On the flip side, investors may choose to continue holding on to losing stocks in order to avoid the negative feelings of taking a loss. These investors choose to believe that "any day now" the company will make that monumental announcement that will boost the stock price. Unfortunately, some losing stocks may never recover and losses could continue.
Hedonic Framing - Why do you integrate your losses and segregate your gains when selling on the stock market?

Humans have a tendency to think more positively about experiencing "multiple wins" or "multiple gains", rather than "one large win / gain". On the other hand, for situations where you have a choice of thinking of a loss as "multiple losses" or "one large loss", you are more likely to prefer “one large loss” because you would rather experience all the associated pain of losing in one hit, than a dragged out feeling of successive painful moments and failures.

If an investor is hedonistically looking to optimise the pleasure that the stock market can give him, then he is likely to combine his losses and segregate his gains.

By selling losing investments in one hit, the investor avoids a succession of painful moments. Likewise, by spreading the sale of winning investments over time, the investor will feel like he is having a "good run" and is therefore on top of the world with his investments.
Conclusion

Hopefully you have confirmed that you are not making any of the rookie mistakes in the “What NOT to do” list and if you are, as much as it goes against what you think you know, try to break the cycle. The mistakes in the list are just lapses in common sense proven to destroy hard earned wealth.

Now that you are armed with our 20 Pre-Investment Check List items, it is time to look at companies with a fresh set of eyes and evaluate each company against our checklist. See which stocks tick all the boxes. Take a position and make sure to be ruthless in your investment strategy. NEVER fall in love with an investment.

Make sure you evaluate at least TEN similar companies so you can get a good comparison and have a good benchmark to pick the standouts.

DO NOT put all your cash into one stock, no matter how good the stock may seem to you. Make sure you diversify and always keep some cash on hand.

Armed with an understanding of the funny things your brain may get up to when there is money on the line, you should also be better equipped in getting those emotions and irrational thoughts in check so that you can start investing smarter.

Don’t get caught up in online hysteria, and DO NOT listen to impressive sounding posters on the internet promising you riches. Always consider top slicing to be your number one priority when investing.
If you follow our Pre-Investment Check List and have a solid plan, you will be well on your way improving your small cap stock investing.

As always, we invite you to follow what we are invested in, in the nextinvestors.com portfolio.

All the best in your investments.

The team at nextinvestors.com
Appendix A

Glossary of Terms

Here we will run through a list of terms that appear in mining and oil and gas presentations, stockbroker reports and quarterly, half-yearly and annual reports.

This will serve as a great tool of reference for terms you come across when evaluating your chosen stock against our 20 investment guidelines.

**Abandoned well:** A well no longer in use.

**Adit:** An entrance to an underground mine which is horizontal or nearly horizontal.

**Aeromagnetic survey:** Geophysical survey carried using an aircraft for the purposes of recording magnetic characteristics of rocks.

**Agitation:** The act or state of being stirred or shaken mechanically.

**AC drilling:** Air core drilling; Air blast drilling technique with limited coring capability.

**Alloy:** A compound of two or more metals

**Alluvial deposit:** Clay or silt or gravel carried by rushing streams and deposited where the stream slows down.

**Anomaly:** Zone determined by exploration methods to be different from its surroundings.

**Appraisal drilling:** Wells drilled in the vicinity of a discovery well in order to evaluate the extent and the importance of the find.
**Ash:** The residue remaining after ignition of coal.

**Assay:** Compositional analysis of an ore, metal, or alloy.

**Associated gas:** Natural gas produced with crude oil from the same reservoir.

**Backfill:** Material used to fill mined out stopes.

**Ball mill:** Device used in grinding to reduce broken ore into powder.

**Banded Iron Formation (BIF):** Iron formation consisting of alternate silica-rich and iron-rich layers.

**Bankable feasibility study (BFS):** A BFS represents a base case for financiers. A positive BFS is one that satisfactorily provides all of the information necessary for a bank to determine that the project is viable.

**Barge:** a flat-decked vessel, usually towed by a boat.

**Base metals:** More common non-precious metals which include lead, copper, zinc, nickel.

**Beneficiation:** Upgrading of a mineral by concentration processes.

**Blast furnace:** A reaction vessel in which mixed charges of oxide ores, fluxes and fuels are blown with a continuous blast of hot air and oxygen-enriched air for the chemical reduction of metals to their metallic state.

**Block:** A North Sea acreage sub-division measuring approximately 10 x 20 kms, forming part of a quadrant. e.g. Block 9/13 is the 13th block in Quadrant 9.

**Blowout:** Out-of-control gas and/or oil pressure erupting from a well being drilled.
**Blow out preventers:** High pressure wellhead valves, designed to shut off the uncontrolled flow of hydrocarbons.

**Borehole:** The hole in the earth made by a drill.

**Brownfields:** exploration which is conducted with close proximity to known ore deposits.

**Bulk sample:** A large sample of mineralized rock selected in such a manner as to be representative of the potential orebody being sampled. Used to determine metallurgical characteristics.

**Bullion:** Gold or silver in bars or ingots.

**Butane:** Is a gas but it is easily liquefied; one of the most useful L.P.-gases; widely used household fuel.

**Byproduct:** A secondary metal or mineral product recovered in the milling process.

**C1 cash cost:** Cash cost incurred mining through to production, less net by-product credits (if any).

**C2 cash cost:** Sum of C1 cash costs and depreciation and amortization.

**C3 cash cost:** The sum of C2 cash costs and indirect costs and net interest charges.

**Call option:** An agreement that gives an investor the right (but not the obligation) to buy a stock at a specified price within a specific time period.

**Carbon in leach (CIL) process:** A recovery process in which a slurry of gold ore, carbon granules and cyanide are mixed together. The cyanide dissolves the gold content and the
gold is absorbed on the carbon; the carbon is subsequently separated from the slurry for further gold removal.

**Carbon in pulp (CIP) process**: Similar to carbon-in-leach process, but initially the slurry is subjected to cyanide leaching in separate tanks followed by carbon-in-pulp. Carbon-in-leach is a simultaneous process.

**Casing**: Metal pipe inserted into a wellbore and cemented in place to protect the wellbore.

**Catchment**: The land area from which water drains to a specific watercourse or water body.

**CFR (Cost and freight)**: A trade term requiring the seller to arrange for the carriage of goods by sea to a port of destination. Under CFR, the seller does not have to get insurance against the risk of loss or damage to the goods during transit.

**Christmas tree**: The assembly of fittings and valves on the top of the casing which control the production rate of oil.

**Coal washing**: The process of separating undesirable materials from coal based on differences in densities.

**Coke**: Solid residue remaining after certain types of coals are heated to a high temperature.

**Coking coal (metallurgical coal)**: A grade of coal that meets the requirements for making coke. It must have a low ash and sulfur content and form a coke that is capable of supporting the charge of iron ore and limestone in a blast furnace.

**Commercial field**: An oil and gas field capable of producing enough profit to make it worth developing.

**Concentrate**: A fine, powdery product containing a high percentage of valuable metal.
Concentrator: A milling plant that produces a concentrate of the valuable minerals or metals. Further treatment is required to recover the pure metal.

Condensate: Hydrocarbons which are in the gaseous state under reservoir conditions and which become liquid when temperature or pressure is reduced.

Cone crusher: A machine which crushes ore between a gyrating cone or crushing head and an inverted, truncated cone known as a bowl.

Contingent resources: Those quantities of petroleum estimated to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies.

Core: The long cylindrical piece of rock, about an inch in diameter, brought to surface by diamond drilling.

Cover: The overburden of any deposit.

Cross-section: A two-dimensional diagram of an object presented as if the object had been cut along its length.

Crude Oil: Oil as it comes from the well; unrefined petroleum.

Cut-Off Grade: A grade level below which the material is not “ore” and considered to be uneconomical to mine and process.

Cyanide: A chemical species containing carbon and nitrogen used to dissolve gold and silver from ore.

Decline: A sloping underground opening for machine access.
Definitive feasibility study (DFS): The most detailed form of feasibility study which determines definitively whether to proceed with a project.

Development Wells: Wells drilled in an area already proved to be productive.

Diamond drilling: Rotary drilling using diamond set or diamond impregnated bits, to produce a solid continuous core sample.

Dip: The angle at which layer rocks are inclined from the horizontal.

Discovery Well: An exploratory well that encounters a new and previously untapped petroleum deposit; a successful wildcat well.

Disseminated: Scattered throughout the host rock.

Dore: Unrefined gold or silver bullion bars which still need further processing to become pure metal.

Down dip: Downward along a dip.

Downstream: Indicates the refining and marketing sectors of the oil and gas industry.

Dredging: An excavation activity usually carried out at least partly underwater, with the purpose of gathering up bottom sediments and disposing of them at a different location. This technique is used to keep waterways navigable.

Drilling permit: The authorization to drill at a specified location.

Drilling: Boring a hole into prospective ground to recover cuttings indicative of rock types and grades of mineralization.
Dry hole: Any exploratory or development well that does not find commercial quantities of hydrocarbons.

Dry gas: A natural gas from a well free of liquid hydrocarbons.

DSO (Direct shipping ore): High grade hematite is often referred to as DSO because it is mined and beneficiated using a relatively simple crushing and screening process before being exported for use in steel mills.

Duster: A dry exploration well.

Enhanced Oil Recovery (EOR): generic term for techniques for increasing the amount of crude oil that can be extracted from an oil field.

Enterprise value: Market cap plus debt, minority interest and preferred shares, minus total cash and cash equivalents.

Environmental impact study: A written report that examines the effects proposed mining activities will have on the natural surroundings.

EPCM: Refers to Engineering, Procurement, and Construction Management. It is a form of construction procurement used in engineering and infrastructure projects.

Epithermal deposit: A mineral deposit consisting of veins and replacement bodies, usually in volcanic or sedimentary rocks, containing precious metals.

EPS (Earnings per share): The portion of a company’s profit allocated to each share.

Escrowed shares: Shares deposited in trust pending fulfillment of certain conditions and not available for trading until released.

EV/Resource oz: Mining valuation method. This is the amount you are paying in dollars per ounce of resource.
**EV/Reserve oz:** Mining valuation method. This is the amount you are paying in dollars per ounce of reserve.

**Exploration well:** Drilling carried out to determine whether hydrocarbons are present in a particular area. Also known as a ‘wildcat well’.

**Farm in:** When a company acquires an interest in a block by taking over all or part of the financial commitment for drilling an exploration well.

**Fault:** A planar fracture or discontinuity in a volume of rock, across which there has been significant displacement along the fractures as a result of earth movement.

**Feasibility study:** An evaluation of a proposed mining project to determine whether the mineral resource can be mined economically. There are four types of feasibility studies used in mining: scoping, preliminary feasibility (PFS), definitive feasibility (DFS) and bankable feasibility (BFS).

**Feed size:** The size of mineral particles entering a processing section.

**Field:** A geographical area under which an oil or gas reservoir lies.

**Fines:** Iron ore granular size up to ~6mm.

**Flotation:** A milling process by which some mineral particles are induced to become attached to bubbles of froth and float, and others to sink, so that the valuable minerals are concentrated and separated.

**Flowsheet:** An illustration showing the sequence of operations, step by step, by which ore is treated in a milling, concentration or smelting process.

**Flowing well:** A well capable of producing oil or gas by its own energy without the aid of a
mechanical pump.

**Fracking:** The process of pumping fluids into a formation at high rates of injection to hydraulically break the rock. The "fractures" which are created in the rock act as flow channels for the oil and gas to the well.

**FOB (Free on board):** A trade term requiring the seller to deliver goods on board a vessel designated by the buyer. The seller fulfills its obligations to deliver when the goods have passed over the ship’s rail.

**Fold:** A bend in strata or any planar structure.

**Footwall:** The rock on the underside of a vein or ore structure.

**Free milling:** Ores of gold or silver from which the precious metals can be recovered by concentrating methods without pressure leaching or other chemical treatment.

**Friable:** Easy to break or crumble naturally.

**Gangue:** The commercially valueless material in which ore is found.

**Gas field:** Field containing natural gas but no oil.

**Gas injection:** The process whereby separated associated gas is pumped back into a reservoir for conservation purposes or to maintain the reservoir pressure.

**Gas well:** A well that produces natural gas which is not associated with crude oil.

**Geothermal:** pertaining to the heat of the earth’s interior.

**Gold equivalent:** A metal other than gold expressed in equivalent ounces of gold using a conversion ratio dependent on prevailing gold and metal prices at the time.
Grade: The amount of valuable metal in each tonne of ore, expressed as grams per tonne for precious metals.

Gravity separation: Metallurgical process that separates metals using the specific gravity differential.

Greenfields: Brownfields exploration is that which is conducted within geological terrain within close proximity to known ore deposits. Greenfields are the remainder.

Grinding: Reducing mineralized rock to the consistency of fine sand by crunching in a rotating steel grinding mill.

Grind size: Size mineralized rock is ground to. Expressed in microns.

Hanging wall: The rock on the upper side of a vein or ore deposit.

Head grade: The average grade of ore delivered to the mill.

Heap leaching: A process whereby gold is extracted by “heaping” broken ore on pads and repeatedly spraying the heaps with a weak cyanide solution which dissolves the gold content. The gold-laden solution is collected for gold recovery.

Hedging: Taking a buy or sell position in a futures market or options market to minimize the risk of financial loss from an adverse price change in the underlying commodity a company is operating in.

Hematite: Heavy and relatively hard oxide material that constitutes the most important iron ore because of its high iron content and its abundance.

Horizontal drilling: A drilling technique that permits the operator to contact and intersect a larger portion of the producing horizon than conventional vertical drilling techniques and can result in both increased production rates and greater ultimate recoveries of
hydrocarbons.

**Host rock**: The rock surrounding an ore deposit.

**Hydrocarbons**: Organic chemical compounds of hydrogen and carbon atoms. There are a vast number of these compounds, and they form the basis of all petroleum products. They may exist as gases, liquids, or solids.

**Indicated Resource**: That part of a mineral resource for which tonnage, grade and mineral content can be estimated with a reasonable level of confidence.

**Inferred Resource**: That part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence.

**Infill drilling**: The drilling of extra holes to increase confidence in an orebody.

**Injection well**: A well used for pumping water or gas into a reservoir.

**In situ**: being in its original position; not having been moved or transferred to another location.

**In the money**: An option is ‘in the money’ if it would make money if it were to expire today. Suppose the current stock price of ABC $100. A call or put option with a strike A call option with a strike of $80 is in-the-money \((100 - 80 = 20 > 0)\). A put option with a strike at $120 is in the money \((120 - 100 = 20 > 0)\).

**IOCG**: Iron oxide copper gold ore deposits.

**Itabirite**: A term widely used in Brazil to denote a banded iron formation containing between 20% and 64% Fe. Unlike the typical Australian magnetite, itabirite requires very little energy
to liberate the iron, and therefore is significantly easier and cheaper to upgrade to a saleable product.

**Jaw crusher:** A machine in which rock is broken by the action of steel plates.

**JORC code:** Professional code of practice that sets minimum standards for Public Reporting of minerals Exploration Results, Mineral Resources and Ore Reserves.

**Laterite:** Soil layer that is rich in iron oxide and derived from a wide variety of rocks weathering under strongly oxidizing and leaching conditions. Currently, the majority of today’s nickel is produced from sulphide deposits, as it is easier and cheaper to mine and process than lateritic ore. However, known sulphide deposits are depleting. As a result a higher proportion of future production is expected to come from laterite deposits.

**Leachable:** Extractable by chemical solvents.

**Lease:** A legal document conveying the right to drill.

**Limit order:** An order placed with a brokerage to buy or sell a set number of shares at a specified price or better. Also known as a ‘take profit order’.

**Liquefied natural gas (LNG):** Oilfield or naturally occurring gas, chiefly methane, liquefied for transportation.

**Liquefied petroleum gas (LPG):** Light hydrocarbon material, gaseous at atmospheric temperature and pressure, held in the liquid state by pressure to facilitate storage, transport and handling.

**Lump:** Iron ore granular size between ~6mm and 30mm in size. Lump is preferred as when it is fed into a blast furnace for steel-making, its particle size allows oxygen or air to circulate
around the raw materials and melt them efficiently.

**Magnetic separation**: A process in which a magnetically susceptible mineral is separated from waste by applying a strong magnetic field; ores of iron are commonly treated in this way.

**Magnetic survey**: Technique which measures variations in the earth’s magnetic field in order to define the distribution of values which may be indicative of different rock types.

**Magnetite**: Magnetite ore has lower iron content than hematite and must be upgraded to make it suitable for steelmaking. While magnetite is generally a lower grade deposit, it is globally accepted as a viable feedstock for the production of premium quality, low impurity steel.

**Measured Resources**: That part of a mineral resource for which tonnage, grade and mineral content can be estimated with a high level of confidence.

**Merrill Crowe process**: Separation technique for removing gold from a cyanide solution.

**Mill**: A plant where ore is ground fine and undergoes physical or chemical treatment to extract the valuable metals.

**Mill feed grade**: The grade of material fed at the mill

**Mineralized zone**: An enriched zone of mineral deposits

**Mud**: A mixture of base substance and additives used to lubricate a drill bit.

**NAV: Net asset value**: the sum of all asset values and liabilities
Net smelter returns: the value received for a mineral after refining, less the cost of transporting the mineral to the refinery and the cost of refining.

Non-refractory ore: Ore which is relatively easy to treat for recovery.

NPV: Net present value: the sum of discounted positive and negative cashflows.

Oil: A mixture of liquid hydrocarbons of different molecular weights.

Oil field: A geographic area under which an oil reservoir lies.

Oil in place: An estimated measure of the total amount of oil contained in a reservoir.

Open in all directions: Drilling has encountered mineralization as far as drilling has gone along strike and at depth.

Open pit: A mine that is entirely on surface.

Operator: the Company that has legal authority to drill wells and undertake production of hydrocarbons.

Orebody: A natural concentration of valuable material that can be extracted and sold at a profit.

Ore: Rock, generally containing metallic and non-metallic minerals that can be mined and processed at a profit.

Outcrop: An exposure of rock or mineral deposit that can be seen on surface; that is, not covered by soil or water.

Overburden: the material that lies above an area of economic interest.
**Oxide ore:** Mineralized rock in which some of the original minerals have been oxidized. Oxidation tends to make ore more amenable to cyanide.

**P1: Proved Reserves:** at least 90% probability of being produced.

**P2: Probable Reserves:** at least 50% probability of being produced.

**P3: Possible Reserves:** at least 10% probability of being produced.

**Permeability:** A measure of the resistance of rock to the movement of fluids.

**Placer:** Alluvial deposit of sand and gravel containing valuable materials such as gold.

**Plugged and abandoned:** A depleted well that has been filled with cement and marked, with all surface equipment removed.

**Plunge:** The angle from the horizontal of a geological feature in a vertical plane.

**Pore space:** The spaces within a rock body that are unoccupied by solid material.

**Porphyry:** any igneous rock with crystals embedded in a finer groundmass of minerals.

**Porosity:** A ratio between the volume of the pore space in reservoir rock and the total bulk volume of the rock. The pore space determines the amount of space available for storage of fluids.

**Preliminary feasibility study (PFS):** Comprehensive study of the viability of a mining project where the mining method has been established.

**Pre-stripping:** Removing waste rock to gain access to an ore body below.

**Price-to-earnings ratio (PE ratio):** The current market price of a stock divided by the
company’s earnings per share for the year.

**Primary ore:** Ore that has remained practically unchanged from the time of original formation.

**Probable reserve:** Can be mined in an economically viable fashion. Sufficient quality to be a basis for decision on further deposit development.

**Product size:** the size of mineral particles leaving a crushing or grinding circuit.

**Prospective resources:** Those quantities of petroleum estimated to be potentially recoverable.

**Proven field:** An oil and/or gas field whose physical extent and estimated reserves have been determined.

**Proven Reserve:** Can be mined in an economically viable fashion. A Proven Ore Reserve represents the highest confidence category of reserve estimate.

**Pulp:** Pulverized or ground ore in solution.

**Put option:** An option contract giving the owner the right, but not the obligation, to sell a specified amount of an underlying stock at a specified price within a specified time

**Pyrite:** A yellow iron sulphide mineral of little value. It is sometimes referred to as "fool’s gold".

**RAB drilling: Rotary air blast drilling:** Drilling method where cuttings are blown up the outside of the rods and collected at surface.
**RC drilling**: Reverse circulation drilling: RC drilling is similar to air core drilling, in that the drill cuttings are returned to surface inside the rods. RC drilling is slower and costlier but achieves better penetration than RAB or air core drilling.

**Recovery**: A term used in process metallurgy to indicate the proportion of valuable material obtained in the processing of an ore.

**Refining**: Extracting and purifying metals and minerals.

**Refractory ore**: Ore that resists the action of chemical reagents in the normal treatment processes and which may require pressure leaching or other means to effect the full recovery of the valuable minerals.

**Reserves**: are valuable, and legally, economically and technically feasible to extract. Reserves can be classified as proven or probable for miners. For oil and gas companies, reserves are proven, probable or possible.

**Reservoir**: Below surface pool of hydrocarbons contained in porous or fractured rock formations.

**Residual oil**: Oil remaining at the end of a specific recovery process.

**Resources**: are potentially valuable, and reasonable prospects exist for eventual economic extraction. Resources can be classified as inferred, indicated or measured for miners. For oil and gas companies, resources can be classified as either contingent or prospective.

**Rig**: The machine used to drill.

**Rock chip sampling**: Collection of rock samples by breaking chips off a rock face for chemical analysis.

**Royalty**: An amount of money paid at regular intervals by the lessee or operator of a mining
property.

**Run of mine (ROM):** Mined ore of a size that can be processed without further crushing.

**Salting:** The act of introducing metals or minerals into a deposit or samples, resulting in false assays. Done either by accident or with the intent of defrauding the public.

**Sampling:** Selecting a fractional but representative part of a mineral deposit for analysis.

**Scoping study:** Initial financial appraisal of an indicated mineral resource.

**Secondary recovery:** A broad term encompassing any method of extracting oil from a reservoir after a well or field has exhausted its primary production.

**Seismic survey:** Exploration method in which strong low-frequency sound waves are generated on the surface or in the water to find subsurface rock structures that may contain hydrocarbons. 3-D Seismic means seismic data that is acquired and processed to yield a three-dimensional picture of the subsurface.

**Semi-autogenous grinding mill (SAG):** A method of grinding rock into fine powder whereby the grinding media consist of larger chunks of rocks and steel balls.

**Shaft:** A vertical or inclined excavation in rock for the purpose of providing access to an ore body.

**Shale:** A very fine-grained sedimentary rock formed by the consolidation and compression of clay, silt, or mud. It has a finely laminated or layered structure. Shale breaks easily into thin parallel layers; a thinly laminated siltstone, mudstone, or claystone.

**Shear zone:** A zone of closely spaced, approximately parallel faults or dispersed displacements.

**Shutdown:** A production hiatus during which the platform ceases to produce while essential
maintenance work is undertaken.

Shoot: A concentration of mineral values; that part of a vein or zone carrying values of ore grade.

Silt: Muddy deposits of fine sediment usually found on the bottoms of lakes.

Sinter: Fine particles of iron ore that have been treated by heat to produce blast furnace feed.

Slurry: A mixture of fine mineral particles and water.

Slurry Pipeline: A pipeline that transports slurry.

Smelting: Extracting metal from its ore by a process involving heating and melting.

Specific gravity: The density of a substance relative to water.

Spud: to being drilling a well

Stockpile: Broken ore heaped on surface or areas underground, pending treatment or shipment.

Stope: An underground opening in a mine from which ore has been or is being extracted.

Stop loss: An order placed with a broker to sell a security when it reaches a certain price. Setting a stop-loss order for 20% below the price you paid for a stock will limit your loss to 20%.

Strike: direction of the line formed by the intersection of a fault, bed, or other planar feature and a horizontal plane.

Strike length: Distance along strike.
Strip ratio: The ratio of tonnes removed as waste relative to the number of tonnes of ore removed from an open-pit mine. For example, a 3:1 stripping ratio means that mining one cubic metre of ore will require mining three cubic metres of waste rock.

Sulphide ore: Sulphide ores are generally found hundreds of metres below surface, and generally require underground mining infrastructure. The main benefit to sulphide ores is that they can be concentrated using a simple physical separation technique called flotation.

Tailings: The material that remains after all metals considered economic have been removed from ore during milling.

Tailings dam: Structure which holds back the storage of tailings.

Tenement: ultimate result of an area selection process. A permit, claim, licence or lease that may be granted.

Thermal coal: Coal used in power generation.

Throughput: The amount of material or items passing through a system.

Topography: The mapped physical features of an existing location, shape and height of the land.

Trend: The direction, in the horizontal plane, of a linear geological feature, such as an ore zone.

Underground mine: Mine located several hundred metres below the earth's surface.

Upstream: The exploration and production portions of the oil and gas industry.

Vein: A fissure, fault or crack in a rock filled by minerals that have travelled upwards from some deep source.
Viscosity: Resistance of a fluid to flow.

Visible gold: Native gold which is able to be viewed to the unaided eye.

Waste dump: Site for the placement of waste rock.

Wash plant: Plant for separating waste rock and coal.

Water flooding: A secondary recovery method for the production of oil from a formation.

Weathering: Near surface alteration of minerals and rocks by exposure to the atmosphere and ground water.

Well: A shaft sunk into the ground to obtain water, oil, or gas.

Wildcat well: A well drilled into an area where no current oil or gas production exists. Also known as an exploration well.

Working interest: A working interest in an oil or gas property is one that is burdened with the cost of development and operation of the property, such as the responsibility to share expenses of drilling.

Winze: Inclined or vertical shaft or passage between levels in a mine.

Zone: An area of distinct mineralization.
Appendix B

Abbreviations

**AC drilling**: Air core drilling

**Ag**: Silver

**Au**: Gold

**bbl**: Barrel

**bcf**: Billion cubic feet

**boe**: barrels of oil equivalent

**bopd**: barrels of oil per day

**BTU**: British thermal unit

**Cu**: Copper

**g/t**: Grams per tonne

**mmboe**: Million Barrels Oil Equivalent

**mlb**: millions of pounds

**BIF**: Banded Iron Formation

**BFS**: Bankable feasibility study

**Capex**: Capital expenditure

**CFPS**: Cash flow per share

**CIL**: Carbon in leach

**CIP**: Carbon in pulp
CFR: Cost and freight

D&A: Depreciation and amortization

DCF: Discounted cash flow

DFS: Definitive feasibility study

DPS: Dividend per share

DSM: Direct shipping material

DSO: Direct shipping ore

EBIT: Earnings before interest and tax

EBITDA: Earnings before tax, depreciation and amortization

EIS: Environmental impact survey

EL: Exploration license

EM: Electromagnetic

EPCM: Engineering, Procurement, and Construction Management

EOR: Enhanced Oil Recovery

EPS: Earnings per share

EV: Enterprise value

FCF: Free cash flow

Fe: Iron

FOB: Free on board

IOCG: Iron oxide copper gold

JORC: Joint ore reserves committee

JV: Joint venture
koz: thousand ounces

LNG: Liquefied natural gas

LOM: Life of mine

LPG: Liquefied petroleum gas

LT: Long term

M&A: Merger and acquisitions

mcf: thousand cubic feet

mmcf: million cubic feet

mmcf/d: million cubic feet per day

mcfgpd: thousand cubic feet of gas per day

mmbbl: Millions of barrels

Mo: Molybdenum

Moz’s: Million of ounces

MRRT: Mineral resources rent tax

Mtpa: Million tonnes per annum

NAV: Net asset value

NPAT: Net profit after tax

Ni: Nickel

NPV: Net present value

Pb: Lead

PE ratio: Price to earnings ratio

PFS: Preliminary feasibility study
ppm: parts per million

PP&E: Property, plant and equipment

RAB drilling: Rotary air blast drilling

RC drilling: Reverse circulation drilling

ROE: Return on equity

ROM: Run of mine

SAG mill: Semi-autogenous grinding mill

Tcf: Trillion cubic feet

Tpa: tonnes per annum

U3O8: Uranium Oxide

V: Vanadium

WTI: West Texas Intermediate

Zn: Zinc