Aussie Mine 2020

Resourcing the recovery

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Executive summary

Welcome to the 15th edition of Aussie Mine, *'Resourcing the recovery'.*

Aussie Mine provides industry and financial analysis on Australia's mid-tier mining sector as represented by the mid-tier 50 (MT50) – the largest ASX mining companies with a market capitalisation of less than $5 billion as at 30 June 2020.

Collectively, the MT50 has maintained a consistent level of revenues and profits throughout the past year, despite the onset of the COVID-19 pandemic. Could the MT50 hold the key to resourcing Australia's recovery? At PwC, we certainly think so.

The MT50 is a story of two groups that largely offset one another. The first includes producers of gold and iron ore, which have benefited from a significant increase in commodity prices and high demand. The second group, featuring commodities such as coal and copper, has not enjoyed these benefits. At the same time, this second group has suffered higher costs incurred while managing operations during COVID-19, not to mention a stronger Australian dollar against the greenback.

On balance, the MT50 has maintained their strong position from last year, and we've seen a greater depth within the mid tier sector, together with a number of explorers joining the cohort.

The pandemic has also highlighted the mining sector's resilience, and the key role that miners play in supporting communities and the broader economy. As an 'essential service', mine sites across Australia have continued to operate throughout 2020, contributing much-needed funds to governments (through taxes and royalties) to support their fight against the health and economic impacts of the virus. There is little doubt that Australian federal and state governments will look to the mining industry to continue to be the bedrock of the economy, and to lead us out of this crisis.

In this year's report, we look at how the MT50 are shaping up to resource Australia's recovery.

Collectively, the MT50 holds significant influence. The group employs a global workforce in excess of 50,000 people and has a market capitalisation of approximately $61 billion, making it large enough to be an ASX5 company. Gold miners represent the largest commodity group in the MT50, comprising 44% of the MT50 by number. However, MT50 coal companies contribute the largest share of revenue ($11.4 billion or 35% of the MT50) having produced more than 120 million tonnes (equivalent to Australia's domestic coal use) in the past year.

To be a legitimate contributor to Australia's economic recovery, however, means satisfying the community's concerns regarding the sector's **environmental, social and governance (ESG) performance**. Our report discusses the latest thinking on ESG reporting, including a snapshot of where the MT50 sits against the core set of 21 'Stakeholder Capitalism Metrics' outlined in the World Economic Forum's (WEF) September 2020 whitepaper. We also outline the expectations for the MT50 when it comes to the 'G' in ESG.

While the MT50 is well positioned right now, COVID-19, along with ongoing US/China trade tensions, continues to create uncertainty in the market. As with any time of higher market volatility, a **focus on productivity** is critical for the group to successfully navigate the next few years. Our report discusses opportunities that exist for the MT50. This includes learning lessons from top-tier miners to increase the productivity of the MT50, as well as investing in **cybersecurity** protections.

Finally, the strong performance of the mining sector relative to other industries creates a temptation for governments to increase royalties or **revisit mining-specific tax regimes**. In the past, industry leaders have discouraged the government from raising taxes, leaving the industry free to **create jobs and promote growth in the Australian economy**. At the same time, there is heightened interest from the community around whether they are getting their fair share of tax receipts from mining corporations as they reap the benefits of higher commodity prices. This includes the MT50.

Right now, there is an opportunity for members of the MT50 to get ahead of the debate and to sign up to the Board of Taxation's **Tax Transparency Code**. Together, the MT50 have paid more than $1.5 billion in mineral royalties and more than $3.1 billion in dividends to shareholders in the past year. With contributions like this, the MT50 could go a long way towards **resourcing Australia's economic recovery.**

An overview of the MT50 in 2020

A golden year

Gold miners represent the largest group making up

44% of the MT50

21%

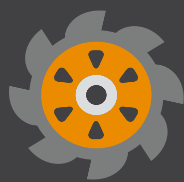
Explorers are back in fashion. There are now 8 explorers in the MT50, all new entrants. Exploration expenditure up 21% for this year's MT50.

$43.17B

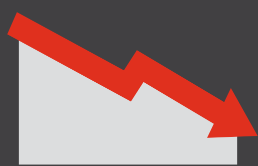
MT50's net assets reach a record high of $43.17B

The impact of COVID-19 on the group

Commodity prices:
Gold/iron ore up
Coal/copper/others down



Production continues



Deal volumes are down

Cash up but short-term debt up more = COVID-19 caution

Managing emerging risks ...

78% of industrial control systems managers believe there will be a cyber attack within 12 months.[1]

Only 50% of directors say that the board fully understands ESG issues that impact the company.[2]

[1] Defence Minister - Linda Reynolds
https://www.minister.defence.gov.au/minister/lreynolds/statements/statement-malicious-cyber-activity-against-australian-networks
[2] Source: PwC's Annual Corporate Directors Survey

Contents

The MT50

The 50 largest mining companies listed on the Australian Securities Exchange with a market capitalisation of less than $5 billion at 30 June 2020, with an average market capitalisation of slightly more than $1.2 billion.

2020 Rank	Change to 2019 rank	Company Name	Primary Commodity	Producer	Market Capitalisation at 30/06/2020 $AUDm	Market Capitalisation change 2019 to 2020
1	**returning**	Alumina Limited	alumina		4,679	-30%
2	▲ 6	Mineral Resources Limited	diversified	✔	3,976	42%
3	▼ 2	Iluka Resources Limited	mineral sands	✔	3,606	-21%
4	▲ 2	OZ Minerals Limited	copper	✔	3,553	9%
5	▲ 10	Alacer Gold Corp.	gold	✔	2,929	100%
6	▲ 3	IGO Limited	diversified	✔	2,877	3%
7	▼ 5	Yancoal Australia Ltd	coal	✔	2,680	-35%
8	▲ 2	Regis Resources Limited	gold	✔	2,653	-1%
9	▲ 4	St Barbara Limited	gold	✔	2,215	8%
10	▲ 1	OceanaGold Corporation	gold	✔	2,094	-14%
11	▲ 8	Silver Lake Resources Limited	gold	✔	1,874	83%
12	▲ 21	Ramelius Resources Limited	gold	✔	1,604	236%
13	▲ 14	Perseus Mining Limited	gold	✔	1,530	124%
14	▲ 9	Gold Road Resources Limited	gold	✔	1,469	69%
15	▼ 11	Whitehaven Coal Limited	coal	✔	1,419	-61%
16	▼ 2	Lynas Corporation Limited	rare earths	✔	1,353	-21%
17	▼ 1	Champion Iron Limited	iron ore	✔	1,352	4%
18	▲ 11	Nickel Mines Limited	nickel	✔	1,256	98%

2020 Rank	Change to 2019 rank	Company Name	Primary Commodity	Producer	Market Capitalisation at 30/06/2020 $AUDm	Market Capitalisation change 2019 to 2020
19	▲ 1	Resolute Mining Limited	gold	✔	1,252	24%
20	▼ 8	New Hope Corporation Limited	coal	✔	1,135	-50%
21	▲ 1	Zimplats Holdings Limited	diversified	✔	1,118	26%
22	new	De Grey Mining Limited	gold		1,061	3123%
23	▼ 5	Sandfire Resources Limited	copper	✔	904	-15%
24	▼ 19	Coronado Global Resources Inc.	coal	✔	894	-75%
25	▲ 1	Westgold Resources Limited	gold	✔	836	15%
26	▲ 15	West African Resources Limited	gold	✔	796	182%
27	▲ 9	Bellevue Gold Limited	gold	✔	726	107%
28	▲ 3	Western Areas Limited	nickel	✔	723	35%
29	▼ 12	Mount Gibson Iron Limited	iron ore	✔	706	-39%
30	▲ 17	Alkane Resources Limited	gold	✔	699	204%
31	▼ 6	Orocobre Limited	lithium	✔	640	-13%
32	new	Capricorn Metals Ltd	gold		587	604%
33	new*	Energy Resources of Australia Ltd	uranium	✔	572	467%
34	▼ 13	Pilbara Minerals Limited	lithium	✔	556	-45%
35	▼ 7	Jupiter Mines Limited	manganese	✔	522	-23%
36	▼ 2	Aurelia Metals Limited	diversified	✔	437	2%
37	▲ 12	Red 5 Limited	gold	✔	392	75%
38	-	Tribune Resources Limited	gold	✔	382	26%
39	new	Legend Mining Limited	nickel		353	540%
40	▼ 8	Galaxy Resources Limited	lithium	✔	317	-37%
41	new	Pantoro Limited	gold	✔	312	45%
42	new	Cardinal Resources Limited	gold		310	138%
43	new	Chalice Gold Mines Limited	gold		302	844%
44	new*	Mincor Resources NL	diversified		289	129%
45	▼ 6	Grange Resources Limited	iron ore	✔	281	-7%
46	new	Emerald Resources NL	gold		275	138%
47	new	Magnetic Resources NL	iron ore		270	218%
48	▼ 18	OM Holdings Limited	manganese	✔	250	-59%
49	new	Dacian Gold Limited	gold	✔	248	107%
50	new	Adriatic Metals PLC	diversified		236	58%

*Previous member of the MT50 - upward return.

Resourcing the recovery… the MT50 now

The MT50 has delivered financial stability and continued productivity in turbulent times, and will be instrumental in orchestrating Australia's recovery. To understand the MT50's impact on the Australian economy, we have imagined what it would look like if it were a single company.

Finance

Market capitalisation

The MT50 would have a market capitalisation of $61B – equivalent to an ASX5 company.

Revenue

The MT50 would generate operating revenue of $29.4B

Profit before tax

The MT50 would generate profit before tax of $5.3B

Funding tomorrow

Expenditure – a sustainable future

Capital and exploration expenditure incurred by the MT50 increased to $6.2B (up 5%).

Royalties – government investment

$1.5B in royalties paid by the MT50 last year. This does not include stamp duties and other taxes paid to governments by the MT50.

Dividends – returns to shareholders

The MT50 paid $3.5B in dividends to shareholders (up 44% from FY19).

Operations

Gold

4.4 **million ounces** (approximately 1,100 gold bars)

Iron ore

26.9 **wmt**

Coal

120 **million tonnes** (approximately equivalent to Australia's domestic coal consumption)**

Copper

210,000 **tonnes** (enough to build more than 2 billion battery-powered electric cars)*

Workforce

Jobs and employment

We estimate that the MT50 presently employs >50,000 people globally. This does not include all the additional jobs created for contractors and communities that service the MT50's operations.

> "IGO Limited … recognises the broader context of our contribution to society and the importance of our role in making a positive contribution to the world by enabling a clean energy future. We believe our reason for being stretches further than simply being a mining company."

Quote from IGO's strategy & purpose

*Source: https://www.mining-technology.com/comment/electric-vehicle-revolution-drive-copper-demand/#:~:text=While%20conventional%20cars%20contain%20roughly,than%20180%20pounds%20of%20copper.
**Source: https://www.rba.gov.au/publications/bulletin/2019/sep/the-changing-global-market-for-australian-coal.html

The MT50 movers and shakers of 2020

A golden year

The surge in gold price over the previous 12 months has shaped the movement in the MT50, with gold miners making up more than 50% of the new entrants.

This shift means there are now 22 gold miners in the MT50 (up from 16 in 2019), with a comparable increase in the proportion of total market capitalisation.

There has also been a shake-up at the top. Only five companies from 2019's list held onto their top-10 positions, with notable new entrants to the top 10 including gold miners **Alacer**, **St Barbara** and **OceanaGold**.

After climbing the ranks of the MT50 over a number of years, **Saracen** is 2020's sole graduate. The uplift in the commodity price, coupled with a shrewd acquisition in 50% of the Super Pit from Barrick in the period, has seen Saracen's market capitalisation exceed the $5 billion threshold ahead of a proposed merger with 2019 MT50 graduate, **Northern Star**.

In our 2019 Aussie Mine report, PwC asked: Are we finally seeing exploration returning to the mid-tier sector? With exploration companies making up two-thirds of new entrants in the MT50 this year, we may have our answer.

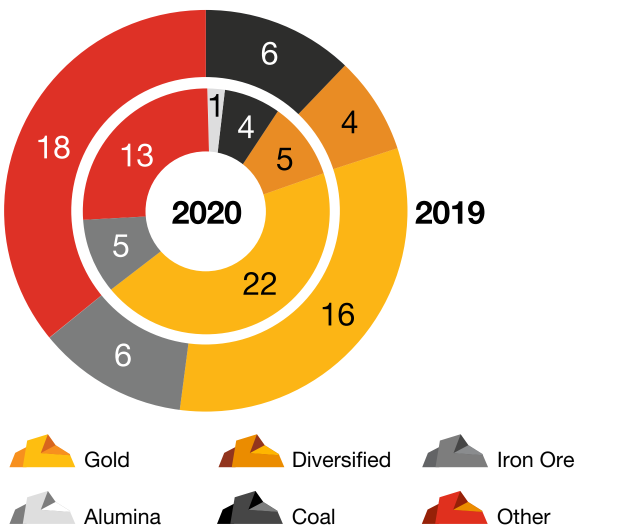
Exploration companies **De Grey Mining**, **Chalice Gold Mines** and **Legend Mining** catapulted into the MT50 on the back of successful strikes in the period, with **De Grey** seeing a 3,123% increase in their annual market capitalisation on the back of the gold discovery at Hemi (Pilbara, Western Australia). De Grey was our biggest riser this year.

Despite having 'gold' in their name, it was Chalice's nickel-copper-PGE discovery at its Julimar project in March 2020 that saw their market capitalisation increase by 568% for the 12 months to 30 June 2020.

Chalice Gold Mines' Managing Director, Alex Dorsch, said Australia was experiencing a "new wave" of discoveries, partly driven by increasing demand for technology minerals. But how long will this greenfields discovery boom continue?

The biggest risers from last years' MT50 were a gold quartet of **Ramelius** (up 21 spots to #12), **Alkane** (up 17 spots to #30), **West African** (up 15 spots to #26), and **Perseus** (up 14 spots to #13).

MT50 Companies by Commodity



Graph 1.1: Split of MT50 by commodity
Source: Capital IQ, PwC analysis

Graduates (>$5B market cap)

- Saracen Mineral Holdings Limited (Gold)

New Entrants

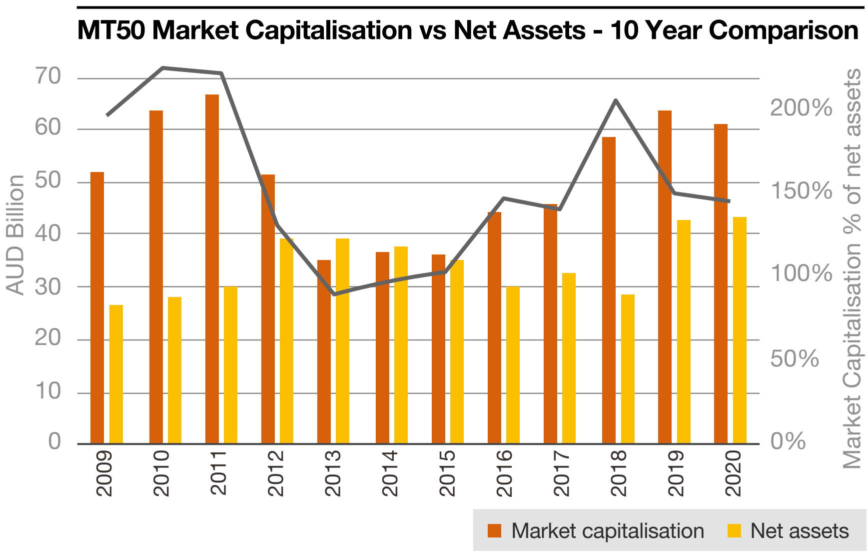
- De Grey Mining Limited (Gold)
- Capricorn Metals Ltd (Gold)
- Pantoro Limited (Gold)
- Emerald Resources NL (Gold)
- Cardinal Resources Limited (Gold)
- Chalice Gold Mines Limited (Gold)
- Dacian Gold Limited (Gold)
- Energy Resources of Australia Ltd (Uranium)
- Legend Mining Limited (Nickel)
- Mincor Resources NL (Diversified)
- Magnetic Resources NL (Iron Ore)
- Adriatic Metals PLC (Diversified)

Exits due to acquisition

- Kidman Resources Limited

= Exploration company

The MT50 over time – successive record years in net assets



Graph 1.2: MT50 market capitalisation versus net assets – 10 year comparison
Source: Capital IQ, PwC analysis

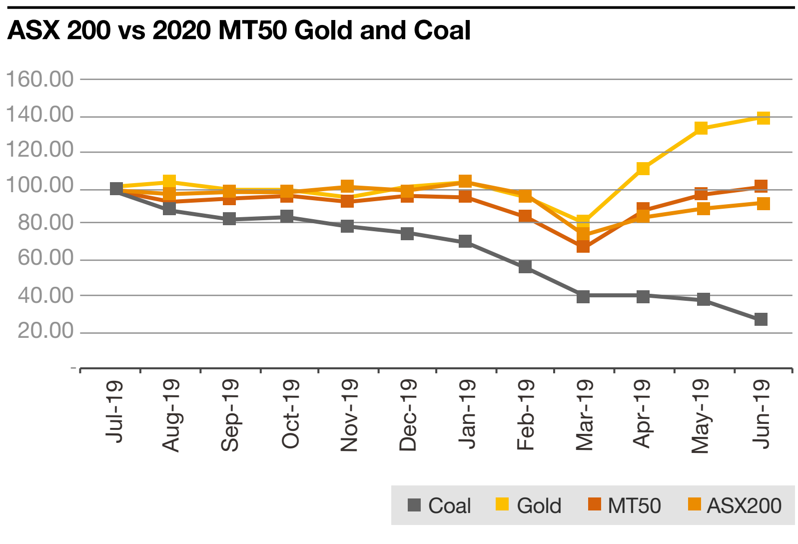
The MT50 has held its position during a turbulent year, with market capitalisation showing no change and net assets seeing a 1% increase on our 2019 cohort. This is only the second successive record year since our analysis began 14 years ago, showing the depth of the MT50 right now.

When we drill down a layer, we see the previous 12 months is a tale of two commodities: gold and coal.

When analysing the movement in the MT50 against the ASX200 over the past 12 months, we can see that the two are closely aligned. However, from April onwards, the MT50 outperforms the market. Truly, the MT50 has a major role to play in resourcing Australia's recovery, both during and post-COVID-19.

Gold's market capitalisation flight path is closely linked to investors' reaction to economic and political uncertainties, supported by record gold prices (Australian dollar). However, the story of coal is multifaceted.

Only four coal miners remain in the MT50 (down from six in 2019), and coal comprises just 10% of the total market capitalisation (down from 22%, 2019). With the commodity price falling to 2015 levels during the period, and despite still contributing the largest share of revenue out of any commodity, three of the four coal companies in the MT50 saw their operating revenues fall.



Graph 1.3: ASX200 versus 2020 MT50 – gold and coal
Source: Capital IQ, PwC analysis

Resourcing the recovery… through responsible ESG practices

“Miners that have a strong ESG focus are on the right track to long-term value creation for their stakeholders”

The importance of ESG performance continues to grow in Australia. Recent press coverage on ESG issues across the mining, financial services and industrial sectors has served as a timely reminder of the need for all companies, especially those in the mining sector, to operate in an appropriately governed, and environmentally and socially responsible manner. Often seen as merely a risk management requirement in order to maintain a licence to operate; ESG is increasingly being recognised as both a differentiator, and a driver of long-term shareholder value.

Unmined opportunity… strategic integration of ESG

The ESG performance of miners can redefine their value – either positively or negatively. Investors want consistent, high-quality information that outlines a strategic plan for long-term value creation. Other stakeholders (including customers, regulators, and NGOs) are also demanding more transparency. The environmental and social footprint of the mining sector makes ESG an especially important strategic priority.

A strong ESG framework provides a springboard to deliver tangible business benefits. Not only does a strong ESG and sustainability proposition correlate with higher equity returns, but studies[1] show it translates into a lower cost of capital and better operational performance. Increasingly, miners are recognising this importance. They’re articulating their alignment to ESG values through their strategic visions and missions where the interests of investors and broader stakeholders are more clearly connected.

Miners that have a strong ESG focus are on the right track to long-term value creation for their stakeholders (including investors, regulators, consumers, employees). At the same time, they’re creating value for the communities in which they operate, and this is key to Australia’s economic recovery.

[1] ESG and the cost of capital (MSCI Inc. Published on 25 Feb 2020)

Stakeholders

Investors

The exponential rise of responsible investment[2] has been driven by an increasing awareness that ESG factors influence investor returns. BlackRock, the world's largest asset manager, kicked off 2020 by announcing that it will make climate change central to its investment considerations.

Regulators

Public and regulatory pressure continues to build, based on concerns including climate change, environmental impacts and rehabilitation, health and safety, water use, and modern slavery.

Consumers

The sustainability of supply chains is in the spotlight, with ESG credentials (for example, low-carbon aluminium and responsible gold mining) influencing the spending behaviours of end consumers.

Communities

Miners have a unique relationship with the communities in which they operate. This includes the need to seek prior and informed consent of First Nations Peoples, as part of a more holistic partnership approach. COVID-19 has reminded the world of its vulnerability and, in particular, the limitations of both global supply chains and the free movement of people.

Employees

Those that integrate ESG into their strategy have an improved ability to attract and retain the best talent through alignment with their values.

The MT50 must continue to step up their ESG efforts in order to meet the increasing expectations of stakeholders. This is fundamental to their success. Moreover, there is an opportunity for the mining industry to enable the transition to a low-carbon, greener economy through the provision of critical resources needed to underpin this shift. The MT50 has a significant role to play here.

[2] The PRI defines responsible investment as a strategy and practice to incorporate environmental, social and governance (ESG) factors in investment decisions and active ownership.

Unmined opportunity… don't forget the 'G' in ESG

Where are we at?

Incorporating ESG opportunities into strategic settings has the potential to reap benefits for the sector. At the same time, managing ESG downside risk is of equal importance. This is particularly so for the MT50, whose governance and risk management approaches to ESG are essential to maintaining their licence to operate, and for their wider social acceptance.

> "Governance is foundational for a company in setting purpose and provides oversight for a company's activities that contribute to a prosperous, sustainable society.[3]"

The results of PwC's 2020 Annual Corporate Directors Survey suggest that ESG may not be as embedded into existing governance structures as it needs to be. In fact, only half of the 700 company directors surveyed indicated that the board fully understood the ESG issues that impacted their companies. Even less of these directors (38%) believed that ESG will have a financial impact – a stark contrast to the views of investors.

Only 38% of directors believe that ESG will have a financial impact.

Only 50% of directors say that the board fully understands ESG issues that impact the company.

> "Five of the top 12 ASX companies have lost chief executives and board members since 2018 because of failures in culture governance.[4]"

What should we be doing?

The ASX recently acknowledged the need for more governance in relation to ESG. Changes to the ASX Corporate Governance Principles (applicable for 31 December 2020 and subsequent financial years) have now come into force, with a focus on sustainability and a company's reputation in the community. Key changes include:

- **Recommendation 4.3:** Requirement to disclose the process to verify the integrity of any periodic corporate report that is not audited or reviewed.
- **Recommendation 3.1:** Requirement for entities to articulate and disclose their values.
- **Recommendation 7.4:** Any material environment or social risks must now be disclosed and how these are, or will, be managed. References the adoption of the TCFD framework (Task Force on Climate related Financial Disclosures) by reporters.

> "Many companies say they have commitments to all of their stakeholders, and that may well be true. But few boards have a structured process for overseeing those commitments or for tracking the company's performance for its non-shareholder stakeholders."
>
> *Harvard Business Review*

If the MT50 are to thrive, by truly integrating ESG into their strategies and the way they operate, then appropriate governance structures around ESG need to be implemented and effectively operated.

What makes good governance?

- Reliable sources of information
- Confidence in assumptions and processes
- Method of reporting and review
- Level of quality assurance
- Audit trail

[3] Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation WHITE PAPER SEPTEMBER 2020: World Economic Forum
[4] Source: https://www.afr.com/work-and-careers/education/financials-are-not-enough-execs-must-learn-corporate-governance-too-20201109-p56cy5

Stakeholders demand ESG disclosures

It is time for the MT50 to up its game on ESG reporting as stakeholders increase their demands for transparent, robust and meaningful ESG disclosures using credible, standardised information. Now, more than ever before, investors are making capital allocation decisions based on the ESG information disclosed. In particular, the push for consistent, standardised information continues to gain momentum.

In response, and with the support of 120 of the world's largest companies, the WEF, in conjunction with the International Business Council, recently released its whitepaper.

The WEF whitepaper sets out a set of 'Stakeholder Capitalism Metrics', as well as disclosures that companies can use to align their mainstream reporting on performance against ESG indicators. These disclosures can also be used to track their contributions towards the UN Sustainable Development Goals (SDGs) on a consistent basis.

Given that investors and other stakeholders have been calling for greater comparability, WEF's core set of 21 Stakeholder Capitalism Metrics provides a useful minimum standard for ESG reporting. Companies that don't meet this minimum standard will increasingly stand out, and any explanation or excuse that performance information for particular ESG risks is not readily available will no longer cut the mustard.

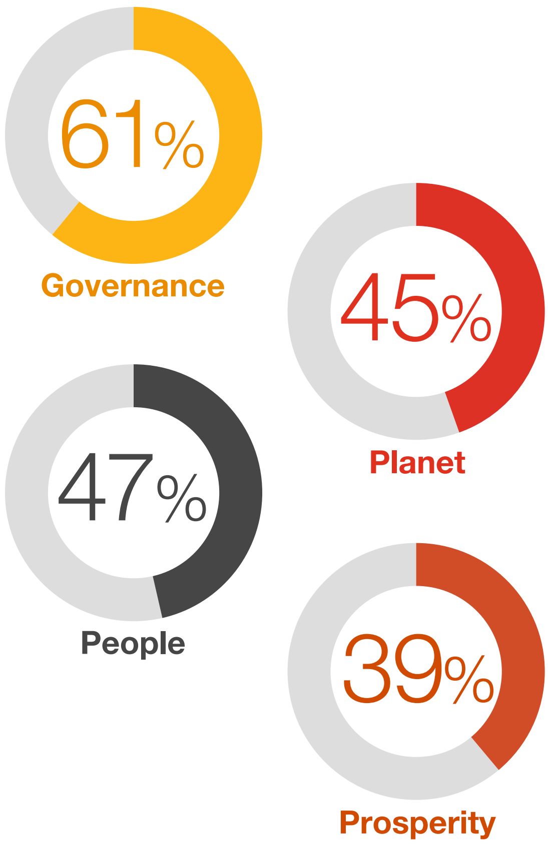
Are we doing enough?

The proposed WEF Stakeholder Capitalism Metrics are spread across four key pillars (principles of governance, planet, people, and prosperity), which have been adopted from the UN's framework: 'Transforming our world: the 2030 Agenda for Sustainable Development'.

In order to determine how mature their ESG reporting is for the four key pillars, organisations should assess whether they have reported on all 21 core metrics.

As shown at right, the reporting of the MT50 remains relatively immature against this new minimum standard.

Proportion of MT50 with disclosures against each pillar



The overall reporting of the top half of the MT50 is considered more mature against the WEF Stakeholder Capitalism Metrics. On the other end of the spectrum, the second half of the MT50 remains far less consistent when it comes to ESG reporting.

Our analysis indicates that disclosures related to the prosperity pillar needs the most amount of work relative to the other pillars. This pillar focuses on what is being undertaken by the company to ensure all human beings can enjoy prosperous and fulfilling lives. With increased emphasis on transparency and accountability, the indirect contributions of companies to greater society, through, for example, job creation, community investment and tax contributions, need to be singled out.

What does good look like?

Resolute Mining knocked it out of the park with their reporting on the governance pillar, showing clear targets linked to ESG risks, as well as detailing how the board is armed to act on those goals.

Perseus Mining and **Galaxy Resources** were very comprehensive with their reporting across the four pillars.

Sandfire Resources has made good progress in addressing the prosperity pillar, which is commonly overlooked, by covering areas like net number of jobs created, community investment, research & development investment, and tax transparency.

Whilst **IGO** and **Iluka Resources Limited** continue their strong focus in these areas, we also saw **Oz Minerals, Champion Iron, New Hope, Zimplats** and **Gold Road** make the Top 10 in our analysis. **Iluka** maintained its position within the Dow Jones Sustainability Index for Australia.

Where to from here?

As a starting point, each member of the MT50 should include, within its reporting, its stated purpose. This should cover how it proposes solutions to economic, environmental and social issues, illustrating the integration of ESG into overall strategy.

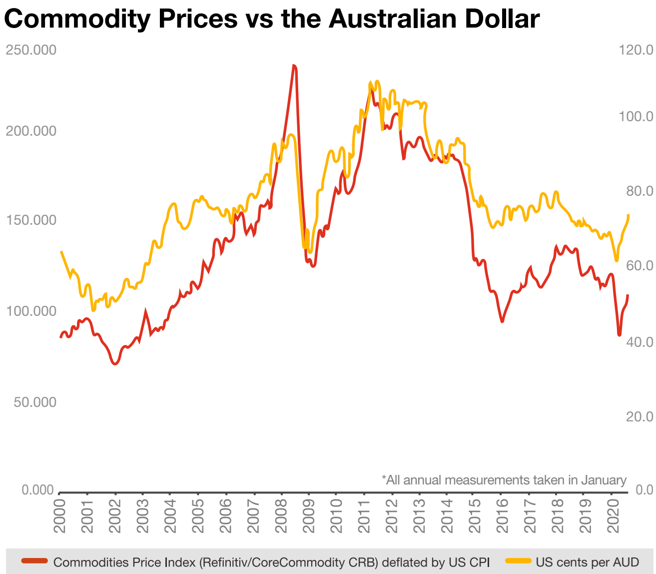
Keep management and directors accountable on ESG through:

1. setting detailed and defined ESG commitments and targets;
2. linking those commitments and targets to KPIs and reporting consistently against them; and
3. linking them to executive and management performance.

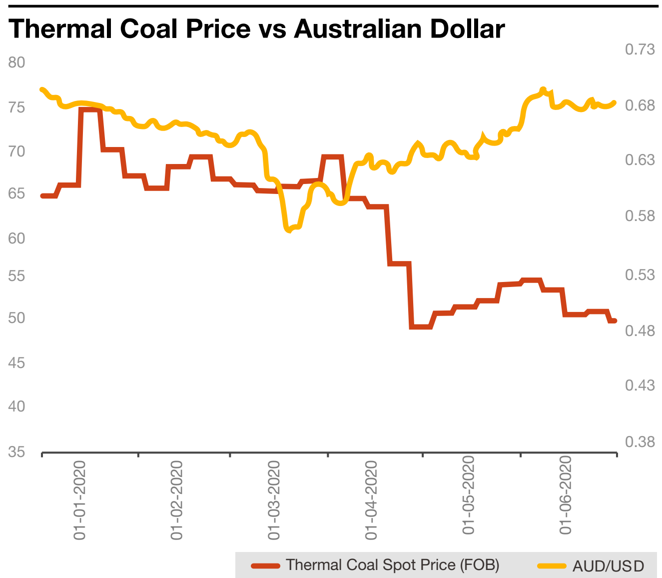
This will assist with the strategic integration of ESG, while also providing stakeholders with the performance information they want, in the areas that really matter.

Improvements in the ESG reporting space will not only help the MT50 maintain their social license to operate; it will also boost their ability to resource Australia's recovery.

Resourcing the recovery... through innovation and productivity



Graph 1.4: The relationship between commodity prices and the Australian dollar since 1996
Source: Bloomberg, PwC Analysis



Graph 1.5: The Australian dollar versus thermal coal prices during 2020
Source: Bloomberg, PwC Analysis

Unmined opportunity ... COVID-19 heightens a productivity focus

As a commodity currency, the Australian dollar usually follows the same trajectory as commodity prices. However, during uncertain times, the divergence between the Australian dollar and some commodity prices is a sure sign of market volatility. This is exactly what COVID-19 has delivered (refer graphs 1.4 and 1.5).

This clearly demonstrates how critical a productivity focus is during market volatility. It also highlights the impact productivity can have, not only on driving the mining sector's performance but, in turn, on the recovery of Australia's entire economy.

Productivity can take many shapes and forms but, at its core, it is either: doing the same with less, or doing more with the same. Many companies embark on the productivity journey and fail. There are good learnings when we look across multiple sectors.

Four key elements to a successful productivity journey for the MT50 - learning from others

1 Structured for success

A successful organisation needs to be structured appropriately to support improvement. This is generally an efficient structure, with a team that has an improvement remit endorsed at the highest levels.

A good example of a company structuring itself for success is: Google. In 2015, Google restructured itself, creating a parent company called Alphabet Inc. and appointing a new CEO at Google, meanwhile two Google co-founders were redeployed to focus on exploring new business opportunities. Since this reorganisation, Google has achieved an upwards growth trajectory, improved cost control on speculative ventures, awarded more autonomy to the separate service lines, and established a more diverse leadership team.

2 A commitment to productivity

A CEO's productivity mandate must be translated into a leadership commitment or target. These targets must be developed in consultation with site and gain by in from all levels of leadership.

A favorite saying of former Toyota chairperson, Hiroshi Okuda, is: "Reform business when business is good". Toyota is an example of a company that is truly committed to productivity. Toyota has a history of setting near-unattainable goals, which is a deliberate strategy of senior executives to push the company to break free from established routines and explore improvement and innovation. This true commitment to productivity is the lifeblood of the company and is a major factor in its success.

Some key tactical actions to get the ball rolling on commitment are: executive endorsement of productivity to the business, a high-level plan, and targets developed with the business.

?

Before embarking on the productivity journey, members of the MT50 should ask themselves:

- Are the right people empowered to make business decisions within reasonable timeframes?
- Is there a team responsible for driving productivity?
- Are back-office functions supporting front-line operations effectively?

3 Reporting on productivity

Productivity and improvement need to become a leadership focus, and form part of a regular discussion. Leaders need to be equipped with the appropriate metrics, including tracking and reporting tools, to enable decision making.

There are numerous examples of where a focus on productivity, supported by appropriate tracking and reporting, have made phenomenal changes to the way people operate. One example is the excellent safety culture in Australian mining. A contributing factor to the Australian mining safety culture has been the legislative requirements in reporting and inspections. These (well-managed and well-governed) legislative requirements have accelerated the industry's focus on safety, and have driven huge innovations in the field.

4 Productivity projects

These can be delivered throughout the business with a focus on technology, automation, workforce, effort per unit of metric and more. This is an iterative process where the objective needs to be constantly repeated and tracked.

As an example, autonomous haulage and remote operating centres are the hallmark of productivity in mining, and are now a common part of an Australian mining landscape. Haul trucks, trains, and fixed plant machinery operating in the Pilbara can be monitored and controlled from 1,200 kms away in Perth. During COVID-19, however, some site personnel are using VR headsets to troubleshoot, and to aid inspection and maintenance of equipment.

Technology can increase the pace of productivity by bringing expertise closer to frontline operations, and by using data to make quicker and more efficient decisions. A few key projects or organisation changes can be a differentiator in these times.

A key success factor is if productivity is culturally embedded into the organisation. Productivity should be part of people's day-to-day working life, and an empowered workforce can drive productivity. As an example of this, BHP has recently established a global multi-year program to promote productivity throughout the culture of their business. This program is called BOS or 'BHP Operating System' and takes many learnings from the Toyota productivity journey. The three main objectives are:

1. **Empower their people**
2. **Pursue operating perfection**
3. **Serve their customers**

BHP is embarking on a journey to embed a continuous improvement mindset and capability throughout the organisation through various streams and initiatives.

In such volatile times it is important for any MT50 company to focus on productivity. Not only will this get the most out of the company's operational efforts, it will also enable the company to withstand swinging commodity prices. Further, the latest Federal Budget included support for R&D, and this might be the perfect stimulus to help boost productivity in the industry.

For an MT50's productivity journey, the correct metrics need to be compiled at the appropriate frequency and granularity to enable decision making, and to focus attention on progress.

Unmined opportunity…
Is cybersecurity a blind spot to operational impact?

Cybersecurity plays a critical role in the mining industry as operations continue to focus on technology efficiencies, automation, and connectivity within the ecosystem.

Mid-tier miners are increasingly looking to adopt smart mining technologies to optimise safety, production, and decision making, in order to create the mines of the future. However, if a device is digitally connected, it *can* be hacked.

Now, more than ever, combating threats to critical infrastructure safeguards the mining industry's performance and, in turn, Australia's recovery.

As these technologies become more interconnected, the potential cybersecurity threats and attack vectors are growing. The impact of these threats can be severe, resulting in production or revenue losses, harm to the environment, regulatory fines, reputational damage, constrained economic growth, and even catastrophic shutdown of critical infrastructure and loss of lives. This is further compounded by the emerging complexities and convergence between operational technology and information technology. In the past, this was viewed as the traditional safety net that many miners have claimed as being the reason why the risk is lower for them.

Additionally, COVID-19 has reshaped how the mining sector scales its operations, reinforcing the need for an environment that supports remote working and automation.

This has introduced new challenges to mining operations. These challenges stem from the sector's growing reliance on third parties and virtual collaboration, as well as its limited workforce and varying levels of restrictions across locations. These all present new opportunities for cyber adversaries.

PwC's 2020 Global CEO Survey report indicates mining CEOs are underestimating the likelihood of a cyberattack occurring in their sector, with only 12% of CEOs being "extremely concerned" about cyberthreats on their company's growth prospects (down from 21% in FY18 and 14% in FY19).

Mining has remained one of Australia's most economically resilient industries throughout the COVID-19 crisis, so miners of all sizes are now an attractive target for cyber adversaries due to their economic growth and role in the extraction and sale of commodities.

Globally, the mining sector is one of the biggest targets for malicious emails, which are used to establish a foothold to then launch a cyberattack.

1 in 258
emails received across the sector are **malicious**

38.4%
of users in the mining sector are targeted with malicious emails[1]

>78%
of those responsible for managing industrial control systems were concerned there would be an attack in the next 12 months[2]

[1] Symantec: Internet Security Threat Report Volume 24, February 2019 https://docs.broadcom.com/doc/istr-24-2019-en
[2] Australian Mining - Mining at high risk of cyber security threats, September 2020: https://www.australianmining.com.au/news/mining-at-high-risk-of-cyber-security-threats/

This year has seen an increase in state-sponsored threat actors, motivated by nationalism and economic disruption. Prime Minister, Scott Morrison, has highlighted the fact that state-sponsored hackers are breaching Australian businesses. In FY20, around 35% of incidents impacted Australian critical infrastructure providers, while an estimated 70 cybersecurity incidents targeted the Australian mining and resources sector.[3]

Many Australian mining organisations are not treating cyber as an organisation-wide risk, and often parts of the business remain unaware of their accountabilities. In fact, high-level mining executives in Australia would only trigger an industry response in the event of a catastrophic event.[4] Despite this, more than 78% of those responsible for managing industrial control systems were concerned there would be an attack in the next 12 months.[5]

2020 has seen a number of successful, highly sophisticated ransomware attacks where adversaries encrypt core systems and hold the organisation to ransom. These attacks can cause prolonged system outages that can last weeks or even months, and have significant safety, operational, reputational, financial, legal and regulatory implications. Business continuity plans are not generally equipped to support system outages of more than 72 hours, which does not match the potential outage timeline inflicted by a ransomware attack.

Operational technology disruption

Target	Primary Threat Actors
• IIoT (Industrial Internet of Things) • Autonomous Fleet (vehicle, drills, shovels) • Drone Technology • Metals and Minerals Sorting • Equipment Management	• Nation State • Corporate Espionage • Insiders • Organised Crime

Compromise of sensitive data and privacy

Target	Primary Threat Actors
• Personal employee data • Payroll data • Accounts payable data • Internal pricing information • Business development • Vendor master data • Inventory data • Scheduling data	• Nation State • Organised Crime • Hacktivists

Consequences

Business Disruption / Loss of Production

Loss of Data

Impacts

Health & Safety
- Production Equipment Outage
- Workforce Injury

Environmental
- Biodiversity damage
- Tailings

Legal & Regulatory

Financial

Penalties for data breaches and non-compliance with privacy regulations

Reputational
Loss of trust and credibility

[3] Australia Home Affairs, 'Australia's Cyber Security Strategy', Minister of Home Affairs, 2020: https://www.homeaffairs.gov.au/cyber-security-subsite/files/cyber-security-strategy-2020.pdf
[4] Engineer and Mining Journal - Dealing With Data: Cybersecurity in the COVID-19 Era, August 2020: https://www.e-mj.com/features/dealing-with-data-cybersecurity-in-the-covid-19-era/
[5] Australian Mining - Mining at high risk of cyber security threats, September 2020: https://www.australianmining.com.au/news/mining-at-high-risk-of-cyber-security-threats/

> **All Australian organisations who might be concerned about their vulnerability to sophisticated cyber compromise can take three simple steps to protect themselves:**
>
> 1. Patch your internet facing devices promptly - ensuring any web or email servers are fully updated with the latest software.
> 2. Ensure you use multifactor authentication to secure your internet accessible infrastructure and cloud-based platforms.
> 3. Become an ACSC partner to ensure you get the latest cyber threat advice so you can take the earliest possible action to protect yourself online."
>
> *Senator the Hon Linda Reynolds, Minister for Defence*[6]

So what can the MT50 do?

By implementing these cyber strategies, recommended by the Australian Signals Directorate (ASD 'Essential Eight'), the MT50 can help to lower the likelihood and impact of a potential cyberattack.

1 **Multi-factor authentication (MFA):** The increased reliance on remote operations and third parties introduces new security challenges for the mining sector to manage, and creates another entry point for adversaries to attack. The use of MFA adds an additional layer of defence through combining authentication methods to digitally verify a user's identity, strengthen user access and prevent unauthorised access.

2 **Patching:** Mining companies tend to take a conservative approach when it comes to patching vulnerabilities in legacy OT systems due to availability concerns resulting from unplanned system disruption and downtime. However, unpatched systems introduce vulnerabilities for adversaries to exploit and attack. Processes and procedures should be developed to rigorously test patches and updates to OT systems.

3 **Privileged access management (PAM):** Privileged users have full control of critical industrial control systems, making them a valuable target. Having weak PAM controls can lead to adversaries targeting and impersonating legitimate users over time to deploy unauthorised changes, impacting OT operations. PAM is fundamental to ensuring that access rights for privileged accounts are allocated and regularly reviewed based on the user's role.

4 **Partnering with the Australian Cyber Security Centre (ACSC)** to share cyber information can help combat organised crime and nation state threats.

[6] Defence Minister - Linda Reynolds
https://www.minister.defence.gov.au/minister/lreynolds/statements/statement-malicious-cyber-activity-against-australian-networks

Resourcing the recovery... through government funding

The mining industry is currently in the midst of a 'mini-boom' and, therefore, it's playing a key role in Australia's economic recovery.

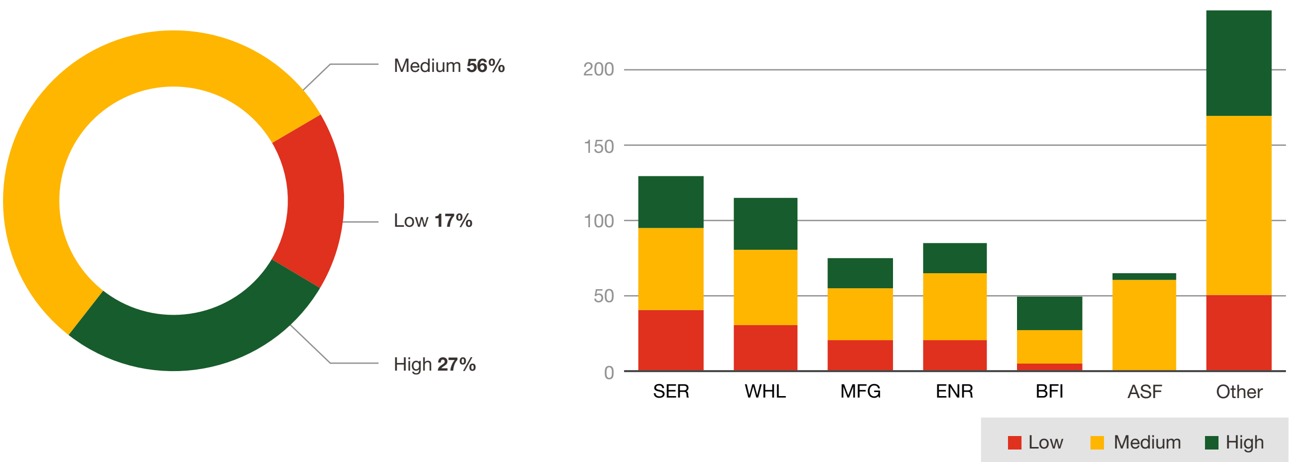
However, in times like these, there is heightened interest from the community about whether they are getting their fair share of tax receipts from corporations reaping the benefits of higher commodity prices – including those in the MT50.

Current state of reporting

The Australian Taxation Office (ATO) has been reviewing the largest 1,000 public and multinational companies to ensure they are reporting the right amount of tax under the ATO's Justified Trust program and, more recently, the Top 1,000 combined assurance program. In the ATO's findings report for 30 June 2020, more than 50% of companies in the energy and resources (ENR) industry only received a medium level of assurance from the ATO. A medium level of assurance means the ATO will seek to gain further evidence and/or analysis on areas not yet assured. The overall level of assurance for the ENR industry is consistent with the overall assurance rating for the Top 1,000 at June 2020 (see graph below).

Increasing revenues, driven largely by higher iron ore and gold prices, is likely to result in an increase in tax paid by members of the MT50. While the data suggests that overall income tax expense from the MT50 has taken a slight dip from 2019, tax is up from prior years, and up significantly for gold and iron ore miners. We would expect this trend to continue into next year's Aussie Mine publication.

Overall assurance rating by industry as at June 2020



Source: ATO Findings report Top 1,000 tax performance program. Note: The table shows the overall assurance ratings by the number of taxpayers for the following key industry groupings: Services (SER), Wholesaling (WHL), Manufacturing (MFG), Energy and Resources (ENR), Banking, Finance and Investment (BFI), APRA-Regulated Superannuation Funds (ASF), all other non-grouped taxpayers.

Unmined opportunity… for tax transparency

There is an opportunity for members of the MT50 to get ahead of the debate and sign up to the Board of Taxation's Tax Transparency Code. Of the MT50, currently only **Iluka Resources Limited** and **OZ Minerals Limited** have signed up to the code.

Signing up to the code publicly demonstrates a willingness to be transparent when it comes to tax obligations, as well as an intention to build trust in society, and we recommend all members of the MT50 consider signing up.

Should governments let the good times roll?

Should increasing mining taxes be back on the table?

Increased revenues have led to increased exploration and capital expenditure. Logically, continuing to support exploration and capital expenditure should turn into higher overall tax receipts, more jobs, and ultimately benefit the community. A strong mining industry contributes significantly to the revenue base and employment. In particular, **the COVID-19 pandemic has shown how reliant Australian governments are on taxation and royalty revenues from the mining industry.**

Mining industry leaders urge the government to avoid changing taxes, and allow the industry to stimulate the economy. In November 2017, Reg Howard-Smith, the then CEO of the Chamber of Minerals and Energy of WA, encouraged the government to minimise industry interference. In relation to the WA Government's plan to abandon an increase to the gold royalty, he said:

> "The government should respect the will of the parliament and now give the gold industry a chance to do what it does best – continue to invest heavily in exploration, which will in turn create further jobs and stimulate economic growth."

The gold-royalty carrot?

In July this year, WA Treasurer, Ben Wyatt ruled out an increase to gold royalties despite the commodity's price reaching record highs. The WA government recently reported a $1.7 billion (or 25.9%) increase in royalty income in 2019-20, which was mainly the result of higher-than-anticipated iron ore prices. The WA Government also noted that gold royalties would have been $149.5 million higher had their proposed gold royalty increase been legislated in 2017. However, any increase in taxes can have a negative impact on investment and, accordingly, it is difficult to say whether all of this $149.5 million would have, in fact, materialised.

Make the most of the stimulus

The MT50 should seek to make the most of the following incentives announced in the Federal Budget:

- A temporary loss carry-back measure, under which companies with aggregated turnover of less than $5 billion will be able to carry-back tax losses from the 2019-20, 2020-21 and 2021-22 income years to offset previously taxed profits from the 2018-19 or later income years.
- Businesses with aggregated turnover of less than $5 billion will be able to deduct the full cost of eligible capital assets acquired after 6 October 2020 and first used or installed by 30 June 2022.
- For businesses with aggregated turnover of less than $50 million, it will also apply to second hand assets.

This will provide some additional funds for the MT50 to invest back into their businesses and help resource the recovery.

M&A activity

Gold transactions lead the way

There has been a significant decrease in both the number and value of deals across the MT50, with 12 deals completed in FY20 compared to 25 in 2019. Gold led the M&A activity with the strong gold price supporting sector consolidation in WA, including **Saracen Mineral Holding Ltd**'s acquisition of a 50% interest in the Kalgoorlie Super Pit from Barrick Gold, which propelled Saracen to become the latest MT50 graduate. Opportunities in the base metals space remains tight with **Sandfire Resources Limited** looking to Africa for its next stage of growth (through the acquisition of MOD Resources), and **Oz Minerals Limited** deciding it was time to own the remaining 30% of the West Musgrave nickel-copper project it didn't hold through the acquisition of Cassini Resources.

The major change in M&A activity compared to prior year was the lack of activity in the lithium and coal space. This followed lower prices for both commodities.

Notable mention must go to **Cardinal Resources Ltd** for its ongoing bidding war between Shandong Gold Mining and Nord Gold. The latest price offer from Shandong is 67% higher than their original offer. Also of special note is last years' MT50 graduate: **Northern Star Resources Ltd**. Northern Star acquired the remaining 50% interest in the Kalgoorlie Super Pit from Newmont Mining in January 2020. This resulted in an announced merger of equals between Saracen and Northern Star in October 2020, extracting $1.5-$2 billion worth of synergies and creating a new $16 billion gold company.

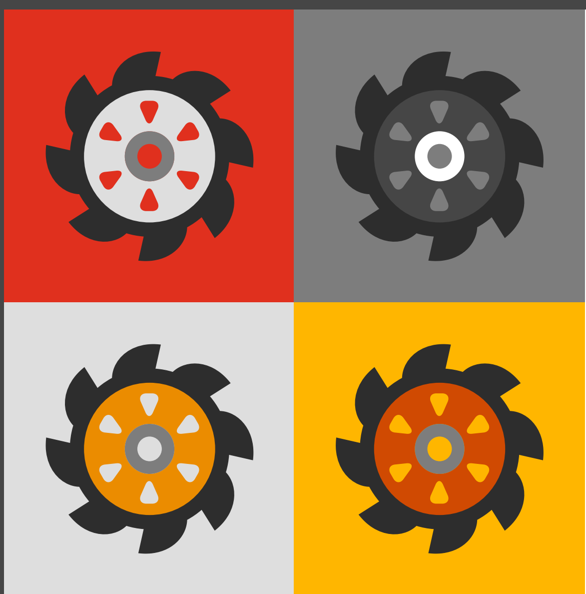
While completed deal activity in the MT50 was lower for the year, capital raisings by MT50 companies dominated the activity, providing stronger balance sheets and potential warchests for future M&A activity.

Outlook

With the gold price forecast remaining strong, gold sector consolidation will likely remain a consistent theme over the next 24 months, supported by a number of recent exciting discoveries. The energy space continues to evolve with markets still consolidating views on the future of lithium (batteries) and uranium, as well as debate over the role of coal in the energy mix moving forward. Given the push towards sustainable renewable energy, it will be interesting to see what the commodity mix looks like over the next few years.

Completed Australian MT50 transactions above $15 million

Completion date	Target	Acquirer	Sector	Approximate deal value $AUDm	MT50 Connection	MT50 Role
22/06/2020	Cassini Resources Limited	OZ Minerals Limited	base metals	64.5	OZ Minerals Limited	acquirer
3/06/2020	Exore Resources Limited	Perseus Mining Limited	gold	47.3	Perseus Mining Limited	acquirer
20/05/2020	Australian Strategic Materials Limited	Alkane Resources Limited (shareholders)	gold	148.8	Alkane Resources Limited (shareholders)	acquirer
31/03/2020	Buckland project	Mineral Resources Limited	iron ore	20.0	Mineral Resources Limited	acquirer
31/03/2020	Resolute Mining Limited's Ravenswood Gold Pty Ltd	Mining Gold Group Pty Ltd	gold	100.0	Ravenswood	target
27/03/2020	Moolarben Coal Operations Pty Ltd (10% Stake)	Yancoal Australia Limited	coal	300.0	Yancoal Australia Limited	acquirer
19/03/2020	Mineral Resources Limited (Ant Hill and Sunday Hill Tenements)	Resources Development Group Limited	iron ore	30.0	Mineral Resources Limited (Ant Hill and Sunday Hill Tenements)	target
10/02/2020	Spectrum Metals Limited (95.1% Stake)	Ramelius Resources Limited	gold	192.8	Ramelius Resources Limited	acquirer
26/08/2019	Duketon Mining Limited (Gold Tenement Package in North Eastern Goldfields of Western Australia)	Regis Resources Limited	gold	20.0	Regis Resources Limited	acquirer
21/08/2019	Cazaly Resources Ltd. (Parker Range iron ore project)	Mineral Resources Limited	iron ore	20.0	Mineral Resources Limited	acquirer
30/07/2019	EganStreet Resources Limited	Silver Lake Resources Limited	gold	77.3	Silver Lake Resources Limited	acquirer
25/06/2019	MOD Resources Limited	Sandfire Resources NL	base metals	137.8	Sandfire Resources NL	acquirer



Key MT50 transactions

Perseus Mining Ltd: Completed acquisition of Exore Resources for c.$64 million to expand its operations in northern Cote d'Ivoire

Ramelius Resources Ltd: Completed acquisition of development gold company Spectrum Metals Limited for c.$200 million

Silver Lake Resources Ltd: Completed acquisition of development gold company Egan Street Resources

Sandfire Resources Ltd: Completed acquisition of African development copper company MOD Resources

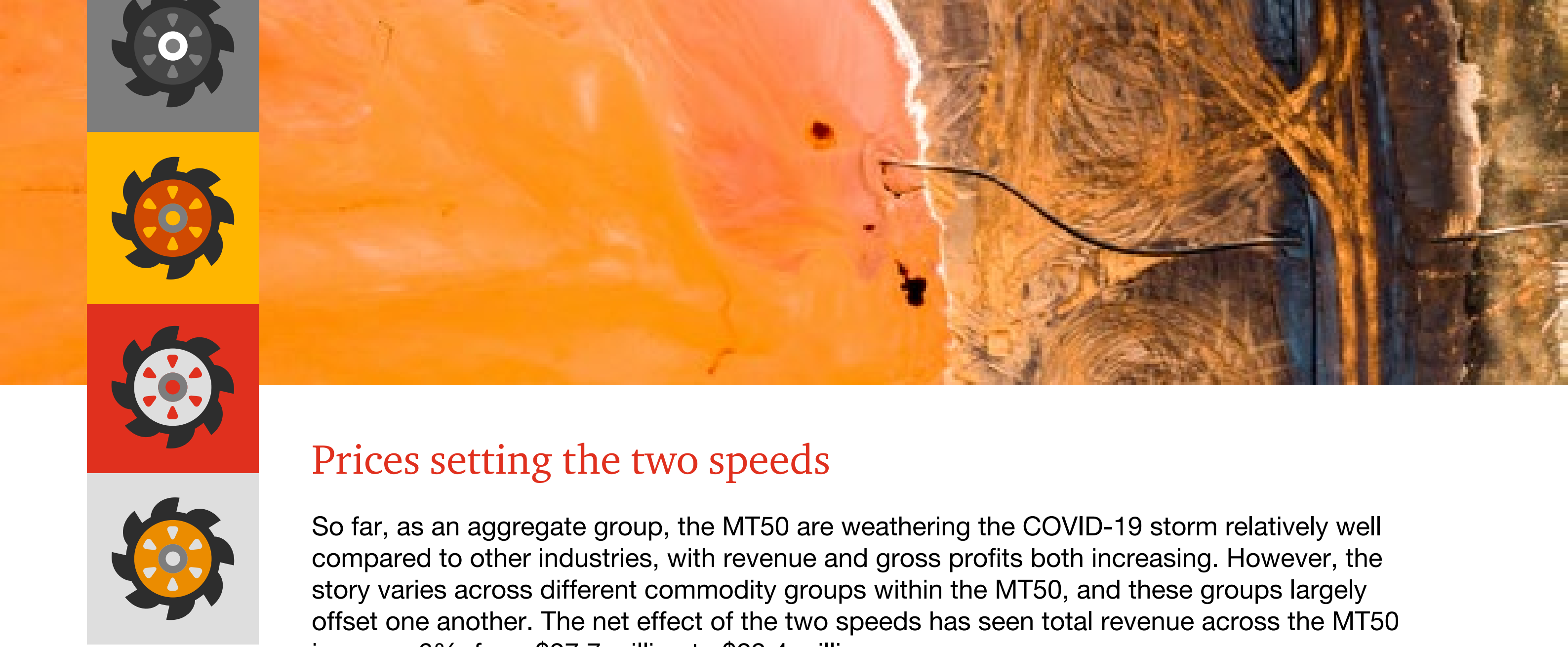
Source: Mergemarket.com

Financial analysis

Profit & Loss

Entity Income Statements	Consolidated			
	2020	2019	2020 v 2019 Var ($m)	2020 v 2019 Var (%)
Revenue from ordinary activities				
Operating revenue	29,423	27,696	1,727	6%
Non-operating revenue	105	68	38	55%
Total revenue	**29,528**	**27,764**	**1,765**	**6%**
Less expenses from ordinary activities	(14,659)	(13,784)	(875)	6%
Gross profit	**14,870**	**13,980**	**890**	**6%**
Selling general and adminitrative expenses	(3,530)	(3,102)	(428)	14%
Exploration expenses	(369)	(306)	(63)	21%
Provision for bad debts	(0)	(2)	2	-91%
Stock based compensation	(58)	(37)	(21)	56%
Other income/expenses	(551)	(833)	282	-34%
Underlying EBITDA	**10,361**	**9,699**	**663**	**7%**
Depreciation and amortisation	(4,556)	(3,698)	(858)	23%
Underlying EBIT	**5,805**	**6,000**	**(195)**	**-3%**
Impairments and other non-recurring items				
Impairment - property	*(296)*	*(190)*	(106)	56%
Impairment - goodwill	*(12)*	*(3)*	(10)	381%
Asset writedown	*(1,119)*	*(22)*	(1,097)	4948%
Impairments and writedowns	(1,428)	(215)	(1,212)	563%
Other non-recurring items	1,221	230	991	431%
EBITDA	**10,155**	**9,713**	**442**	**5%**
EBIT	**5,599**	**6,015**	**(416)**	**-7%**
Net interest expense	(643)	(518)	(125)	24%
Other non-operating items	355	1,212	(856)	-71%
Profit from ordinary activities before tax	**5,311**	**6,709**	**(1,398)**	**-21%**
Income tax (expense)/benefit	(1,599)	(1,670)	71	-4%
Net profit from continuing operations	**3,713**	**5,039**	**(1,326)**	**-26%**
Earnings of discontinued ops	3	(2)	5	-224%
Minority interest in earnings	(132)	(146)	13	-9%
Net profit to parent	**3,583**	**4,891**	**(1,308)**	**-27%**
Adjusted NPAT	**5,011**	**5,106**	**(95)**	**-2%**

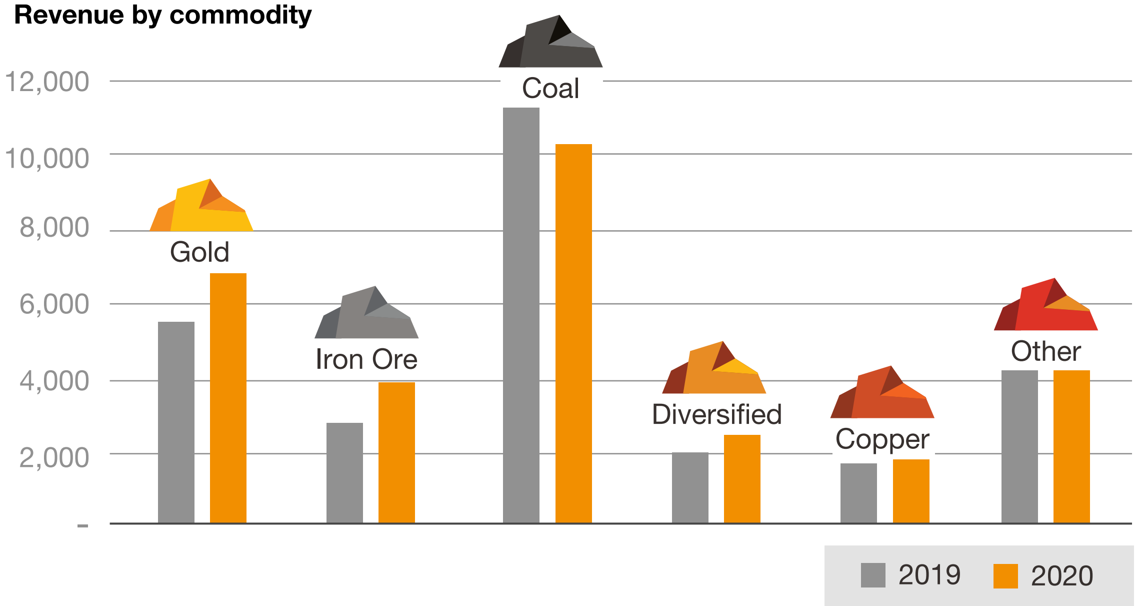
Source: Capital IQ, PwC analysis



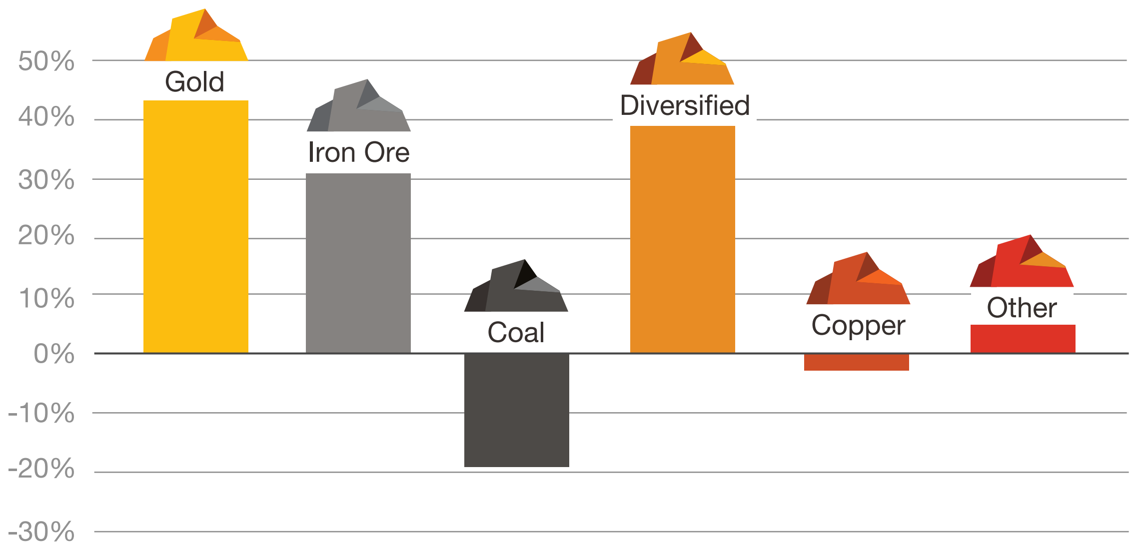
Prices setting the two speeds

So far, as an aggregate group, the MT50 are weathering the COVID-19 storm relatively well compared to other industries, with revenue and gross profits both increasing. However, the story varies across different commodity groups within the MT50, and these groups largely offset one another. The net effect of the two speeds has seen total revenue across the MT50 increase 6%, from $27.7 million to $29.4 million.

Revenue by commodity



Gross profit % by commodity



Source: Capital IQ, PwC analysis

Gold and iron ore

Unsurprisingly, accelerating gold and iron ore prices have led to increased operating revenues of 24% and 35% for the two commodities respectively. Similarly, gross profits for gold miners increased 44%, and 31% for iron ore. Star iron ore performers included:

Mount Gibson Iron Limited whose gross profit rose 68% off the back of the successful program to monetise stockpiles of remnant low-grade material from the Extension Hill and Iron Hill deposits in the mid-west, as well as management of the group's treasury reserves .

Champion Iron Limited's gross profit increased by 38%, benefiting from the surge in iron ore export prices during 2020. The company credited their success to the strong demand for their 66.4% iron ore concentrate. (The concentrate is desired by steel mills because higher iron ore grades optimise output while also significantly decreasing CO2 emissions.)

Nickel

Three entities contributed to the nickel results, with **Nickel Mines Limited**'s revenue rising 626% following their transition from the development stage into production at the company's RKEF projects. Nickel's revenue as a whole rose 18%.

Mineral Sands

Iuka Resources Limited, the only mineral sands entity in the MT50, saw revenues drop by 2%.

Coal

In contrast to gold and iron ore, coal producers in the MT50 reported a decline in revenue of 9% and a fall in gross profit of 18% due to weaker commodity prices and greater costs. Despite this, coal continues to be the largest contributor of revenues and gross profits to the MT50 with **Yancoal Australia Ltd**, **Coronado Global Resources Inc** and **Whitehaven Coal Limited** making up three of the top five revenue earners of the MT50.

Lithium

Lithium producers reported a decline of 22% in revenue, with **Galaxy Resources Limited** and **Ocrobre Limited** dropping 55% and 4% respectively. However, the third lithium player in the MT50, **Pilbara Minerals Limited**, saw a huge 97% increase in revenue.

Do impairments tell a different story?

Net profits for the MT50 have decreased by 33% from the prior year, driven by increases in impairments, from $0.3 billion in 2019 to $1.5 billion in 2020. This is not at all unexpected in the context of the COVID-19 pandemic. Our analysis identified that **almost half (22) of the MT50 have recognised an impairment charge in the last 12 months**, with 10 recognising an impairment greater than $10 million. Interestingly, gold and iron ore were not spared from impairment, despite the rally in commodity prices.

On the other hand, none of the MT50 recognised significant impairment reversals during the latest financial period. Again, this is not surprising given the uncertainty created by the COVID-19 pandemic.

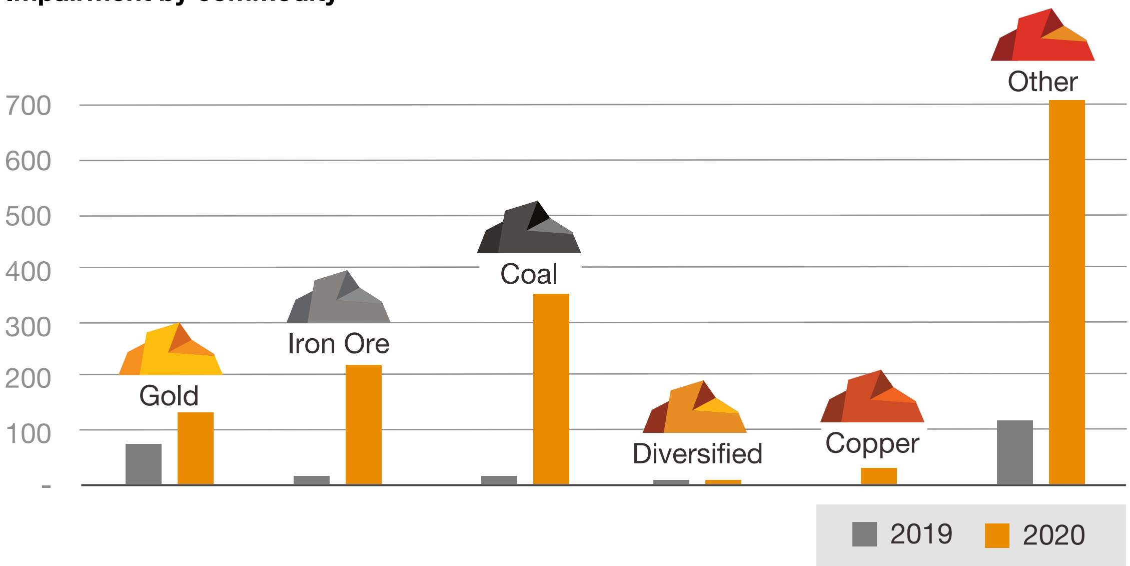
Notable impairments recorded during 2020 include:

Mineral Resources Limited recognised impairments totalling $216 million related to their Yilgarn iron ore tenements following strategic decisions on deposits where the group had previously conducted significant exploration and development work.

Iluka Resources Limited's $414 million impairment related to the Sierra Rutile Project. This was because operational performance achieved to date was below the acquisition investment case, and also as the group did not have a defined development approach for the Sembehun deposit, resulting in difficulties in ascribing value to the deposit.

New Hope Corporation Limited recognised $347 million of impairments, $110 million of which related to the New Acland Coal Mine Stage 3 Project. This project failed to obtain approval from the Queensland Government, which it first applied for in 2007. Additional impairments on other coal exploration projects and oil producing assets were a result of market conditions, as well as a significant decline in global energy prices, plus the potential expiration of exploration rights in the future.

Impairment by commodity



Source: Capital IQ, PwC analysis

Balance sheet analysis

Entity balance sheets	Consolidated			
	2020	2019	2020 v 2019 Var ($m)	2020 v 2019 Var (%)
Current assets				
Cash and cash equivalents	8,893	7,664	*1,229*	*16%*
Inventories	3,972	3,456	*516*	*15%*
Receivables	2,598	3,169	*(570)*	*-18%*
Other current assets	700	921	*(221)*	*-24%*
Total current assets	**16,163**	**15,210**	***953***	***6%***
Non-current assets				
Long-term investments	3,760	4,309	*(549)*	*-13%*
Property, plant and equipment	43,700	38,547	*5,153*	*13%*
Capitalised exploration expenditure	-	-	*-*	*100%*
Accounts receivable	209	175	*34*	*19%*
Loans receivable	1,151	1,090	*62*	*6%*
Deferred tax asset	761	1,919	*(1,158)*	*-60%*
Other intangibles	210	217	*(7)*	*-3%*
Goodwill	276	251	*25*	*10%*
Other non-current assets	2,426	1,775	*651*	*37%*
Total non-current assets	**52,493**	**48,282**	***4,210***	***9%***
Total assets	**68,656**	**63,492**	***5,164***	***8%***
Current liabilities				
Accounts payable & accrued liabilities	3,768	3,422	*346*	*10%*
Interest bearing liabilities (short term borrowings)	2,717	981	*1,735*	*177%*
Income tax payable, current	814	462	*352*	*76%*
Unearned revenue, current	77	134	*(56)*	*-42%*
Deferred tax liability, current	-	-	*-*	*100%*
Other current liabilities	1,314	1,389	*(75)*	*-5%*
Total current liabilities	**8,690**	**6,388**	***2,302***	***36%***
Non-current liabilities				
Long-term debt	7,837	7,658	*179*	*2%*
Capital leases	1,480	472	*1,008*	*214%*
Unearned revenue, non-current	304	375	*(71)*	*-19%*
Deferred tax liability, non current	2,427	3,126	*(698)*	*-22%*
Other non-current liabilities	4,747	4,319	*428*	*10%*
Total non-current liabilities	**16,796**	**15,950**	***846***	***5%***
Total liabilities	**25,485**	**22,338**	***3,148***	***14%***
Net assets	**43,170**	**41,154**	***2,016***	***5%***
Equity				
Share capital and premium	39,978	38,398	*1,579*	*4%*
Retained earnings (accumulated loss)	3,304	3,179	*125*	*4%*
Other equity	(111)	(423)	*312*	*-74%*
Total equity	**43,171**	**41,154**	***2,016***	***5%***

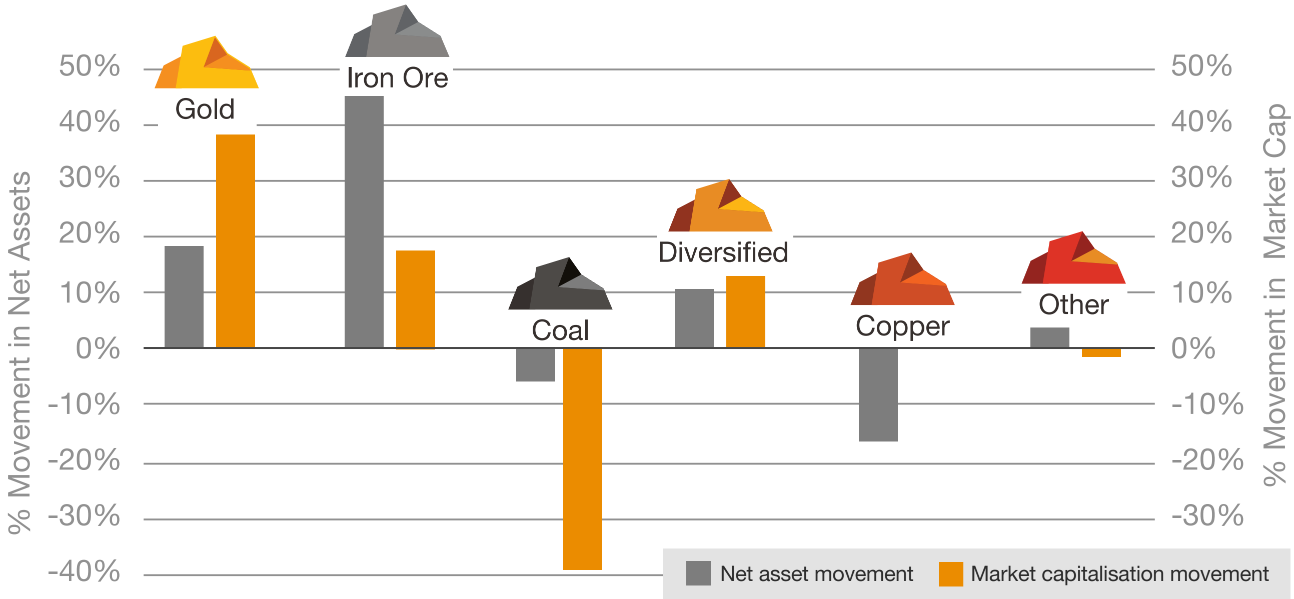
Source: Capital IQ, PwC analysis

Net assets

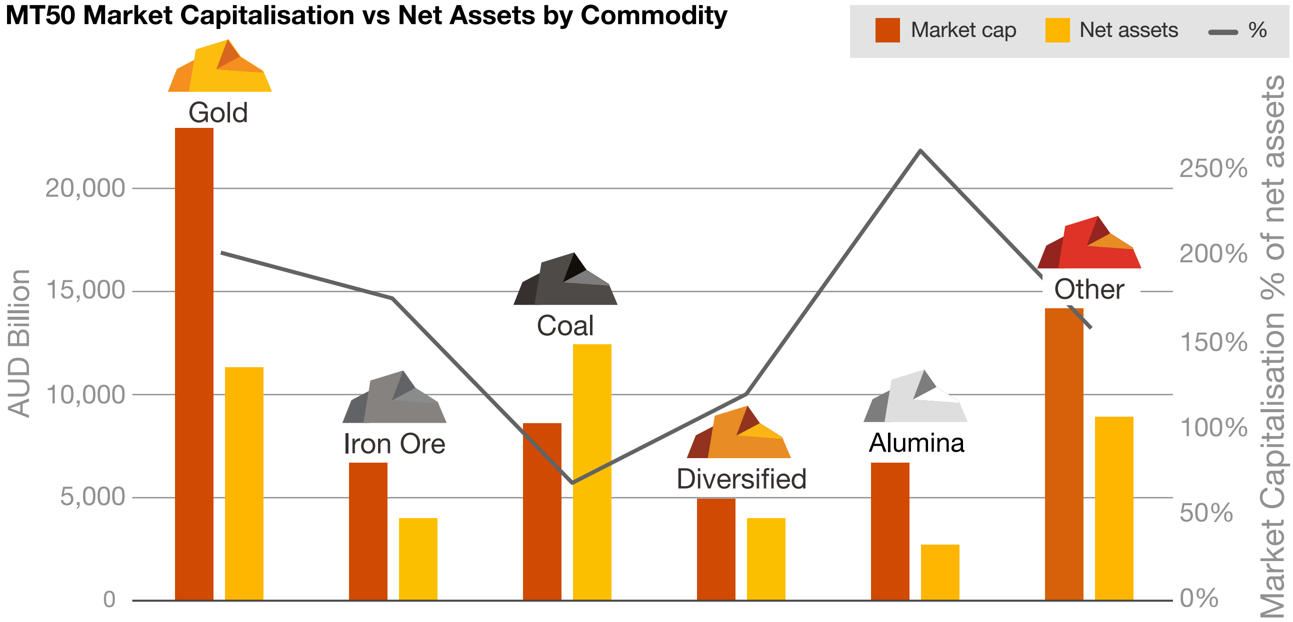
This MT50 cohort saw an increase of 5% in their net assets to $43.1 billion – the highest level of net assets seen in 15 editions of PwC's Aussie Mine. While iron ore and gold lead the charge, the biggest drop in net assets for any commodity group was aluminium, and this was driven by **Alumina Limited**'s substantial dividend return to shareholders.

While the increase in net assets for iron ore and gold translates to an increase in their market capitalisation (especially for gold), the same cannot be said for the coal producers featured in the MT50. Coal miners suffered a collective 55% decrease in market value with **Whitehaven Coal Limited** and **Coronado Global Resources Inc.** being hit the hardest (61% and 75% decrease respectively). Around 75% of Australia's electricity generation presently depends on coal. The drop in market capitalisation potentially reflects the shift in investor sentiment towards the industry, or uncertainty around the direction of the future of global energy demands, or a combination of both. As a result of the decline, the MT50 coal producers collectively find themselves in a market capitalisation deficiency position for the first time in recent years, posing the question: will this translate into impairments in the near future?

% Movement in Net Assets and Market Capitalisation by commodity



MT50 Market Capitalisation vs Net Assets by Commodity



Our analysis indicates that there has been a big build up for the MT50 in both cash (increase of $1.2 billion or 16%) and property, plant and equipment (increase of $5.1 billion or 13%) giving an appearance that the group may be gearing up for some positive activity.

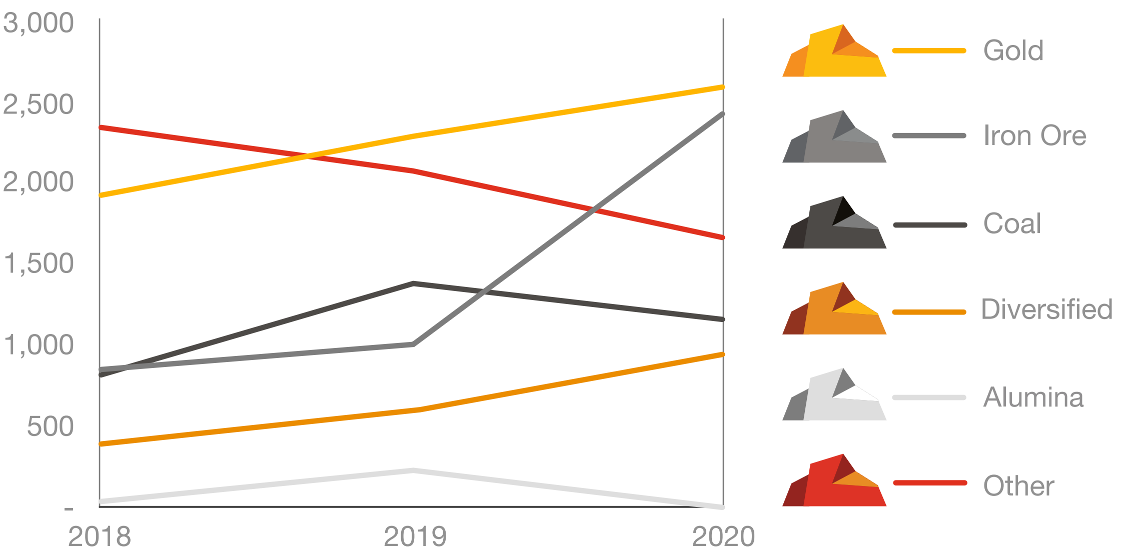
Source: Capital IQ, PwC analysis

The war chest widens, but has COVID-19 conservatism taken hold?

The total cash balance of the MT50 has increased by 16% from 2019, and now stands at a whopping $8.9 billion total. Similarly, property, plant and equipment has increased by $5.2 billion (or 13%) giving the appearance that the group may be gearing up for some positive activity.

- Iron ore miners alone saw their cash balances increase by $1.41 billion, which is only just shy of the $1.42 billion net increase for the MT50 overall. The temporary disruption of Brazil's iron ore supply chain resulted in increased commodity prices in the period, and the increase in operating revenues for the MT50's iron ore miners translated into a sizable uplift in their cash balance.
- **Mineral Resources Limited** contributed $1.3 billion to the increase and saw their cash position increase by 474%. This was driven by strong commodity prices, as well as the proceeds relating to the partial sale of the Wodgina Lithium Project to chemical manufacturing company Albemarle in the period.
- While gold and diversified companies also saw increases in their cash balances (albeit more modest gains than iron ore), the same cannot be said for other commodities. Coal and copper alone saw their cash balances decrease by close to $400 million in total.
- At the same time, short-term debt (up $1.7 billion or 177%) and capital leasing (up $1 billion or 214%) have sky-rocketed. This means that the MT50 need to keep an eye on their working capital over the next 12-24 months with net current asset ratios dropping rapidly.

Sum of cash balance



Source: Capital IQ, PwC analysis

Cash flow statement

Entity Cash Flow Statements	Consolidated			
	2020	2019	2020 v 2019 Var ($m)	2020 v 2019 Var (%)
Net income to parent company	3,583	4,891	(1,308)	-27%
Change in accounts receivable	(6)	(263)	257	-98%
Change in inventories	(612)	(5)	(607)	12138%
Change in accounts payable	71	336	(265)	-79%
Change in unearned revenue	2	3	(1)	-44%
Change in deferred taxes	181	482	(301)	-62%
Change in other net operating assets	(77)	371	(448)	-121%
Income taxes (paid)/refunded	366	219	147	67%
Other	5,188	3,387	1,802	53%
Cash generated from operations	**8,696**	**9,420**	**(724)**	**-8%**
Cash flows related to investing activities				
Capital expenditure	(5,878)	(5,665)	(213)	4%
Proceeds from sale of property, plant and equipment	460	75	385	513%
Cash acquisitions	(954)	(1,751)	797	-46%
Divestitures	1,228	102	1,126	1108%
Purchases of investments and intangibles	(115)	258	(373)	-145%
Other investing activities	6	87	(82)	-94%
Net investing cash flows	**(5,254)**	**(6,894)**	**1,641**	**-24%**
Cash flows related to financing activities				
Short term debt issued	*78*	*108*	*(30)*	*-28%*
Long term debt issued	*4,000*	*4,723*	*(723)*	*-15%*
Debt issued	4,078	4,831	(753)	-16%
Debt repaid	(3,356)	(5,451)	2,094	-38%
Common stock issued	*885*	*2,318*	*(1,433)*	*-62%*
Preferred stock issued	*213*	*-*	*213*	*100%*
Proceeds from share issues	1,098	2,318	(1,220)	-53%
Stock repurchases	(303)	(129)	(174)	134%
Ordinary dividends paid	(2,783)	(2,090)	(693)	33%
Special dividends paid	(744)	(353)	(391)	111%
Other financing activities	(236)	(258)	22	-9%
Net financing cash flows	**(2,246)**	**(1,132)**	**(1,114)**	**98%**
Net increase/(decrease) in cash	**1,196**	**1,394**	**(198)**	**-14%**

Source: Capital IQ, PwC analysis

Operating cash flows

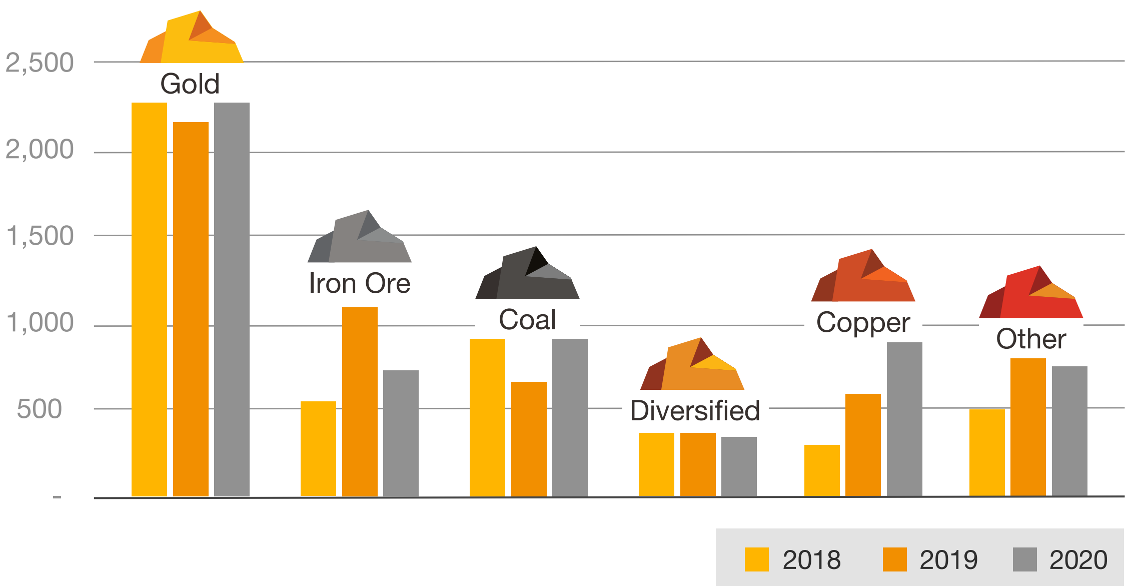
The biggest decline in operating cash flows seen across the MT50 were coal companies (24%) and mineral sands (49%). The MT50's operating cash flows were buoyed by gold and iron ore companies, which increased by 21% and 95% respectively.

Despite the decline, the MT50's biggest earners came from coal companies, namely: **Yancoal Australia Ltd** and **Coronado Global Resources Inc**. Yancoal and Coronado generated $1.54 billion and $680 million respectively in operating cash flows last year. Two of the biggest improvers from the prior year were **Mineral Resources Ltd** (220%) and **Silver Lake Resources Limited** (251%). Lithium players (including **Orocobre Ltd** and **Galaxy Resources Ltd**) suffered the biggest cash flow percentage decreases due to the global decline in prices.

Capital expenditure

Interestingly, capital expenditure has not followed the same two-speed pattern as the rest of the key financial metrics. Overall, capital expenditure for the MT50 has increased by 4% on last year. The biggest spender in 2019 was **OZ Minerals Ltd** who spent $763.9 million. This included spending on development costs at Carrapateena; general property, plant, equipment and mine development at Prominent Hill and the Carajás; and study costs for the West Musgrave project.

Capital expenditure by commodity

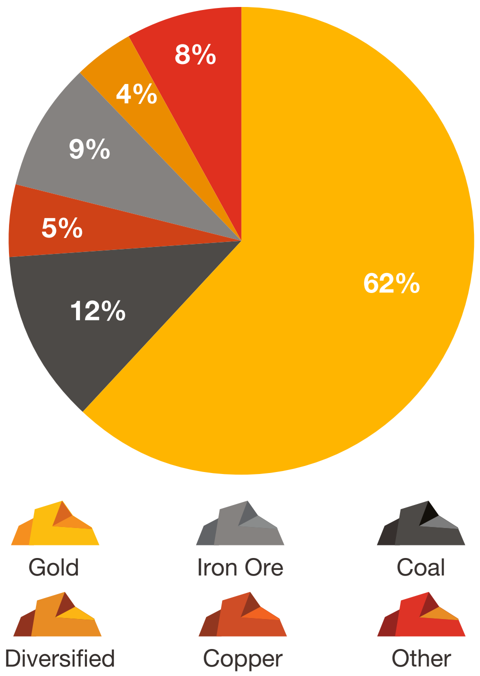


Source: Capital IQ, PwC analysis

Is exploration back?

This year, eight of the 12 new entrants in the MT50 were explorers. Three of the success stories included **De Grey Mining** (gold), **Chalice Gold Mines** (PGE-nickel-copper) and **Legend Mining** (nickel-copper). The exploration spend across the MT50 is overwhelmingly directed at finding gold. Given the diverse finds of our new entrants, is there an opportunity for the MT50 to begin exploring for different commodities?

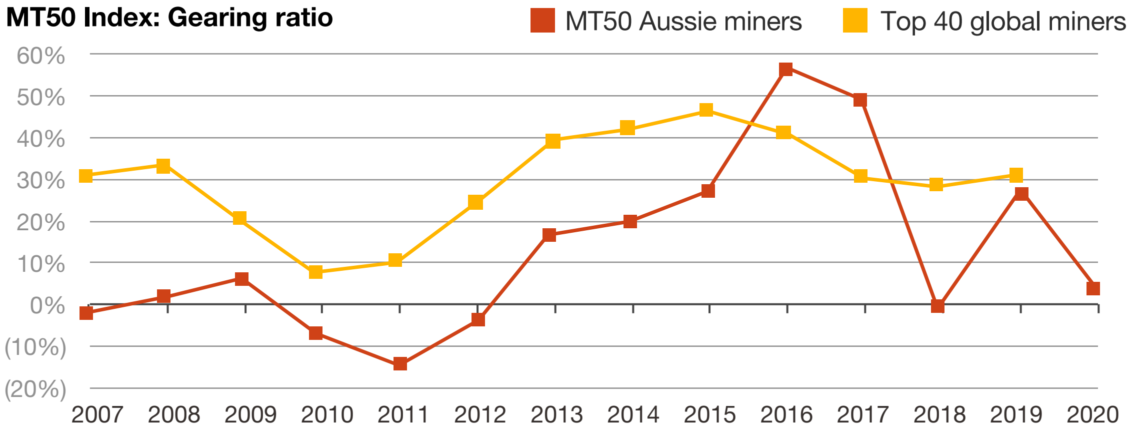
Exploration $ by commodity



Debt

The amount of new debt taken on by the MT50 has decreased by 16%, however, the amount of debt repaid has also decreased (down 38%), resulting in an overall increase in debt levels from the prior year. Further, our analysis indicates that the amount of entities taking on debt has increased by 37.5%.

MT50 Index: Gearing ratio



Source: Capital IQ, PwC analysis

In the previous financial year, almost half of the MT50's debt was taken out by **Mineral Resources Limited** and **Coronado Global Resources Inc**, who each took out more than $1 billion in debt. This year, it was the gold miners that added to the debt balance of the MT50, demonstrating the confidence of the gold miners moving forward. **St Barbara Ltd** established a $200 million syndicated facility to support the group following the acquisition of Atlantic Gold. **Perseus Mining Ltd** took on new debt in order to settle superseded loan facilities and to maintain operational flexibility during the COVID-19 crisis. It was also used to progress the development of Yaouré. **Resolute Mining Ltd** took on US$130 million to acquire all of the issued capital in Toro Gold (the owner of the Mako Gold Mine in Senegal). This complements their existing portfolio of large-scale, long-life mines. Finally, **West African Resources Ltd** entered into a project debt facility with a drawdown limit of US$200 million for the development of the Sanbrado gold project.

Explanatory notes

We have analysed the largest 50 mining companies listed on the ASX with a market capitalisation of less than $5 billion at 30 June 2020. The results aggregated in this report have been sourced from publicly available information, primarily annual reports and financial reports available to shareholders.

Companies have different year-ends and report under different accounting policies. Information has been aggregated for the financial years of individual companies, and no adjustments have been made to take into account different reporting requirements and year-ends. As such, the financial information shown for 2020 covers periods between 1 January 2019 and 30 June 2020, with each company's results included for the 12-month financial reporting period that falls into this timeframe.

All figures in this publication are reported in Australian dollars, except where specifically stated. The results of companies that report in currencies other than the Australian dollar have been translated at the average Australian dollar exchange rate for the financial year, with balance sheet items translated at the closing Australian dollar exchange rate. Some diversified companies undertake part of their activities outside of the mining industry. Unless specifically stated, no adjustments have been made to exclude such non-mining activities from the aggregated financial information.

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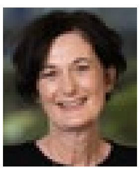
Please reach out to us if you'd like further information on any of the topics discussed in this report.

National Mining Leader



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Thank you

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