

Oil & Gas

GL Noble Denton



REINVENTING REGULATION

The impact of US reform on the oil
and gas industry



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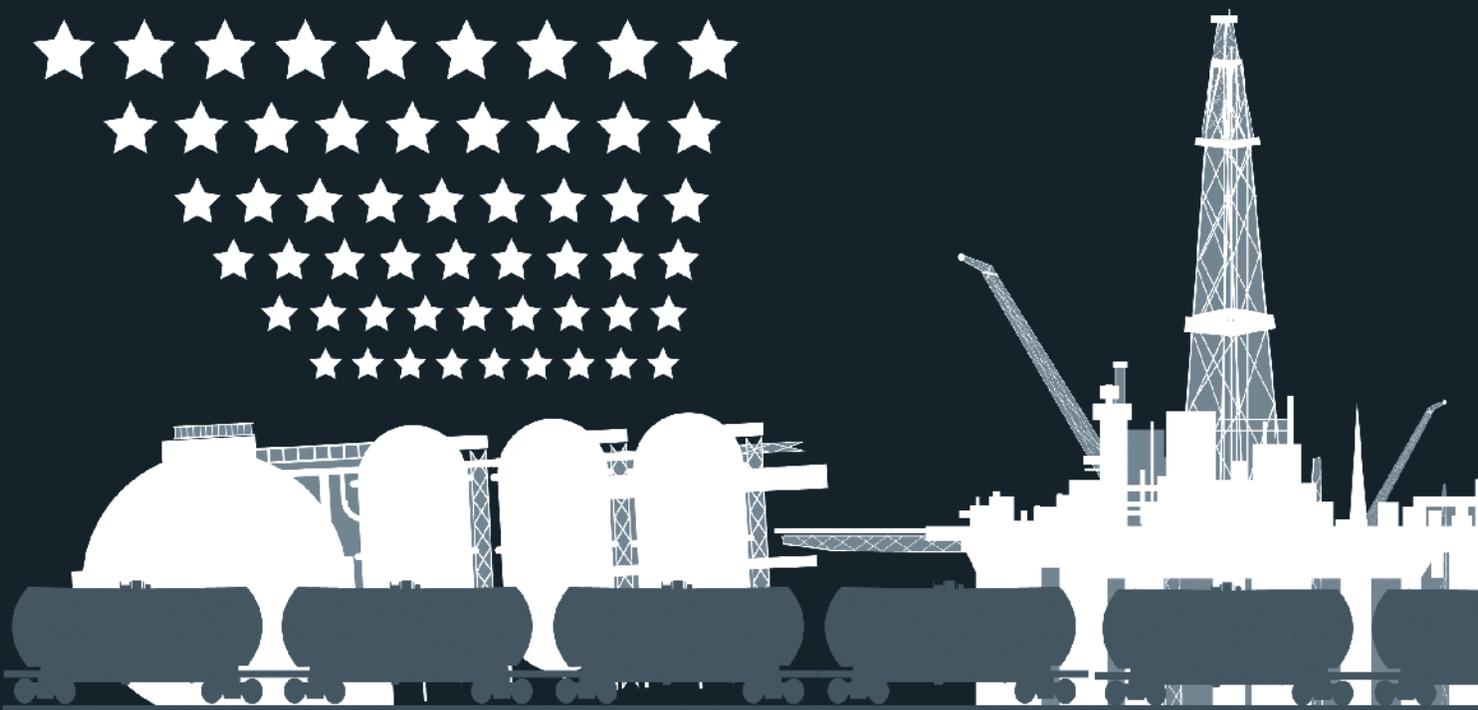
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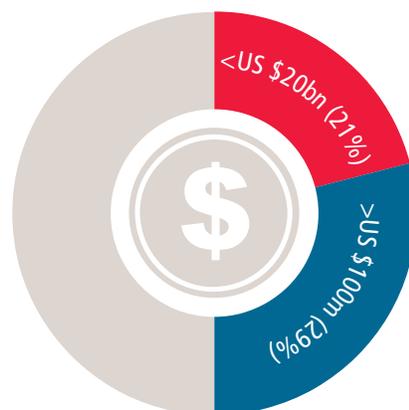
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ABOUT THE RESEARCH

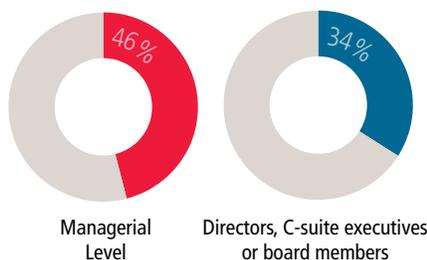
This report is one of a series of industry studies commissioned by GL Noble Denton, the independent technical advisor to the oil and gas industry. Specifically focused on the impact of regulatory changes on the sector in the US, it provides a snapshot of industry sentiment, confidence, priorities and fears related to this issue.

During March and April 2013, we surveyed more than 100 senior professionals and executives across the oil and gas industry, all of whom have operations in the US. The majority of the respondents have offshore operations, although many also have onshore operations.



← Just over one in five (21%) of respondents are employed by companies with annual revenue of more than US\$20bn.

← More than one-quarter (29%) have annual revenue of US\$100m or less.



← Respondents represent a range of levels of seniority: nearly half (46%) are at managerial level, while 34% are directors, C-suite executives or board members.

Our thanks are due to the following for their time and insights (listed alphabetically by surname):

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EXECUTIVE SUMMARY

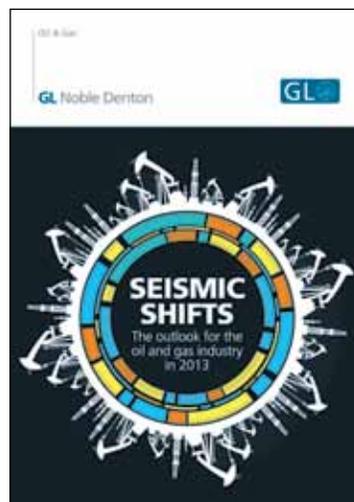
It was inevitable that the devastating Macondo oil spill in the Gulf of Mexico in 2010 would incur a strong regulatory reaction; no government could fail to act in the wake of such an incident. Much has already happened. Indeed, the January 2013 edition of our annual industry outlook research – *Seismic Shifts* – noted an ongoing industry-wide adjustment to the “new normal” of regulatory oversight. It also highlighted clear concern about the degree to which legislation is being “rushed” into place, and the costs of compliance. As such, it is timely to take a more granular review of the industry’s perceptions of how the regulatory process is currently unfolding within the US.

Based on a poll of more than 100 industry professionals operating within the US, this report seeks to gauge perceptions across the industry of how well reforms are being set and implemented there, and to assess the likely implications in the coming two years. Its key findings include:

The US oil and gas regulatory landscape is getting tougher, and will likely drive change in other regimes globally. An overwhelming majority – nearly nine in ten (85%) – of oil and gas industry professionals expect the US regulatory regime to get tougher in the coming two years, even on top of the changes already implemented. The repercussions of this regulatory tightening will go well beyond simply seeking to ensure a safer offshore operating environment within the Gulf of Mexico. Six in ten (60%) of those polled expect the current regulatory trends within the US to have implications for regimes

elsewhere. A significant reason for this is that tax revenue is perceived, rightly or wrongly, to be the top driver of reform, ahead of increased safety or environmental protections.

Safety will improve as a result of these reforms, with some companies even proactively seeking to generate competitive advantage elsewhere on the back of them. A core aim of regulatory reform relates to bolstering safety – and, in this regard, the changes are working to the good. Nearly half (47%) believe the regulations coming into effect in the next two years will increase the overall safety of the industry, while 35% disagree. In turn, some leading



Seismic Shifts, GL Noble Denton's research on the outlook for the oil and gas industry in 2013

companies are making greater safety a source of competitive advantage, proactively applying new standards globally, whether required or not, to ensure that operations face fewer disruptions. Safety standards more generally are rising, as suppliers start to include new features in equipment by default.

Nevertheless, regulatory changes will inevitably have an impact on business. At a high level, the industry holds a balanced view on the rules being set. Still, there is no escaping the fact that company operations will be impacted as a result of this. Around six in ten (61%) say the business impact of the new regulations so far has been either “somewhat” or “highly” negative, especially for larger, publicly listed firms that are typically more in the spotlight. Critics point to a range of issues, from uncertainty over key drilling and pipeline projects, through to revision of commercial shale-oil rules.

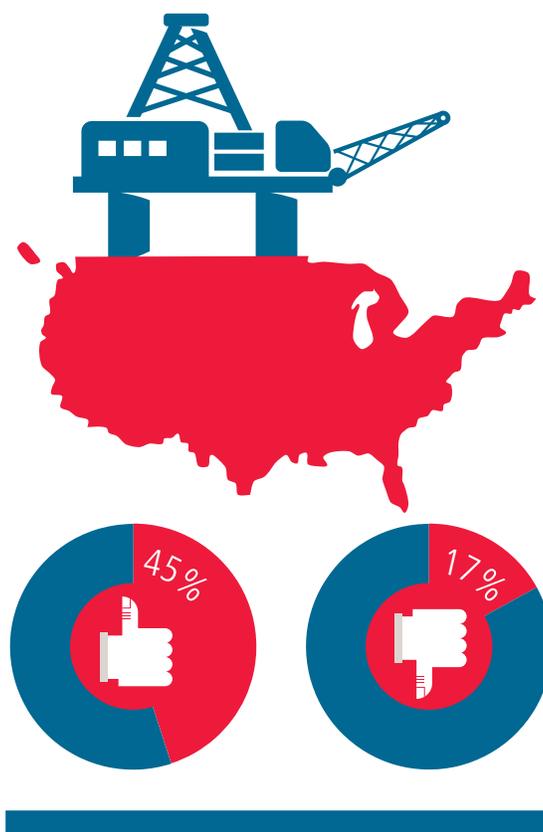
Industry consolidation is a likely consequence of the spiralling compliance costs and administrative workloads resulting from reforms.

Increased compliance costs (cited by 81% of respondents) and a greater administrative workload (76%) are the two largest impacts being felt. For example, the hiring of many new inspectors at federal agencies will in turn require operators to increase staffing levels in response to such enquiries. There could also be other implications, such as a greater likelihood of consolidation: 57% of those polled think the need for greater compliance spending will in turn force increased levels of mergers and acquisitions (M&A), to create larger entities, capable of meeting regulatory requirements.

While appetite for risk has been affected by the regulatory changes, the US remains a compelling environment in which to operate.

In *Seismic Shifts*, the most recent of our annual industry outlook reports, oil and gas professionals singled out the US as the world's most favourable operating environment in 2013. Many of their peers in this latest study agree: nearly 45% say that, regardless of any regulatory shifts, the US will remain a leading destination in which to operate, while just 17% disagree. Despite this, 56% say that their firm's appetite for risk has taken a hit as a result of the changes in oversight,

↓ **TO WHAT EXTENT DO YOU AGREE WITH THE FOLLOWING: REGARDLESS OF ANY REGULATORY SHIFTS IN THE US, THIS WILL REMAIN A TOP-CLASS ENVIRONMENT IN WHICH TO OPERATE RELATIVE TO MANY OTHER REGIMES IN WHICH WE WORK.**



making it less likely that they will pursue certain opportunities.

Although firms will be affected differently, it is unlikely that there will be a marked change in investment levels as a result of regulatory changes. Although a sizeable minority of oil and gas professionals worry over a drop in investment within the US as a result of reforms, far more think this is unlikely. Exactly half (50%) think spending will either remain constant, or increase, compared

with 25% who feel it could drop. Larger firms, those with an annual revenue of US\$10bn or more, were gloomier here: 50% anticipated a strong or moderate drop in investment levels, in part owing to their ability to switch investment to elsewhere in their global portfolio while reforms settle in within the US.

The industry is looking for greater clarity and guidance over regulations, especially relating to liability. Any significant change in regulation needs to be accompanied by clear guidance from government. However, in the view of the industry, the changes that have been implemented have lagged in this respect. More than half (51%) of respondents argue that the authorities could have done a better job in preparing the industry for regulatory changes, while almost as many (48%) said there was a lack of clarity over where liability lies for any future incidents.

The industry generally favours a goal or performance-based regulatory regime. Nearly eight in ten (76%) consider a goal-oriented regulatory environment, in which targets are defined, but companies are free to decide on how to achieve them, as most effective in achieving the intended goals. But familiarity clearly brings comfort: most respondents – all of whom operate in the US – singled out the US as their preferred regime, despite the typically more prescriptive approach there. ●

INTRODUCTION: THE EVOLVING REGULATORY LANDSCAPE

In the three years following the Macondo incident in the Gulf of Mexico, the US authorities embarked on one of the most extensive reforms of offshore oil and gas regulation in the country's history. This began with a drilling moratorium imposed on operations in the Gulf and culminated in the restructuring of key federal regulatory agencies, and the introduction of a number of reforms.

These reforms are ambitious in scope. As a dedicated National Commission observed in 2011, "Government oversight must be accompanied by the oil and gas industry's internal reinvention: sweeping reforms that accomplish no less than a fundamental transformation of its safety culture."

The ensuing reforms strengthen requirements for everything from well design and workplace safety to corporate accountability. They are aimed at ensuring that the US can safely and responsibly expand development of its energy resources. They introduce a host of new safety measures, to reduce the chance of any loss of well control, while also ensuring better containment capabilities in the event of a spill (see right).

To oversee all this, new agencies have been created, replacing the former Mineral Management Service (MMS). In 2010, the

MMS was renamed the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). In 2011, this was split into the Bureau of Ocean Energy Management (BOEM), responsible for managing development of offshore resources in an environmentally and economically responsible way; and the Bureau of Safety and Environmental Enforcement (BSEE), which was set up to enforce safety and environmental regulations. In essence, BOEM dictates policy, while the BSEE is charged with follow-through and inspection.

Much of the core reforms are now in place, with the focus now primarily on implementation, although, as with any regime, there will be ongoing amendments. In August 2012, the final rule for offshore drilling safety was released, which cemented an interim rule that had been in place for two years. Elsewhere, modifications

are still coming through. For example, in April 2013, the BSEE released an update to its Safety and Environmental Management Systems (SEMS) rule, dubbed SEMS II, which modifies the initial rules set up in late 2010. Operators will be required to implement these strengthened requirements by 2014, but also remain on the hook to submit their first completed SEMS audit to BSEE by 15 November 2013. These form the majority of the reforms coming through, although efforts are ongoing in some areas. For example, public comments on a draft Safety Culture Policy only recently closed, in March 2013. ▶

'Operators will be required to implement these strengthened requirements by 2014, but also remain on the hook to submit their first completed SEMS audit to BSEE by 15 November 2013.'

KEY REFORMS

A snapshot of some of the key reforms, as detailed by the BSEE and BOEM.



1. OFFSHORE REFORMS

DRILLING SAFETY

- ◆ Sets out new casing and cementing requirements, along with new integrity tests. Independent third party verification of various issues now required.

- ◆ Operators must demonstrate that they are prepared to deal with the potential for a blowout and worst-case discharge. Includes new requirements for subsea secondary blowout preventer (BOP) intervention, along with function testing and related documentation.

- ◆ Permit applications for drilling projects must meet new standards for well design and casing, and must be independently certified.

- ◆ A corporate compliance statement and review of subsea blowout containment resources for deepwater drilling is now required.

- ◆ New multiple-person inspection teams have been set up, allowing the simultaneous inspection of multiple operations.

WORKPLACE SAFETY (SEMS II)

- ◆ Offshore operators must maintain comprehensive safety and environmental programmes. This entails performance-based standards for operations, including equipment, safety drills, environmental safeguards, and management oversight.

- ◆ Companies have had to develop and maintain a Safety and Environmental Management System (SEMS). In April 2013, a modified SEMS II rule came into effect, with additional requirements for job safety analysis (JSA), auditing, rules for stop work authority (SWA) and ultimate work authority (UWA), and an employee participation plan.

- ◆ Resource management has been separated from safety oversight, giving engineers and inspectors greater autonomy.

- ◆ Robust environmental analyses must be conducted, while the potential environmental effects of proposed operations must be given due consideration.

- ◆ A draft Safety Culture Policy will seek to set out a robust set of guidelines to ensure safety is prioritised, including personal accountability for actions taken.

CONTRACTORS

- ◆ The Department of the Interior (DoI) has issued internal guidance related to taking enforcement action against contractors.

- ◆ BSEE is working to make available Incidents of Noncompliance (INCs) issued to offshore oil and gas operators and contractors.

2. ONSHORE REFORMS

- ◆ Focus has been on new leasing policies that ensure a more orderly and environmentally sound process for oil and gas development on public lands.

- ◆ Unconventional oil and gas projects are also affected, with the federal Bureau of Land Management (BLM) proposing to regulate any use of hydraulic fracturing (fracking).

- ◆ These rules would enlarge BLM's authority, require increased disclosure, expand regulation of well-bore integrity, and also oversee any waste-water disposal. A new draft of this fracking law was expected as this report went to press. ●

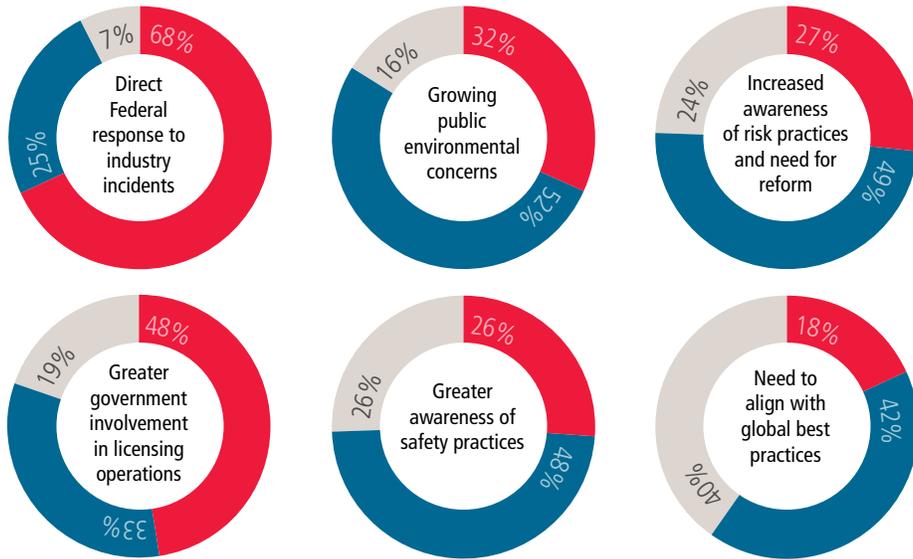


For more information, see:

BSEE Regulatory Reform: www.bsee.gov/About-BSEE/BSEE-History/Reforms/Reforms.aspx

BOEM Regulatory Reform: www.boem.gov/About-BOEM/Reforms/Reforms.aspx

↓ **WHICH OF THE FOLLOWING DO YOU CONSIDER TO BE THE KEY DRIVERS OF REFORM, WITH REGARDS TO THE REGULATORY OUTLOOK IN THE US?**



KEY ■ Major driver ■ Moderate driver ■ Limited/marginal driver

at driving job creation. This is especially true for governments under pressure on this front.

It is already clear that industry reforms will be expanding the size of oversight agencies. The BSEE hired 166 new staff in 2012 and was expected to hire eight new employees per month in 2013, as it builds up its oversight capacity. This is expected to continue: US president, Barack Obama, recently announced that he was seeking US\$24.8m in additional funds for 2014 for BSEE to carry out its oversight tasks. With much larger inspection teams forming, the industry will in turn likely need to employ more staff of their own in order to cope. ●

DRIVERS OF REFORM

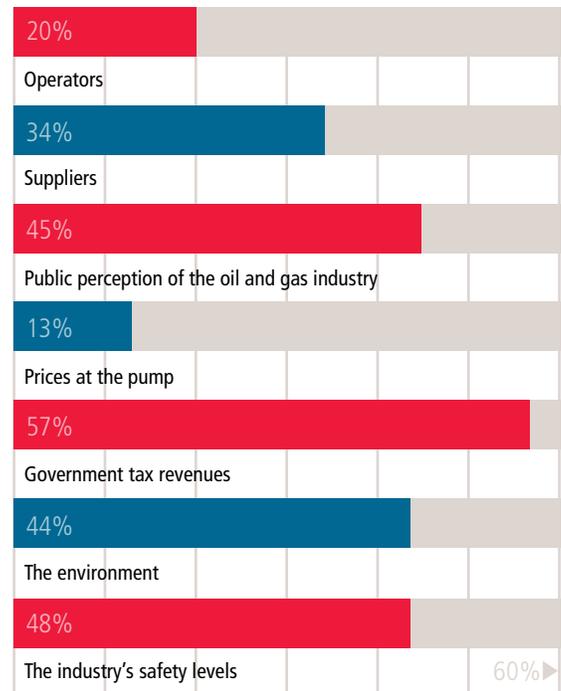
Reform is the nature of a government’s work, but is the current US legislative agenda solely reactive to the events of 2010, or proactive in truly seeking to create a better operating environment?

More than two-thirds (68%) consider it to be a direct response to industry incidents. But many also perceive the government to be looking to exert greater influence: nearly half (48%) consider greater involvement in licensing operations as a major driver of government involvement. Political and federal agency activism and populism were also identified as major factors, while greater awareness of environmental and safety issues were further contributing issues.

Little of this is surprising. “Generally, regulators don’t tinker with things unless there’s an incident,” explains Arthur Stoddart, Vice President, Risk, Safety and Integrity at GL Noble Denton. “Big things change because of incidents or near misses. All the major regulatory step-changes have been born of big disasters.”

Many also see other processes at work. For example, when asked who benefits most from these reforms, nearly six in ten (57%) industry professionals cite government tax revenue ahead of industry safety levels (48%). Donald Malenfant, a former energy advisor to the Canadian government and Vice President and Owner at Taratech, adds that such reforms often include elements aimed

↓ **IN YOUR VIEW, WHICH OF THE FOLLOWING WILL BENEFIT FROM IMPENDING US REGULATORY CHANGES? SELECT ALL THAT APPLY**



ASSESSING THE INDUSTRY IMPACT

Our survey reveals that, while the oil and gas industry largely feels prepared for regulatory changes, plenty of challenges remain. Respondents overwhelmingly expect the US regulatory regime to get a lot tougher than before: 85% believe this to be the case. And the reality is that what happens in North America will have implications for other jurisdictions, with six in ten (60%) seeing US regulatory trends having implications for regimes elsewhere.

This is not without positive outcomes, however. As one example, new capping requirements for subsea and well containment are now spreading worldwide, says Tim Daigle, an Advanced Technology Manager at Fluor Offshore, an engineering firm. "Everything is just getting safer. Even the drilling rigs are safer and more automated," he says.

This may cost more, but it has tangible results. David Welch, CEO of Stone Energy, an oil and gas firm active in the Gulf of Mexico, reckons new rules have added 10-20% in additional costs. However, the net result is safer operations and a capacity for quicker intervention on incidents – both having clear upsides for operators.

This is a widely held sentiment: "The whole industry has responded to the change in requirements," argues Paul Sullivan, Director of Global LNG and FLNG at WorleyParsons Group, a service provider;

"Equipment and component suppliers within the industry have responded well in dealing with the enhanced requirements."

Of course, the toughening regulatory climate is also a corollary of the industry's ongoing development. Increased pressure to explore within increasingly technically challenging environments, such as the Arctic, is pushing the industry to embrace new and better technology.

A BALANCED VIEW

Nevertheless, any change in oversight brings with it challenges. More than six in ten (61%) of those polled believe that the impact has been either "somewhat" or "highly" negative over the past two years. This will lighten to some degree in the coming two years – not least as the industry adjusts – but slightly more than half of those surveyed (53%) expect the impact on their business to remain negative. Furthermore, while changes may have been inevitable, many feel

these could have been better communicated. In addition, uncertainty remains on some key issues: for example, 48% are concerned about a lack of clarity over liability for incidents.

Some are more strident in their criticism than others. The American Petroleum Institute (API), an industry body, has issued various critiques, arguing that there has been little real interest in improving regulation and encouraging greater investment in US oil and gas projects, which in turn has resulted in a significant slowdown in leasing and permitting. It cites government decisions to withdraw and delay the issuance of leases for federal onshore lands, redo commercial shale oil regulations, stall on the Keystone XL pipeline, and uncertainty over so-called wild lands, among other things. It also points to proposed hydraulic fracturing rules as especially significant, with fears of extra layers of permitting, inconsistencies between federal and state regulations, and additional costs. ►

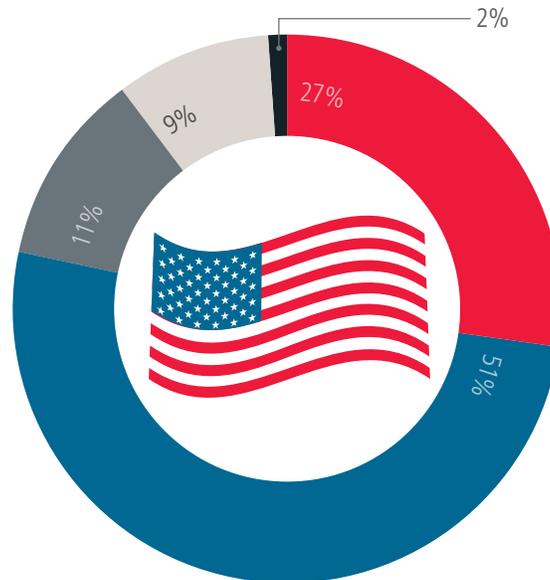
“For some states that are in the process of amending existing oil and gas regulations to address issues related to shale gas development, such as California and New York, there is a lot of public opposition to drilling making it an increasingly challenging environment for companies,” says Susan Sakmar, Visiting Assistant Professor at the University of Houston Law Center.

Nevertheless, our survey highlights that the industry as a whole has a more balanced view. Many believe that the new regulations will achieve improvements that will serve the industry well and support the ambition of restoring public confidence in the oil and gas industry. If anything, the responses show a balance between those in favour of the changes and those with reservations. After all, many firms in the industry stand to benefit from certain regulations, such as an increased focus on asset inspection, which will inevitably boost companies specialising in this area.

And, on key issues, such as whether the rules will improve overall safety, more respondents than not thought they would (47% versus 35%). “More inspection isn’t a bad thing. You’ve got a lot of infrastructure in this country that has still never been checked since it’s been put in the ground,” says Mr Malenfant.

Others agree: “Yes, there are greater compliance costs and

↓ HOW WELL PREPARED WOULD YOU CONSIDER YOUR BUSINESS TO BE, WITH REGARDS TO ITS READINESS FOR THE LIKELY REGULATORY CHANGE IN THE US OVER THE NEXT TWO YEARS?



more administrative workload, but there’s a trade-off too,” argues Mr Welch. “I can point to a few things on the deepwater side in particular that are designed to prevent another event, things such as third-party certifications, prevention inspections on a more regular basis and more stringent cementing regulations, which do serve to make the industry safer and less at risk of having another incident.”

FROM COMPLIANCE TO COMPETITIVE ADVANTAGE

Whatever the final impacts of the regulatory shifts in progress, companies by and large consider themselves ready to comply. Around eight in ten (78%) say they are either “highly” or

- KEY**
- Highly prepared
 - Somewhat prepared
 - Neither prepared nor unprepared
 - Somewhat unprepared
 - Highly unprepared

“somewhat” prepared for the implementation of regulatory change in the next two years. In part, this is owing to the lead-time that the industry has had, with a clear realisation that public concern over the spill in the Gulf would demand a strong response. “After Macondo, we had a period of uncertainty and that is now coming to a close, at least in the US with the BSEE and the new regulatory authorities. It’s all understood now. The message is: These are the rules. Get on with it guys,” argues Mr Stoddart.

Nevertheless, the onus is now on companies to absorb the changes underway and react appropriately. “The compliance requirements will improve over time, provided, of course, that the industry incorporates learning from daily practices. But it’s clear we’re not there yet,” says Riaz Khan, Vice President, Risk, Safety and Integrity at GL Noble Denton. Right now, firms are working hard to be prepared, not least owing to the deadline pressures they face, such as the need to submit a completed SEMS audit to BSEE by November 2013, and to comply with broader SEMS II requirements during 2014. “Companies have hard dates that they have to meet or lose their licences to operate, so everybody’s moving forward very aggressively to comply,” says Mr Welch.

All this chimes with other indicators that the industry has done much to increase its preparedness for future

incidents, and not just in the US. One example is the formation of industry entities, such as the Marine Well Containment Company (MWCC), the Helix Energy Solutions Group (HESG), and the Subsea Well Response Project (SWRP). These mutual aid bodies are intended to help mitigate the toughest impacts of regulation, such as costs associated with intervention and clean-up equipment, for any firm that joins their membership.

A further positive outcome is the sharing of new technologies focused on well intervention and clean up. "We're getting better technologies in place, so systems are more robust, more intuitive, with more real-time data acquisition and feedback. All this is contributing to a better industry," says Fluor's Mr Daigle.

Many of these safety gains are being shared globally, with some leading international companies now adopting internal safety standards across their whole businesses, whether required or not. This in turn can help maintain a competitive advantage. "Firms can operate uninterrupted without the need for constant shutdowns or stop orders, or changes in operations owing to a lack of understanding and mismanagement of the compliance requirement. It's a competitive advantage in a sense. Yes, it's an added cost, but it's certainly an opportunity as well," argues Mr Malenfant. ●

MAPPING THE IMPACTS ON RISK, COSTS AND INVESTMENT

This research sought specifically to gauge the impact of regulatory changes on three core areas: risk; costs and compliance; and investment plans. Key findings on these are as follows:

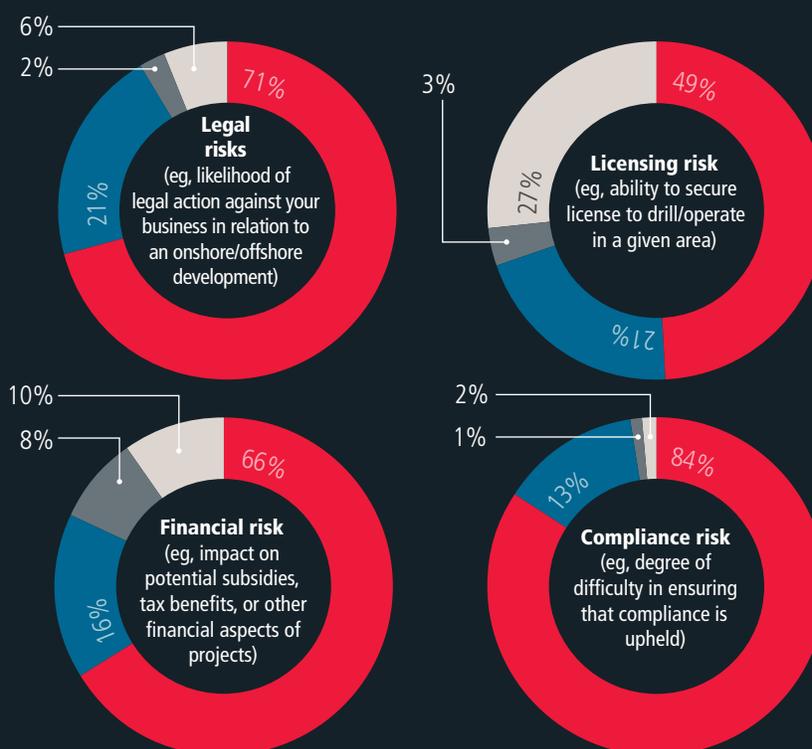
A) APPETITE FOR RISK

A high proportion of companies polled for this study see various key risks increasing for their business, as a result of the reforms. From the degree of difficulty

in ensuring that compliance is upheld, through to legal risks, the impact on potential subsidies and tax benefits, and licensing risk, all look to be rising (see below). As a result, the industry's appetite for risk has, unsurprisingly, taken a hit: overall 56% say it has fallen. This will no doubt boost safety in some regards, as firms rethink overly risky projects; however, on the flip side, it could impact investment levels (see point C).

As one example of this, Daniel Simmons, Director at the US-based Institute of Energy Research, which evaluates public policies, points to slow federal approvals as an example of increased operating risk. "For the companies that are operating on public lands, whether onshore or offshore, where the federal government is the main regulatory body, it takes on average 220 days to secure a permit to drill, but just 27 ▶

↓ HOW DO YOU THINK THE FOLLOWING RISKS TO YOUR BUSINESS HAVE CHANGED AS A RESULT OF THE SHIFTING US REGULATORY REGIME?



KEY ■ Increased ■ No change ■ Decreased ■ Don't know / Not applicable

days in Colorado and 10 days in North Dakota, where the state is the main regulator," he says.

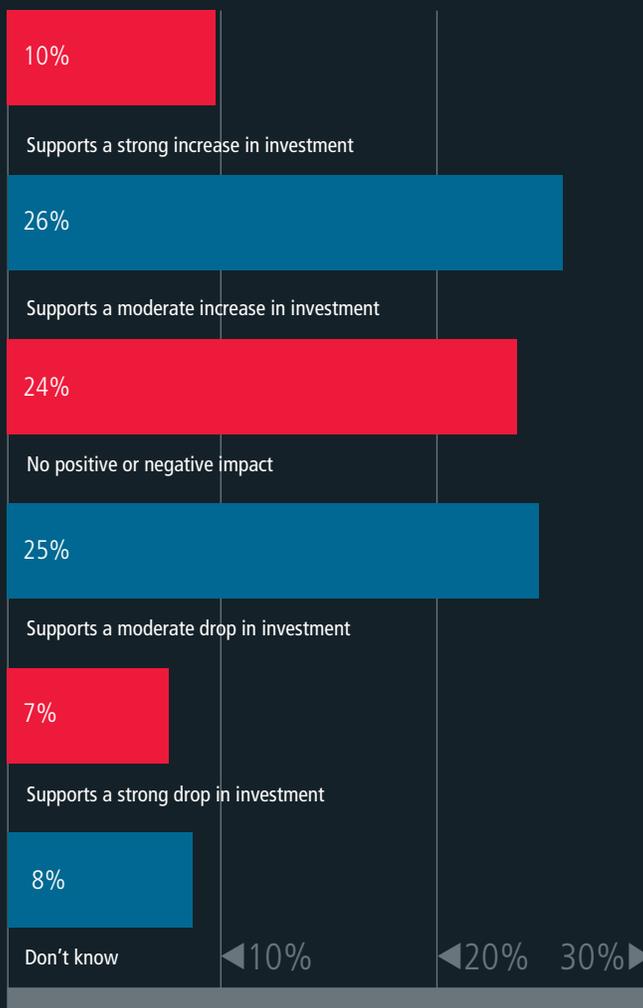
Nevertheless, the US still manages to attract a growing number of market entrants. "Every week, there are new companies from India, China, and Europe that are coming into this market space and opening up shop," says Mr Malenfant. "For them, it's pretty simple. It's part of the cost of doing business. If you don't want to do business here and you don't want to invest in putting in that audit trail internally within your organisation, then go elsewhere."

B) COSTS AND COMPLIANCE

Increased costs are the most obvious impact from regulatory shifts; 81% of respondents report a negative hit on compliance costs, while a further 76% see bulkier administrative workloads ahead. This is in keeping with our *Seismic Shifts* research, which found that expectations for increased spending on compliance in 2013 was strongest in North America: 60% expected a rise in capital expenditure there, compared with 44% in Europe.

As one example, increased BSEE scrutiny means that the time taken for permits to drill wells to be approved has been increased. In combination, one executive says that the changes made

↓ WHAT IMPACT DO YOU EXPECT REGULATORY SHIFTS WITHIN THE US TO HAVE ON YOUR INVESTMENT PLANS IN THE REGION (IE, NEW CAPITAL EXPENDITURE, OR OTHER SPENDING RELATED TO GROWING THE BUSINESS)?



in the post-Macondo era mean companies should expect to spend 20% more on developments. Charles Lucas-Clements, Director of Strategy and Business Development at Xcite Energy, adds that as authorities decide that they want a higher level of insurance cover, it will require firms to hold specific funds to cover this.

This holds particular consequences for smaller players. According to Bill Daugherty, a consultant at AGR FJ Brown, the administrative workload means a particular burden is placed on smaller operators and contractors. "The large firms have an army of people, so they'll be the ones who can afford the risk, because, from

a global-portfolio perspective, they've got their Gulf of Mexico risk spread across other places too," he says. As such, nearly six in ten (57%) expect to see regulatory reforms resulting in increased industry consolidation, as only larger players will be able to afford to compete for business.

C) INVESTMENT LEVELS

While some fears remain of a slowdown in investment as a result of regulatory reform, this is a relatively small concern, not least owing to the scale of the opportunity within the US. Exactly half (50%) think investment levels will stay unchanged, or even increase, compared with 25% who see investment taking a hit (see left). Evidence of this is seen in the rise in the number of permits issued in the Gulf of Mexico, which suggests a continued appetite for investment. In 2012, the BSEE issued 112 permits for new Gulf of Mexico wells deeper than 500 feet, compared to 76 for the whole of 2009.

The risk of a drop in spending seems highest within larger firms – those with annual revenue of US\$10bn or more. Exactly 50% of respondents in these firms think investment will drop, compared with just 25% who think it will increase. One reason for this is that large firms have other areas in their global portfolios to which they can redirect investment, whereas smaller players typically have little option but to commit to additional spend in the region in which they operate. ●

PRESCRIPTIONS FOR REFORM: WHAT THE INDUSTRY WANTS

Despite concerns over some aspects of reform – greater workload, increased costs, and a lack of clarity over certain issues – our research gives a clear sense that the US will remain a top-class environment in which to operate. Only 17% of respondents to our survey disagreed with this notion.

For regulators, getting the balance right between ensuring a competitive operating environment, and one that achieves the desired changes on safety is tough. Overall, 53% believe regulatory shifts are either going in the right direction, or are at least as good as before, compared with 46% who disagree. But, as one survey respondent puts it, the US still provides “the best combination of required safety regulations to maintain a safe industry, and yet allow for a free market economy... to thrive”.

At the most basic level, the oil and gas industry’s preparedness for a disaster is simply better than before. There is also recognition, reluctant or otherwise, that the ground rules have changed and there is no going back. As such, the emphasis within the industry has turned to implementation.

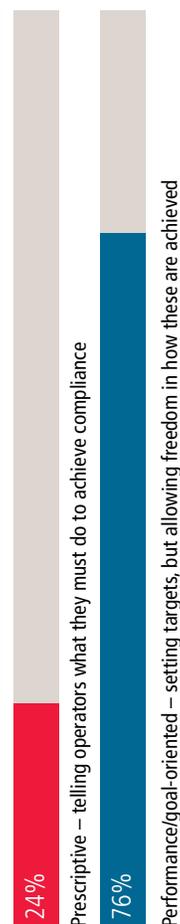
WHERE TO NEXT?

It is still early in the process of adjustment to regulatory change, but industry professionals are

eager that any future amendments to current reforms be fully fit for purpose in future, bolstering the industry’s reputation, ramping up safety standards and enabling operators to invest in production. So what kind of oversight could best enable that outcome?

Looking back, regulatory regimes have typically been forged in the aftermath of a major incident, such as the UK’s 1988 Piper Alpha or Norway’s 1980 Alexander L. Kielland. Similarly, as the US regime evolves, it will bear the hallmarks of Macondo, the incident that will have influenced much of its policymaking.

Today, both the Norwegian and UK regulatory models are generally regarded as being more goal-oriented in nature (see p14). For example, under the UK’s system, it is up to the operator to prove that operation risk is mitigated, which gives considerable freedom to the operator, but also shifts the burden of proof to them. “In principle, the UK regime is definitely one of the better ones,

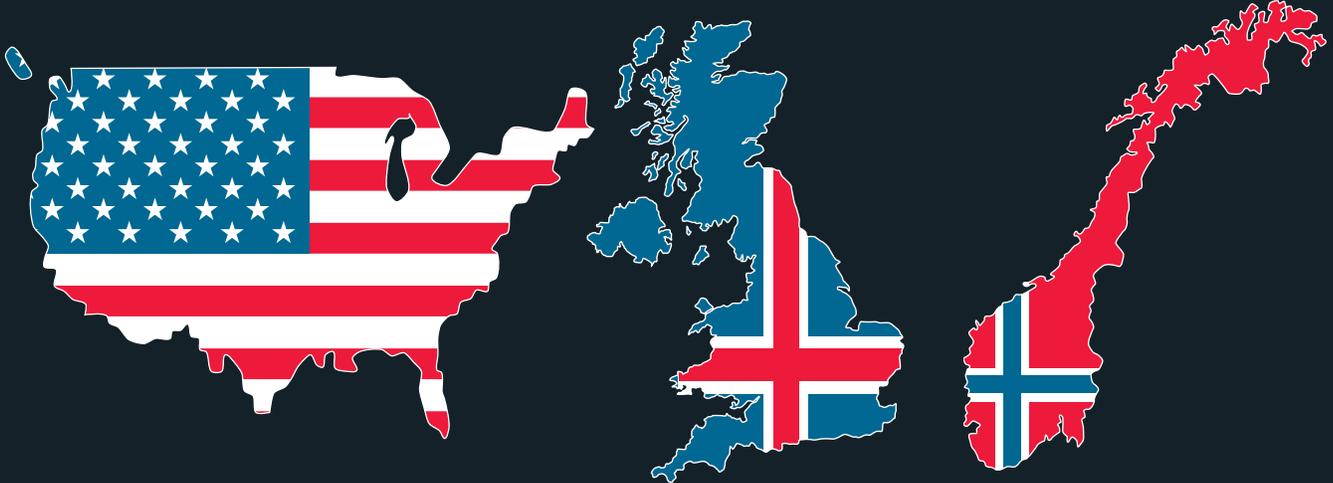


but it depends what you like,” says Mr Lucas-Clements. “If you like the principle of ALARP [as low as reasonably practicable], to ensure that the risks to health and safety are reduced, then it’s a good system. But if you prefer a set of mandatory rules in black and white, then it’s not for you.”

Among those surveyed, there is a clear preference for a goal-oriented approach: a regime that sets clear targets in terms of safety and environmental protection, but that allows significant freedom in the way in which these are achieved. Around eight in ten (76%) favour this approach as a model for the future despite reform in the US being largely prescriptive in its approach. Nevertheless, familiarity brings its own comfort; in asking respondents which specific regime they favoured most, the US topped the list. ●

↑ WHICH OF THE FOLLOWING APPROACHES TO REGULATION DO YOU CONSIDER TO BE MOST EFFECTIVE, IN TERMS OF ULTIMATELY ACHIEVING THEIR INTENDED GOALS?

A ROUGH GUIDE TO KEY REGULATORY REGIMES



THE US MODEL

🔴 The US system mainly offers prescriptive regulations, often incorporating industry standards.

🔵 In terms of the drilling requirement, operators must meet performance-based conditions and prescriptive regulations for casing and cementing, and must submit plans for well design and drilling procedures. For example, under the enhanced BSEE regulations, firms seeking permit allocations must obtain independent certification.

🔵 The post-Macondo period has seen only one significant deviation from the prescriptive approach, with the enactment of the new SEMS rule, which analysts say resembles a performance-based approach.

🔴 In terms of well control, operators must follow a specific approach, and must be able to operate well control equipment from the rig. They must also show that operators have sufficient funds, and can access a second rig to drill a relief well.

THE UK MODEL

🔴 The UK regulatory model is a performance-based approach. Operators must continually demonstrate that they are taking measures to minimise hazards and risks to as low as reasonably practicable (ALARP).

🔵 There are no requirements for an emergency shutdown system or dynamic positioning system, but operators must meet conditions to minimise risk, ensure safety, and prevent fluids from escaping.

🔴 Industry professionals like the transparency of the approach, and the freedom of approach that it affords them.

THE NORWEGIAN MODEL

🔵 Norway offers a performance-based approach with guidelines and recommended standards.

🔴 There are no specific requirements on well design or casing and cementing, but operators must have an emergency shutdown system and a dynamic positioning system. They must also have intervention equipment (such as blowout preventers, safety valves and diverters).

🔴 Norway's chief advantage, in the view of the industry, is that it has set clear guidelines for both the environment and personnel, with highly qualified people overseeing the enforcement of these guidelines. ●

For additional reading on this topic, see:

• "Comparing the offshore drilling regulatory regimes of the Canadian Arctic, the US, the UK, Greenland and Norway" from the Pembina Institute.

• "Robust offshore risk regulation – an assessment of US, UK and Norwegian approaches", Preben H. Lindhøe, et al, 2012

CONCLUSION: ADAPTING TO THE 'NEW NORMAL'

Despite complaints, adjustments to the way companies operate are already happening. Dealing with regulation is a perennial requirement, but, in many respects, it is becoming a more important component of the corporate toolkit. To some extent, it is even being seen by some as a means of generating competitive advantage – not just within the US, but elsewhere, by minimising shutdowns.

Most companies polled for this study expressed confidence in their readiness for regulatory change. The coming two years will be sure to test that. Over that period, companies operating within the US will need to be prepared for the following shifts:

- ◆ More regular, and more in-depth, inspection of installations by authorities. Nearly all industry professionals expect the climate to get tougher in this regard.

- ◆ Companies will devote much more funding to dealing with compliance and the increased

administrative workload that comes with it. And, as demand for compliance experts surges, supply will inevitably be constrained.

- ◆ Far more time being required to obtain permits and to commit to drilling.

- ◆ Despite these challenges, the opportunity remains clear, with firms intent on furthering exploration and production, as evidenced by the revival of permitting in the Gulf of Mexico.

- ◆ There will be potential for greater consolidation, as smaller firms struggle with a tougher compliance regime.

- ◆ Over time, a more co-operative relationship between the industry and regulators will develop, especially as key measures are bedded in. ●





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About GL Noble Denton

GL Noble Denton, part of the GL Group, is a global independent technical advisor to the oil and gas industry. With a presence in over 80 countries, the company applies global best practice in safety, integrity and performance across the lifecycle of its clients' on- and offshore operations.