At the crossroads

Can Australia's oil & gas producers re-establish global competitiveness? John McCreery and Brian Murphy, Bain & Co., show how a renewed focus on excellence can help companies restore their competitive edge.

Executives in Australia's upstream oil and gas industry may feel like they are running to stand still these days, as they wrestle with high project costs, expensive labour and declining productivity, which raises unit costs beyond sustainable levels.

But in fact, these executives and the industry they serve are hardly standing still. They are poised at a critical crossroads, where the decisions made over the next few years will determine Australia's long-term position in international energy markets. The industry faces a choice between its continued march towards high project costs, declining productivity and expensive labour – all of which would doom it to lag behind more agile competitors and new supply sources from North America and East Africa – or a reinvigoration that creates more productive companies in a more efficient and streamlined sector.

Reinvigoration is the obvious choice: The opportunities for Australia's energy sector remain extremely compelling. Global energy demand continues to grow, particularly in Asia, with a shift towards gas. Investments over the past decade could position Australia as the world's biggest LNG supplier by 2018, and further investment of US$ 180 billion is possible. There have also been renewed efforts from regulators to smooth out the approval process and reduce the structural complexity of large projects – for example with the emergence of the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) as a one-stop shop for offshore regulatory approval in Commonwealth waters.

However, the challenges are huge, too. Capital and operating costs continue to rise, spurred by large projects, ageing fields, high labour costs and regulatory complexity. New suppliers are going after Australia's backyard markets in Asia. Some customers are agitating to change how they buy LNG. Margins for producers will depend on where they sit on the cost supply curve. This has always been true, but the imperative to control costs is even stronger now. The tightening labour squeeze is made worse by the imminent retirement of a generation of seasoned professionals just as new capacity comes online, increasing the demand for capable operators and making continued wage inflation a real concern. This year's Australian Petroleum Production and Exploration (APPEA) conference in Perth reported cooks on offshore platforms making US$ 350 000 per year.

Given these dynamics, the industry would seem to have a choice between more of the same – not really an option, according to many executives – or taking a two-pronged approach that transforms the industry and the companies within it. At the sector level, the industry must become more competitive by streamlining regulatory processes and working together to ensure a supply of competent talent. At the same time, individual companies must reinvigorate their operations with investments aimed at getting the most out of ageing fields, while creating an unrelenting focus on operational excellence across their entire business, from front-line operations to back-office processes, if they are to boost productivity.

Improving productivity

Oil and gas executives worry about the escalating costs and sustainability of large LNG projects on Australia's east and west coasts, particularly as the industry embarks on multiple large projects simultaneously. Companies are conducting volume and cost reviews, as they recognise that the last decade's growth spurt has left them bloated and overly reliant on complex business processes. Executives say they want to go back to the basics and reduce the complexity of their organisations and business processes.

There are parallels to the mining industry, where commodity price swings have led companies to try to simplify and boost productivity over the past two to three years. Three lessons seem most relevant to oil and gas:

- Develop the full potential of each asset. Rather than accept improvement levels of 5% to 10%, evaluate the full potential of every field and well. Assess what would need to be unlocked in order to extract this value. Make 'barrel chasing' part of everyday discussions.
- Deliver on the basics. Set up programmes to ensure safety, improve front-line operations, build maintenance and planning excellence, and increase the effectiveness of the supply chain. Make sustainable unit cost management a permanent part of operations. Keep an eye on the headcount and how it is organised. Project organisations are masters of justifying and building everything they need, almost becoming small companies within larger ones. Once created, these structures and silos are hard to dismantle.
- Make it last. Reinforce and repeat the message that this is not a limited improvement programme, but a change in the way the business operates. Once step changes are made, continuous improvement must become part of the everyday mindset.

Within upstream oil and gas operations, productivity improvements fall into two categories: increasing volume and reducing unit costs. To increase volumes, producers have to find ways to identify constraints and unlock new potential. Better maintenance and planning can help reduce downtime. Boosting reliability across sites, even by small percentages, can increase productivity significantly over time.

Beyond the headline issue of LNG, the declining productivity in Australia's maturing oil assets – particularly in central Australia, Victoria and Western Australia – makes it difficult to control unit costs. In Australia it appears that barrel chasing – the imperative to squeeze the most out of the reservoir – is an underdeveloped capability compared with other mature areas such as the Gulf of Mexico and the North Sea.

In the unconventional fields of Queensland, Australia has seen a massive ramp-up in activity. However, it still lags behind the US in setting up efficient factory-style production that keeps costs down. This type of production requires a relentless focus on planning, execution and management of the supply chain, as well as a mindset for continuous improvement.

The industry is also turning its attention to the next frontier of opportunity: oil shales in Australia. As the excitement and interest grows, executives should be wary that another activity front could stretch the industry even further, tightening the talent supply and adding cost pressures.

Managing the labour squeeze

The need to improve productivity and reduce complexity reinforces the need for technical and leadership capability. As Australian activity levels have increased, the best talent has found itself in high demand, with the flexibility to move from one organisation to the next.

Historically, Australia's oil and gas industry was able to develop capability through experience, as companies worked on one large project at a time. Now, with multiple large projects running at the same time, companies have had difficulty staffing them with enough experienced people.

But even that constraint appears to be shifting as stakeholders across the board recognise the seriousness of the situation. The industry needs to refresh itself with a new generation of talent as a generation of experienced talent begins to retire.

Maintaining the edge on international competition

Australian oil and gas executives are still assessing the effect new gas exports from North America to Asia will have. Companies must consider the ramifications and make investment bets amidst this uncertainty as they evaluate the cost base for their current and future LNG operations. They will need to keep in mind that while the market for gas is still growing, a potential decoupling of landed LNG prices from crude indexation and the realignment of pricing to the New York Mercantile Exchange could squeeze margins, favouring lower-cost producers.

This could be difficult for Australia's producers, given their overstretched sector, hot climate and distance to markets. Even so, Australia's producers have some advantages over newer competitors, including the power of incumbency and a long track record of reliable supply.

Making it sustainable

What do successful companies do to push on to a winning position? A clear way to be left behind is to stand still. Not only are there tough headwinds, but many companies do not fully realise their productivity has been in decline over the past 5 to 10 years. It is not enough to face the headwinds; they must retake lost ground.

From working with Australia's most successful companies, it has become clear that following a few key steps can transform companies and significantly increase productivity.

- Focus on value. Too many organisations invest time and effort in activities that do not generate value. As companies improve productivity, they develop a more comprehensive view of the ways they generate value, and they prioritise those activities. Such a view requires a perspective across a company's entire range of activity, not just within one organisational silo or another. For example, an integrated view of production volume constraints looks across functions and focuses on improving activity to overcome barriers. Companies must form teams containing all the required functional disciplines; this is no time for an organisational turf war.
- Lead with strength and will. At many resource companies, executives can describe the more productive future they aspire to, but they cannot deliver it. Often the barrier lies in leaders who require too much precision or certainty before they act. But transformative business change does not come with the level of precision that, for example, major development investment decisions do. Often, leaders need to take a leap of faith to get started.
- Build capabilities. Oil and gas companies need to continue their prolonged and patient investments to build the fundamental capabilities that create more productive organisations. These include integrated business and activity planning processes, maintenance strategies, permit processes, master data, improvement and prioritisation tools, and effective change management. The shopping list of capabilities may seem obvious, but experience from Australia and elsewhere suggests that many of these basic capabilities have eroded. Good planning can be detailed, repetitive and relentless work, but it ensures that projects are ready to implement before resources are allocated. In Australia, as elsewhere in the industry, seasoned planners who know the norms for their basin are in short supply.
- Motivate desired front-line behaviours. Simply setting targets and metrics is not enough to change old habits or motivate performance excellence under challenging conditions. Managers must present a clear vision for the change as it applies at each level – for example, what will the future look like for a production superintendent? They must also accurately describe the front-line behaviours they want to motivate, as well as the positive consequences that should result.

Finally, as Australia's oil and gas executives work towards the changes that will make their industry more competitive, they must also be aware of the dangers inherent in a single-minded focus on cost reduction. Consider the example of the Cost Reduction Initiative for the New Era (CRINE), launched by oil and gas companies working in the UK North Sea in the mid-1990s, when slumping barrel prices compelled them to find ways to increase productivity. Conversations with executives who worked through the initiative suggest that, while CRINE led to some simplifications and short-term cost savings, it left behind a mindset of cutting corners. In their opinion, this has contributed to a legacy of underinvestment on equipment maintenance and routine activities like painting, which in turn is now affecting production efficiency, equipment reliability and uptime. While a well-intentioned cost-cutting programme and focus on benchmarking can be forces for good, they must be balanced with the right mindset and behaviours that bring about real, sustainable change and investments in long-term efficiency and productivity.