



KPMG GLOBAL MINING INSTITUTE

An eye to the future

**Adapting to change in a
volatile mining industry**

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Like death and taxes, change is inevitable. Surviving change requires adaptability, to take on different forms more suited to new situations. The mining sector, in particular, is in a period of significant change. After hitting historic highs of over US\$1,700 an ounce in 2011,¹ the price of gold lingers around US\$1,200 to US\$1,300 an ounce today,² with the estimated cost of production steadily rising to between US\$1,100 and US\$1,200 per ounce.³

Labor unrest is a regular feature in many emerging nations, with recent clashes between mining operators and workers taking place in China, Ukraine and Peru. Tax policy remains unpredictable, with countries such as Zambia and Australia pulling back on some special mineral taxes in response to concerns that this could harm the industry. In the face of such uncertainty, leaders need to be nimble but also thoughtful with their responses to all this change. After all, the right solutions may not be obvious. As Warren Buffett once observed, "In the business world, the rearview mirror is always clearer than the windshield."

Many famous philosophers espouse the concept that knowledge is power, something with which I agree. In a period of major change, survival is dependent upon an in-depth knowledge of the tools available, to lead well and make the right decisions.

In this release from the KPMG Global Mining Institute, we provide thoughtful insights into implementing change and the benefits of transformation through standardization, outsourcing and divesting non-performing or core assets. After several years of unprecedented layoffs in the industry, talent and resource management will be critical to future success.

We therefore stress the need for international operators to have an effective mobility program that allows them to move resources from where they are to where they are needed, in a cost-effective and efficient manner, creating a strong, mobile and global workforce. Our analysis of talent management strategies highlights the benefits of having detailed, long-term output targets and matching resource needs accordingly.

Given the constant turbulence in the sector, we also include useful overviews of recent tax and regulatory developments in three key markets: Canada, China and Ghana.

Mining is unlikely to become any less uncertain and stable over the coming years and I believe that the issues raised in this paper, along with the solutions proposed, can help the sector in its quest to better manage change.



Darice Henritze
Global Mining Leader, Tax

1. Monthly gold prices since 1950 in USD (London market). Data is sourced from the Bundesbank.

2. Exactly how much does it cost to produce an ounce of gold?, Peter Koven, 6 March 2014.

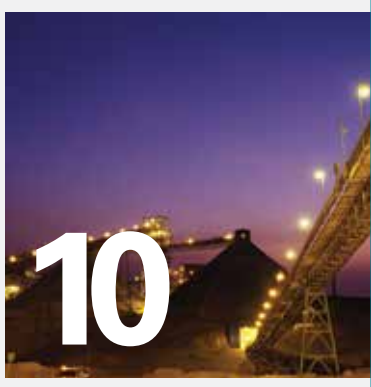
3. The Terrible Truth of Gold Mining Cost Reporting, Brent Cook.

Content



The Change Challenge: Sustaining results in the evolving landscape of mining 05

Why change management matters	06
Winning for the long term	09
Case Studies	09



Right person, right place, right time, right cost 10

Running a smooth worldwide mobility program	13
Creating a strong, mobile, global workforce	15



A new workforce for a new era 16

Toward a coordinated talent management strategy	18
KPMG: applying the science of HR	20
Case study: comprehensive HR review	20



Country profiles 21

Canada	22
China	24
Ghana	25



The Change Challenge: Sustaining results in the evolving landscape of mining

People are the biggest factor behind successful change initiatives. As mining companies adapt to a volatile global environment while seeking to increase operational efficiency, they must closely manage the impact of change on their employees and businesses.



Recently, the mining industry has experienced seismic changes and the associated organizational challenges that come with responding to threats. Plummeting commodity prices and currency fluctuations have put a serious dent in profitability, while increasingly complex extraction requirements have propelled capital investments in sophisticated, automated equipment. In parallel, greater scrutiny of operational, environmental and labor-related issues have steadily increased pressure on corporate responsibility and financial transparency.

For a boom-and-bust industry, this may seem a common occurrence. However, in an age of ever-evolving competitive advantage and accelerating change, the familiar approach of accepting the status quo is no longer an option. Today's leading mining companies are proactively transforming their organizations and managing the related disruption to establish a foundation for sustainable, long-term performance.

Our latest research and direct experience working with clients around the world reveals that many mining change initiatives focus on strategic operating model transformation. From wholesale functional restructuring and business process outsourcing to captive shared services centers and structured divestitures, mining companies are asking business functions to provide the

efficiencies and agility to drive future growth.

However, despite the best laid plans, nearly half of all strategic initiatives fail. Why, despite the urgency, do some companies succeed in using their 'burning platforms' to advance projects while others end up simply getting burned?

Why change management matters

Multiple issues may impede a change initiative. Complacency, internal politics, inconsistent approaches, conflicting projects and mixed messages can limit or prevent realization of business benefits. In other cases, mining companies underestimate the intensity of effort required for success and declare premature victory, shifting focus to other priorities before the real battle is won. Despite the best intentions of bright people, achieving meaningful, lasting business transformation remains elusive.

However, not all change initiatives fall short. Past experience working with clients in mining and other similar industries has shown that successful initiatives share a common enabler: effective behavioral change management.

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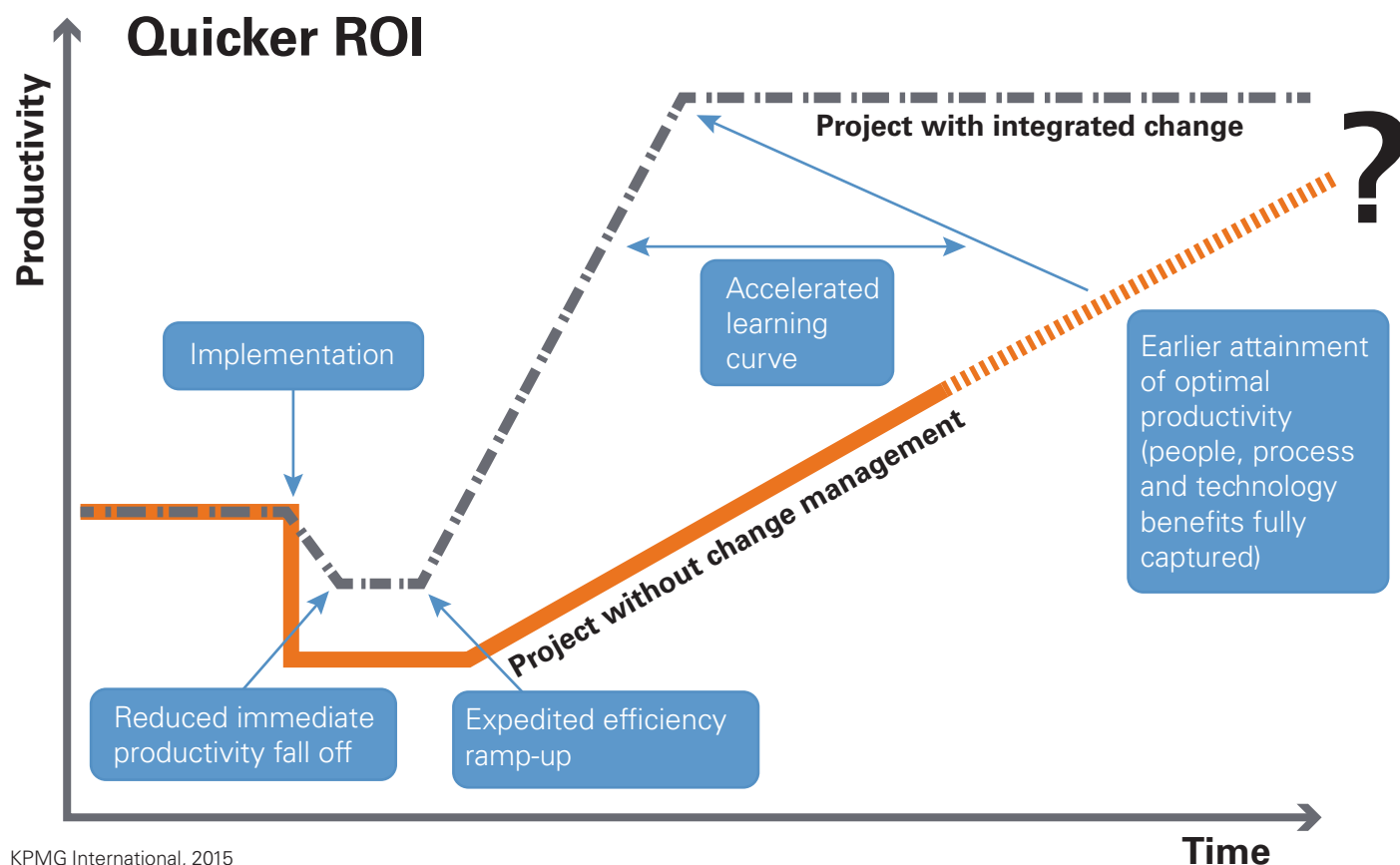


Properly designed and implemented change management efforts can result in a range of benefits for the supported initiative. Change management can also increase the speed to adoption and minimize productivity dips associated with the effort, leading to faster benefits realization. In many decentralized mining organizations in

which gaining momentum for initiatives can be difficult, managing change is a differentiator. Ultimately, matching the commitment to getting the process and technology 'right' with an equal resolve to mitigate the impact of change on people becomes a key differentiator in getting the most out of change initiatives.

Transformation: agility through standardization

Many of our mining clients have grown through acquisition, frequently integrating new entities to various degrees. Others, facing cost



KPMG International, 2015

constraints, have been limited in their ability to invest in new technology or institute consistent process improvements. These factors have resulted in different organizational structures with different systems, data, processes and cultures, all leading to higher costs and limited flexibility. As companies seek to drive their enabling functions (finance, supply chain, procurement, IT and HR) to greater agility through process, technology and data transformation, the degree of variation in ways of working, employee competencies and organizational capabilities presents challenges.

A concerted focus on ensuring continuity, maximizing productivity and institutionalizing new behaviors and performance expectations is required. Developing a compelling vision based on a solid understanding of change impacts, supported by a proactive change strategy, can mitigate risks with targeted training and communication and strategic stakeholder engagement. Helping to model and reinforce 'good' behaviors while clearly explaining and discouraging 'the old' is essential to building long-term commitment to the transformation.

Along with timely and transparent communication, our experience shows that significant consideration must be given to effective knowledge transfer. Capturing detailed requirements, validating them against risks and buttressing weaker areas of the organization with proactive retention strategies staves erosion of the historic knowledge base. It is equally important to understand that employees indirectly affected by such initiatives may have their roles, responsibilities and interaction patterns impacted by operating model changes. As such, a successful workforce transition strategy encompassing separation and capability development for the remaining organization is essential.

Divestitures: a return to the core

In recent years, mining companies have turned to divestitures to minimize exposure to underperforming markets or less strategic assets such as those related to transportation or processing. Those choosing to pursue divestments must be prepared to address the multitude of associated challenges, including realigning roles of remaining employees, managing disruption before, during and after the sale and often re-educating the remaining organization on new service and operating level agreements with suppliers.

A strong retention strategy must be instituted to minimize the flight of talent which may be critical to both the sale and on going operations. Throughout the transition, employees need unambiguous leadership and strategic communication that fosters a sense of inclusion and alleviates organizational concerns. Equally important is a clearly defined training and knowledge transfer approach. Our experience supporting divestitures shows that initial oversights in considering the full scope of training needs or defining the expected involvement of subject matter experts, leads to subsequent delays, disagreements and incomplete transitions.

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In mining, where typical enabling functions tend to operate independently and inconsistently across geographies, most outsourcing or shared services implementations require initial centralization, and only then, a migration of work. ”

Outsourcing and shared services: centralizing the decentralized

Today, less than half of all mining companies outsource any of their functions.⁴ With mounting pressures on bottom lines, these statistics are unlikely to remain unchanged in the near future. In mining, an industry in which typical enabling functions tend to operate independently and inconsistently across geographies, most outsourcing or shared services implementations require initial centralization and, only then, a migration of work. As most outsourcing initiatives impact headcount and increase anxiety, the manner in which the company engages and retains employees throughout the transition becomes of paramount importance to its overall success.

4. *Mining Industry Outlook 2014, 2014.*

Over the years, KPMG in the US has helped many clients implement customized, not 'one-size-fits-all' change strategies. Change is contextual and managing it in an industry as intricate as mining is a science and an art. Recently, we worked with two very different mining companies and we wanted to shine a special light on these projects, as we've found them to be representative of the challenges that resonate with our mining clients. Also, we're proud of our relationships and work there.

CASE STUDY: making it real

Communication is the best policy

A large global mining company seeking to optimize components of its finance, procurement, HR and IT functions was challenged when its leadership team found itself divided in its support for both the urgency and approach for changing its operating model. While the leaders worked to get on the same page, initial perceptions of executive misalignment rapidly translated through the organization, resulting in pockets of conflicting

and inaccurate understanding and the associated employee anxiety, confusion about roles and flight of top talent.

Understanding the nature of the problem, our initial focus was on establishing a common vision at the top of the house. We helped the leadership team define the 'why, how and why now' for this initiative as well as the collective and individual responsibilities for realizing its benefits. With the vision crystallized, we triaged broader organizational understanding gaps with communication that clearly addressed the needs of employees

and external stakeholders. By actively and visibly positioning leaders in key program communications, we helped reinforce consistent messages, quieting the rumor mill and improving productivity.

Key lesson learned

Employees mirror leaders. In mining, where 'we'll wait it out' can be the default reaction to change, particular emphasis must be placed on senior management behaviors and communication.

CASE STUDY: change leaders at all levels

In a period of growing demand for industrial minerals, a North American client sought to restructure its operations which, after decades of growth through acquisition, evolved into semi-autonomous business units operating in a siloed, disparate manner. Realizing the need for scale, the company undertook a comprehensive transformation of its finance, procurement, operations, supply chain, S&OP, and sales and marketing functions.

Given the degree of organizational change and the inherent need for buy-in across all levels, we worked with the client to develop project roles that required its people to develop acumen in the new processes and technology being implemented and the corresponding change management responsibilities, charging them with communicating the change to their leaders and peers, both within and outside of their function. By developing this cadre of change agents, we helped groom a new

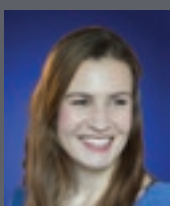
cadre of leaders, effective both as process design experts and confident as stewards and advocates of change, helping increase the reach of the overall change management effort and accelerating adoption.

Key lesson learned

Challenging your high-potential, lower-level resources with driving the change can be the critical opportunity to identify and develop the leaders of tomorrow.

Winning for the long term

When faced with a significant transition, we've found that approaching change management in a holistic, proactive and structured manner is essential for mining companies seeking a solid foundation from which they can get their people ready, willing and able to deliver the desired benefits. More importantly, a focused change strategy can develop the long-term skills, capabilities and tools to address the next big change initiative, which ... in an industry like mining, is just around the corner.



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Right person, right place, right time, right cost

Expatriate employees can provide essential skills where they're most needed. However, assignments can be costly and with high failure rates. A well-administered global mobility program can help reduce the risks of a poor fit, ensure compliance with local regulations and improve the value delivered by the engagement.





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According to KPMG's Global Assignment Policies and Practices Survey, half of mining industry respondents expect to increase their use of international assignees over the next 5 years.”

As mining spreads to ever more remote locations, often in countries where experienced, local workers are thin on the ground, companies often have little choice but to scour their own talent pools, or those of competitors, for expatriates. According to KPMG's Global Assignment Policies and Practices (GAPP) Survey, half of mining industry respondents expect to increase their use of international assignees over the next 5 years.⁵

Some of these individuals may be long-serving employees accustomed to recurrent overseas engagements around the world. Others could be considering an overseas posting for the first time, while a few could even be new recruits. International assignments are an ideal opportunity to broaden the careers of younger staff or transfer technical or specialized expertise to the local workforce.

Expatriates can also be extremely costly. In addition to the upfront relocation expenses, such as immigration documentation, personal goods shipment and travel charges, they bring a host of ongoing costs in the form of housing, transportation, cost-of-living increments, language/cross-cultural training, children's education and regular trips home. Tax is a further complication, with the employer typically expected to fund any difference in net salary, should the expatriate move to a country with higher taxes.

Some assignments are challenged, or actually fail, due to the employee's, or his/her family's, inability to settle into their new environment. It can be especially difficult for accompanying spouses and children forced to make new friends and adjust to unfamiliar cultures without the benefit of an automatic support system, such as the one that the employee's daily job offers.

5. KPMG'S Global Assignment Policies and Practices (GAPP) Survey, April 2015.



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Once candidates have been chosen, they should undergo formal assessments for their suitability, with the results used to inform go/no-go decisions.”

Of the mining executives taking part in KPMG's survey, 47 percent reported that their company offers no cross-cultural training to the expatriate, the spouse or the family.

Screening can offer a guide as to whether employees and families can settle into a new country or the actions that can be taken to make the settling-in process smoother. Yet, just 13 percent of survey respondents say their businesses use a trained evaluator and 39 percent carry out no prior assessment at all. In many instances, the results of these tests are simply handed to the employee with no training or recommendations as to how to use them.

Once the assignment is complete, repatriation, as well as being a further cost, is often inadequate. Less than a third of the survey's mining industry respondents feel that their organizations manage the repatriation process well, which could increase the chance of unwanted and ill affordable employee attrition.

Running a smooth worldwide mobility program

Delivered effectively, a global mobility program can help ensure that the company has a ready stream of professionals where they are most needed, at minimum possible cost. However, many companies do not operate a wider workforce resourcing plan, making it harder to coordinate assignments around the world. And, without a strong set of policies and procedures, administrators face punishing schedules and compliance gaps trying to cover all the bases.

A well-oiled mobility machine requires coordination between the potential assignee and a host of stakeholders, including the business unit head, HR, payroll, global mobility, tax, finance and third party tax, relocation and immigration service providers. As each of these interactions can be time-consuming and expensive, every party should have a clear view of its role.



Some assignments hit problems due to the employee, or his/her family, failing to settle into their new environment. ”

Once candidates have been chosen, they should undergo formal assessments for their suitability, with the results used to either inform go/no-go decisions or as a guide for further training and coaching in order to increase the likelihood of success.

Pre-planning can sometimes reduce the cost of assignments. For example, based on compensation levels or tax circumstances, some nationalities may be cheaper to send on assignment than others. Employees with large families will be more expensive than individuals with no dependents, which could influence the selection process, so long as no anti-discrimination laws are breached. Some prospective expatriates may have foreign tax credits from previous assignments that could be carried over to a lower-tax country, reducing the overall assignment costs.

Mining companies that fail to comply with local laws and regulations can suffer penalties and damage to their reputation. The industry has a mixed record of compliance, with a sometimes casual attitude to issues such as registering for visas, tax and social security. In the worst cases, expatriates falling foul of the authorities could be prosecuted or deported. Laws in some emerging countries are gray or can change quickly, so employers

need to have a systematic process for keeping abreast of all developments and ensuring that all assignees are fulfilling their official obligations. Specialist external mobility advisors can be of particular help in this respect.

When sending employees abroad, companies will want to minimize the direct and indirect costs (some of which, notably, certain taxes, continue for several years following the assignment) and try to evaluate the overall return on this significant investment. Such a calculation is, by nature, fairly subjective and hard to quantify, depending upon factors such as the ‘purpose’ and ‘business value’ of the international assignment program. Nevertheless, it represents financial discipline and there should be a process for tracking ongoing costs and benefits.

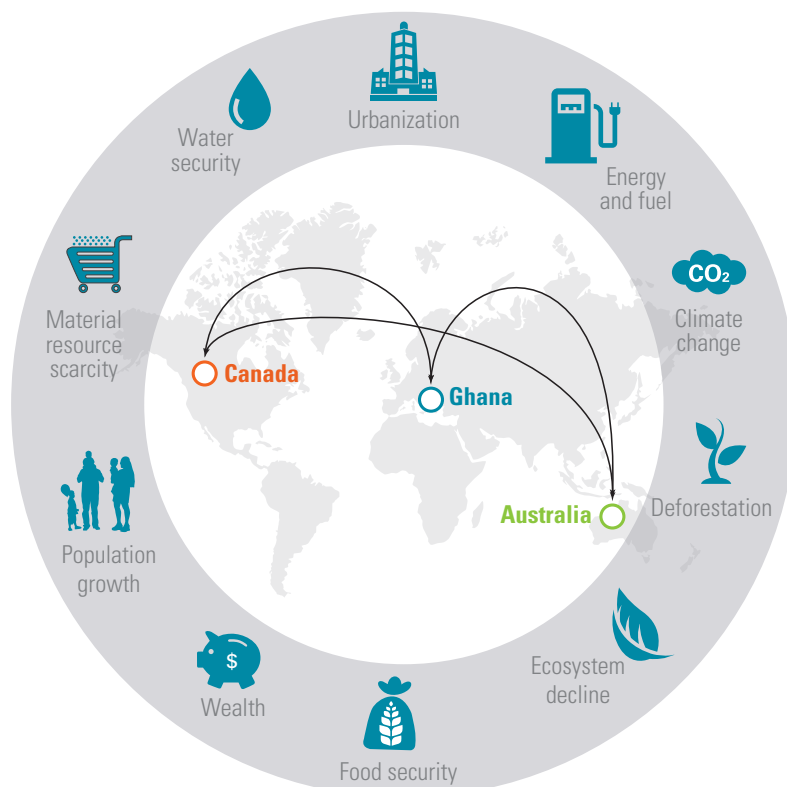
Finally, a smooth and well-planned repatriation can increase the chance of employee retention, which raises the organization’s return on its investment in that individual. It is not enough to simply return the expatriate home (or to their next overseas job). There should be a formal transition process, with ongoing support throughout the assignment, regular discussions about future career moves and a full repatriation plan at least 6 months in advance of the end of the assignment.

Key components of a global mobility program:

- clear policies and practices that are aligned with the organizational workforce plan
- screening of candidates, with appropriate training and/or follow-up
- comprehensive review of all costs, including the initial move, ongoing living and tax expenses and repatriation
- ongoing corporate tax, immigration, payroll and individual tax compliance checks
- longer-term repatriation/sequential assignment planning.

Creating a strong, mobile, global workforce

KPMG's global mobility specialists have years of experience helping mining companies create robust programs with clear, thorough policies and procedures. We cover every step of the process, from selection through to placement and subsequent repatriation, with deep knowledge of the latest tax and payroll regulations, to help clients remain compliant. Our professionals take a global perspective of workforce planning, making mobility part of an organization-wide resourcing strategy that puts the right people in the right place at the right time and at the right cost in order to help deliver corporate strategy.



Source: KPMG (2012). Expect the Unexpected: building business value in a changing world



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A new workforce for a new era

Talent management plans should be aligned with long-term production needs to ensure a ready supply of appropriately skilled workers. The development teams have a key role to play in designing a structure and culture conducive to new skill sets.





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Picks, shovels and hard hats are being replaced by laptops and university degrees. ”

Twenty-first century miners are less and less likely to resemble their predecessors. Where mining companies once employed vast armies of largely unskilled labor, today's workforce is characterized by increasingly higher degrees of technical competency.

The search for commodities has taken mines to more remote and deeper sites, calling for greater automation. Picks, shovels and hard hats are being replaced by laptops and university degrees, as desk-bound workers operate sophisticated drilling and digging equipment, calling for engineering and technology capabilities and spatial awareness. And with open cast mining on the rise, driving skills have come to the fore, to operate the huge trucks that are becoming commonplace.

These changes place huge demands on workforce planning and talent management, in order to guarantee a sufficient supply of the right people

throughout the lifetime of the mine. Location has also taken on added significance, with employees needed in new sites, often far from existing mines. Having enjoyed a steady stream of recruits, companies now have to forge new relationships with communities and educational establishments, often in unfamiliar geographies.

At the other end of the talent supply line, there are difficult choices to be made over lesser-skilled, manual workers, many of whom are likely to become redundant in the new technological era.

Toward a coordinated talent management strategy

Mining talent management is primarily a science, not an art, with requirements based upon detailed output targets over a long-term timeframe of up to 10 years or



more. Planners should know the volume, costs and extraction methods for each location and use this information to make reliable estimates on the number and types of skills necessary to meet these objectives. These forecasts feed into a talent acquisition, development and retention strategy.

Recruitment practices will inevitably shift to different audiences, including schools and colleges, as companies sponsor courses and create internships and other forms of work experience. Training methods must change to adapt to mechanized and open cast mining, leading to accreditation and other qualifications. Training facilities may have to be built in different locations to avoid costly travel to sessions, while virtual methods can also speed up learning.

A new type of workforce calls for a fresh organizational culture, with management styles more suited to

the growing proportion of trained and educated employees and a greater emphasis upon accountability and performance management. Each employee needs a personal development plan to optimize performance and minimize attrition and to optimize the investment in talent. Leadership should receive coaching and training on managing in a different environment.

The HR development team also comes under scrutiny. As its professionals focus on a wider range of recruitment and training methods, they need to acquire new skills themselves and become directly accountable for workforce effectiveness. With reduced workforce numbers, the total size of the supporting team should be reduced accordingly to become a leaner, profit-oriented function that can demonstrate the value it brings.

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KPMG: applying the science of HR

By fusing talent management experience with deep mining knowledge and experience gained at the national and international levels, KPMG can help member firm clients

build a reliable pipeline of employees with the skills to meet tomorrow's demands. Our network of People & Change professionals retain a focus on the bottom line to ensure that mining companies can accurately predict their HR needs and cost-effectively staff their various locations.

CASE STUDY: comprehensive HR review

The client wanted to carry out a comprehensive review of its HR development for a key market to build a competent talent base to meet future business needs. With the epicenter of operations shifting geographically and a significant disposal of one site looming, management sought an efficient operating model that would bring profitability in the face of falling commodity prices.

KPMG in South Africa's team reviewed the current workforce in terms of three main types of mining activities: conventional, mechanized and open cast and, using detailed production forecasts, projected the numbers of each type of miner needed. We then assessed the entire HR operating model, including the skills and payroll costs, to come up with an optimum number of employees required to recruit, train and manage the workforce, identifying a significant reduction due to an improved organizational structure and ways of working, with a refreshed approach to training.

During the project, we visited a number of sites, including smelters, concentrators and refineries, to better understand the current capacity and infrastructure at operational training centers. As well as laying out a plan for the location and size of new centers, other enhancements included a greater use of new technology in training and more emphasis upon graduate and management development and underlying culture. In addition, our team recommended a special training center of excellence to set policy, guidelines, standards and procedures and support all training centers across the organization.

The company now has an excellent foundation from which to build a 21st century workforce that can deliver its strategic goals.



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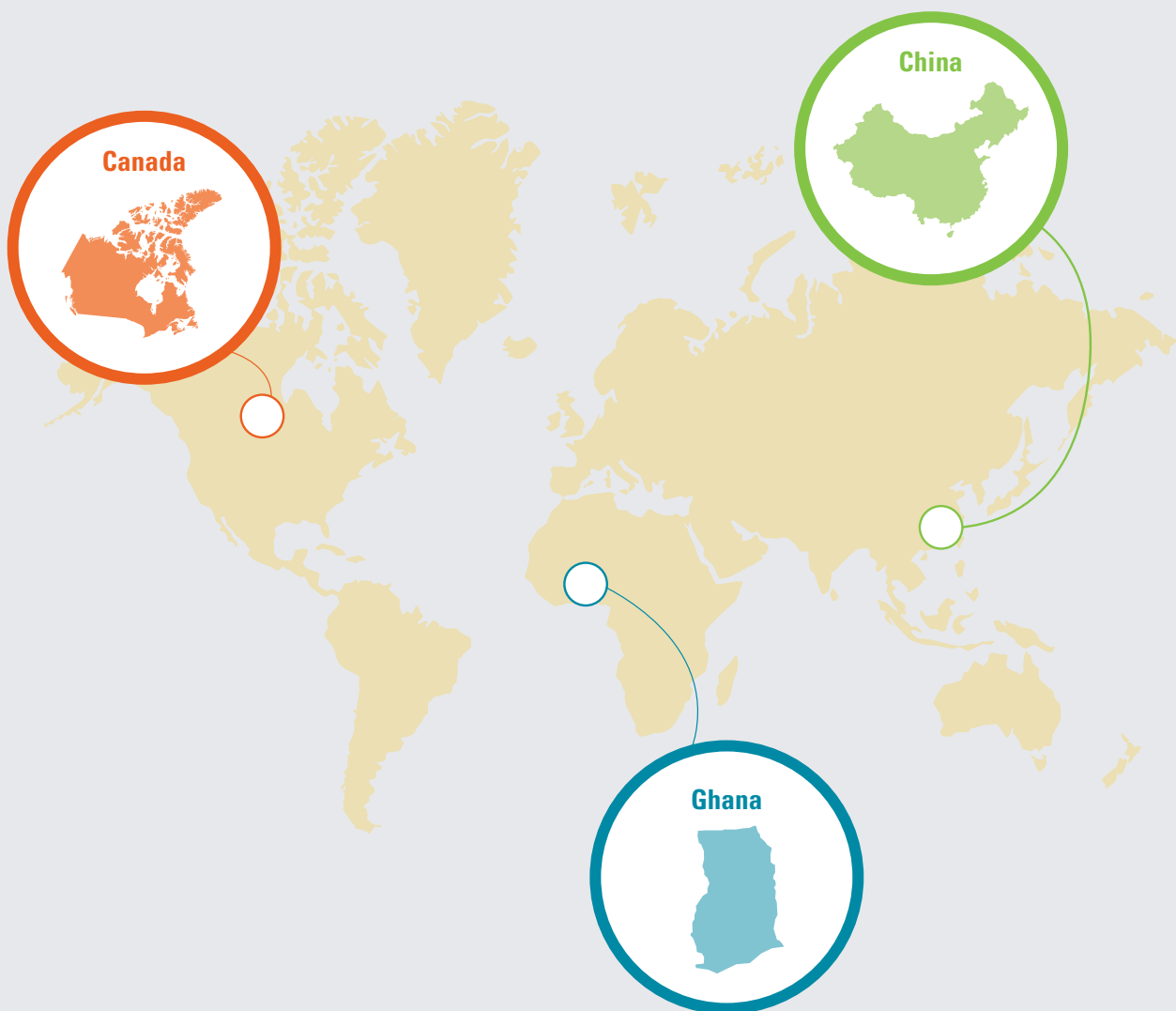
Nhlamu, is a Partner with KPMG in South Africa and is the Executive Director, responsible for leading the People Business Unit. She also sits on POLCO (the Policy Committee) and EXCO (Executive Committee) and heads up People and Change in the Management Consulting Business Unit.

Key lessons for building a dynamic, efficient HR development function

- Analysis of mining output should be thorough, including the volume and cost of each type of extraction.
- Talent requirements should be based on detailed operational targets and should outline the skills required for each method and their current availability.
- The location of mines impacts the ability to recruit, while the location of training centers is crucial to achieve efficient development programs.
- It is important to be aware of legislative requirements for training.
- The workforce plan should take into account future technology developments.

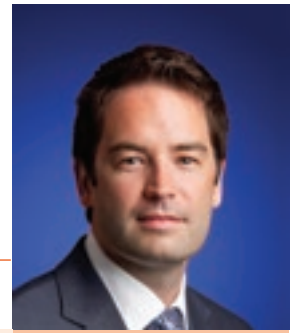
Country profiles

In the following chapter, we provide an overview of recent trends in mining taxation in Canada, China and Ghana.





Canada



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Scott is a tax partner with KPMG in Canada and is part of the Vancouver mining practice. With over 15 years experience with KPMG, Scott provides Canadian domestic and international tax advice exclusively to the mining industry, focusing on mining and exploration companies in Canada and abroad.

A favorable mining tax regime

Canada has a federal government, 10 provincial governments, and three territories governed by the federal government. Each of these governing bodies levies income taxes on corporations and individuals. With the exception of Prince Edward Island (which has no mining activity), each province and territory also levies separate mining taxes or royalties on mining activities. Consequently, Canadian mining companies are subject to a three-tiered taxation system comprised of federal income tax, provincial income tax and provincial mining tax or royalties.

Provincial mining tax and royalties are deductible when calculating federal and provincial income tax. However, provincial income tax is *not* deductible when calculating federal income tax (and vice versa).

Mining activities receive special tax treatment and incentives at the federal and provincial levels to encourage investment in the mineral resource sector. This includes deductions, allowances and credits that may be claimed against the income from the mining operation, either in the year of expenditure or, sometimes, in a prior or subsequent year.

Although in recent years the federal and provincial governments have withdrawn some of these incentives, Canada continues to have a tax environment favorable to mining businesses and their investors, including:

- Low rates of income tax relative to most other countries in which mining activities take place. The federal income tax rate is 15 percent and the provincial and territorial income tax rates range from 10 percent to 16 percent, depending on the particular province or territory (i.e. a combined income tax rate before provincial mining taxes and royalties, ranging from 25 percent to 31 percent).
- Although recent legislative changes will reduce the rate at which expenses may be written off, the rapid write-off of intangible expenses and the cost of tangible assets allows most taxpayers to recover the costs of bringing a mine into production before any tax must be paid.
- Although most tax credits are being phased out, credits for certain intangible expenses reduce the tax liability of corporations and can be carried forward for 20 years.
- A 'flow-through share' mechanism allows corporations to renounce intangible expenses to investors. Corporations

engaged in certain exploration activities can, therefore, monetize expenses that they are unable to utilize in the foreseeable future.

- Operating losses can be carried forward for 20 years, enabling most taxpayers to use start-up losses, should mining operations become sustainably profitable.
- Only half of a capital gain is included in income.
- Most provinces impose a profit-based tax on mining operations instead of a royalty on gross mining revenues.
- Capital taxes have been eliminated in most provinces.
- Most provinces have 'sales and use' taxes that allow businesses to pass the tax to the ultimate consumer. Consequently, businesses do not bear the cost of these taxes.
- There is no withholding tax on non-participating interest paid by a corporation to an arm's-length, non-resident lender.
- In most of Canada's treaties, the maximum rate of withholding tax on dividends paid to a non-resident parent corporation is 5 percent.

The following features of the Canadian tax system are considered less favorable to the mining industry:

- Canadian tax law does not allow loss transfer or consolidation. To access losses within a related Canadian corporate group, a taxpayer must, therefore, use separate tax planning techniques.
- Some provinces (e.g. Alberta and Saskatchewan) require mining operators to pay royalties rather than profit-based taxes.
- Some provinces (e.g. Manitoba, Saskatchewan and British Columbia) impose 'sales and use' taxes that are borne by businesses rather than the ultimate consumer, although there are typically exemptions for mining-related assets.
- There are other taxes and charges for which a business is liable, regardless of whether it is profitable. These include Canada Pension Plan and employment insurance payments at the federal level and provincial employer health taxes and payroll taxes.

Recent legislative changes

Classification of Canadian resource expenditure:

Historically, nearly all Canadian exploration and development expenses that were incurred before a mine enters into commercial production were classified as *Canadian exploration expenses* ('CEE'). A taxpayer may deduct the full amount of its cumulative CEE to the extent of its income. Two categories of costs qualify for CEE treatment:

Grassroots exploration: costs incurred for determining the existence, location, extent or quality of a mineral resource in Canada.

Mine development: costs incurred for bringing a new mine in Canada into production 'in reasonable commercial quantities,' before the new mine reaches a commercial level of production.

Mineral property acquisition costs and the cost of sinking or excavating underground work after a mine is in production are classified as Canadian development expenses ('CDE'). A corporation may deduct up to 30 percent of the cumulative CDE pool each year.

Following the 2013 federal budget, 'mine development' costs no longer qualify for CEE treatment and will instead be treated as CDE (subject to the transition period described below). Consequently, only grassroots exploration costs qualify for 100 percent deductibility treatment as CEE. A transition period from 2015 to 2018 will provide for a proportionate allocation of mine development costs between CEE and CDE, depending on the particular year in which the expenditure is incurred.

Elimination of accelerated capital cost allowance:

Generally, a taxpayer can claim tax depreciation annually for depreciable property in the form of a capital cost allowance ('CCA'). The CCA for most mining assets is calculated at 25 percent per year on a declining balance basis. Certain mining assets acquired before a mine enters into commercial production or in the course of a major mine expansion may be eligible for accelerated CCA ('ACCA') of up to 100 percent.

Following the 2013 federal budget, ACCA will be phased out between 2017 and 2020 for eligible mining assets acquired after the budget date. Eligible mining assets acquired prior to this date will continue to be eligible for the ACCA.

Phase-out of investment tax credits ('ITCs'):

The following non-refundable ITCs have provided incentives to the mining industry:

- Mineral exploration and development tax credit ('METC'), equal to 10 percent of certain grassroots exploration costs and mine development costs.
- Atlantic investment tax credit ('AITC'), equal to 10 percent of costs incurred to acquire 'qualified property' for use primarily in the Atlantic provinces (Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland and Labrador). Qualified property includes buildings, machinery and equipment used in mining-related activities.

Following the 2012 budget, the METC is no longer available for grassroots exploration costs incurred after 2012 or for mine development costs incurred after 2015. Furthermore, the AITC is no longer available for qualified property acquired after 2015. Certain relieving transitional provisions may apply for both the METC and the AITC.

Canada's response to BEPS and tax transparency

Anti-treaty shopping:

Following the 2013 release of a consultation paper on possible measures to prevent treaty shopping, the 2014 federal budget outlined a proposed domestic anti-treaty shopping rule that, if adopted, could apply to all of Canada's tax treaties. Although the budget summary provides some insight into the direction the government is headed, there are currently no definitive rules or timelines for these highly anticipated provisions. If enacted, such rules may impact foreign-based mining companies with investments in Canada.

Thin capitalization:

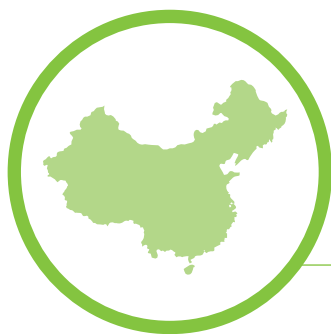
In recent years, the government has tightened the Canadian thin capitalization rules to further limit base erosion through interest deductions. Such changes have included a reduction in the debt-to-equity ratio from 2:1 to 1.5:1 and the addition of provisions to target back-to-back loan arrangements.

Foreign affiliate anti-dumping regime:

The 2012 federal budget introduced the foreign affiliate dumping ('FAD') rules to further combat base erosion. The FAD rules are designed to discourage foreign-based corporations from using Canadian subsidiaries to make investments in foreign affiliates as a means to leverage the Canadian subsidiary (i.e. debt dumping) or access liquid funds of the Canadian subsidiary (i.e. surplus stripping). Limited exceptions to the FAD rules are available when the investment is viewed as a strategic expansion of the Canadian business abroad by the Canadian subsidiary. FAD rules are complex and can cause adverse tax consequences for foreign-controlled Canadian mining companies, including a reduction in paid-up capital, application of the thin capitalization rules and/or a deemed dividend payment to the foreign parent (which would trigger a withholding tax obligation).

Tax transparency:

In 2014, the federal government released the *Extractive Sector Transparency Measures Act*, which will establish mandatory reporting standards for Canadian extractive companies. The Canadian reporting and disclosure requirements are expected to be closely aligned with the requirements in the Dodd-Frank Wall Street Reform and Consumer Protection Act in the US and with the European Union's Transparency and Accounting Directive. The draft legislation should come into force in Canada in 2015 and the first year of application is expected to be 2016, although the draft regulations are not available at the time of writing.



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A snapshot of mining tax laws

Corporate income tax (CIT)

Businesses are subject to CIT on their earnings related to their operation in China with a standard rate of 25 percent. Taxable income is revenue less non-taxable income, tax exempt income, deductions and carried forward losses (up to 5 years).

Operational costs and expenses (including capital expenditure, operating expenditure and tax expenses) are deductible, as are personal safety insurance premiums paid for employees in special job categories.

Enterprises must make monthly or quarterly provisional CIT payments and file their annual returns (from 1 January to 31 December) by 31 May of the following year.

The standard CIT rate may be reduced to 15 percent if 1) the enterprise is certified as 'high-technology' or 2) it invests in the western regions of China and satisfies certain conditions.

Value added tax (VAT)

VAT rate for metal mining products and nonmetallic mining products is 17 percent. Input VAT (on the purchase price based on qualified VAT invoices or paid on importation) is creditable against output VAT.

Business tax

A 5 percent business tax is levied on the transfer of natural resources use rights, including maritime use rights, mining exploration rights, mining exploitation rights, water intake rights and other natural resources use rights (excluding land use rights). It is planned that business tax would be replaced by VAT in 2015. However, the detailed rules are not determined as of 31 March 2015.

Customs duty

Imports: Mineral products imported into China are subject to customs duty, calculated as: dutiable value (purchase price + non-price fees) x tariff rate.

Exports: Some products are subject to export customs duty, which is mainly levied on high consumption, high pollution and scarce resources and varies for different types of goods. Export customs duty also applies to preliminarily processed mineral products.

Resource tax

Organizations and individuals engaged in mineral exploration within China and its territorial waters are charged resource tax. This tax is not refundable when exporting mineral products and is not levied on importation of mineral products.

There are ranges of resource tax rates for different types of mineral products, based upon the related resource grade and mining conditions.

Charges and royalties

Non-oil and gas enterprises are subject to resource compensation fees, prospecting license fees and mining royalties.

Resource compensation fee

Enterprises that explore and produce mining and mineral products must pay a resource compensation fee based on the sales revenue, with rates ranging from 0.5 percent to 4 percent, depending on the type of taxable product.

The resource compensation fee is calculated as:

(sales revenue of mining and mineral products) x (resource compensation fee rate) x (coefficient of mining extraction rate).

The coefficient of mining extraction rate = (approved mining extraction rate) / (actual mining extraction rate). Effective from 1 December 2014, the resource compensation fee for oil and gas has been combined with the resource tax, and the corresponding resource tax rate for oil and gas was increased. It is expected that such a change will gradually apply to other natural resources and the mining royalty and tax regime will also be amended later.

Prospecting license fee

Mining companies are subject to a prospecting license fee at 100 Renminbi (RMB) (US\$16) per 100 square kilometers (km²) per year for the first 3 years and RMB 200/km²/year (US\$32) from the fourth year onwards, however, the cost shall not exceed RMB 500/km²/year (US\$80). The fee shall be paid either as installments of up to 2 years or as a lump-sum payment. Mineral exploration rights for foreign invested companies requires approval from relevant authorities directly under the State Council.

Mining royalty

To acquire mining rights, companies must pay a royalty of RMB 1,000/year/km² (US\$160).

In addition to the mining rights fee, mining rights of land explored by the State is allotted an evaluated price to recover the cost incurred during the State's exploration process. The mining right purchase fee shall be paid either as installments of up to 6 years or as a lump-sum payment.

Companies that engage in exploration and exploitation of scarce mineral resources should apply for preferential rates or exemption on prospecting rights and/or mining royalties.



Ghana



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Recent mining tax developments

Mineral-rich states view the mining sector as an important source of tax revenue and Ghana is no exception, with a number of changes to the tax regime, particularly since 2012.

In that year, the corporate tax rate for mining companies was raised from 25 percent to 35 percent. A windfall profit tax of 10 percent also proposed but not implemented and, despite inclusion in the 2013 budget statement, has again been stalled due to pressure from the mining companies.

The tax depreciation rate on tax depreciable assets used in mining and petroleum operations, grouped as 'Class 3 depreciable assets,' has also changed to 20 percent per annum over a 5-year period. The previous method of calculating tax depreciation on these assets allowed companies to add 80 percent of the asset cost base to the tax depreciation. An uplift of the tax written down value from 20 percent to 25 percent has been abolished, removing any enhancement to tax depreciation.

In addition, Class 3 depreciable assets are now subject to capital gains tax of 15 percent upon disposal in situations in which the proceeds exceed the cost. Such proceeds were previously set off against the tax written down value of the pool of the assets.

The Value Added Tax (VAT) rate has been raised by 2.5 percent to 15 percent, excluding the 2.5 percent National Health Insurance Levy (NHIL). Even though mining companies are generally exempt from VAT/NHIL, they still have to pay VAT/NHIL on some locally sourced goods and services and reclaim this payment, which can impact their cash flow and working capital. Almost all mining companies operating in Ghana have significant VAT/NHIL receivables owing from the government.

Mining companies previously paid royalties between 3 percent and 6 percent which, in practice, was usually 3 percent. This rate has now been fixed at 5 percent.

Under transfer pricing regulations introduced in 2012, all companies involved in inter-related party transactions must file

transfer pricing tax returns. This transfer pricing requirement impacts most mining companies in Ghana, the majority of which are part of multinational groups. Compliance with these regulations will inevitably bring additional costs.

Ring-fencing was introduced as part of the mining sector reforms, prohibiting mining companies from charging expenditure on different concessions/mining areas against the producing concessions/mining areas. Most mining companies have within their concessions both prospecting and producing mines operating simultaneously and, therefore, are unable to charge costs of the further reconnaissance and exploration activities against their producing concessions, which exposes them to additional taxes on these areas.

In 2011, a committee was set up to review all existing and prospective mining leases and agreements to ensure a more level playing field for the mining companies and give the government a fair share of revenues. Any signing-off of prospective leases and agreements has been suspended until this exercise is completed. Despite this suspension, mining companies that were in the process of formalizing their prospective leases and agreements have been given approval to continue with their operations.

Mining companies have historically commented on what they perceive to be the negative impact of taxes in Ghana. In a recent publication of the Ghana Chambers of Mines, Ghana was ranked second-highest in terms of effective tax rate (next to Guinea) among 20 or so mining countries worldwide. The effect of the taxes, together with the fall in gold prices, high wages and competition for skilled labor may have caused mining companies to hold back further investments. Companies such as AngloGold Ashanti have laid off employees to cut costs, while Newmont Gold Ghana Limited only withheld a similar move following pressure from the labor union. Ghana's mining industry makes a significant contribution in terms of tax revenue, employment and corporate social responsibility and an enabling tax environment can help the sector survive and thrive.

KPMG's Global Mining practice

KPMG Global Mining Centers

KPMG member firms offer global connectivity through our 14 dedicated Mining Centers in key locations around the world. By working together seamlessly, we help member firm clients adapt and respond to a rapidly evolving mining environment.

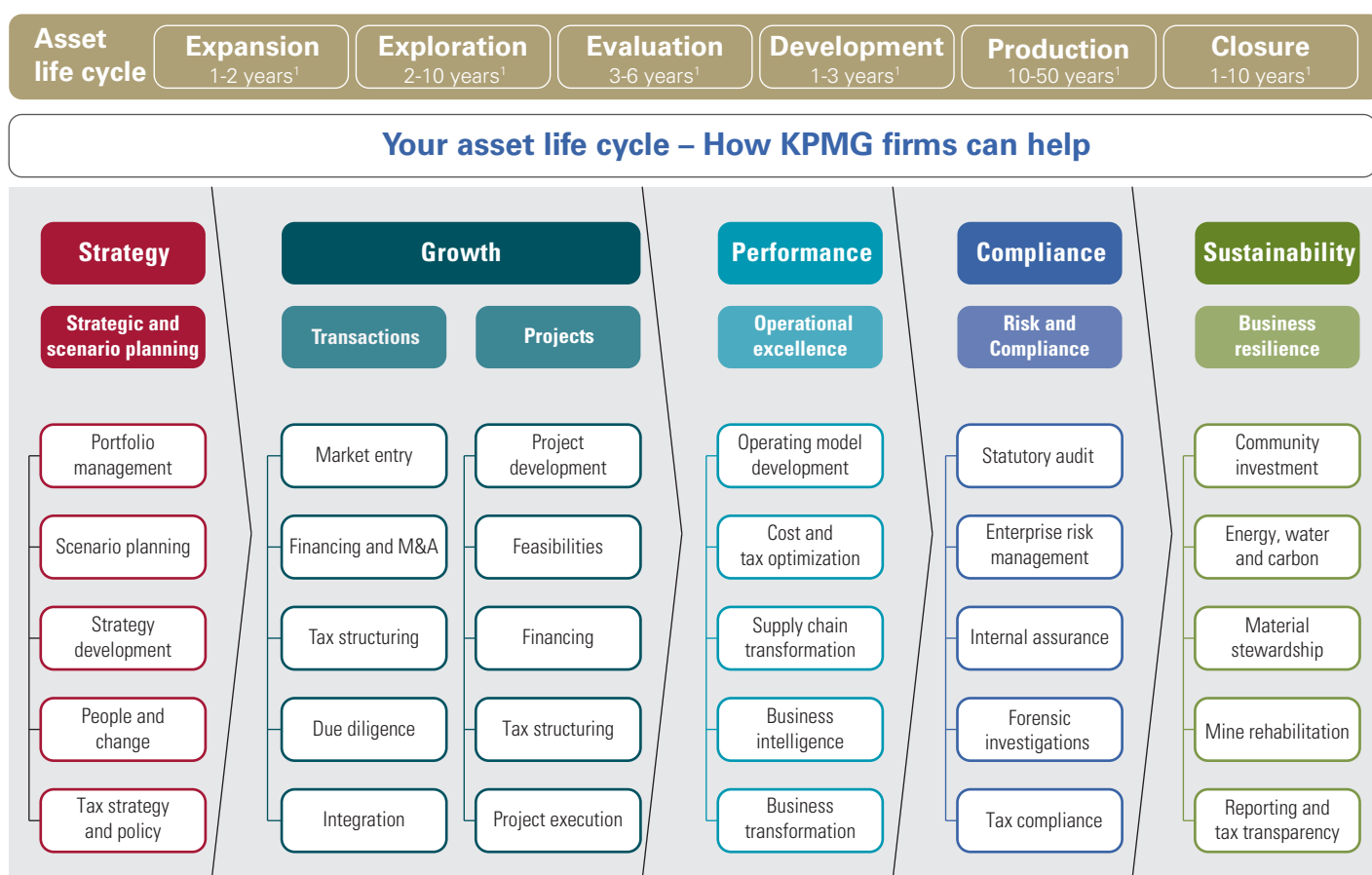
Our centers are located in or near areas with high levels of mining activity: Beijing, Brisbane, Denver, Johannesburg, London, Melbourne, Moscow, Mumbai, Perth, Rio de Janeiro, Santiago, Singapore, Toronto and Vancouver.

Each center is composed of professionals with extensive practical experience in the mining industry who work together to share information, thought leadership, training and support. As a client, you will get access to the latest industry thinking, skills, resources and technical development from a team that has local knowledge, backed up by in-depth global expertise. Our firms are continually building our understanding of global trends and developments by sharing observations and insights with you.

For more information, visit kpmg.com/mining



KPMG – mining service offerings



Source: KPMG International 2012

¹Estimated duration of stage in the mining asset life cycle

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