LNG EXPORT NA 2025

LNG EXPORT 2025 PROCUREMENT TRENDS SURVEY

Created in association with the

LNG Export NA Conference & Exhibition
June 11-12, George R Brown Convention Center, Houston

www.lngexport.us

CONTENTS

The Current State of Play

LNG industry bullish on project growth

The North American LNG industry is confident that a new wave of export projects – on the US Gulf Coast in particular – will be entering construction soon. This comes as the US prepares for a change of administration after former President Donald Trump won the November election.

As Trump prepares to take office again, his planned Cabinet picks offer an indication of what can be expected under the incoming administration. In particular, it has been announced that Trump intends to nominate an industry insider – oilfield services firm Liberty Energy's CEO, Chris Wright – to lead the US Department of Energy (DoE).

In addition, details are starting to emerge on the Trump administration's initial plans. One late November Reuters report cited sources familiar with the matter as saying that the Trump transition team was putting together a wide-ranging energy package to be rolled out within days of his taking office that would include new LNG export permit approvals. The sources added that lifting the "pause" imposed on the processing of export permits this year by the administration of US President Joe Biden would be an early priority for the incoming Trump administration.

This bodes well for projects that have been held up at the pre-construction stage as they await permits from the DoE for exports to countries with which the US does not have free-trade agreements (FTAs). Several developers have delayed final investment decisions (FIDs) because of the LNG permitting pause but could now prioritise getting their projects over the line in 2025. This comes on top of other, fully permitted projects that are also moving towards FID, such as the recently renamed Woodside Louisiana LNG project, formerly Driftwood LNG.

If these projects proceed as expected, they will unleash a new wave of additional LNG capacity construction on the Gulf Coast. This could result in US LNG export capacity nearly doubling from 11.3 billion cubic feet (bcf) per day in 2023 to 22.4 bcf per day in 2030, according to business intelligence firm Rystad Energy.

The anticipated growth would come while global LNG demand is also forecast to rise, reaching almost 600 million tonnes in 2030 according to Rystad. Buyers of LNG will be keen to secure future supplies, including in Europe as the continent continues its shift away from dependence on Russian natural gas, and in Asia, as demand keeps growing.

There is a risk that new capacity coming online will contribute to an LNG glut in the medium term, putting downward pressure on prices and profitability. But in the longer term, there are warnings that a supply gap could develop by 2035 without new capacity beyond what it currently in operation or under construction.

Exporters of US LNG will be keen to capitalize on anticipated demand over the long term and to capture a greater share of this growing global market. However, they will have to navigate various challenges, including the fact that the labor force and supply chains are already strained by existing construction, with new projects threatening to exacerbate this.

> "There are warnings that a supply gap could develop by 2035 without new capacity beyond what it currently in operation or under construction."

Summary of Survey Results

It is against this backdrop that we recently conducted a survey of a large group of project and procurement leaders within the LNG industry in an effort to gauge their expectations of procurement trends as they look ahead to 2025. The respondents represented both LNG operators and engineering, procurement and construction (EPC) companies.

The survey found that a majority of respondents were optimistic about their project pipeline growing and helped to paint a clearer picture of their focus for the coming 12 months. Some of the other key findings included concerns over both a talent gap and a shortage of workers.

The survey also provided insight into the main priorities of respondents as they look ahead to 2025, as well as an indication on how they plan to allocate investment into technologies and how they intend to address some of their main challenges.

Given the anticipated boom in LNG construction, particularly on the Gulf Coast, the bullishness over an increased project pipeline comes as no surprise. There are already signs of momentum towards new FIDs in 2025. Most recently, in early December, Woodside signed a revised lump-sum turnkey (LSTK) EPC contract with Bechtel for the development of Louisiana LNG ahead of a planned FID in the first quarter of 2025. Others targeting an FID in 2025 include Kimmeridge Energy Management's Commonwealth LNG, pending the receipt of outstanding permits.

Concerns about skills shortages also come as no surprise when an increase in construction activity threatens to further stretch an already strained workforce. On the Gulf Coast, a boom in construction has been underway for some time, across a range of facilities including LNG terminals, petrochemical plants, infrastructure for the export of crude oil and natural gas liquids (NGLs). Warnings about construction stretching the skilled labor force to its limit are not new.

Developers of projects set to reach FID over the coming months and years will need to consider how best to advance their construction plans as the availability of skilled labor becomes increasingly scarce. While efforts are being made to train a new generation of skilled workers, this takes time. In the meantime, there is a risk that productivity could decline if less experienced workers have to be brought in.

This challenge ties in with the survey's findings on there being considerable interest in modular construction. Modularization has been touted as one way of working around location-specific workforce constraints. The approach is still being tested, but the more modular facilities come online, the better the industry will understand what works best and how to improve on it.

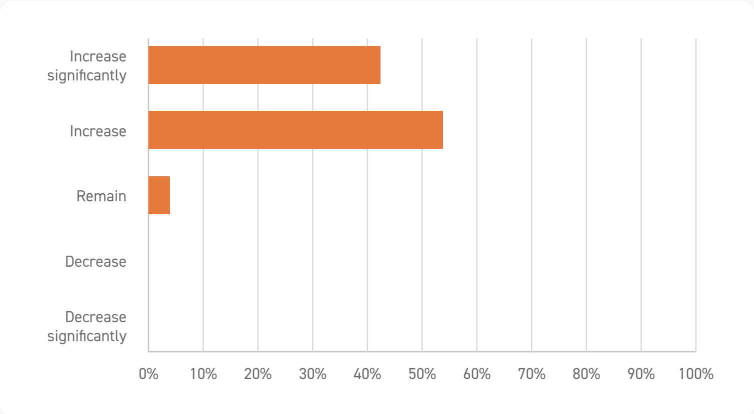
Planned investment in technology represents a further illustration of industry priorities. Survey respondents' planned spending over the next 12 months is set to be focused mainly on areas including artificial intelligence (AI), engineering and design, supply chain management and modular services.

This aligns with the interest in modularization and also provides some examples of how respondents are trying to achieve operational efficiency – the majority's main strategic priority as identified in the survey.

Response breakdown

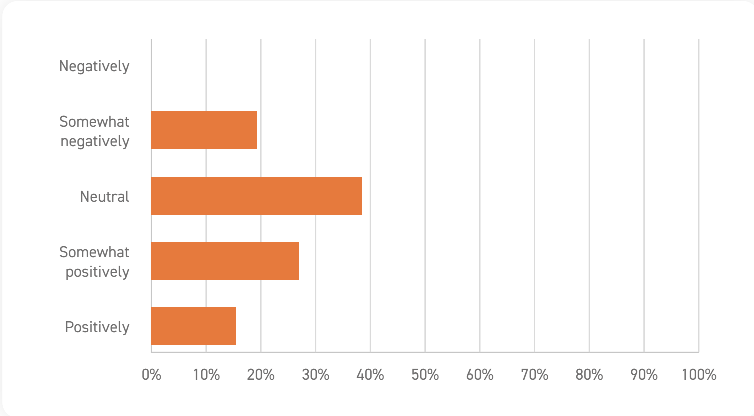
A closer look at the survey questions provides additional clarity on industry expectations. Some of the questions drew mixed responses, showing that while there are overarching trends at play, they do not necessarily affect all respondents the same way. Nonetheless, certain key themes emerged in the responses

How do you anticipate your project pipeline will evolve over the next 12 months?



Asked about their anticipated project pipeline over the coming 12 months, a large majority – 96.16% – said they expected their project pipeline to increase to varying degrees, while 3.85% said they expected it to remain unchanged and none anticipated a decrease. While 53.85% of respondents simply said they anticipated an increase, 42.31% expected their project pipeline to increase significantly. This makes sense in the context of looming FIDs on several LNG export facilities, pending the receipt of necessary outstanding regulatory approvals in most cases.

How do you see policy and / or regulatory landscape impacting your project development plans and procurement strategy over the next 12 months?



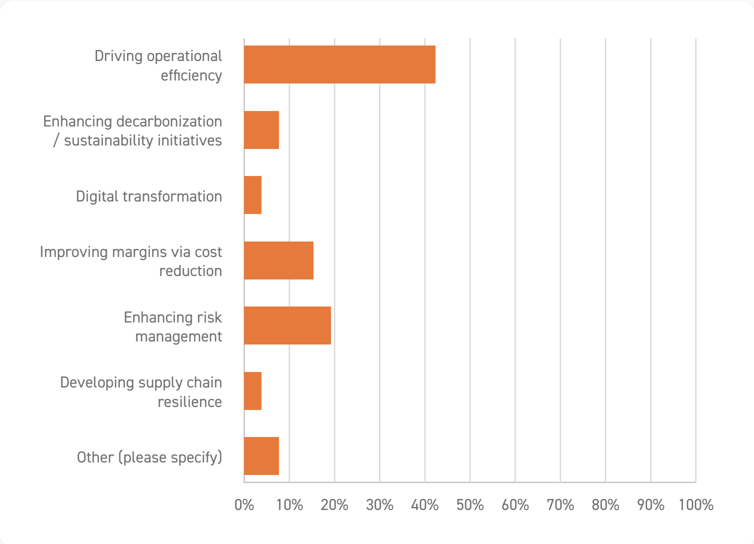
When asked next about the policy and regulatory landscape and how it was expected to affect project development plans and procurement strategy over the coming 12 months, responses were more mixed. A total of 42.30% of respondents expected the policy and regulatory landscape to affect them positively to a greater or lesser extent. This breaks down into 26.92% anticipating a somewhat positive impact, versus 15.38% expecting the policy and regulatory landscape to affect them positively.

Meanwhile, 38.46% of respondents expected a neutral impact and 19.23% said they expected the policy and regulatory landscape to affect their project development plans and procurement strategy somewhat negatively.

A possible explanation could be concerns over new tariffs being introduced by the incoming administration and their potential impact on construction costs. The previous Trump administration introduced steel tariffs in 2018, resulting in increased LNG construction costs. The concern is that a similar scenario could play out after Trump takes office again.

Indeed, Trump has voiced his intention to impose blanket tariffs on all imports from Canada and Mexico, as well as China. Canada and Mexico are major exporters of steel to the US. And a potential new trade war with China could spill over into the LNG industry, disrupting the flow of LNG between the two countries and deterring Chinese buyers from signing new offtake agreements. This, in turn, could slow efforts by project developers to contract sufficient volumes to proceed to FID.

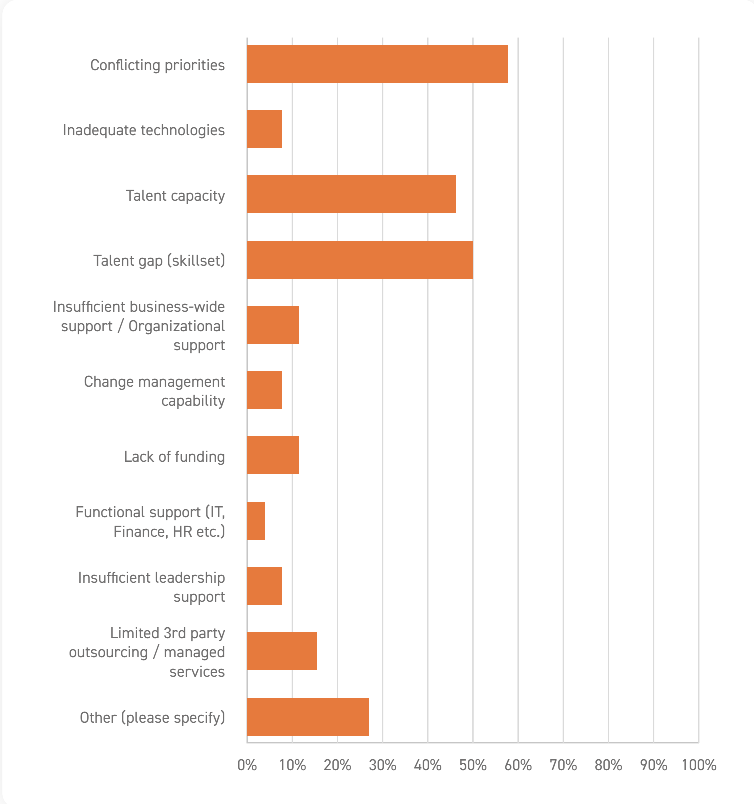
What is your top strategic priority for the next 12 months?



Next respondents were asked what their top strategic priority was over the next 12 months. Responses were mixed but a clear majority said it was driving operational efficiency, at 42.31%. The second most popular priority was enhancing risk management, at 19.23%. The improvement of margins via cost reduction accounted for 15.38% – the third most popular option – and 7.69% of respondents said their top priority was enhancing decarbonization or sustainability initiatives. Digital transformation and the development of supply chain resilience were the top priority for even lower percentages of respondents, while 7.69% said they had another top priority that had not been listed.

This mix of strategic priorities points illustrates some of the current trends affecting the industry, including cost inflation, supply chain challenges, digitalization and a push for decarbonization. The extent to which responses varied, though, indicates that different companies also have differing approaches to the challenges at hand.

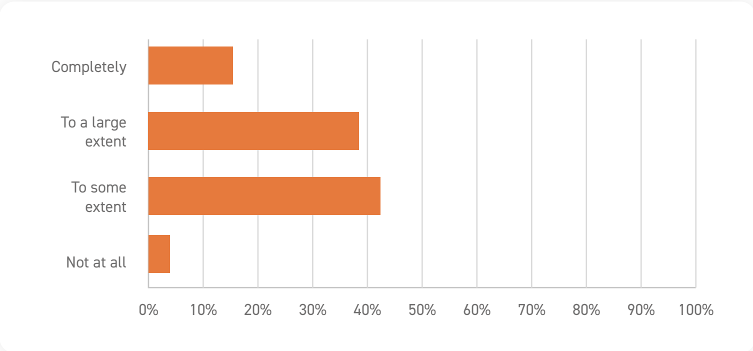
What do you see as the biggest barrier to meeting your strategic priority over the next 12-months?



Respondents were next asked about what they saw as the biggest barriers to pursuing their strategic priorities over the next 12 months. Here, respondents were asked to pick their top three barriers. Conflicting priorities was seen as the top barrier, accounting for 57.69% of responses. Not far behind was the talent – or skillset – gap, accounting for 50.00%, while talent capacity was the third most popular pick, at 46.15%. It is worth noting that the talent gap and talent capacity combined accounted for 96.15% of responses.

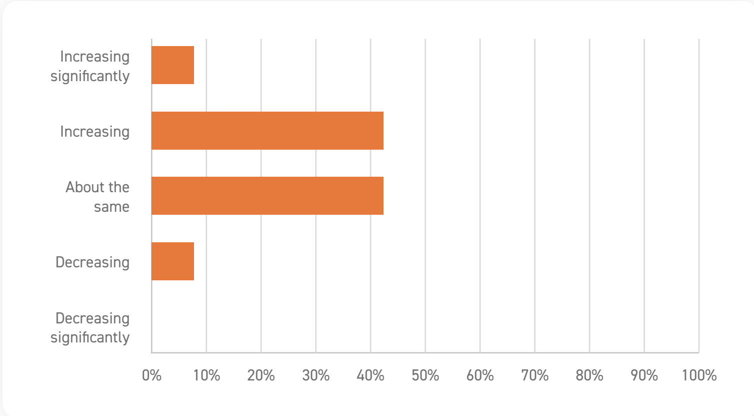
Respondents also identified other barriers, including limited third-party outsourcing (15.38%), a lack of funding (11.54%) and insufficient business-wide or organizational support (11.54%). Barriers such as insufficient leadership support and functional support accounted for even lower percentages of responses, while 26.92% of responses pointed to other barriers that had not been listed in the question.

Do you believe your team has the necessary technology stack to deliver your strategic priorities over the next 12-months?



A large majority of respondents, 96.15%, agreed to a greater or lesser extent that their teams had the necessary technology stack to deliver their strategic priorities over the next 12 months. Breaking this down, 42.31% agreed to some extent, 38.46% agreed to a large extent and 15.38% agreed completely. Only 3.85% did not agree at all that their team had the necessary technology stack.

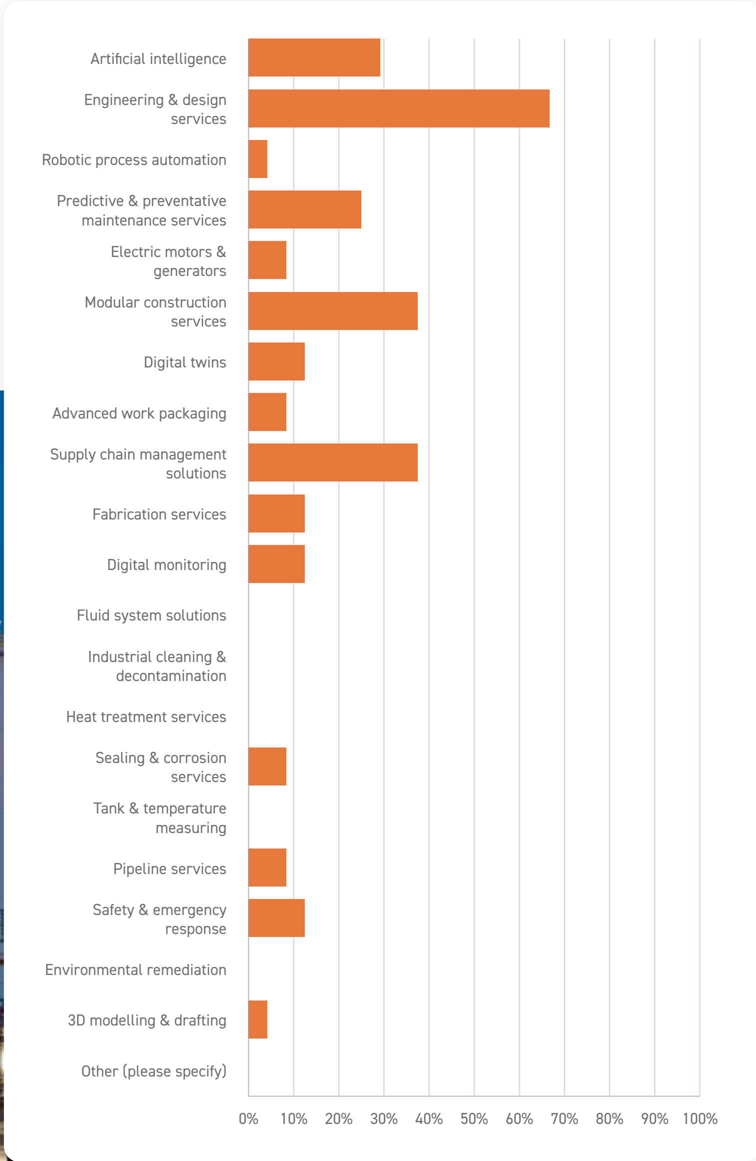
How is your budget for investing in new technologies changing over the next 12 months?



A breakdown of planned budgets for new technologies over the next 12 months yielded mixed answers – 7.69% of respondents said their budget for this was increasing significantly, while 42.31% simply said it was increasing. Another 42.31% said their budget for new technologies was staying the same and 7.69% said it was decreasing.

> "One late November Reuters report cited sources familiar with the matter as saying that the Trump transition team was putting together a wide-ranging energy package to be rolled out within days of his taking office that would include new LNG export permit approvals."

Where do you plan on investing in technology to help meet your strategic priorities over the next 12-months?



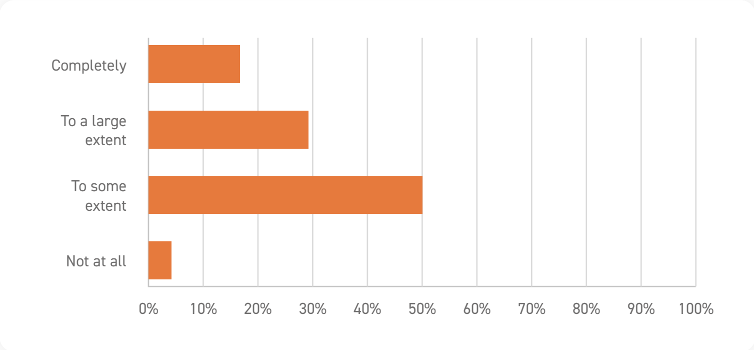
A breakdown of what technology budgets would be invested in order to help achieve strategic priorities over the coming 12 months also produced mixed results. Once again, respondents were asked to select their top three picks from a list of options. A small minority did not answer this question. Of those that did answer, a majority identified engineering and design services as being among their top picks, at 66.67%. This was followed by modular construction services at 37.50% and supply chain management, also accounting for 37.50%. AI was not far behind, at 29.17%, followed by predictive and preventative maintenance services at 25%. A host of other technology investment areas including fabrication services, digital monitoring and digital twins each garnered 12.50% or less of responses.

LNG EXPORT NA 2025

June 11-12
George R Brown Convention Center
Houston

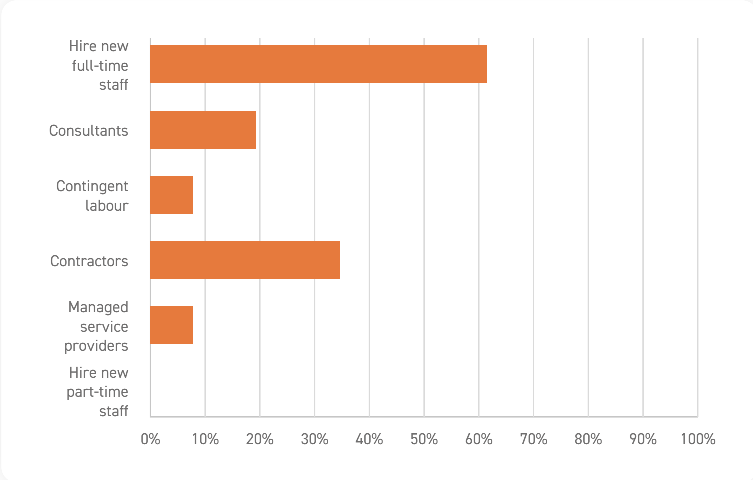
www.lngexport.us

Do you believe your team has the skill and capabilities to deliver your strategy over the next 12-months?



Despite concerns over skills shortages, 95.84% of respondents had varying degrees of confidence in their teams' capability to deliver on their strategy over the next 12 months. Breaking this down, 50.00% believed this to some extent, 29.17% believed it to a large extent and 16.67% said they believed completely that their teams had the requisite skills and capabilities. Only 4.17% of respondents said they did not believe their teams to have the necessary skills and capabilities at all, and a small minority opted not to answer this question.

How do you plan on meeting your talent needs over the next 12-months? Please select your top solution



Finally, respondents were asked to give their top option for meeting their talent needs over the coming 12 months. A majority – 61.54% – said they planned to hire new full-time staff, while 34.62% said they would be turning to contractors. Additionally, 19.23% planned to turn to consultants, 7.69% said their top option was contingent labor and another 7.69% pointed to managed service providers. Notably, none said their top choice would be hiring new part-time staff.

The coming months will show how these expectations align with reality and by the end of 2025, the industry will hope to have more clarity on which approaches are the most effective for navigating the current operating environment.

> "Several developers have delayed final investment decisions (FIDs) because of the LNG permitting pause but could now prioritise getting their projects over the line in 2025."

LNG EXPORT NA 2025

June 11-12
George R Brown
Convention Center
Houston

www.lngexport.us