Engineering and building success
Your priorities, our professionalism…

Our starting point is your needs. Being ready and able to rise to your challenges is what makes us a leading professional services provider to private and public engineering & construction sector clients.
Introduction

The engineering and construction sector is a vital part of the global economy, accounting for over 11% of global GDP. The key global trends of increasing urbanisation, the economic shift from west to east and changing demographics all point towards an increasing level of construction output in the next decade.

However, the sector is also faced with many challenges. These range from skills shortages in engineering and specialist trades to the broader questions of how to invest in and embrace new technologies and processes, and how to design, build and operate in a sustainable way in a world of limited resources. And all of this in a sector which operates on tight margins and where the balance of risk and reward presents challenges even for the best-run organisations. Engineering and construction is a highly competitive sector with low barriers to entry and a fragmented supply chain.

Responding to your needs

PwC works throughout the value chain with architects, engineers, project managers, contractors, building materials producers, house builders, developers and operators. Our strengths are matching our specialist capabilities, understanding all parts of the sector and bringing insights both from within the industry and best practices from other industries.

Through our extensive global network, we are able to help with the big challenges facing the sector. We leverage the knowledge, experience and solutions of our network of 195,000 professionals in 157 countries to support our own engineering and construction practice of over 5,000 professionals. With such a far-reaching network, we work with engineering and construction companies in just about every location where they do business. On top of that, our Strategy& business gives us additional resources to help you connect strategy to successful delivery.

A relationship that you can trust

Teaming up with PwC gives you a professional partner that can help you move rapidly, and with assurance and rigour, to deliver what you need. When you call on us, our depth and breadth means we’re in a good position to deploy the right expertise to respond to your issues. You can depend on us as a trusted partner. Our clients stay with us in relationships that are built to last.

This statement of our capabilities aims to highlight some of the many ways we can support you. We are passionate about the industry in which you operate and are ready to help you rise to the challenges that you face.

Jonathan Hook
Global Engineering & Construction Leader

Jonathan Hook
Your starting point is our starting point

All the engineering and construction expertise of PwC is brought together with one focus – you, the client. Our priority is the issues that matter to you. PwC’s global engineering and construction team provides professional services to companies and industry players of all sizes, across all segments of the industry.

We work with more than 20,000 companies in the engineering and construction industry worldwide. We are able to rapidly deploy a broad range of skillsets to address your particular project challenges. You will know us for our core strength in finance, but our teams also include engineering, technology, human resources, legal and project management specialists, to name just a few.

We also have practical in-depth experience right across the various engineering and construction industry sectors – from large-scale industrial and commercial construction, residential construction and engineering services, all the way through to the supply chain of materials and equipment. Our global network of industry specialists not only understands the challenges companies in this industry face, we know the businesses with which these companies most frequently interact. This big-picture perspective provides us with a unique vantage point that benefits our clients.

Today’s engineering and construction companies need to manage a wide range of challenges. Growing global infrastructure needs are providing a significant project pipeline, but growth momentum varies across regions, influenced by economic trends, political stability and commodity prices. Project complexity is increasing as, for example, technology enables buildings and infrastructure to become increasingly smart and interconnected. Operational excellence, financial discipline and risk mitigation remain as important as ever and, of course, the pressures for faster delivery and lower costs are always present.

Engineering and construction - responding to global megatrends

Urbanisation
Rapid population growth in both new and mature cities is creating demands for new and improved infrastructure.
Increased demand for newly-built high-density housing.

Emerging market growth
Demand shift from slow-growth Europe to markets in Asia, Africa and Latin America.
Fifty-two per cent of all construction activity was in emerging markets in 2013 and, by 2025, this is expected to increase to 63 per cent.

Technology
Buildings and infrastructure are becoming more complex (e.g. smart buildings/cities).
Design and construction of buildings is changing as adoption of smart technology becomes standard (e.g. building information modelling - BIM).

Demographic change
An ageing population is driving growth for residential housing for the elderly.
Single-person households are becoming more common.

Climate change and resource scarcity
Sustainability is increasingly important in both construction and operational performance of assets. Increased regulation and taxes linked to emissions and waste are influencing the nature of projects and processes, as are client and user requirements.
New infrastructure is required to support sustainable energy development.

1 Global Construction 2025, Global Construction Perspectives and Oxford Economics.
At PwC we bring together the precision, structure and deep analytical capabilities of Audit and Tax, the market knowledge and structuring skills and Strategy and Deals, with the creative mindset and problem-solving skills of Consulting. We are objective in our work and careful to use fact-based approaches and replicable methodologies. We begin with the end in mind and consider implications across strategy, structure, people, process, and technology.

We focus on action, impact, and value – we don’t just assess and recommend, we also help you implement with agility and flexibility. We take advantage of our global reach and interdisciplinary talent to deliver what you need, when and where you need it.

**Audit and assurance**

PwC is the external auditor to many leading companies across the engineering and construction sector. These organisations want audit teams that know their issues and understand the business challenges. Our professionals understand the complexities of long-term contract accounting and the importance of understanding contractual positions and challenging end-of-life forecasts. We understand that auditing in this sector requires experience and judgment. Our staff receive specialist training in the sector and have the knowledge and experience to help you with financial accounting challenges such as revenue recognition, acquisition accounting, IFRS conversions, share plans, valuations and pensions issues.

PwC auditors use the same global audit methodology around the world, fully compliant with International Auditing Standards and local requirements. This globally consistent approach means that, regardless of location, PwC people can evaluate your business systems and processes using a standard, familiar approach. This gives you a uniform level of quality and consistency of outputs.

We also have an established internal audit practice in the sector, operating either on a fully outsourced or on a co-sourced basis, where we supplement your in-house internal audit function by bringing in specialist skills that it may not make economic sense for you to retain on a permanent basis. Our experience of internal audit reviews is wide-ranging and covers operational, value-for-money and project-specific reviews as well as financial, IT and process reviews.

Increasingly, organisations in the sector are required or take the initiative to obtain third-party assurance over non-financial metrics. We have a methodology for providing that assurance, and report both privately and publicly on sustainability measures such as carbon emissions, health and safety metrics such as accident frequency ratios, and employee measures around retention and engagement.

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**Putting our services to work for you**

At a glance – why PwC?

- We live and breathe the sector: we understand your issues and are able to respond to your priorities.
- We have over 5,000 staff worldwide dedicated to the engineering and construction sector.
- Our global coverage means we are on hand wherever you need us.
- Our teams collaborate with our clients and make it a top priority to earn their trust. This is embedded in our everyday culture and demonstrated through our ethics, professionalism, and long-lasting relationships.
- We are methodical in sharing knowledge and experiences among our global network of practitioners. This allows us to gain significant insights that benefit our clients.
- We think broadly and remain flexible in our support of long-term objectives that transform our engineering and construction clients. At the same time, we do not lose sight of shorter-term gains, such as speed-to-market and increased efficiencies, which also influence bottom-line results.
- Our firm’s size and scope of capabilities offer us a distinct advantage in meeting the complex needs of some of the world’s largest companies within the industry.
- We understand the importance of establishing business benefits upfront to improve their realisation, and measuring the impact of an initiative after it has been delivered. This is how we do business.
**Consulting**

We help organisations create value. We understand that engineering and construction companies face a multitude of challenges and operate in a low-margin, highly competitive environment. But there are great growth opportunities as well. We work with you to help you grow, to improve your operations, manage risk and regulation, and develop the talent within your organisation. For engineering and construction companies, growth can come in a variety of ways: through international expansion, through broadening the service offering into new aligned sectors and through innovating and developing more efficient, safer, sustainable products.

Growth in international markets is strongest in emerging economies in Asia and Africa, where the trend is heading towards greater urbanisation and the development of infrastructure. We understand the drivers of growth and which sectors it is likely to be in. We are a global sponsor of Global Construction 2030, a global forecast for the construction industry. We also have a dedicated Growth Markets Centre team to ensure companies receive the full benefit of PwC’s global knowledge and access to bespoke teams helping them to successfully achieve their growth markets ambitions.

Our strategy team works with leading companies in the sector analysing market sub-sectors and identifying opportunities to expand or earn higher returns. Many organisations are looking to diversify their activities and develop a higher proportion of annuity income at more stable margins, and/or to move up the value chain and develop partnerships and framework agreements. A greater degree of certainty over revenues and earnings increases the opportunity for the sector to innovate and invest.

Our operations team helps you address the challenges of a growing cost base. Commodity prices are volatile and the industry suffers from both the cyclical pattern brought about by government spending plans and economic cycles, and also its private sector clients in sectors such as energy, housing, transport and property. We help you transform your important value chain functions, through bidding, project management, governance and reporting, sourcing and management of the supply chain.

**Risk Management**

The engineering and construction sector has traditionally had a strong focus on risk at project or site level, but increasingly Boards need to consider risk on a more holistic basis. The risks in the sector are extensive, starting with health and safety and the critical need to protect the wellbeing of the workforce and that of the supply chain. The risk extends through reputational risk of project failure, financial risk in a low margin sector with cash volatility, and contracting risk encompassing bribery and corruption and competition concerns, to name just a few.

Risk and regulation are a feature of the sector. We help our clients take a practical and holistic view of risk and develop governance and compliance programmes to ensure that you operate within the boundaries of relevant legislation and regulations.
Deal services

Deals are an important feature of the sector. The largest engineering consultancies, EPC contractors and programme managers are becoming bigger through acquisition as they expand their global footprint and follow their clients to territories with growth opportunities. Mergers, acquisitions or joint ventures offer options for companies looking to move into new territories, secure different parts of the value chain, generate a higher proportion of their revenue through long-term services frameworks, or bring in different skills.

We work with our clients to determine the right strategy, identify targets, support negotiations and undertake both commercial and financial due diligence. Due diligence is particularly important in a long-term contract environment, where you need to be very clear about the quality of the order backlog, the status of projects you are acquiring and any legacy issues. We work alongside your commercial teams, bringing our multidisciplinary expertise to support you. We operate across all key markets and our experience extends through the deal continuum from strategy, through diligence, execution and post-deal integration.

Tax services

We have the largest network of tax specialists in the world, with over 30,000 dedicated people. We can support you both locally and globally, wherever you require our advice. We solve challenging issues, and keep you apprised of local, state, domestic and international tax regulations. We help you construct effective crossborder strategies, manage your global tax rate and support your tax compliance needs.

International projects present particular challenges for the sector, particularly regarding local corporate and personal tax laws. These are also a challenge for individuals working on projects outside of their home jurisdiction. Our international mobility team provides support around tax returns, payroll services, immigration advice, personal tax planning, policy development and implementation, arrival and departure support, and cost projections.

Project governance and management

Our Capital Projects and Infrastructure (CP&I) practice supports our clients throughout the initiation and execution of large-scale projects. We support you by helping to introduce appropriate government frameworks and reporting processes, improving delivery performance and project management capabilities, and assisting in the recovery of capital projects or programmes that are underperforming.

Dispute resolution

Contractual disputes are unfortunately a recurring feature in the sector, particularly when economic times are tough, but also when projects undergo major scope change or encounter design or ground condition changes. If contracts do not have clear mechanisms to deal with change, disputes may arise between clients, contractors, engineers and specialist contractors, and these disputes and the value associated with them can be material.

We provide financial and commercial skills to both public and private-sector organisations, which are clients of the sector, and also work for engineering consultants, contractors and project managers to support their analysis. Our experienced professionals can offer assistance with case assessment, discovery assistance, quantification of exposure, claim preparation, rebuttal and expert witness testimony.

Human resources

With the core workforce approaching retirement eligibility and universally insufficient succession planning, many engineering and construction companies are struggling to get ahead of their attrition rates and loss of intellectual/experiential capital. The industry experienced a loss of skilled resource following the economic crises of 2008 and has not invested sufficiently in training. It continues to find it challenging to attract a diverse range of individuals into long-term careers in the sector. Moreover, an inability to attract ‘millennials’ to hard-core EPC work is making it more difficult to backfill entry-level up through senior-level positions. Employee retention and development are crucial to achieving efficiencies and effectively managing labour costs.

With more than 6,000 professionals in over 150 countries, the PwC network has one of the world’s largest human resource (HR) advisory organisations. Our multidisciplinary approach allows us to advise on all aspects of people management, helping our clients to create value and deliver competitive advantage for their businesses through people.
Putting your priorities first

Strategy development

In today’s changing environment, engineering and construction firms face a range of strategic issues. Market focus, value chain positioning, sector exposure and international reach are all important considerations, alongside the ever-present concerns of cost reduction, margin enhancement and contract risk. Many engineering and construction firms are focusing on supply chain management, slimming down organisational structures and looking hard at operational efficiency to ensure that they are getting the best available prices.

An end-market view is all-important. Can exposure to cyclical sectors such as housebuilding and commercial construction be balanced with activities that give some protection during downturns? What diversification strategies are available to reduce overdependence on single sectors? Growth in oil, gas and petrochemicals, for example, has provided much historical momentum for some companies but a lower oil price environment has led to heavy reductions in energy infrastructure investment.

With so much uncertainty and mixed economic indicators in many regions, what opportunities are there for geographic diversification? There are opportunities in high-growth emerging markets, but there are a number of considerations that engineering and construction companies should consider. For example, does the regulatory environment enable or restrict operations of international firms and do you have the local relationships, expertise and supply chain to support operations?

Similarly, companies need to be mindful of opportunities to capture more of the market and improve margins by moving up the value chain. Are the right mechanisms and tools in place to assess opportunities and threats that might demand a change in business focus? Particularly in an era of fast-changing technological development, there might be opportunities in pursuing adjacencies in infrastructure and services.

How PwC can help you

Developing medium-/long-term strategic direction
We have extensive experience in developing strategic plans for engineering and construction companies. These typically include:

- developing a fact base on the external market environment and competitive environment
- assessing the strengths, weaknesses and ambitions of the client
- developing detailed visions, strategies and business plans
- understanding optimal positioning in the value chain.

Enabling entry into new geographies and sectors
We are on hand to perform market assessments and market entry strategy development for your company when you are considering entering new markets. Whether this is expansion into a new geography or expansion into an adjacent sector, we conduct detailed market and competitor analysis before developing a specific and detailed market entry strategy. This typically includes:

- detailed market sizing and forecasting
- competitor benchmarking
- key customer identification
- market entry strategy development including acquisition screening.

Assessing engineering and construction business portfolios
We provide support to global construction groups to help them develop a strategy for optimising their portfolio of businesses. We do this both by looking in detail at the specifics of each business unit, to understand the strength of each as a standalone business. We also look top-down to understand each business unit's fit with the overall strategy and the synergies between business units. Based on this, we work closely with management to implement specific business unit recommendations and reconfigurations to the portfolio.

Cost review
We can benchmark your cost base to understand how you compare with competitors. We then identify the major cost levers, in order to develop a strategy for improving your cost position, to ensure you have market-leading margins.

Target operating model design
We have extensive experience of target operating model design. This includes a number of elements, including organisational design, supply chain management and business model design. We can assist at every level of the design, from setting the high-level strategic direction, based on industry benchmarking and best practice, to the detailed design of the ‘to’ and ‘from’ states.
**Working together - a growth strategy for a major power plant component supplier**

**Context**
A major power plant component supplier and service provider needed fresh strategic options to grow into new markets (both new regions and new fuel types) in order to achieve growth targets and to compensate for shrinking revenues in its core fossil fuel power plant market in western Europe.

**Approach**
Strategy& screened the world (more than 60 countries with more than 10 GW installed capacity) by fuel type for sizeable, growing and stable markets. For those markets, we analysed attractiveness by value chain steps, identified the focus areas of the client’s current business, assessed capabilities and described the envisioned future service offering. Interviews with local experts were conducted to validate the market attractiveness and applicability of the client’s service offering. We then aligned entry options with the overall group strategy, and developed a set of detailed strategic growth options and recommendations, including a financial plan and expansion roadmap.

**Outcome**
The client gained the benefit of a clear strategy to significantly increase revenues in the long run by diversifying its core business. The analysis was based on an in-depth assessment of key power generation markets across fuel types globally with a market perspective backed up by local market experts. It also included an outline of implementation steps.
Putting your priorities first

Improving profitability

Despite the recent growth in the engineering and construction market globally, the industry has not yet experienced pre-recession profitability levels. Firms are competing fiercely to win every project. A downturn in fixed capital expenditure, with scarcer availability of finance and slowing economic growth, will further increase competition and create new pressure on profit margins.

To remain competitive in the long run, the bottom line is all-important. But reductions in the cost base have to be matched by strategies on the revenue side and a growing recognition of the need to compete in an environment of increasing customer expectations. As well as the ability to accurately estimate the project cost, a strong focus on revenue generation, the cost of goods sold, selling, general and administrative expenses (SG&A) and the operating model is necessary to deliver on project budgets and to drive profitability (see graphic).

How PwC can help you
Increasing your revenue through profitable growth strategies

Engineering and construction firms are contending with the rising cost of plant, labour and materials, globalisation, greater project complexity and customer expectations for faster and lower-cost project delivery. We can help you navigate these challenges. Whether supporting a growth strategy, an emerging market strategy, a reorganisation, or a project-cost optimisation, we can deliver a significant and sustainable impact for your firm.

Being Fit for Growth *
Fit for Growth is PwC Strategy&’s approach to transforming your company’s performance and accelerating growth. We can help link your overall strategy to operations to ensure delivery at optimum levels. It’s based on taking a more strategic approach to cost management in order to prepare for the next round of growth. Being able to expand requires work on three complementary, reinforcing elements — determining strategic priorities, optimising costs, and reorganising for growth. Our Fit for Growth approach is designed to help you develop and lock in capabilities that keep resources flowing to ‘good’ costs and away from ‘bad’ ones. The outcome is an adaptable, high-performance culture with an accelerated path to sustained growth.

Accuracy of estimation and execution in accordance with the contract
Knowing the cost of various elements of projects is at the heart of successful bid estimation and delivery. In turn, sound knowledge of costs and their variability is vital for decisions on the form of contract and contract terms as well as contract review and mitigation measures. PwC can help you develop cost planning capability, designing and developing your project knowledge database to store the elemental costs of your past and current projects. This database can be used to provide cost inputs and benchmark your bids, improving your ability to improve estimation accuracy. We can help you with the review of contracts, identify risks and advise on mitigation and control measures for bids and ongoing projects.

Operational efficiency through standardisation and embedded controls
Predictability of time, cost and quality of most engineering and construction projects remains a challenge in the industry. The primary reasons are poor overall governance and integrated process frameworks that compromise management control. We can help you to develop integrated and well-defined policies and processes with embedded controls, in order to provide clear operational guidance for the execution
of projects across their lifecycle. We can help embed a culture of cost awareness and entrepreneurship. Further, we can help you to develop an overarching governance framework including delegation of authority and reporting mechanisms to clarify decision-making, improve controls and visibility.

**Reducing your costs with improved sourcing/procurement**

Our experience has shown that as much as 10% of engineering and construction companies’ total spend could be suitable for low-cost sourcing (LCS) and that on average a 30% cost saving is achievable when sourcing from low-cost markets. In addition, best-in-class category management can reveal cost and efficiency opportunities in supplier consolidation, negotiation and overall procurement experience. PwC can help your procurement heads and departments to hone their sourcing strategies and evaluate the operational, financial and reputational implications of sourcing from low-cost markets. We help companies to conduct cost analyses, identify suitable suppliers and partners and guide them through the supplier selection process, going on to help companies draw up supply agreements. We’ve helped companies in engineering and construction and related sectors to secure dramatic cost savings of up to 30%. We can also help you move to a more data-driven, real-time, digitised relationship with suppliers, as well as identify opportunities to improve procurement terms and processes.

**Asset optimisation**

Plant, machinery and vehicles (PMV) are a critical part of project delivery and the third biggest project cost behind labour and materials. Buy or rent is a key return-on-capital-investment decision for engineering and construction firms. Efficient utilisation, optimisation and management of assets can have a significant impact on profitability. PwC can support you in many ways, from the assessment of current assets to developing forward-looking cost profiles for operating, maintaining, refurbishing and replacing, to sustain standards of service.

**Outcome**

The project resulted in an immediate increase in the profitability of the business of around 5% – some 100 million Saudi Arabian Riyal (SAR) on a projected two-year spend of 2.15 billion SAR. But there was also the long-term impact of making such savings sustainable by putting a more efficient delivery model in place which provides procurement services to projects with the optimal combination of minimising cost, responsiveness, flexibility and control.

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**Working together – improving profitability**

**Context**

A major Middle East-based construction firm specialising in infrastructure and residential mega-projects had been through a period of record exponential growth, but at the expense of diminishing profit margins. It faced a crisis with a shortage of liquidity and a major working capital problem. Projects suffered and, in many instances, the quality of work delivered by subcontractors was compromised while others defaulted. PwC was commissioned to conduct an assessment of the supply chain, analyse spending and recommend best practices to optimise procurement operations.

**Approach**

PwC sought to identify the impact of procurement on the profitability of the business. A very systematic approach was adopted, which yielded a quantitative and qualitative analysis which was used as base for highlighting system and process inefficiencies, benchmarking performance, identifying savings opportunities, and recommending an implementation plan to capture savings, improve performance and increase profitability. A market assessment was conducted for each spend category, to determine industry profitability levers, market trends, government regulations, and other factors contributing to the profitable procurement of items and services. A sophisticated spend analysis was conducted, with PwC drilling down and analysing the supplier base, spend consolidation, item price variance, standardisation of products, competitive sourcing strategies, subcontractor performance, bidding and tendering strategies and their impact on unit rates, etc. to generate savings opportunities, improve the bottom line, and ultimately increase profitability.
Putting your priorities first

Capital projects & infrastructure

Our Capital Projects & Infrastructure (CP&I) practice supports our clients throughout the initiation and execution of large-scale projects. PwC has a dedicated international practice supporting investors and contractors. Our focus is on delivering value from capital projects for you, our client. Our services are particularly relevant for both large-scale public and private sector clients of the engineering and construction sector, but we also work with delivery partners, contractors and engineers engaged in delivering large-scale capital programmes.

Sound project definition and effective decision-making at the outset and throughout a capital project are critical to a successful outcome. It’s obvious, and most entities involved in a project know that. But still outcomes go wrong. Many of the causes come down to people-centred issues. There are plenty of books on project management. The science of project management is well known. But the way in which it is delivered, the people and the cultural aspects are often what pose the challenge.

The ability to influence project success and enhance value is greatest at the start of project evaluation and rapidly declines as a project advances towards implementation. The quality of decision-making in the early stages is therefore a critical factor in project success. In the context of today’s highly volatile markets and an uncertain economic outlook, it is more critical than ever to have a robust project appraisal process in place in which all market, technical and execution uncertainties are factored in to key decisions.

Avoiding surprises: getting the right risk management in place
We can help you select from a comprehensive suite of control tools and procedures to address detailed planning and scheduling, active change management, cost controls, risk management, quality controls, safety management contract administration and regulatory compliance. You will also want to establish detailed control analytics that regularly analyse performance parameters and report timely, relevant and accurate metrics to senior management and project stakeholders.

Safeguarding success: strengthening project management and governance
We can help you make the organisational changes needed to ensure you are ‘project-ready’, or determine whether you need to make changes in the middle of the project. We can help you design and implement major change programmes that improve performance, build capabilities, and strengthen behaviour over time. Our support gives you the guidance and the push to drive organisational change—such as moving from good to great performance, cutting costs, or turning around a crisis.

Always ready: being your strategic delivery partner
During the delivery phase, we can help you keep on track with support on scheduling, construction management, progress measurement and reporting as well as risk and chance management. If problems arise, we can recover matters with status reviews, schedule slippage analysis, improvement measures and other interventions. We can help prevent disputes but, if you do have to go into dispute, we can assist with resolution and settlement.

Getting the project funded: overcoming obstacles
We have the expertise, broad experience and an extensive network to assist in structuring the funding of complex infrastructure projects. We can ensure all relevant funding issues are raised and addressed in time, efficiently and professionally, thus avoiding the risk of not having the right funding in place or suffering from a poor funding structure.

How PwC can help you
Effective project appraisal: getting it right from the start
Clear project definition and effective decision-making at the start of a capital project are critical to a successful outcome. We can assist you in taking the right actions early to avoid costly errors later. Estimating a large first-of-a-kind project or a programme that spans multiple years with multiple projects is always high-risk. We can help you avoid poorly informed, inadequate, or optimism-biased cost estimates and identify the elements that pose the greatest risk to delivery.

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Working together – improving project controls and selecting a cost-management system for a major civil engineering contractor

Context
A major civil engineering contractor with operations in five countries across Asia had seen their order book expand substantially within a short period and required a consistent approach to commercial management processes and the reporting of project costs in order to maintain an accurate overview of their project portfolio.

Approach
PwC was engaged to conduct a maturity assessment of existing project controls and cost-management processes and systems across each of the contractor’s international divisions. We recommended a number of improvements and assisted in their implementation. This included the development of commercial standard operating procedures (SOPs) and the evaluation, procurement, and implementation of a cost-management system. We developed the Proof of Concept for multiple system vendors, which included the development of Use Cases and demonstrations with sample project data.

Impact
The implementation of the cost-management system and development of SOPs will improve the contractor’s ability to forecast project and portfolio costs with up-to-date data from a single source. The contractor will be able to use a standard automated workflow for the commercial management of its projects across its international divisions, and will facilitate standard management reporting and dashboards to provide senior management with a consistent suite of reports.
Global engineering & construction statement of capabilities

Putting your priorities first

Digital technologies

Rapid advancements in technology platforms, digitisation, mobile connectivity and customer expectations are creating the conditions for engineering and construction companies to transform many of the ways they do business. Digital technologies are especially valuable in improving operational efficiency, as well as enhancing external and internal collaboration. They are also having a positive impact on innovation capacity and sourcing and supply chain management.

By streamlining the way information, content and process control are packaged, digitisation offers engineering and construction companies new ways of engaging with customers, planning and tendering for projects, delivering projects and providing new value-added services and enhancements. In an era of the ‘internet of things’ and connected smart cities and communities, digital technologies are going to be embedded more and more in the built environment as well as in companies’ internal and client-facing systems. An effective digital strategy is increasingly important in driving growth, reducing time and cost, streamlining workflow and customer engagement, and enhancing knowledge and talent. Without it, engineering and construction companies risk losing out to more agile competitors, or even falling prey to disruption of the sector by companies with new business models taking advantage of the disintermediation opportunities that digital technology opens up.

How PwC can help you

Developing a clear digital strategy
We can help you to update your business strategy with a clear vision of how digital technologies can help to deliver competitive advantage, together with a robust plan that includes concrete measures of success. We can help you pinpoint the ways in which digital technology can add value, streamline your operations and enhance internal and external collaboration. We can also help you take the steps to identify and capitalise on the new business opportunities offered by digital technology. Through clear strategy, we can help you map your digital journey.

Creating your digital user experience
We can help you make sure the investment you make in digital technology is focused on creating the right user experience that will boost your engineering and construction project success and competitiveness. What is the experience you need to deliver for both your staff and your partners and clients? Is it going to be successful in streamlining processes and improving operational efficiency?

Ensuring digital engagement
Your investment in digital technology is worthless if it is not successful in engaging with your staff, suppliers and customers. We can help ensure your efforts are focused on the things that will create ‘stickiness’ and loyalty, making processes easier, increasing levels of self-service and automating processes. Digital processes can help you deliver much more real-time information on what is happening on a particular project – live information for all the relevant people on how much of the budget has been used, what workflow has been completed and what inputs lie ahead. We will help you prioritise the initiatives that will have the most cost-effective impact.

Leveraging and integrating existing technologies
We can help you ensure that existing technology platforms, such as SAP systems, are integrated into your new digital communications streams, enabling you to get data that sits in the SAP and immediately send it, for example, to a mobile device. We can also help you steer your technology development in ways that recognise that technology platforms now need to be able to evolve fast and frequently rather than stay static for years.

Strengthening cybersecurity
Cybersecurity risks have evolved dramatically but, in many cases, the approach businesses use to manage them has not kept pace. For engineering and construction companies involved in security-sensitive projects, it is of paramount concern. Cybersecurity isn’t just about technology and computers. It’s about protecting people, information, systems, processes, culture and physical surroundings. PwC will give you that confidence by helping you shape a broader strategic response to cyber risk and target investment on what matters most. We can help you understand your current capability and put in place a plan to target cybersecurity investment in the right places. We can also help you respond to actual cyber incidents and advise on the legal issues surrounding breaches, data privacy and protection.
Working together – PwC and a global engineering construction and services company

**Context**
A leading global engineering construction and services company supporting the energy, petrochemicals, government services and civil infrastructure industries needed to replace a legacy sales system that wasn’t scalable and was unable to support multiple business units.

**Approach**
PwC sought to use a very simple and focused approach. We leveraged the knowledge already gained from working with the company on its back-end processes and technologies and applied that to the front office. We suggested they built on the success that they already had with one business unit adopting a more effective CRM solution and used that as a model for replicating it across the organisation. So rather than starting from scratch, they are building on the good aspects of what they already have.

**Outcome**
The result is a faster move to a standardised customer relationship platform across the organisation. The company can expect to empower their workforce as well as to enable higher levels of collaboration with higher levels of transparency into their sales pipeline and relationships. They will have information accessible on multiple devices, particularly mobile devices, whenever it’s needed. Productivity will be boosted with much more real-time information on what is happening on a particular project.
Putting your priorities first

Deals

Engineering and construction growth potential remains somewhat constrained in mature markets and sectors but is substantial in fast-growth countries and some new technological areas. The key global trends of increasing urbanisation, the economic shift from west to east and into Africa as well as changing demographics all point to an increasing level of construction output in the next decade.

The largest engineering consultancies, EPC contractors and programme managers are getting bigger through acquisition as they expand their global footprint and follow their clients to territories with growth opportunities. Those that are looking to move into different parts of the value chain, generate a higher proportion of their revenue through long-term services frameworks, or bring in different skills, will often look to do this through merger, acquisition or joint venture.

Successful deal delivery requires a great deal of care in determining the right strategy, identifying targets, conducting negotiations and undertaking both commercial and financial due diligence. Due diligence is particularly important in a long-term contract environment where you need to be very clear about the status of projects you are acquiring.

How PwC can help you

PwC can offer expert deal structuring and financing advice at all points throughout the deal cycle. We deliver value through quantitative analysis, rigorous implementation and leading-edge structuring techniques, carrying out pre-acquisition due diligence, ensuring tax-efficient deal structuring and post-deal integration. Crossborder deals are growing rapidly and are becoming much more complex. At PwC, we work alongside your commercial teams, bringing our multidisciplinary expertise to support you, operating across all key markets with your central and local teams.

Divestitures and sell-side advice

Our engineering and construction specialists help you complete and extract the maximum value from your transactions. We identify appropriate buyers and will implement a sale to generate the best price for our client.

Delivering deal value

We help find the targets, analyse the strengths and weaknesses, identify synergies and potential improvement opportunities, negotiate terms, access capital, manage the post-deal integration process, carve out non-core assets, and make changes to realise improvements in long-term performance.

Restructuring and recovery

Our recovery professionals are valued by clients for their ability to quickly identify problems, gain cooperation, develop viable solutions, and implement them with sensitivity and precision. Our experienced teams offer a full range of advisory and implementation services, from turnaround and restructuring plans to optimised exit strategies.

Mergers and acquisitions

We provide independent valuation advice for your business. By offering robust planning for the parties to a transaction, we enable clients to capture the most value possible and implement changes to deliver synergies and improvements after the deal.

Commercial strategy

Our commercial experts can assess markets and forecast demand/supply for the future, analyse revenues and project operational costs. We can help with capital expenditure planning and management team’s strategy reviews.

Financing

Our finance professionals have a wealth of expertise to provide support with financing options assessment, commercial and financial structuring, overall transaction support and asset valuations.

Integrating sustainability in transactions

We can help you in integrating environment, social and governance criteria in your transactions. Should you be a vendor or a buyer, we can assist in assessing the risks and potential of a portfolio.
Working together – divestiture services for the sale of €6.5 billion overlapped assets

Context
PwC provided divestiture services on the disposal of €6.5 billion-worth of assets as part of the anti-trust requirements following the merger between two global industry leaders. The divested assets were located in 12 countries across four different continents.

Approach
The merger calendar dictated the signing date, leaving no more than seven months for the entire disposal process. We mobilised a team of around 180 people at very short notice, covering all the required workstreams, including finance, business plan modelling, carve-out, tax, pensions and data room management. We covered the entire value chain of the disposal by providing services in financial/tax/pension/operational due diligences, target operating model, business plan modelling, tax structuring, and SPA support, with strong interaction between all streams to ensure full alignment of the outputs. We also supported management interaction with different kinds of potential acquirers (strategic buyers vs. financial sponsors), notably in the preparation of management presentation and Q&A sessions, taking into account their respective interests.

Impact
Despite a challenging and changing timetable, due to late change-scope requirements from the anti-trust authorities, we were able to meet all deadlines thanks to our one-team flexible organisation. Within the seven-month period, the two groups successfully announced exclusive negotiations further to a binding commitment made by the acquirer regarding the sale of the disposal assets for an enterprise value of €6.5 billion. We provided relevant historical and projected financial information. Standalone assumptions were also updated in real time, using a flexible model built by our operational carve-out and business plan modelling teams. Among other achievements, our virtual data room uploaded and dispatched tens of thousands documents and handled several thousand questions from bidders. Together with the banks, we organised over 100 expert sessions with bidders in different time zones in less than four weeks.
Putting your priorities first

Financial, reporting, assurance and tax

The judgements involved in accounting for long-term contracts, frameworks and development projects, as well as the fragmented nature of the supply chain and prevalence of joint ventures, add to the complexity of financial reporting in the engineering and construction sector. The challenges of reporting increasingly go beyond historical financial accounts, with stakeholders seeking information on order backlog, health and safety and other non-financial measures such as emissions and diversity. Tax considerations too are not straightforward, particularly where you are operating across international borders. However, there are also opportunities for tax efficiency, for example where companies are investing in new technologies.

Our experience in the sector means we are well placed to offer expertise in assurance and reporting for engineering and construction companies. Our experience of accounting for long-term contracts means that we understand the need to examine contract terms both with clients and the supply chain and we know how to challenge cost-to-complete assessments. Additionally, we are leaders in the development of non-financial performance reporting, helping our clients respond to the need for greater transparency, improved corporate governance and sustainability reporting.

How PwC can help you

Revenue recognition
The IASB and FASB have been collaborating on a new revenue recognition accounting standard for a number of years. We have been extensively involved in discussing the implications with our clients and inputting concerns on behalf of the industry back to the standard-setting bodies. While the standard now issued does not create as fundamental a change for the sector as appeared to be the case in the early discussion paper and exposure drafts, there is still much for users to consider prior to implementation – for example, around contract segmentation, changes and variations, claims and also disclosure.

Joint operations and joint ventures
The use of partnering in the sector to spread risk and combine skills and resources is common, in particular on major programmes or infrastructure projects. Accounting for these arrangements again needs careful consideration of both the legal structures and commercial considerations.

Order book/backlog reporting
The reporting of order backlog is increasingly prevalent among quoted companies and an important source of information for users of financial statements. There is a degree of inconsistency around what is included within backlog, in particular when considering framework agreements and projects where preferred-bidder status exists.

Environmental and non-financial reporting
We are the leaders in the development of non-financial reporting, helping our clients respond to the need for greater transparency, improved corporate governance, and business models based on the principles of sustainability. We can provide assurance around environmental reporting, ensuring compliance with CO2 and other emission-monitoring requirements and also reporting on health and safety statistics, such as accident frequency reporting.

Tax
Tax planning when working across borders is very important. Considerations include withholding tax legislation, consideration of entity or branch structures and also personal tax and employer taxes connected with individuals working on projects outside their home jurisdiction. Our international team of tax professionals can help you structure your activities so that they manage and report your tax affairs effectively and so that your compliance arrangements are robust.
Given the status of discussions, the timing of a final standard is undetermined.

***Given the status of discussions, issuance of the final standard could be delayed to 2014.

Engineering and construction industry – Constructing change: A standard-setting roadmap

FASB/IASB projects:
- Discontinued operations
- Fin. instr. - classification & measurement
- Consolidation
- Going concern
- Intangibles
- Goodwill
- Redeliberations

Engineering & construction
- Cautious confidence
- Building on strengths to enter new sectors
- Pessimistic about the economy, 67% of engineering & construction CEOs.
  Despite their reservations about the last year, they think there are more opportunities for growth than peers in other industries: only 28% believe the economic outlook than their US and China counterparts.

But Saudi Arabia and Africa are also steeling themselves for major disruptions at lower gearing up for disruptive megatrends:
- Corruption, compared to 58% are also worried about bribery and
- 50% are also concerned about foreign competition makes them
- More nervous. But they're generally more relaxed about

The oil price collapse has been a mixed blessing from an economic perspective, supporting
- FLACCON: growth, offset weak capital markets, and stimulate subdued commodity prices, leaving the Eurozone. A flurry of transactions in the region indicate a healthy deal market

The strong dollar could drive US outbound deals in the coming months since foreign

Business restructuring and strategic alignment was among the primary drivers of M&A in the last quarter, though investor groups also had
- Pressure on the construction segment, along with continued drop in building products
- and construction industry mergers and acquisitions analysis. The number of transactions of $50 million or above increased to 64, a 73% improvement over the first relative to the prior quarter in both volume and value of transactions. The number of

M&A activity accelerated sharply in the second quarter of 2015 with substantial increases
- Involving environmental resource engineering specialists (by investor groups, in both cases).

In fact, 41% of engineering & construction CEOs
- More confident than their five years, although 31% don't expect any
- More than half of all engineering & construction
- New opportunities for growth?
- Capitalise on new opportunities for growth?
- Reassess impacts processes
- Validate changes
- Navigating change
- Communication, knowledge

Material gains in sustainability
The business case for the construction products sector

Global construction
20 30
A great forecast for the construction industry in 2016

A selection of our thought leadership publications on engineering & construction industry issues
Addressing bribery and corruption

Bribery and corruption remain an endemic threat to the reputation and wellbeing of businesses operating in the engineering and construction sector. High-value projects, complex supply chains and contractual structures, high levels of interaction with government and the inherent challenges of many of the higher-growth markets conspire to make this issue particularly difficult to address and stubbornly persistent. The consequences for businesses which fall foul of anti-corruption laws are potentially severe and there has been a significant intensification in law enforcement and regulation.

In international surveys, engineering and construction companies are consistently found amongst those sectors most susceptible to bribery and corruption. But there is no reason to suppose that people who work in the sector are inherently more corrupt than others, nor that the desire to see business done transparently and cleanly is any less strong than in other sectors. The reasons for the relatively high levels of bribery and corruption are rather due to the nature, scale and structure of the projects, as well as geographical, cultural and other external characteristics that may apply.

Through a combination of enhanced legislation and regulation, concerted law enforcement activity and other measures such as debarment from public procurement for corporates found guilty of corruption, the likelihood and extent of adverse consequences of bribery and corruption have steadily increased over recent years. Many countries have followed the US and the UK in updating their anti-bribery laws and beefing up enforcement – and not only in the west; major developing economies such as India, China and Brazil have recently witnessed significant developments in this area too.

How PwC can help you

Knowing your enemy

Without a sound diagnosis, there can be no effective cure. No business risk can be effectively mitigated unless it is properly analysed and understood. This requires more than a general recognition that bribery and corruption are risks inherent in the business, although this is a good start. It requires a comprehensive and up-to-date analysis of all business activities and how these might give rise to the risk of bribery or corruption. Only such an analysis will enable an organisation to implement, or remediate as necessary, an appropriate anti-bribery programme.

Identifying the risks

Engineering and construction projects typically involve many contracting parties and complex financing arrangements, often including the use of public monies, multiple phases, numerous stakeholders – directly or indirectly – and they may unfold over long periods of time. All of these factors, among others, will tend to heighten the potential for breakdowns in accountability and governance, potentially leading to bribery and corruption, or other misuse or misappropriation of funds and resources. The inherent risks of a given activity will tend to be compounded by the outsourcing of that activity to a third party, since you cannot outsource your overall legal responsibility. At the same time you are inevitably reducing the amount of control you have over how the activity is conducted. As well as analysing the underlying risk, there is also the need to assess the risk associated with the third party, through appropriate risk-based due diligence.

Moving beyond compliance to a positive ethical culture

PwC can help your organisation travel further along the anti-corruption path. The key challenge is to seek to move from a system focused on compliance to a positive culture of ethical thinking, decision-making and behaviour. This may sound idealistic, but it is in fact simply more effective. Compliance-focused programmes do not fire peoples’ imaginations and have a tendency to encourage avoidance and circumvention. The attempt to prescribe rules for every situation is doomed to fail. Values-based programmes focused on the empowerment of people to make ethical decisions are likely to work better, certainly in the longer term.

Putting sound processes and controls in place

We can help you put in place the building blocks of an ethical culture covering governance and organisation, risk assessment, policies and procedures, training and communication, reporting, monitoring and assurance. Most importantly, we can help you make sure they are real and effective by focusing on measures that are proportionate and clear and that truly empower people.
Outcome
Ultimately, the client was able to achieve a significant cultural shift, with ethical business thinking and practices built into business as usual. Specifically, with our support, it was able to develop:

- anti-corruption policies and guidelines which are comprehensive in scope and practical and real to people on the ground
- targeted training materials and a strategy for delivering them
- a clear assessment of existing controls and the identification of deficiencies requiring remediation
- new and improved procedures and controls to mitigate the risk of corrupt conduct
- a clear road map and programme for implementation of new policies, guidelines and controls.

Outcome
A number of issues were uncovered. These included the arrest of the owner of a potential acquisition target on charges of corruption and misappropriation of government funds, and identifying that one of the targets had previously been fined for tax violations and implicated in an illegal donation to an overseas political party. We also discovered that its owner/director held shares in a company that had acted as a vehicle for the payment of bribes to a number of high-profile individuals. Our findings have enabled the client to manage the risks involved in deciding whether to pursue an acquisition and mitigate local market corruption and reputation risks.

Working together – integrity due diligence on acquisition targets

Context
A global construction company instructed us to undertake a number of detailed integrity due diligence reviews on acquisition targets across central and eastern Europe. Our work sought to identify information and analyse any potential regulatory and reputational risks involved in the event of our client deciding to proceed with an acquisition.

Approach
On each acquisition target, we undertook detailed public records research and also discreetly gathered market intelligence from our network of industry experts and sources. This was focused on the target’s background and commercial history, ownership structure, business activities, reputation, government connections, political contributions, and involvement in litigation/prosecution.

Working together – rebuilding compliance and ethics

Context
A global engineering company, listed in the US as well as in its home country, found itself the subject of multiple criminal and regulatory investigations by various European law enforcement agencies as well as the US Securities Exchange Commission and the US Department of Justice. Against this background, the company had to respond appropriately to the allegations, rebuild trust with regulators and demonstrate that it had invested in a substantial remedial programme.

Approach
We worked closely with the client on a number of aspects of its remediation programme, including the:

- drafting of new anti-corruption policies and guidelines
- design and delivery of an extensive group-wide, multi-tiered, anti-corruption training programme.
- evaluation and gap analysis of anti-corruption procedures and controls, both centrally and in local business units
- design of new and/or improved procedures and controls
- design and support for a group-wide rollout of all of the above elements.
Responding to sustainability challenges

More and more companies integrate sustainable development issues in their activities. Corporate Social Responsibility (CSR) is an important element in creating potential added value for many companies. Developing a long-term vision of their activities leads them to see environmental, human resources, governance and social issues not only as sources of regulation to comply with or risks to limit, but also as levers to reduce costs and to explore new market opportunities.

The built environment accounts for 40% of global energy consumption and one third of global greenhouse gas emissions. Construction companies, building products and construction materials manufacturers, as well as real estate and building-intensive industries, are increasingly focused on how they can reduce their environmental footprint. The ability to design and deliver eco- and energy-efficient buildings and infrastructure is a growing source of competitive advantage in the sector.

In addition, the ability to develop human capital, implementing the best labour practices and health and safety record, is another key factor for companies gaining competitive advantage and establishing themselves as preferred contractors. Such status also depends on their capacity to show the highest corporate governance, code of conduct and anti-corruption standards, and to demonstrate effective stakeholder management.

How PwC can help you

Developing your corporate social responsibility strategy

We help many companies in the construction industry to define their CSR strategy. Based on our experience, we can provide you with a complete diagnosis of where you are regarding CSR and help you to develop your strategy, through the definition of material issues and key indicators. We can also help you develop new business models based on the principles of sustainability. Using a combination of subject matter expertise, desk research and data analysis, consultation of stakeholders, and sector benchmarking of best practices, we can help give you a clear roadmap for where you want to go, and how to achieve it.

Improving environmental and socio-economic performance

We can support your operational strategies to reduce your environmental impact and increase your socio-economic performance. In close discussion with your teams, we can map your operations and your assets portfolio in order to identify areas for improvement. We can develop tools, based on existing material such as carbon balance, to guarantee performance follow-up and optimisation. We can also provide you with an eco-valuation programme, accounting for the financial consequences of potential improvements, assessing global costs and added value.

Providing assurance and reporting

We are leaders in the development of sustainability performance reporting, assisting our clients to respond to the need for greater transparency. We can help you put reporting in place, improve it and make it more reliable. From an assurance perspective, we can carry out verifications for your CSR-related reporting, whether for relevant regulations or on a voluntary basis.

Developing eco-design of buildings and construction materials

We can help you to assess the environmental and social impacts of your buildings and products on the whole-value chain, taking into account economic issues, in order to integrate this product-oriented approach in your strategy. This will help you to increase value, reaching high standards in certifications such as BREEAM in the UK or LEED in the US. PwC uses its expertise in life-cycle assessment, based on international ISO 14040 and 14044 norms, GhG Protocol methodology for carbon footprint, state-of-the art social metrics and total possession cost assessment.

Strengthening the sustainable sourcing and control of subcontracting

PwC can assist you to create equitable relationships with partners, suppliers and subcontractors, in order to limit social and reputational risks but also to integrate them in your progress plans to speed up achievement of your goals. We can help you to assess them in terms of environmental and social performance, based on our experience in responsible procurement, consultation of your suppliers and the SA 8000 standard, which provides an international framework for ethics information such as labour rights, health and safety, equitable compensations, forced and child labour. We can provide you with material to include environmental and social criteria in contracts and to accompany them in the improvement of their performance.

Developing smarter and more eco-friendly districts infrastructure

In an era of smart technology and increasing technological integration, we can support your involvement in smart city and sustainable infrastructure projects. Such projects typically involve multiple public and private stakeholders and we are on hand to advise on stakeholder coordination and reporting, constructive public-private partnership contracts and efficient project management. We are able to draw on our network of expertise in subjects such as territories development, eco-mobility, social and functional diversity, energy, waste and water management and biodiversity.
Working together – implementing CSR commitments

Context
One of the world’s leading construction companies, with a presence in around one hundred countries, asked PwC to help it put its new corporate social responsibility (CSR) into operational reality across all the group’s entities.

Approach
PwC began by assessing the level of understanding of the group’s new CSR strategy among the various entities, conducting more than 40 interviews with members of their executive committees. We then developed a maturity scale to assess where each entity was against each CSR commitment. The scale had four levels for each commitment, adapted to the core business activity, geographical footprint and size of each entity. Each entity was then able to conduct a self-assessment of where they stood in relation to the group CSR strategy, using self-assessment software that we created, with 16 forms covering the eight commitments.

Impact
The roll-out of the group’s strategy by the entities was improved and operational action plans were implemented. For each CSR commitment and each performance level, the software provides them with clear and concrete advice and actions to put in place to improve their performance and progress to the next level. In this way, participants get involved in implementing and achieving the group strategy.
Emerging markets

Attractive economic performance, population change, rapid urbanisation and the need for infrastructure development are all contributing to robust long-term prospects for engineering and construction firms in growth markets. Frontier markets in Africa, south-east Asia and Latin America have stepped into the limelight, with growth markets doubling to a 60% share of global construction activities by 2025 versus 2012.

Growing market governments have significantly increased investment in construction projects, both housing and infrastructure, while continuing to search for new funding sources. Increased utilisation of public-private partnerships to finance large-scale projects is expected, with growth markets such as India, Philippines and Vietnam already stepping up efforts in this area. The New Development Bank has been established by the BRICS countries – Brazil, Russia, India, China, and South Africa – with US$100 billion in initial authorised capital at its disposal.

Competition in growth markets has heightened in the recent years, with engineering and construction companies from ‘developed’ growth markets, especially China, gaining traction. State ownership and support from state banks are giving them good capacity to expand overseas. Alliances have become an important consideration for western engineering and construction companies in some growth markets. For all companies, the challenges of supply chain logistics and recruitment and retention of skilled staff are considerable. Competition for skilled talent is high in growth markets, and local capacity-building and empowerment is also an important priority. Companies also need to be adept at dealing with often ambiguous business environments, considerable bureaucracy and corruption, as well as complex tax and regulatory systems.

How PwC can help you

Support from our Growth Markets Centre

PwC’s Growth Markets Centre (GMC) is a global intelligence unit dedicated to helping engineering and construction companies navigate market entries and expansion in complex growth markets. Companies have traditionally operated in growth markets via project delivery by contractors, while retaining their headquarters and key infrastructure in developed markets. But the requirement from growth-market governments for local content has created a need to establish local operations and a local value proposition.

Preparing your on-the-ground operations

We can provide a holistic growth-market framework consisting of four key pillars – value proposition, operating model, financial & human capital, and business environment – to help engineering and construction companies prepare on-the-ground operations and determine the right entry as well as operations in challenging markets. Easy access to in-country market teams and information provides you with the intelligence to better understand market needs and culture. Additionally, proven methods, databases and tools from the GMC can be tailored to your growth-country requirements.

Developing your value proposition

Engineering and construction companies have to differentiate themselves from local and multinational competition, especially those from the ‘developed’ growth markets such as China. Highly competitive bidding is thus a pressing need when entering and expanding in growth markets. In order to maintain profitability, companies will have to balance their pricing against revenue maximisation. We can help companies to assess market potential and customers’ requirements and expectations, helping you to bid for the project at the right pricing level and evaluating whether the market offers sufficient value and volume for investments to pay off.

Assessing and handling the business environment

Engineering and construction companies operate in a highly regulated environment, often having to cope with a large number of licensing issues and duties. The need to import machinery and share intellectual property such as secured construction plans across territories adds to the growth market challenge. We can help companies measure the conduciveness of the growth market’s business environment by understanding local regulations and tax structures as well as the institutional landscape - legislative and judicial risks, country and strategic risk, both political and economic. It is an essential part of planning for a successful market entry and expansion strategy.

Establishing the operating model

We can help engineering and construction companies to develop the appropriate capabilities to grow profitably in new growth markets. Key issues include the identification of business/operating businesses to import versus those that are better localised, and the development of a strategic and operational framework for supply chain management and optimisation.

Supporting your human capital needs

Upgrading the skills of the local workforce and the recruitment and retention of local talent are crucial for multinational engineering and construction companies in growth markets. A key issue for companies is also how to best manage intercultural differences and integrate local talent effectively with the firm. PwC can help you build effective partnerships and teams for success in growth markets. This involves identification of partners or acquisition targets to strengthen your company’s value proposition and capabilities, developing and building the local team, as well as developing and promoting an appropriate culture in the team.

Putting your priorities first
Working together – winning business in emerging and frontier markets

Context
PwC was asked to assist a Chinese construction company with a bid for the master planning of the Kyauk Phi special economic zone (KPSEZ) in Myanmar. This included a deep sea port, industrial zone and residential area.

Approach
PwC’s growth markets team supported PwC colleagues with case studies on similar special economic zone developments, identified potential short-term and long-term challenges, summarised key learning from successful port, industrial and residential zones globally, and identified SMEs with special economic zone knowledge. PwC’s key role was in providing financial and commercial services for bid preparation which, among others, included:
• advising the company in formulating a winning strategy for the bid and building a solid business plan for the bid
• conducting a macroeconomic study for KPSEZ opportunities and positioning
• reviewing the company master plan for developing the three elements of the project
• building robust financial models to assess the viability of the businesses for these three elements and support with financial analysis for key decisions for the bids
• tax and accounting advice in relation to the bid structuring and to build financial forecasts
• supporting the company in the bid submission, bid presentation and interview, and negotiation up to the financial close.

Outcome
The company was selected as the preferred bidder for the development of both the deep sea port and the industrial park in the KPSEZ. PwC is continuing to work with the company on the engagement, supporting them in bid negotiations.
What makes us different?

Why more than 80% of Fortune Global 500 companies work with PwC...

We take the time to listen, question and understand their goals and their competitive and regulatory environment. Then we tap into our global network, deep industry knowledge, 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 with clients 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 companies work with PwC.

Our knowledge

Our worldwide network of industry specialists are linked by a sophisticated internal knowledge-management system, giving them the tools to input their insights and draw upon the most up-to-date information for the benefit of our clients. Our programme of ‘thought leadership’ is widely respected. From roundtable client discussions to global surveys, we share knowledge with our clients on industry issues. Each year, we gather and disseminate opinions on the issues that are of key strategic importance to our clients and the challenges that lie ahead. Our knowledge draws on the insight of our worldwide network of sector specialists as well as the sector itself.

Our people

The scale of our resources means we can address our clients’ needs whenever and wherever they arise. Our skilled teams are located in areas where your business operates today as well as in other destinations where your future growth strategy may take it. We aim to draw our people from the very best pool of talent and develop them to be the very best in our sector. We ensure our people are immersed in local knowledge about the markets they serve but also gain the global perspective that comes from a worldwide organisation.

Our reach

We can be wherever you need us to be. With a network of over 5,000 staff dedicated to the engineering and construction industry, we are able to be on hand to respond to your needs. We work with all types of engineering and construction companies in all different markets. Our far-reaching global footprint enables us to provide clients with a greater depth of talent, resources and know-how.

Representative E&C audit and other assurance clients

| Arcadis | Arup | Bechtel | China Communication Construction | China State Construction | Granite | Kier | Kone OYJ | Kyocera | Laing O’Rourke | Odebrecht | Owens Corning | Samsung C&T | Samsung Engineering | San Faustin/ Tenaris | Votorantim | Wolseley | WS Atkins |
|---------|------|---------|----------------------------------|--------------------------|--------|-----|--------|--------|-------------|----------|---------------|-------------|-------------------|----------------|----------------------|------------------|---------|---------|---------|

Representative E&C advisory and tax clients

| ACS | AECOM | AMEC | Balfour Beatty | CH2M Hill | Fluor | HOLCIM | KBR | Lafarge | Leighton | Lend Lease | Skanska | USG Corp. | Vinci |
Local coverage, global connection

A global network of functional and industry specialists

PwC’s engineering and construction practice consists of nearly 5,000 professionals who serve the engineering and construction industry and is a part of an industrial products group that consists of more than 31,500 professionals, including approximately 18,600 providing assurance services, 7,700 providing tax services, and 5,200 providing advisory services.

North America & the Caribbean
5,700 Industrial Products professionals
1,000 E&C industry professionals

Middle East & Africa
1,360 Industrial Products professionals
190 E&C industry professionals

South America
1,960 Industrial Products professionals
450 E&C industry professionals

Asia
9,000 Industrial Products professionals
1,000 E&C industry professionals

Europe
12,700 Industrial Products professionals
2,000 E&C industry professionals

Australia & Pacific Islands
1,000 Industrial Products professionals
200 E&C industry professionals

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