

STRATEGIC ALLIANCES IN UPSTREAM OIL AND GAS

GETTING SERIOUS ABOUT COLLABORATION

By Stuart Groves and Jake Leslie Melville

IN THE PAST FEW decades, the need for expert skills and expensive, specialized equipment in the upstream oil and gas industry has created a division of labor between operators and contractors. As the industry evolves, the relationship between the two is, in some cases, shifting from a transactional approach to an association that is collaborative and mutually beneficial. Increasingly, operators and contractors are forming strategic alliances for the delivery of capital projects. When done right, such alliances can unlock significant value for both sides. Recent megamergers and other challenges facing the industry underscore the need for operators and contractors to review their relationships and see how they can create more value by forming closer partnerships.

How Contractual Relationships Are Changing

Upstream operators rely heavily on contractors to provide services and equipment. In fact, contractors now account for 20 to 50 percent of operating costs and as much

as 95 percent of operators' capital expenses. Historically, for capital projects, these relationships have been tactical, based on project-by-project agreements, such as reimbursable or lump sum contracts. Operators have managed projects and hired a host of contractors with the skills and equipment to develop these projects, keeping costs down through tightly managed competitive-bid processes and holding contractors accountable for their performance.

More recently, the contracting method has evolved into frame agreements, which have further reduced costs and, in some cases, fostered greater collaboration beyond the project-by-project approach. Frame agreements establish common protocols and standards—such as commercial base rates—that operators can use on future projects with a preapproved set of potential contractors.

Project-by-project contracts and frame agreements have many advantages, but they can be adversarial in nature and limited to meeting the contractual terms for a specific project. The more collaborative ap-

proach of strategic alliances, which some operators and contractors are now considering, could drive greater value in project delivery. These alliances may be particularly helpful in today's upstream environment, where operators and contractors are facing major financial and competitive challenges.

Operators and Contractors Face Major Challenges

These are trying times for both upstream operators and contractors, which are facing structural changes in the market and, more recently, tumbling crude-oil prices.

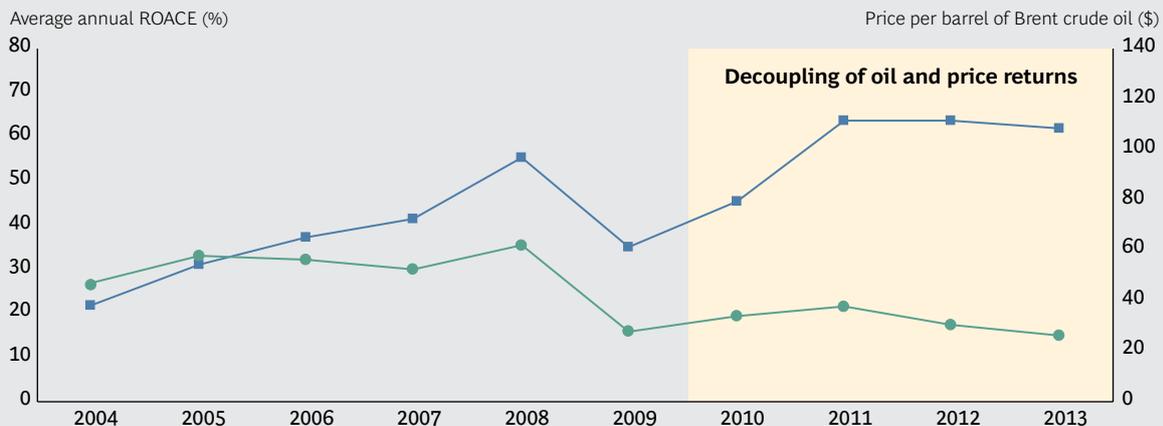
The oil and gas market's fundamental structure has been steadily deteriorating. Resources that can be exploited with relative ease are being depleted, forcing companies to undertake increasingly complex projects, such as deepwater and remote developments. These projects typically are larger and carry technical, financial, and environmental risks that are greater than more conventional efforts. At the same

time, sustained cost inflation, higher taxes, more government intervention, and a scarcity of necessary capabilities have shifted value away from operators and contractors.

The impact of these structural changes is evident in the declining financial returns of operators and contractors. From 2004 to 2009, operators' upstream returns on average capital employed was roughly 29 percent; from 2010 to 2013 it fell to 18 percent, even as oil prices increased by almost 60 percent. (See Exhibit 1.) The weaker returns reflect income growth that was flat, at best, as well as a steadily rising rate of capital employed per barrel of production. Similarly, for contractors, the annual total shareholder return plummeted from 23 percent to 8 percent during the same period. This drop was driven by declines in both margins and in the number of new sanctioned projects, as well as an increase in capital intensity.

The recent oil-price drop has exacerbated the situation. Crude oil prices have de-

EXHIBIT 1 | Structural Changes in the Market Are Reducing Profitability



Metric	2004–2009	2010–2013	Δ (%) ¹
Price per barrel of Brent crude oil (\$)	65	103	59
Average annual ROACE for operators (%) ²	29	18	-36

— Operators — Brent crude oil

Sources: Barclays; Bloomberg; BCG analysis.

Note: ROACE = return on average capital employed.

¹Because of rounding, percentages might not match.

²The average annual upstream ROACEs for operators are based on the averages of 19 oil and gas companies.

clined by 50 percent since the summer of 2014 because of weak global demand and significant production growth in the U.S., Libya, and Iraq. This slide in oil prices has also affected global natural-gas markets.

As a result of the oil price drop, operators now face declining oil and gas revenues from current production and, in some cases, have been forced to write down producing assets. Moreover, some of their growth projects are no longer financially viable. Contractors are struggling with diminishing backlogs, decreasing margins, and idle equipment. This difficult environment has been reflected in contractors' share prices, which have declined by an average of more than 40 percent since March 2014.

Operators and contractors have responded vigorously to the structural and oil price challenges. They have reduced operating expenses and cut capital budgets by an average of about 20 percent. In addition, many are now decreasing activities in once-profitable mature fields and accelerating decommissioning efforts. Similarly, contractors have announced price reductions, reorganizations, cost cuts, and layoffs. Moreover, operators and contractors are starting to consolidate to build scale and capabilities by undertaking megamergers, such as those recently announced between BG and Shell; Talisman Energy and Repsol; and Baker Hughes and Halliburton.

Although the current market performance is expected to improve, as it has done in previous industry cycles, we believe that oil price volatility, greater project complexity, and the ongoing transfer of value are permanent trends. We expect operators to face fewer growth opportunities, more costly projects, and greater liabilities—all leading to lower profits. Contractors will face a more competitive and combative environment, with rigorous price competition and tougher contracting terms. Those with clear advantages in cost, technology, and project delivery will prosper; others will suffer or be forced out. Operators and contractors will increasingly look for new opportunities to merge, divest, and form alliances to deliver increased value.

In today's challenging market, strategic alliances for capital projects provide an opportunity for operators and contractors to work together more closely, with the objective of improving the efficiency and effectiveness of project delivery, enhancing their capabilities, and strengthening their competitive positions.

Strategic Alliances Focus on a Shared Destiny

The objective of any strategic alliance, regardless of the form it takes, is to align the goals of the operators and contractors around a shared destiny, in which companies jointly invest in an activity, provide resources and capabilities, and share the risks and potential returns—all while remaining independent. Strategic alliances can involve two or more companies across multiple geographies and take many different forms, from joint ventures to equity and nonequity partnerships to industry-level initiatives. They can create new legal entities or constitute simple contractual relationships with mechanisms for sharing costs and gains.

Done properly, strategic alliances for capital projects in the oil and gas industry can result in mutually beneficial and more balanced ways of working. The benefits that each partner receives should be greater than those gained by working individually. Collaborating for the long term and more consciously sharing risk can foster innovation, reduce costs, and improve the overall safety, performance, and operability of projects by harnessing the partners' resources and capabilities.

In our recent work with clients, we have identified a number of key benefits that result from capital project alliances between oil and gas operators and contractors.

More Efficient Project Delivery. Several factors contribute to delivering projects more efficiently:

- Reduced sourcing effort because there is no need to tender new work within the alliance

- Standardized contracts and call-off procedures
- Competitive prices in return for stable work
- Increased resilience to address adverse market conditions
- Extended global reach through the expanded footprint of the alliance

More Effective Project Delivery. Several factors contribute to delivering projects more effectively:

- Greater contractor involvement in the concept design stages, when the ability to influence cost and value creation is greatest
- Continuity of personnel committed across multiple projects within the alliance, which ensures that knowledge is not lost
- Continuous improvement that emerges as a result of the stability of the alliance

Enhanced Capabilities. Developing capabilities provides the foundation to drive improved efficiency and effectiveness. Several factors contribute to enhanced capabilities:

- Access to a global, flexible, scalable, and responsive resource pool
- Shared and common standards, functional specifications, processes, and tools that enable the use of repeatable capabilities across projects
- Training, temporary assignments that enhance skills, and other personnel development
- New technology development through focused alliance initiatives

Strengthened Competitive Positioning. Several factors contribute to strengthening competitive positioning:

- The ability to deliver projects more efficiently and effectively
- Reduced risk and resource commitment in project deliveries

- Enhanced reputation by working and gaining experience in an industry-leading alliance

Strategic alliances are already common in many other capital-intensive industries that have faced rapid change and fierce competition, such as the automotive, aerospace, telecommunications, and transportation sectors. IBM, Mitsubishi, Siemens, General Electric, General Motors, and Daimler, for example, have developed new technologies and improved productivity through greater collaboration with their suppliers and customers.

While alliances are only just gaining acceptance in the oil and gas industry, several have already demonstrated tangible and sustainable value.

BP's Andrew Alliance. BP formed a strategic alliance with seven contractors for the development of its Andrew project in the North Sea in 1996. The Andrew Alliance included construction of a fixed platform with topside facilities supported on a four-legged steel frame. The contracting team comprised Brown & Root, Santa Fe, Saipem, Highlands Fabricators, Allseas, Emtunga, and Trafalgar House. BP structured the alliance to link the cost of the project to the financial rewards, which were shared among the alliance members. Functioning as a single team, alliance members shared common objectives and incentives and reduced the need for contract interactions. Despite challenging targets, the project came in 20 percent under budget and six months ahead of schedule.

CRINE. The Cost Reduction Initiative for the New Era, or CRINE, was an industry-wide program adopted in the 1990s with the objective of reducing operating and capital costs for projects on the UK continental shelf without compromising either safety or production volumes. A number of

North Sea operators and contractors participated in the program, which aimed to eliminate waste and inefficiency in the platform-construction supply chain. The companies defined functional specifications, developed standard contracts, and simplified the contracting process by creating a single industry prequalification body, which eliminated duplicative effort. The alliance succeeded in reducing the industry's overall costs by 40 percent while improving safety at North Sea facilities, although some of the benefits were later eroded by rising oil prices and the ensuing inflation. Many of the strategies and business processes developed then are still in use today.

Inspired by the success of these earlier alliances, several companies have recently formed alliances to address key project and technical needs.

Shell's FLNG Alliance. Shell is constructing the world's first floating liquefied natural gas (FLNG) facility. The massive ship will chill natural gas produced in the field—generating at least 5.3 million tons of liquids per year, according to company press releases. A frame agreement formed in 2009 with Technip and Samsung Heavy Industries was strengthened in 2012 to enhance collaboration on the design, engineering, procurement, construction, and installation of future FLNG facilities.

BG Group and KBR. In January 2015, BG Group entered into a single-partner alliance with KBR, under which KBR will provide front-end-loading engineering services, project management expertise, and technical support across BG's global upstream portfolio. According to press releases from both companies, the alliance, which could last as long as ten years, involves a new method of work between operators and contractors and includes a level of integration and collaboration that is deeper than such parties have shared in the past. The alliance will enable BG to minimize its fixed costs while retaining access to high-value technical expertise and support. It will enhance BG's productivity and agility while also providing a steady pipeline of work for KBR.

The Challenges of Building Successful Alliances

Alliances can be difficult to set up and implement, especially among large companies with well-established corporate cultures. We have identified several key areas of concern:

- *Culture Clash.* Operators and contractors find it difficult to break the typical adversarial mentality.
- *Management Focus.* Leaders become distracted by other key issues and challenges facing the business.
- *Integration Failure.* Operators and contractors do not adapt their traditional ways of working to a new way that is better suited to the alliance, and they fail to build relationships across the organizations.
- *Employee Resistance.* While leaders often support an alliance, frontline workers might approach it with pessimism—or even outright opposition.
- *Unmet Expectations.* The alliance fails to deliver the benefits that were envisioned by both companies.
- *Inadequate Contract Design.* Poorly designed contract terms and inefficient or bureaucratic processes work against collaborative behaviors.
- *Momentum.* Initial excitement in the alliance recedes as implementation challenges emerge.

How to Build Successful Alliances

Companies can mitigate these potential pitfalls by creating the proper foundation for their alliances. In our recent work with clients, we have found ten best practices for setting up an alliance. (See Exhibit 2.) They focus on approaches for partner selection and contracting and for establishing a streamlined operating model for the alliance. Four of the practices are absolutely crucial to get right; failure in any one of

EXHIBIT 2 | The Best Practices for Creating a Strategic Alliance

Partner selection and contracting

Rigorous partner selection

Ensure a clear scope of work, cross-functional reviews of contractors, and honest contractor self-assessment

Shared strategy and objectives

Ensure strong alignment of goals and approach, with a clear value proposition for all partners

Right contracting models

Match contract model with project, market conditions, and internal competencies

Appropriate risk allocation

Apply only appropriate risk to contractors to create win-wins

Streamlined operating model for the alliance

Relentless focus on governance

Develop formal governance structures to ensure efficient and effective delivery

Strong alliance leadership

Ensure that leaders are problem solvers, collaborative, well connected, strong communicators, and able to deal with ambiguity

Deep integration

Integrate technical delivery approach, locations, and people development; make building relationships a priority

Transparency in collaboration

Increase transparency toward partners and involve them early in projects; communicate widely

Value-based decision making

Identify value opportunities early and consistently make project decisions on the basis of value

Robust performance management

Develop key performance indicators linked to alliance benefits; hold regular executive reviews and resolve performance issues

Source: BCG analysis.

these critical practices will jeopardize the success of the alliance.

Rigorous Partner Selection. Operators must clearly define what is required from contractors when tendering for an alliance. This typically involves developing a clear scope of work that is agreed upon by all parties and crafting a preliminary plan that details how operators and contractors will work together. The selection process should typically involve a cross-functional review of the tender response and include visits to contractors to assess their technical capabilities, cultural alignment, and ability to collaborate. In this process, contractors must be honest about what they can deliver and what they can't.

Shared Strategy and Objectives. When entering an alliance, the partners must agree on the overall strategy and objectives. They should explicitly define the alliance's individual and shared benefits and how the alliance will deliver them, with a clear value proposition for all

partners. An operator should define an initial alliance strategy that links to the company's corporate strategy and ensures a compelling case for how the alliance will address the specific cost, technical, delivery, resource, and business development challenges. The operators should align and update this strategy with the chosen contractors, incorporating their specific characteristics and requirements. The updated strategy and objectives must be owned by all the companies in the alliance.

Strong Alliance Leadership. Alliances are difficult to manage. Challenges such as employee resistance, culture clashes, and maintaining momentum require a skilled alliance-management team. Members of this team must be collaborative leaders, problem solvers, and strong communicators who are well connected in their own organizations and able to deal with ambiguity. They should be high performers who see the alliance as an excellent career-development opportunity. Moreover, they must be fully committed to the alliance's

success, particularly when facing the many implementation challenges.

Deep Integration. Deep integration is critical to align the ways of working, foster the right culture and performance, and deliver synergies. Processes, systems, tools, and standards should be combined and shared to develop best practices for the alliance. Whenever possible, members of an alliance should work together within integrated delivery locations to ensure consistency of personnel, interface mechanisms, and time zone management. Training and temporary work assignments within the alliance should be actively encouraged. Relationship management should be a priority across all levels, groups, and geographies of the operators and contractors. Before embarking on any integration effort, operators and contractors should discuss their respective cul-

tures, agree on one culture for the alliance, and develop a plan to create it.

Defining the Future

As we have shown, operators and contractors can shield themselves from market challenges by forming alliances for capital projects, thus improving the efficiency and effectiveness of project delivery, enhancing capabilities, and strengthening competitive positioning. In our view, companies that select the right partners, define a shared strategy and objective, and use strong alliance leadership to drive deep integration can fully realize those benefits despite the implementation challenges they face. The oil and gas industry may be only beginning to embrace alliances, but we believe that greater collaboration will define the future of many operator and contractor relationships in the industry.

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