KPMG

cutting through complexity

Driving the efficiency and productivity agenda

In the Bowen Series – recap

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The economic downturn has taught many mining companies salutary lessons about processes, capability and the need for rigour if recovery is going to prove sustainable.

In this workshop, KPMG discussed recommended courses of action to navigate the difficult – and often uncomfortable – change process that occurs during and follows a downturn, and how to emerge with better insights, innovation and capability than ever before.

Calls to action

Our inaugural Bowen coal forum made it clear that coal market players from across the supply chain should be considering the following questions:

- Have you reduced your cost basis enough to weather the market downturn and drive through to the next upturn?
- Are you sticking to your guns? You have likely invested in strategies to get through the current climate – but are you holding onto them? Will they continue?
- Are you taking advantage of the potential value that can be delivered from meaningful and effective planning regimes and data within the organisation?
- Do you really understand your data? Have you used technology to reset your cost base to sustainable levels?
- Are you learning from the successful junior mining companies about how to optimise capital expenditure, as well as focus on operating costs?
- Are you maximising the value of data in the right way and is this data truly accurate? How relevant to improving operational efficiency is the data being managed and reported?
- Do you have the right people on your team? If not, get them and take them on your journey. The need for flexibility and adaptability, at all levels, is key.
- Being innovative is now business as usual – are you driving this mentality through your people and culture to deliver sustainable change?

The current coal environment

The coal market is subject to so many influences, from regulation to environmental factors and even international conflicts, that predicting market performance is notoriously difficult. That said, experts around the world are in general agreement that we'll see coal rebounding nicely over the next 5 years.

This is mainly being driven by growing urbanisation in China, India and the rest of the world. Despite issues around oversupply in relation to slowing steel production, especially in China, we predict a medium- to long-term appetite for steel into 2019 and beyond to feed new buildings and infrastructure construction, and a consistent increase in forecasted energy needs to support ever-growing cities.

As we all know, commodity prices are cyclical and management priorities can change depending on where we are in the business cycle. In our experience, each phase of the business cycle can take months – or even years – to transition through, so not panicking and staying the course is vital. Most mining companies will have been through these cycles before and we believe that it's what you commit to doing better each time that can really affect how well – and how quickly – you bounce back.

Addressing supply costs

Beyond initial savings made by targeting the complex, high-value service contracts and easier low hanging cost-cuts, the downturn has highlighted basic gaps in many mining companies' procurement capabilities.

Post contract consolidations and the important early wins it has become clear that stronger, more insight-driven procurement skills are required to continue shaping the cost curve in a market downturn. It was our experience that many mining companies lacked the procurement capacity and capability to maximise the impact of their supply side cost out efforts, to make the savings stick, and to continue to target value in the protracted reshaping of the market we've seen.

In many cases we found that the often significant gaps in procurement process and management were masked by the ability to secure deep savings as the market fell. Many companies recognised that they left a lot of value on the table in this process, constrained by time and capability. Some have sought to strengthen the procurement capabilities and authority within their operations to secure additional value from their supply arrangements in the short term, and to better control costs when commodity prices turn.

For many companies there is an opportunity to get some basics right. Some companies had little insight on current market rates for many purchased items, or for what may be driving the cost trends of many services and supplies. The basic ability to monitor and compare prices across supply alternatives, and to invest in understanding what is really behind the costs of the big suppliers, is critical to managing value. Systematic documentation of supplier negotiations and interactions, and discipline by operations personnel to avoid unintended commitments, are also important. Adherence to basic rules about contract authorisation and signoff before services can commence are also critical to helping avoid price leakage (and other risks). These may seem basic expectations, and indeed they are. But it is hard to build a mature, disciplined, informed procurement capability on shaky foundations, and unfair to expect good cost control without the basic disciplines that can deliver it.

On top of robust data, market-price awareness, and proper process and paperwork, having all levels of the company committed to pull together in the same direction is crucial to building a successful, mature procurement operation that delivers value for the business. That means stronger teaming between operations and procurement, and leadership consistently supporting the role of procurementas a critical value delivery capability, well beyond contract and purchasing administrators. Developing shared performance goals and higher visibility of costs and cost-based targets throughout operations can also influence buying behavior to be more commercially astute. Better demand monitoring and limiting the influence of powerful suppliers, and actively managing supplier performance is also key.

Steps to increasing capability to avoid disadvantage in an upturn seem reasonable enough, but often companies don't appreciate the step-up in operating maturity that they represent. Plans for improvement are best built around mine performance priorities, rather than capability gaps. Businesses focusing their procurement efforts on delivering better operational performance and reducing total lifecycle cost of supply, rather than just targeting "sticker price" improvements, will position companies to make the necessary short-term cost management choices effectively and control their destiny when the much awaited upturn comes.

Realising the value of planning and data

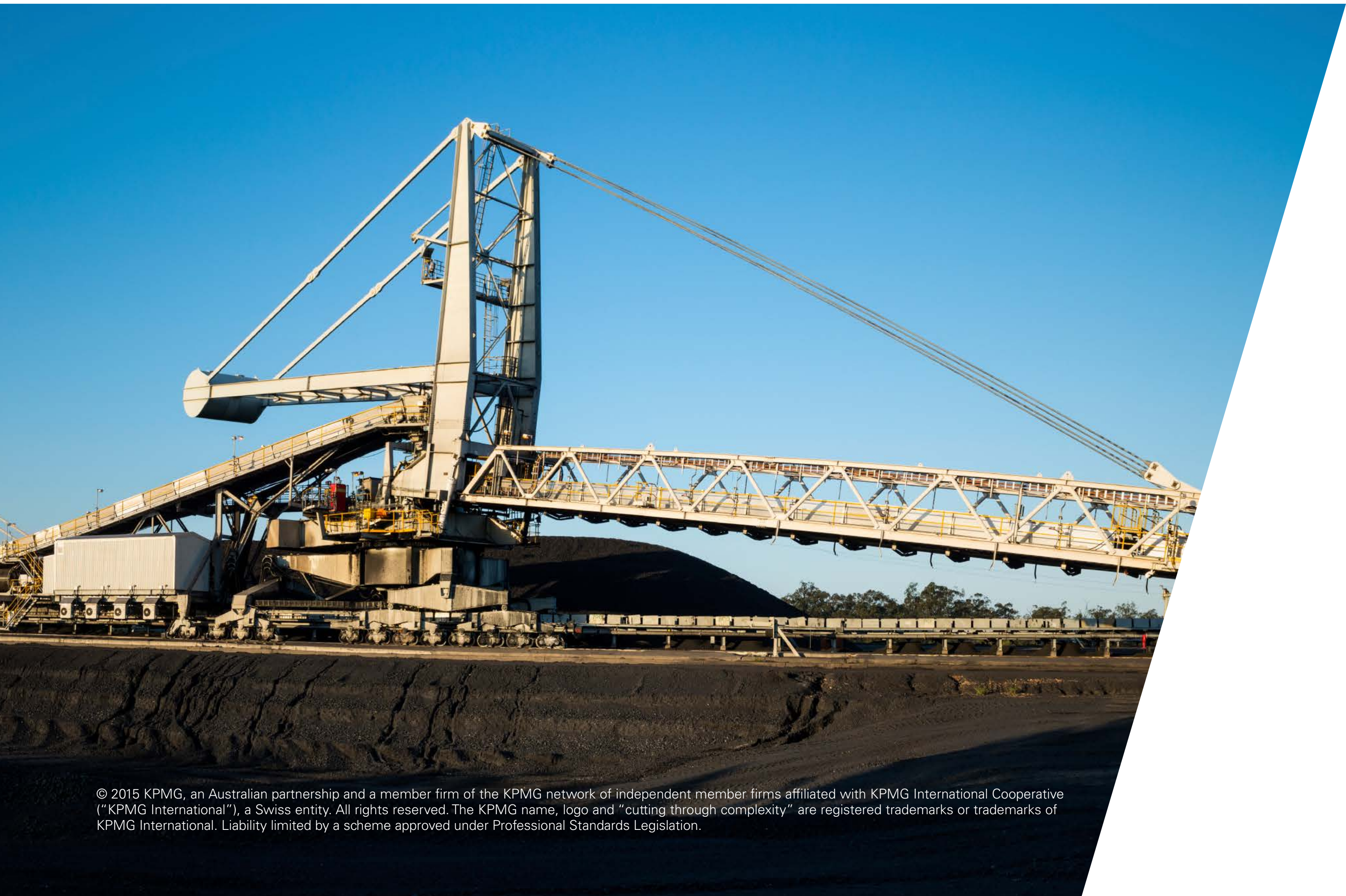
Although routine planning processes exist at all operations, compliance is often poor, especially spatial compliance. This gives cause to question whether companies are fully leveraging the benefits of their planning processes.

In the continuum of planning steps within a typical structured planning process, the quarterly plan is, in our experience, the pivotal planning process companies are looking to improve.

Done comprehensively, the quarterly planning process calls for disciplined project management of the planning process itself – creating key milestones throughout the planning lifecycle and involving the right people at the right time, with clear roles and accountabilities.

As a measure to help with performance measurement and improvement, we've found companies have invested in real-time production recording systems and process control systems to acquire vast amounts of data – but many haven't realised its full potential, forgoing the opportunity that such systems promise.

In our experience, driver-based production and unit-cost reporting and variance analysis can be developed to leverage real insights from the mass of available data. Embedding this reporting in month-end reports at site and executive level will create a shared and quantified understanding of the impact of the production and cost drivers, and promote constructive challenges and improved decision making.



Four key components are needed to generate good information from data:

01

DRIVER MODELS

built on a sound understanding of the industrial processes involved (for example, drill and blast process, truck and shovel, plant processing capacity)

02

DATA DICTIONARIES

sound dictionaries – especially time usage models that support the data required by driver models

03

DATA QUALITY IMPROVEMENT

Regular reviews and data filters to identify and remove database errors

04

CONSISTENT REPORTING

supporting all levels of management, from short-interval control and shift-end reporting, through to executive reporting.

Unlike manufacturing, the nature of mining's progressive development through pit cutbacks, strips and underground development means that driver models depend heavily on key mine planning drivers, as well as the more familiar industrial cost drivers. And what's more, driver-based reports use the operational language of planners and operators, connecting the executive perspective with daily operational realities.

While modelling is expressed in rigorous mathematical relationships applied to operational processes, it must also support elegant and transparent reporting to communicate appropriately at the pit floor and in the boardroom.

How to manage change better

When it comes to change management, it may come as a surprise that 70 percent of all change efforts fail – and many more don't deliver all of their intended benefits. But, given that most leadership and change models were developed in far less volatile times – when the world was more certain, and competitive structures evolved more slowly – this result shouldn't be altogether unexpected.

Within an organisation, there are a number of common reasons why change programmes fail, including:

- different agendas and outcomes
- failure to adapt the change method
- lack of stakeholder buy-in
- insufficient leadership capability and commitment
- over-reliance on organisation hierarchy
- insufficient implementation support.

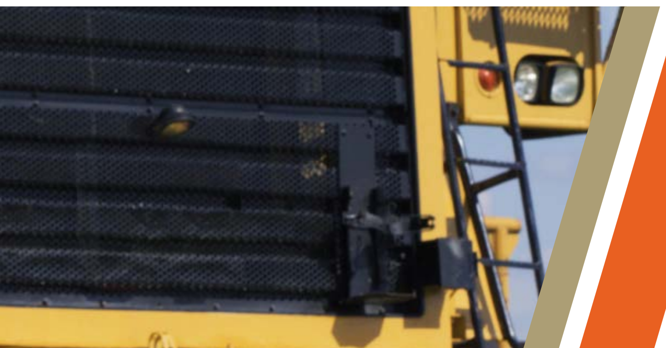
Evidence of these – and sure signposts that the change process is going off the rails – include competitive and negative behaviours between teams and individuals, cynicism and low morale amongst staff being reflected in higher levels of sick leave and turnover, people 'hanging onto the past' and unforeseen obstacles regularly causing project delays and budget blowouts.

It's also key to understand that any major transition is an emotional process. When you know the generally consistent peaks and troughs that people go through – from initial anxiety and happiness or relief at the outset, through fear, guilt and depression and ending in an upswing of gradual acceptance and moving forward, it's easier to identify what phase an employee is going through and give them more targeted, helpful support.

Communicating the reasons why change needs to happen can mitigate anxiety and resistance, helping with buy-in, and giving employees the knowledge they'll need when they're called upon to make changes. Listening to, and enlisting, people's ideas and feedback helps create a shared vision and an exciting roadmap, while rewarding staff for implementing the change process – and seeing first-hand the inherent rewards and possibilities of the new way – is vital for making changes stick.

Another powerful approach in building support and momentum for change is engaging the people at the top and the bottom of any business at the same time. While traditional change programmes focus on the authorising sponsor – and establishing reinforcers and influencers throughout an organisation to support them as they filter change down – our approach addresses the authorising sponsor and the people who are going to be directly or indirectly affected by change, simultaneously. This way, change filters up and down, resulting in greater buy-in and faster adoption than the one-way process. This seems to be a more sustainable approach, going forward.

Before we work with any organisation to implement a change management process, we also recommend a change programme maturity assessment. Measuring key steps along the path – including business case and vision, involvement strategies and benefits realisation – it's a useful tool to test the robustness of a programme prior to rollout, and to predict how successfully it will be adopted in an organisation.



Diversity in mining

Employers are facing a challenge to commit to greater diversity – especially gender diversity – in the coal industry. But instead of seeing it as an exercise in compliance, the biggest success stories have welcomed it as a chance to change their business for the better.

How 'doing the right thing' did everyone wrong

Typically, industries have looked to legislation to increase diversity. Coal mining is no different. But while you could argue in favour of enforcing diversity policies where initial buy-in was low, there was always a risk that it could be consigned to the 'must do' basket out of box-ticking rather than a genuine appreciation of what it could bring to the table.

And while this approach has seen greater representation of women and ethnic minorities in the coal mining industry, it has arguably been less effective at changing entrenched biases and increasing natural advocacy. At its least successful, it has even risked doing a disservice to diverse talent in the coal industry by reducing their hiring to tokenism, and feeding a reactionary and ill-informed rumour mill that set employee against employee.

The 'fair go' factor and hiring over the boom

More positive are the economic and values-based motivations that have encouraged more women and minorities to enter the coal industry.

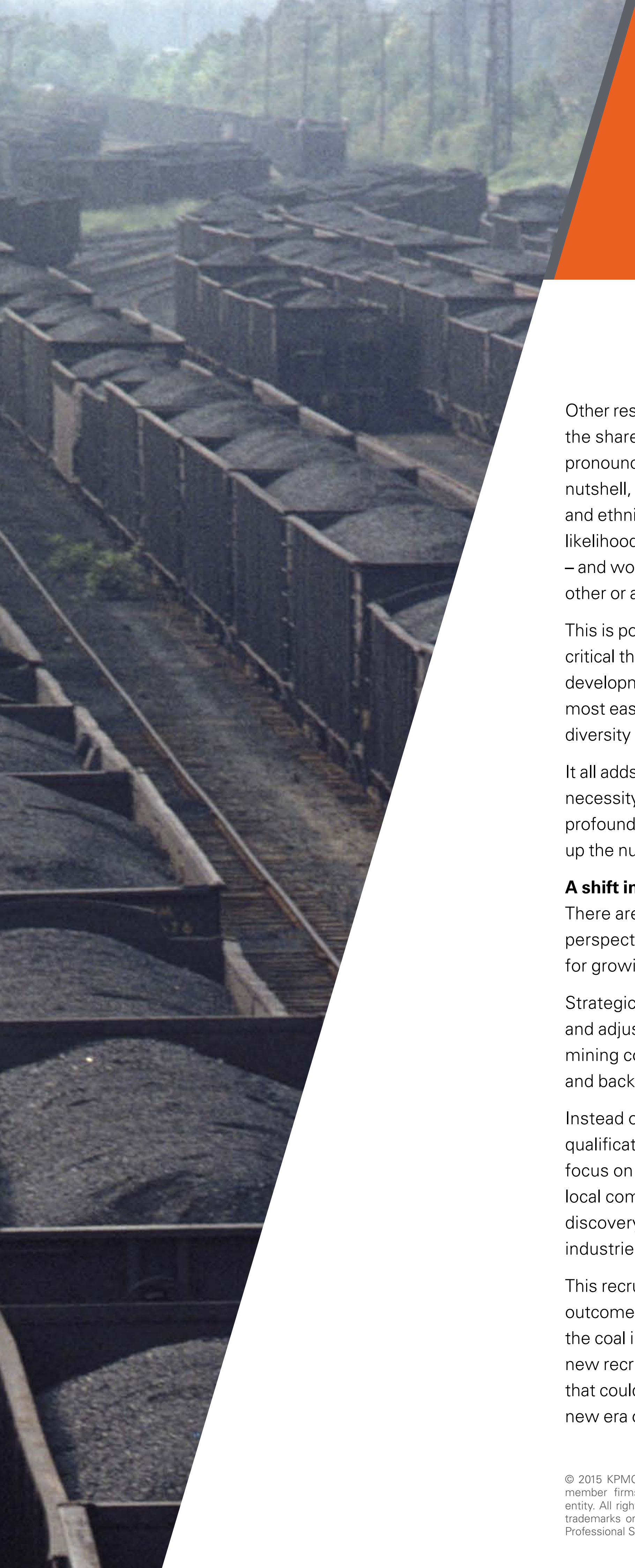
When mining went through its last growth spurt, the industry desperately needed an injection of untapped talent across the board. Women – making up half the world's population – were a logical group to look to. The challenge then was how to make an industry that had a reputation for being overwhelmingly male-dominated appealing enough to attract them.

An additional influence that has helped boost diversity among Australian employers is our general 'give them a fair go' national culture. While pockets of prejudice will always exist throughout the world, our general respect for each other as individuals means that most Australians will give anyone the chance to prove themselves – regardless of their gender or background.

But, while these factors go some way towards encouraging the greater acceptance and recruitment of minority groups, it's clear that every industry – not just coal mining – could be missing the most compelling case of all for inviting more diversity into the workplace.

The role of diversity in tackling 'groupthink' risk

In the 1970s, Yale Research Psychologist Irving Janis coined the 'groupthink' model – how loss of individual creativity, uniqueness and independent thinking can lead to dysfunctional group dynamics and increasingly homogenous (and less critical) decision-making.



Other research throughout the 60s and 70s also produced the shared finding that groupthink was especially pronounced the more alike group members were. In a nutshell, if group members had similar ages, genders, and ethnic, economic and education backgrounds, the likelihood was that they would all think in the same way – and would be increasingly reluctant to question each other or assert a point of view that stood apart.

This is potentially disastrous news for innovation and critical thinking, and poses a major risk for the future development of the coal industry – a risk that can be most easily and effectively overcome by injecting more diversity into our field operations and boardrooms.

It all adds up to a compelling – and powerful – case for the necessity of diversity in the coal industry. That's far more profound and far-reaching reasoning than merely 'making up the numbers'.

A shift in perspective

There are significant benefits to shifting your perspective of diversity from compliance to a strategy for growing innovation.

Strategically changing entry criteria for certain jobs and adjusting hiring practices has enabled a number of mining companies to recruit talent from different pools and backgrounds.

Instead of hiring purely on past experience and qualifications, this means changing perspective to focus on capability. This can uncover natural talent from local communities and minority groups, and lead to the discovery of transferable skills from complimentary industries, such as farming.

This recruitment rethink has already resulted in positive outcomes for local economies. But, more significantly for the coal industry, it has also created the framework for a new recruitment model committed to innovation – one that could usher in unexpected new talent and an exciting new era of progress.

How can we help you?

We have an enhanced range of services focusing on strategy, growth and performance along the mining project life cycle. We deliver in a better way for our clients – in the pit, in the control room, in the boardroom or a combination of all three.

KPMG's approach is not to present clients with products or services, but to work with them, debate and discuss issues, and formulate outcomes that work for them. We hope our first session of the In the Bowen series and the commentary provided in this publication are testament to this.

Our collaborative approach helps clients limit the expectation gap and ensures they are part of service delivery. And because we work with our clients, we provide sustainable outcomes, which we know is what the coal sector is seeking. The challenges facing the coal and broader mining industry are complex, and it is vital that service providers demonstrate they have a deep technical and commercial understanding of these issues, in the right context. We are confident that the mining team at KPMG has this ability, and more. The strength of our capability is our people, who are market leaders. They are passionate about the industry and working closely with clients to respond to their challenges, using experience from across the supply chain, which will deliver better outcomes to you.

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