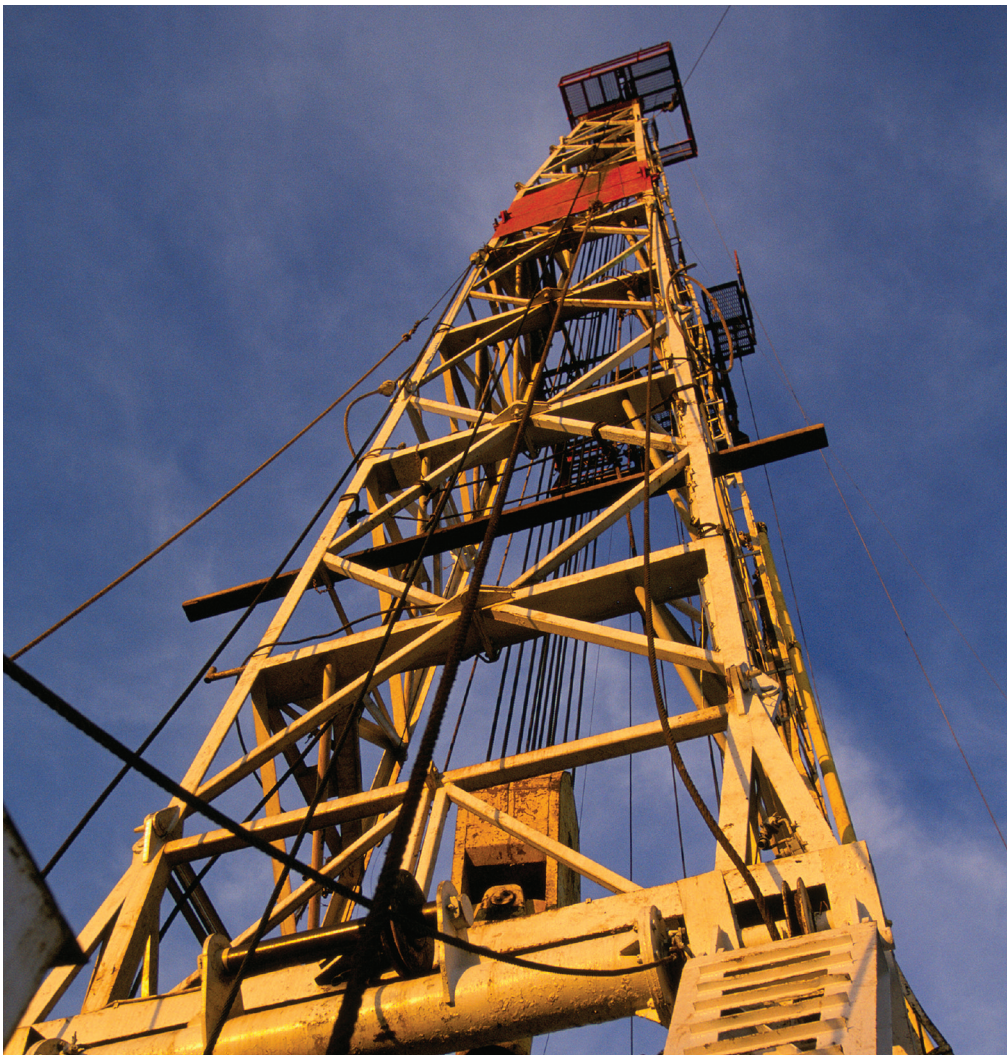
*PwC energy consulting – oil and gas capabilities*

# *Delivering operational excellence*



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# *Introduction*

***Getting the very best out of operational activities has become vital for oil and gas companies. Reserves are becoming more inaccessible and expensive to get out of the ground. New technologies and engineering solutions need to be maximised. Scarce talent has to go further. Midstream and downstream activities need to gain margin. Above all, industry safety is critical.***

Operational excellence is no longer something to strive for – it is a 'must have'. PwC's operational excellence services can ensure you deliver. We'll develop a picture with you of the gains you can make. Then we'll make sure you are on an accelerated path to make them real. You'll have a clear understanding of your destination and the confidence to get there fast.

We're close to the industry and have insight into the challenges you face. We've seen the problems companies often trip over. For example, the pitfalls of not involving developers or receivers early enough, or the difficulties operations and subsurface sometimes have in collaborating. We've got substantial major project development expertise as well as existing asset optimisation capabilities.

Our operational excellence solutions give you:

- A structured approach to assess current operations and design improved processes which are linked to strategies.
- Supported by a PwC proven methodology and toolbox that accelerates the project, involves management and key employees.
- Support to implement the project, securing the ownership and commitment of functions to deliver continuous improvement.
- An outcome that results in a documented "one way of operating" embedded in your business management system and with clear links to people and competences.

PwC is a leading adviser to the global energy industry, working with every segment of the business – from upstream to midstream to downstream – to provide business solutions tailored to meet your needs. For more than 100 years, we have helped energy companies succeed.

*We look forward to the opportunity to work with your company.*

**Michael Hurley**
Global Energy, Utilities & Mining Advisory Leader

**Ole Martinsen**
Energy Consulting Partner

# Our insight, your expertise

***Our starting point is always your situation and your needs. Often the answers are within your organisation. Our structured and proven approach helps you discover them and put them to fast, effective use. If you don't have the internal capacity, we'll help you get the solutions from outside and bring your capability up to speed. And, where appropriate, we'll involve your key partners and Original Equipment Manufacturers (OEMs) as well to make sure everyone is working together.***

Your starting point could be a number of situations. Our operational excellence solutions can help you:

- secure operational compliance, from government, industry or internal corporate procedures
- realise subsurface potential, efficiently and sustainably
- improve operational results
- prepare and support change, such as bringing in new operational responsibilities or new business areas
- introduce new operational technology or make better use of existing information/systems.

### *An integrated approach*

Five key areas are covered by our operational excellence solutions suite:

- E&P core improvement
- Strategic competence management
- Asset optimisation
- Supply chain management
- Key performance indicators (KPIs)

Each area offers a specific focus but is also designed to interlink with any requirements you have in the other areas to give you a fully integrated and comprehensive service.

### *Industry-specific expertise*

PwC's Global Oil and Gas Group provides professional services to companies and industry players of all sizes, across all segments of the industry. We provide industry-specific solutions in the fields of audit and assurance, transactions and tax. And with our extensive experience in the sector, we're able to offer a much wider range of consulting services to meet your more specific needs.

We are also the partner of choice for many medium sized and smaller companies. PwC is on hand when governments and regulatory bodies need top-level advice on reform of market structures or hands-on delivery of the resulting change programmes.

At an international level, we are the funding patron of the World Energy Council and a longstanding partner and sponsor of the World Energy Congress but also the World Petroleum Congress. PwC's Annual Global Energy, Utilities and Mining Conference regularly forms part of the International Energy Agency's global roadshow to launch its annual World Energy Outlook.

### *On hand to cover a wide range of issues*

Our oil and gas specialist consulting teams work with yours to innovate and grow, improve operations, manage risk and regulation, and leverage talent. We are ready to assist you in managing a range of issues such as international expansion, investment in and roll-out of new technology, regulatory reform, commodity/fuel price volatility and price risk management, workforce issues, industry consolidation and asset portfolio rationalisation, outdated legacy systems and investment in new systems, and gaining value from mergers and acquisitions. We also have significant experience of delivering large, complex mega projects across all segments of the oil and gas industry.

***Our team works with you to develop a clear picture of the improvements you can make and how to deliver them.***

# E&P core improvement

***An E&P core improvement or 'blueprint' exercise prepares an organisation for new challenges, roles and responsibilities. It builds on an extensive set of well-proven and documented E&P processes. It's designed to give a vision of the end state, as well as an integrated set of documents as input to the organisation's business management system. The E&P core improvement project clarifies the organisation's goals, activities, roles and responsibilities and drives change by involving managers and key employees across functions.***

We have developed a comprehensive but modular toolbox, with industry practices for all relevant domains, to guide and challenge improvement opportunities. Our approach is rooted in a methodology proven in IOC and NOC settings to accelerate analysis, design and implementation – securing management control and key stakeholder involvement.

PwC's E&P core improvement projects have clearly defined deliverables, providing documentation and plans for the organisation's external and internal interactions, processes and people. An E&P core improvement project will serve as a foundation for organisational readiness, compliance, with a focus on supporting change and driving continuous improvement.

## At a glance

### Why do you need 'E&P core improvement'?

It provides a shared, documented "one view" of how the organisation will work as a prudent operator, securing compliance and organisational learning.

## How PwC can help

We have industry-trained project leaders and practitioners to support clients in end-to-end or specific functional improvement. We offer fixed or flexible project models to drive operational improvement, where we will create documented processes, with clear roles, responsibilities, interfaces and dependencies. The project may include information and technology requirements, and development/update of business management systems.

### *From vision to strategy*

Starting on top, capturing the organisation's strategy, the E&P core improvement approach will bridge corporate goals and objectives to each function – as drivers for all processes.

### *From strategy to implementation*

PwC E&P process improvement experts can support your organisation as an initial sparring partner, to develop the operational strategy and to map out the improvement journey. Our focus is to create real and sustainable impact, and we will support the whole initiative through to implementation – to ensure proper adoption.

### *A system-agnostic approach*

The PwC approach to E&P core improvement will provide documentation in a 'system-neutral' format, allowing the company to use their preferred system to capture, communicate and maintain processes in the future.

## Typical issues

- *Exploration*: obtaining access to acreage, and accelerating evaluation and development handover.
- *Field development*: fast tracking where possible by standardising concepts – to reduce time to first oil.
- *Major projects*: major project approach and control.
- *Preparing for operation*: 'transition to operation', achieving planned production.
- *Operations*: production efficiency – realising subsurface potential.
- *Reservoir management*: maximising economic resource exploitation.
- *Asset management global/local portfolio*: maximising value from operated as well as partner operated assets.
- *Well delivery*: improving process effectiveness and efficiency, alignment with stage gates.
- *HSEQ*: in all we do – securing the license to operate.

## *Working together – preparing for new organisational responsibilities*

***Context***
The organisation had been operating as an exploration company. After being acquired by a European energy company, the focus changed to include both development and operations. PwC acted as the organisation's development partner. Our experienced implementation team used the PwC E&P Blueprint programme to support the task of developing and changing the organisation.

***Approach***
Our work covered the development and documentation of new goals, activities and roles/responsibilities – brought together in a new management system.

The following activities were carried out during a six month project:

- Developed the project and resourcing plan with the management team.
- Established strategic activity maps, with roles and responsibilities for each of the existing and new departments.
- Both the 'as-is' and the 'to-be' situations were documented to create a transition plan.
- Critical interfaces between departments and functions were clarified to secure ownership of new activities.
- All information produced was assembled and inputted to the new management system.
- Carried out change activities, including the development of training material and facilitation of training.

### *Benefits*

A changed and well prepared organisation – staffed in accordance with the new operating model and activities. All departments and managers were well prepared – and supported by management systems – to carry out the new activities.

## *Working together – improving well delivery processes*

***Context***
A large national oil company with ambitious production targets identified the need for improvements within its well delivery processes as key to future success.

***Approach***
To build an understanding of the company's current situation, the PwC team conducted interviews in all relevant parts of the organisation as well as a thorough analysis of the management system, with particular focus on the documented drilling processes. Based on findings from the interviews, process analysis and discussions with the client, key improvement areas were selected for further studies.

This involved:

- Updating and improving process documentation in the drilling planning phase (where the company was facing significant challenges).
- Developing well delivery stage gates to secure checkpoints, knowledge capture and lessons learned.
- Develop a well categorisation framework to ensure that planned wells are projected, contracted and reviewed in accordance with impact,cost, complexity and risk.
- Detailing how to incorporate continuous improvement initiatives in the well delivery process (involving well categorisation and stage gates).
- Developing a process management cycle to ensure updates and changes to the well delivery processes.

### *Benefits*

A new well delivery process was designed which clarified activities, roles and responsibilities between the drilling, exploration and field development departments. The company gained an assessment of lessons learned from recent changes and a well categorisation system was put in place to support focused improvement. We also embedded process governance and systems for continuous improvement.

# Strategic competence management

***Making the very best of the talent you have is vital in an era of skills shortages. It's even more important in the context of demonstrating competence and effectiveness following a series of major oil and gas industry accidents. Strategic competence management helps you ensure that you have sufficient capabilities within your E&P areas to support operational plans and to be compliant with external requirements.***

The oil and gas industry is undergoing a shift in their workforce in several regions where the experienced labour is moving into retirement, leaving the company with critical gaps in certain areas. Companies not planning for this shift could suffer from a weakened ability to meet their future growth.

Based on our extensive experience from several projects, PwC has developed a comprehensive framework covering the majority of issues our clients meet with regards to management of competence. It is a continuous structured process. By revealing gaps through mapping of existing competence against short and long term requirements, you can take corrective action.

Working closely together, we will deliver a detailed overview of the future competence requirements, which will support long term strategic goals. This will help support safe, efficient operations and resource management as well as put you in the best position to explore new business opportunities.

## At a glance

### Why do you need 'strategic competence management'?

In order to know you are doing everything you can do to maximise competences and fill any gaps.

## How PwC can help

Our toolbox includes accelerators such as blueprints for oil and gas competence catalogues, competence management processes, job descriptions and best practice examples of functional requirement specifications for support systems. Tailored activities may include:

- Assessment of current HR and competence strategies against future needs.
- Development of competence management strategies.
- Development of competence catalogue to identify competence requirements for positions in the short and long term.
- Requirements for IT support system.
- Set up of an assessment framework including self-assessment.
- Development and integration of competence management process maps.
- Implementation of strategic competence management.

### *Maximising talent*

Strategic competence management helps on a number of fronts:

- Clear understanding of competence requirements to achieve long and short term strategic goals.
- Efficient utilisation and allocation of key resources.
- Targeted recruitment activities.
- Targeted training and development.
- A clear appraisal process.
- The skill sets to respond to business opportunities.
- Alignment of business units to overall strategic objectives.
- Safe and efficient operations.
- Adherence to regulatory standards.

Our experience has shown us that this integrated holistic approach to competence management enables companies to respond more efficiently to business opportunities and challenges.

## Typical issues

- *Step change phases* – the moves from exploration, to development and production require a need for continuous upgrading and alignment of competence and skills.
- *Regulatory scrutiny* – increased focus on competence management from oil and gas regulatory bodies, requiring improved competence planning, tracking and transparency.
- *Skills shortages* – the need for enhanced talent practices to effectively compete in the 'war for talent'.
- *New business areas* – addressing uncertainty in sourcing the competence base to meet future business opportunities.
- *Optimal use of competences* – matching the right skills to the tasks through efficient utilisation and allocation of resources.
- *Generational shifts* – addressing the gaps from the generational shifts in the workforce early enough to train, recruit or develop new capabilities within the organisation to meet future needs.

## *Working together – offshore competence management*

***Context***
After the merger between two national oil companies a common operating model for the 28 offshore production units was implemented. The objective of the model was to define one common operational approach and at the same time ensure flexibility in the sourcing of the offshore manpower resources. To support such flexibility as well as safe and efficient operations, processes and systems for competence management needed to be developed and implemented.

***Approach***
We supported the company in a number of areas:

- Defining work processes for competence management.
- Defining the structure of and building the competence catalogue and job requirements.
- Facilitating workshops to collect relevant master data.
- Setting functional requirements for the supporting system.
- Implementation and roll-out.
- Training of leaders and skilled workers in using the system.
- PMO and day to day support to the project manager.

## *Benefits*

- Right competence to the right task.
- Aligned employee development and company needs including a structured way of handling employee development.
- Easier resource allocation.
- Compliance with laws and regulations.
- Competence measured on the same underlying principles.
- Complete overview of current competence base.
- Ability to take action on competence gaps.
- Simplified recruiting.

## *Working together – competency modeling and role profiling*

***Context***
As part of a reorganisation exercise, a major Middle East exploration company wanted to review and update job descriptions for all of its positions to ensure alignment with the structural and strategic changes that the organisation was undergoing. It sought to update its technical competency framework in order to clearly specify the critical knowledge, skill and behavioural attributes required to deliver the company's business strategy and objectives. The company also wanted to establish an assessment process that would enable it to evaluate its employees for their competency proficiency levels and a development plan that would help bridge identified competency gaps.

***Approach***
PwC worked closely with the company to:

- Develop job descriptions for all positions, ensuring alignment with the company's structural and strategic changes.
- Develop detailed technical competency models and competency profiles across all job families and positions.
- Develop a competency assessment process with requisite tools and templates to assess employee competencies against the competency models.
- Define job family specific core development plans that outlined blended developmental tools to help address employee competency gaps.

## *Benefits*

The job descriptions and the technical competency models established clear roles and responsibilities, as well as critical knowledge skill and behavioural attributes, that were needed to achieve the company's strategic and business objectives. The development plans helped the HR team to consolidate the training and development plans for various job families and focus attention on bridging the individual gaps.

# Asset optimisation

***The oil and gas industry is asset intensive. But many assets are aging. This puts a premium on the need for good asset optimisation to manage not only the operational risks, but also to improve profitability. In particular, for a long period of time many refineries have been struggling with cost-cutting pressures arising from shrinking margins and old plants with a need for improvement and investment.***

PwC takes a holistic approach to asset optimisation. Cutting across functional and organisational boundaries, we take an integrated view of the business to understand end to end (E2E) business processes and identify where value is added to generate business outcomes. PwC's three-stage methodology helps you to gain sustainable cost reductions.

1. Initial insight quantitative analysis – what are the potential savings?

2. On-site diagnostic: tailored tool for the task – where are the potential savings?

3. Improvement plan – how do we realise the savings?

It addresses the limitations of traditional approaches by focusing on where the root causes of problems lie across the business. This approach is designed to be backed with board level sponsorship.

## At a glance

### Why do you need 'asset optimisation'?

Because you can't afford your assets to become an asset drain rather than an asset gain.

## How PwC can help

Improvement plans typically incorporate several or all of the workstreams below. Each workstream is comprised of a number of individual elements in pursuit of the overall objective. These areas of focus are deliberately phased to build upon prior successes and bring about sustainable change within the organisation.

***Cost management and control***
Improve cost management discipline, processes, tools and capabilities to ensure that the right spend decisions are made by the right people with the right information.

***Procurement and supply chain management (PSCM)***
Drive cost savings, control value leakage, implement end-to-end procurement process, and establish organisation capability to deliver sustainable improvements.

***Performance management***
Establish standard management and performance indicators as well as process to manage business performance down to the front line.

***Maintenance effectiveness***
Develop planning, scheduling and execution rigour throughout the organisation to shift focus from accommodating to eliminating defects.

***Major projects***
Enhance front end loading, promote adherence to the major projects gate review process, and reduce the cost and duration of major projects.

***Project portfolio optimisation (PPO)***
PPO uses state-of-the-art tools and methodologies to quantify the potential cost, benefits and risks of the projects you are considering or have underway. The result is a systematic way of assessing and defending capital deployment decisions. PPO begins with creating a template specific to your organisation's priorities, idiosyncrasies and data availability that will help quantify a project's value. The resultant sophisticated project valuation and portfolio prioritisation system gives a new level of insight. Leadership will have access to a suite of information to help guide, value and defend funding decisions, and increase your organisation's efficiency.

***People and leadership***
Improve capabilities and individual performance management

***Communications and engagement***
Ensure communications and engagement at all levels of the organisation. Distill and share knowledge between workstreams.

## Typical issues

- Maintenance execution too reactive and corrective.
- Low time on tools inefficient use of craftspeople.
- Old/unchallenged cultural behaviours.
- Too complex business processes, improvements stall.
- Insufficient operating budget control and cost management.
- Poor cross functional cooperation.
- Weak management decision support.
- Contract terms not known to execution level.
- Lack of strategic sourcing, pooling of demand. Best market prices not achieved.
- Uncertainty regarding which capital spend project to prioritise.

## *Working together – organisational effectiveness and efficiency improvements for a refinery*

***Context***
The client sought a solution to drive organisational effectiveness and efficiency, to sustain prior gains and close the performance gap at two key refineries. PwC needed to work closely with the client to leverage previous work and effectively perform analysis.

***Approach***
PwC designed a programme that leveraged the client's prior analyses, identified gaps in organisational effectiveness and efficiency, and launched actions to capture sustainable improvements. We used our proven methodology, addressing gaps and closing them in a sustainable manner. The approach analysed the processes and alignment needed for organisational effectiveness and efficiency. It included a rapid analysis of the client's prior work, structured interviews, data analysis, and synthesis of findings into recommended work plans.

### *Benefits*

The output of the diagnostic was a report detailing identified sources of inefficiency, areas of process breakdown, areas of misalignment of organisational elements, and a series of recommendations to address these findings to improve organisational effectiveness and efficiency. The recommendations included specific interventions and a roadmap for improvement.

## *Working together – performance and profitability improvement for a refinery*

***Context***
Decreasing refinery margins and reducing gas prices across Europe had created significant pressures on our client to reduce cost and improve efficiency.

***Approach***
Using previous project experience, PwC identified refinery issues and improvement areas for the client's refinery. A three step process was established to enable faster initiation of transformation activities and allow benefits to be delivered as early as possible:

- Initial insight quantitative analysis – a high level review of current data to identify potential savings;
- On-site diagnostic – built upon the initial insights to identify where the issues lay across one or more of the end to end processes and analysed outputs to refine the focus for the improvement areas; and
- Improvement plans – projects (scalable to the problem) were developed to target the diagnostic results within manageable 100 day plans.

Additionally, a powerful 'diagnostic' tool based on lean manufacturing theory was used. The aim of this approach was to provide a detailed assessment of what opportunities exist, where in the organisation they lie and their likely scale and ease (or difficulty) of capture.

### *Benefits*

The project identified potential savings of US$125m and developed action plans to realise the savings. PwC brought in knowledge, methodologies and tools to conduct the diagnostics and experience from previous projects of this type combined with international competence.

# Supply chain management

***The aftermath of the tsunamis in Southeast Asia and Japan highlighted the importance of supply chain resilience. Both events left many companies discovering that the quest to maximise the efficiency of their supply chains had severely impaired their ability to cope with disruption. We live in a world where the connections up and down the supply chain, as well as inside companies and outside to the world around them, are increasingly important.***

The ever-evolving landscape supporting supply chains is always changing, creating new risks. Today's C-suite is tasked with harnessing the opportunities of a global supply chain while managing its complexities. Inflation is driving up costs throughout the chain. Speed to market creates greater challenges. Our strategies help clients avoid supply disruption, quality issues and brand degradation.

Some of the typical issues that companies encounter are highlighted in the 'contexts' panel. We have developed a comprehensive but modular service offering addressing each of the six identified main issues through a dedicated module. The modular approach creates a pragmatic toolbox, avoiding the risks of 'wide scoped supply chain transformation projects'.

## At a glance

### Why do you need good 'supply chain management'?

Because failures can be mission critical at worse and costly or time consuming at best.

## How PwC can help

***Better connection to internal customers***
Implement a demand capture system and adopt a customer relationship management approach to the way Procurement and supply chain management (PSCM) deals with the business and end-users to identify accurately demand and document requirements/contractual commitments.

***Improved supplier performance and reliability***
Measure and report supplier/partner performance regularly through balanced score cards, target benchmarks and KPIs to manage the effectiveness of the supply base and focus on delivery (value, speed, and service). Segment the supply/partner base and concentrate efforts on working with key relationships to deliver the most value to the business, throughout the contract life cycle. Pro-actively communicate with them using relationship management and communication plans, and where possible integrated systems.

***Improved strategic sourcing***
Develop market intelligence channels and use pre-qualification mechanisms/tools. Establish category management teams, supported by dedicated research teams to seek out and qualify new partners, technologies and sources of supply. Develop a pre-qualification guidelines and a database that integrates into procurement systems. Leverage external agencies where possible to reduce external workload.

***Good supply planning***
Establish a central capability and integrated system to capture demand across the organisation. Consolidate plans and demand information to drive procurement and warehousing decisions. Establish processes to review, prioritise and group demand and develop regular forums to review forward demand with the business. Optimise stock levels based on actual demand, with a centralised vision of the inventory.

***Avoiding excessive stock levels***
Assess current stocks and segment according to fast-mover, slow-mover, non-mover obsolete. Reset desired stock levels accordingly and dispose of excess stocks where possible.

***Strengthening technical capability***
Implement a centrally-led strategic sourcing function segmented into business categories and deliver training to create the capability to source long-term contracts and category supply deals. Separate some, or all, of the indirect expenditure and have a central team to manage this spend, to leave those teams serving the business to focus on the business requirements.

## Typical issues

- *Weak connection to internal customers* – errors in PO and contractual agreements, creating long lead time.
- *Poor supplier performance and reliability* – insufficient communications, inadequate performance management and absence of supplier performance improvement programmes.
- *Strategic sourcing* – functions are fragmented and the pre-qualification process is ineffective. Lack of strategic sourcing and category management capabilities.
- *Supply planning* – incomplete, or insufficiently robust, demand plans, leading to service delays, over/under stocking of goods.
- *Excessive stock levels* – misalignment of demand and supply due to poor supply planning.
- *Technical capability* – procurement teams have insufficient depth of market knowledge and business understanding in the areas that really matter to the business.

## *Working together – PwC and the Kuwait Oil Company*

***Context***
The Kuwait Oil Company is a prominent national oil company in the Middle East. Its supply chain has traditionally worked rather reactively. The company wanted to improve it as part of a growth strategy targeting a 30% increase in oil production capacity and 1000% increase in non-associated gas production capacity by 2030.

***Approach***
The supply chain improvement programme consisted of three main phases:

- A design phase during which organisation, process and systems were assessed, created and/or improved.
- Once the target organisation was validated, the project shifted to a transition mobilisation phase.
- An implementation phase where changes were transferred to operation, through training, change management and pilot projects.

### *Benefit*

PwC supported the development, design, implementation and roll-out of the project with a complete redesign and optimisation of supply chain operational processes. A special focus was given to demand planning, pre-qualification, bid management. A new team was created to specialise in strategic sourcing and supplier relationship management.

## *Working together – PwC and PKN Orlen*

***Context***
PKN Orlen wanted an assessment of changes underway in procurement, investment and cost-related projects, system fraud and capital group governance.

***Approach***
The project had two components:

- A look at best practice in process structure and procedures.
- An analysis of projects delivered between 2008 and 2012 and an assessment of their potential impact on the development of management capabilities.

### *Benefit*

The company was able to identify areas that required significant changes, risk-preventive regulation or cost/time reducing deregulation.

# Key performance indicators (KPIs)

***Key performance indicators (KPIs) are a type of performance measurement commonly used by oil and gas organisations to evaluate success. But success can be defined in very different ways. Choosing the right KPIs needs a good understanding of what is important to the organisation. But sometimes the understanding needed is insufficiently developed or not linked adequately to KPIs.***

Having proper KPIs in place increases the ability to generate up-to-date performance data that can help assess alignment to short-, mid- and long-term goals and objective. The visibility on capital project performance, in terms of cost, schedule, risks, resources, return is improved. Other advantages of setting up KPIs are the enhanced ability to measure and address vendor performance but also to better assess compliance to health, safety, security and environment (HSSE) standards.

## At a glance

### Why do you need effective 'key performance indicators'?

Because ultimately you can't manage what you don't measure and getting them wrong could steer you in the wrong direction.

## How PwC can help

Our service offerings encompass the key Enterprise Performance Management (EPM) elements, including strategic and midterm planning, value management, balanced scorecard (strategy maps, KPIs, performance measures, target setting, corrective and preventive actions).

### *Oil and gas enterprise performance management (EPM) diagnostic*

- Assessment of KPIs and performance measures in place against oil and gas leading practices, and in light of the client's strategic goals, objectives and critical success factors.
- Assessment of EPM processes against oil and gas leading practices, including strategic, tactical and operational planning alignment, process and data integration, calendar optimisation, etc.
- Assessment of EPM systems in place in terms of fulfilment of business requirements, covering standard tools for planning, balanced scorecard, business intelligence and reporting, as well as specific tools used by oil and gas companies for strategic scenario modelling and capital planning.
- Assessment of the organisational structure and the effectiveness of the governance model in facilitating information flow and decision making.
- Identification of gaps and analysis of root causes.
- Development of a "case for change", including improvement, recommendations, expected benefits, cost-benefit analysis and improvement roadmap.

### *Oil and gas enterprise performance management (EPM) improvement*

- Design of new or revised KPIs, performance measures and management dashboards, drawing from oil and gas global benchmarks.
- Design of new or revised planning and performance management processes in alignment with IOC and NOC leading practices.
- Definition of EPM systems requirements, development of solution architecture, assistance in evaluation and selection of EPM systems and tools that are suited for oil and gas environments.
- Design of new or revised EPM organisational structure and governance model.
- Training and coaching on new EPM design, and provision of implementation supervision and support.

## Typical issues

- *Absence of a robust performance management mechanism* to align organisational performance to corporate strategy, goals and objectives.
- *Poor performance visibility* and insufficient data to support decision-making.
- *Poor target setting* – targets either lack ambition/do not drive growth or are unrealistic and over ambitious.
- *Insufficient value analysis* to link strategy with operational performance.
- *Lack of closed loop system* for continuous performance improvement.
- *No single source of truth* – multiple repositories for performance data.
- *Reliance on time consuming, inefficient processes* for data consolidation and generation of KPI and management dashboards.

## *Working together – enhancing the existing performance management system*

***Context***
A fully integrated Russian oil and gas company was faced with several problems in the area of enterprise performance management, including a KPI system that did not motivate top management, an excessive number of indicators and inadequate methodology.

***Approach***
The PwC team performed several tasks. We:

- analysed the current situation and identified gaps in different areas of the KPI system
- conducted best practice analysis to develop recommendations for a selection of high level KPIs in the corporate, upstream and downstream divisions
- developed a conceptual model of a target KPI system based on the company's strategy map and oil and gas value driver model
- developed KPIs covering core operations (both upstream and downstream) as well as support functions (HR, finance, legal and other) and key management layers.

### *Benefits*

- Improved existing mechanisms of strategy operationalisation.
- Improved KPI system with respect to best practice in the oil and gas industry.
- Increased transparency of KPI calculation methods.

## *Working together – improving performance management reporting*

***Context***
There was a lack of routines for performance management (PM) reporting as well as a low degree of KPI automation plus a lack of structure in targeting and forecast processes.

***Approach***
PwC took over responsibility for PM reporting to ensure timely reporting with sufficient quality, while improving the associated processes. We were also able to automate a significant amount of the KPI's, thereby allowing more time to be spent on other activities. PwC took on a key role in driving the annual target and forecast process, and played an important part when 12 month rolling forecasts were implemented. The improvement initiatives were targeted at the cluster (region) and business unit (country) level of the organisation. The improved structure and processes were handed over to the client and backed up with a considerable training programme.

### *Benefits*

PwC delivered an improved system for PM reporting, which required less staff hours to maintain, thereby allowing for more time to be spent on analytical activities.

# *Worldwide presence: Our people, our knowledge, our reach*

## *Why more than 80% of Fortune Global 500 companies work with PwC…*

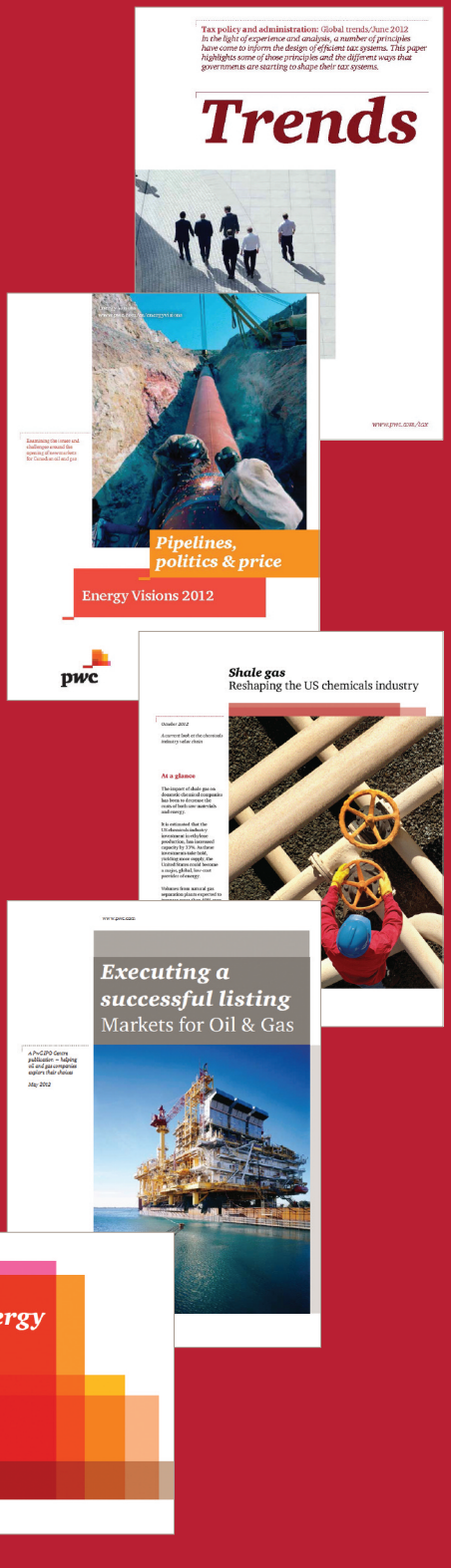
We take the time to listen, question and understand our clients' goals and their competitive and regulatory environment. And then we tap into our global network, deep industry expertise, and strong judgement and experience to help each client create the kind of value they are looking for.

The cornerstone of our approach is the belief that developing strong relationships unlocks value and meaningful results – and further strengthens the capabilities of our network. This is how we do business. And we believe it's why more than 422 of Fortune Global 500 companies and 439 of the companies in the FT Global 500 work with PwC.

PwC has been adding value by providing professional services to energy companies for more than 100 years. We help companies confront the industry's most challenging issues and changes by developing effective solutions and strategies.

With over 5,300 industry-dedicated professionals located in strategic energy centres, we can help companies everywhere they operate. We have over 350 partners serving global energy companies worldwide. PwC is located wherever the industry is exploring for, producing, refining and selling hydrocarbons. Headquartered in Houston, Texas our Global Energy Group has major energy centres around the world including Brazil, Canada, China, Norway, Russia, the UK, and throughout the Middle East and Africa.

PwC can help energy companies evaluate priorities, assess risks, and build stakeholder confidence. Our global energy practice focuses on delivering professional services to companies of all sizes, across all segments of the industry. We provide industry specific solutions in the fields of audit and assurance, tax, deals and consulting services to help companies address their business and stakeholder issues.



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