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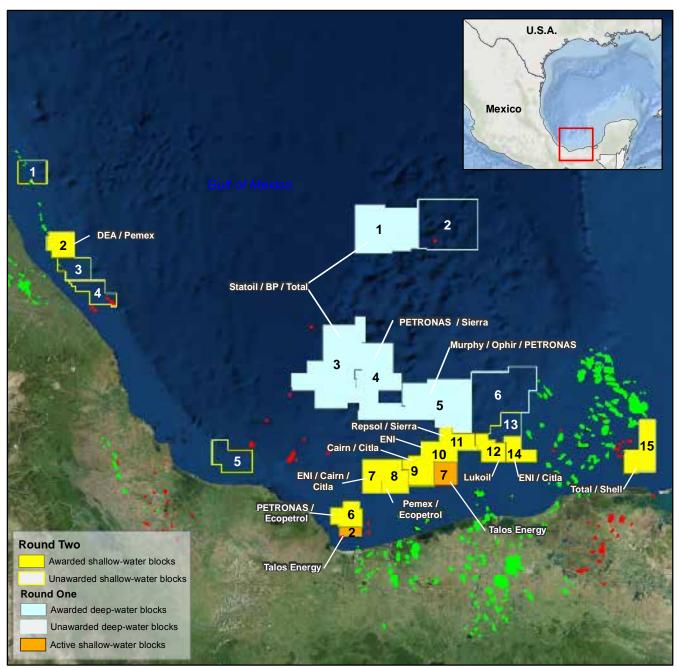
Feeding frenzy in Mexico's shallow-waters - results from Round Two

Mexico continued its streak of successful licensing rounds with Round Two's shallow-water exploration phase, which saw strong bidding even as global exploration spend remains disciplined. Industry-nominated blocks led the way, with the award of 10 of 15 blocks, in line with Wood Mackenzie's earlier prediction. Mexico drew new entrants and is rapidly developing a very diverse corporate landscape. All seven Majors now hold assets in the country. Pemex, the NOC, has found its bearings in this new competitive landscape, standing out as the most active bidder and maximising its presence in three consortia.

The results signalled that the global industry was hungry for material shallow-water opportunities. Operators displayed an increased willingness to bring forward work commitments. Nine wells are expected on six of the ten blocks awarded. This is encouraging to the Mexican government, which faces declining production unless new discoveries are made. Bidders still showed conservatism by focusing on Salinas Sureste acreage, closer to the traditional core of Mexico's production, while snapping up just one Tampico-Misantla block. The round was also noteworthy for its successful bidding structure. Bid caps were placed in blocks to prevent counter-productive, overheated bidding, which was seen in Round One's onshore phase.



Ten of fifteen blocks were awarded



Source: Wood Mackenzie, Esri Basemap

Consortia led the way with heavy bidding

Only one block was awarded in Tampico-Misantla, while nine blocks were awarded in Salinas Sureste. Intra-block competition was heated in many cases and companies bid the maximum acceptable bid levels several times. This suggests that companies tended to draw similar conclusions from the available subsurface data, while also seeking to concentrate closer to Mexico's historic core producing area. The fact that several blocks were awarded at the maximum bid level also demonstrates the awareness of Mexico's regulators, who implemented a policy of smaller, more frequent rounds, which has enabled Mexico to apply lessons learned from phase to phase.

A maximum bid cap prevents the overheated bidding seen in Round One's onshore phase that could prevent the development of blocks won with uneconomically-high bids. By pre-announcing minimum acceptable bids for each block, Mexico also



corrected a significant problem from Round One's shallow water exploration phase, where several blocks went unawarded despite receiving bids because the government decided to keep the minimums secret.

Twenty-seven bids were offered

Block	Bids		
Block 1	0		
Block 2	2		
Block 3	0		
Block 4	0		
Block 5	0		
Block 6	4		
Block 7	5		
Block 8	1		
Block 9	5		
Block 10	5		
Block 11	2		
Block 12	1		
Block 13	0		
Block 14	1		
Block 15	1		
Source: Wood Mackenzie			



A total of 20 individual bidders and 16 consortia qualified for this phase, and 20 of 36 bidders participated. The most active participants were consortia; only the Premier/Sierra consortium refrained from bidding. ConocoPhillips, Hunt, ONGC, PAE and Rosneft qualified as individual bidders but did not participate. Of the remaining 15 individual bidders, only CNOOC participated alone and did not form part of a consortium.

Pemex submitted the greatest number of bids *



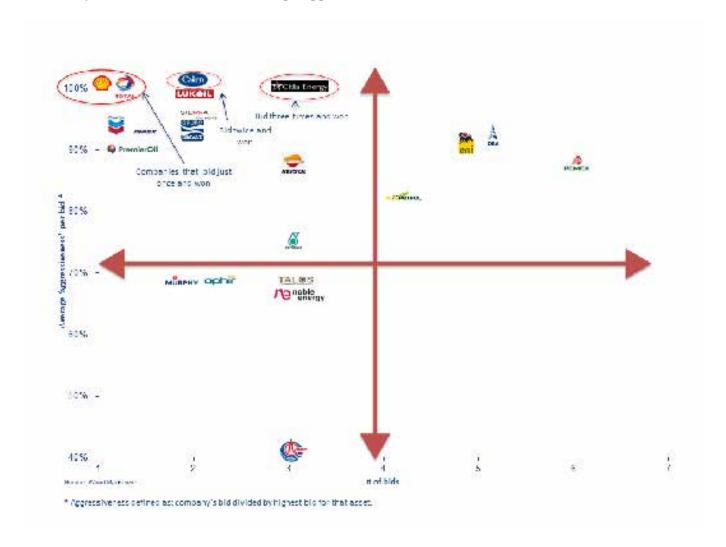
^{*} Including bids as consortium member



The competition was fierce, averaging nearly two bids per block. This is almost twice the bids per block versus previous exploration licensing rounds. Sixty percent of the awarded blocks received multiple bids. Minimum acceptable government profit shares were 23% or less, but the average winning bid was closer to 57%. Since bids trended higher, it might seem tempting for the government to raise the minimums in future rounds. However, this would only cap lowball offers, which were rare in this round.

Companies bid more aggressively than in previous licensing rounds

Most companies bid for few blocks through aggressive offers



Companies had the benefit of using Round One's bidding data in this round. The use of competitor intelligence played a greater role, especially since nearly all blocks on auction had been offered in earlier rounds or were industry-nominated. Bidders fell into three categories: those who bid aggressively for few blocks, those who bid aggressively for many blocks and those who targeted few blocks and bid low.

Companies such as ENI, DEA, Pemex and Ecopetrol were the most aggressive participants, also acquiring the highest numbers of blocks. They participated through several different consortia. These companies are clearly looking at Mexico as a key area of growth and bid accordingly. DEA, ENI and Pemex were three of the four companies that bid for Tampico-Misantla acreage, where only one block was awarded. Over half of the bidders fall into the category of companies who went after a smaller number of blocks, bid aggressively and tended to fight for the same blocks. All but three companies in this group picked up acreage.



The third category was companies who took a more selective and disciplined approach both in the amount of blocks they bid on and their offers. Murphy, Ophir, Talos and CNOOC were among the companies in this category. They already hold acreage in the country and can afford a more conservative approach than a new entrant. Noble bid more conservatively than the competition on three separate blocks, a sign of how the company's tight oil positions in the Lower 48 strongly compete within its portfolio.

A healthy variety of peer groups participated, further diversifying Mexico's upstream sector

Mexico draws all the Majors in

All seven Majors now hold assets in Mexico. Four of the seven submitted bids in this round. The resource potential in Mexico's under-explored shallow waters is substantial enough for these companies, and any success would likely be quick and low-cost to bring online. ENI was the most aggressive bidder of any company class. It clearly aims to build a position of scale in the country and has so far eschewed the deepwater to focus solely on shallow water where costs are much lower. It, along with partner Citla Energy, was the only bidder on Block 14 which holds the undeveloped Xulum field and which is contiguous to blocks holding the Ayin-Batsil discoveries, to be awarded in October 2017.

Total and Shell, in consortium, bid only on the most easterly block — Block 15 — which was also the largest on offer. It appears to lie outside the main play fairways. The block is rumoured to have sub-salt potential and its risk-reward ratio did not appear enough to attract anyone else in the round. Missing from the list of bidding companies this time was Statoil, having narrowly missed out on blocks in the shallow water phase of Round One. However, the company was very active in Round One's deepwater phase, acquiring two blocks. This suggests the Norwegian NOC may focus on digesting its deepwater prizes before returning to the auction block.

Pemex plays by the new rules

Pemex emerged as the dominant player in this round. As the world's largest shallow-water producer, the NOC had the opportunity to play to all of its strengths in Round Two. It was the most active bidder and offered the widest range of bids (ranging from 21% to 70%). Pemex's bids were tailored to the likely competition and prospectivity of each block, a sure sign that Pemex came well-informed, prioritising returns over aggressive bidding.

The NOC also formed three consortia, the maximum allowed under the rules. DEA, Ecopetrol, Chevron and Inpex were all partners, which shows that Pemex is learning how to participate in the new competitive landscape. The NOC is aiming to assemble a returns-focused portfolio, with low capex requirements in the near-term. This will allow the NOC to plan for longer term growth while dealing with its immediate challenges of declining production and a constricted budget.

New entrants: Independents, regional NOCs and PE-backed companies

Ecopetrol and Repsol finally made their debuts in Mexico. Both companies' exploration budgets have been massively cut in the last years and new venture activity has been limited. Both were restrained in their bidding. Repsol placed three bids, winning one, but did not offer commitment wells on any blocks. Ecopetrol partnered with Pemex in one block with a low, uncontested minimum government share bid of 20.1%. The Colombian NOC's strategy considers international organic growth as fundamental given Colombia's declining production, so their entry into Mexico is a natural fit with this plan.

Citla, a PE-backed start-up, aggressively bid in the licensing round, winning the three blocks it targeted. In two cases, it bid the maximum government profit share of 75%. Citla was incentivised to put its private-equity committed capital to use. The company had bid previously for onshore opportunities in Round One but was priced out by extravagantly high bids placed by less experienced players. Citla now joins the Riverstone-dominated club of PE-backed E&Ps present in Mexico such as Talos, Sierra and Fieldwood.



Work commitments should have a heavier weighting in the bidding variable

Participants focused bids on the government profit share, avoiding work commitments on some bids. Of ten blocks awarded, there were only commitments to drill nine wells. Forty percent of the blocks awarded had no commitment to drill wells, which does not necessarily mean that these companies will not drill, but leaves open the possibility. Of those, three were single-bid blocks. However, two received offers above the minimum, which signals these companies anticipated competition. These companies may have bid additional exploration wells if the weighting had more heavily impacted the outcome.

The commitment wells bid represent an improvement over past rounds, but Mexico must focus even more on work commitments if it is to offset declining oil production. To incentivise exploration, Mexico will need to put more weight on work commitments. Otherwise the country faces the trap of focusing purely on profit-share, which reaps long-term returns only if a discovery is made. Aligning future bidding variables towards work commitments may dissuade some explorers. This round's results, though, show appetite would likely still be strong enough to produce competitive licensing. Globally, however, requiring work commitments continues to be a challenging ask in a low oil price environment. Mexico should maintain its *no-minimum well commitment* policy, but would do well to incentivise companies towards voluntary well commitments through heavier bid weighting.

Competition was fierce in Salinas Sureste and scarce in Tampico Misantla

Salinas Sureste

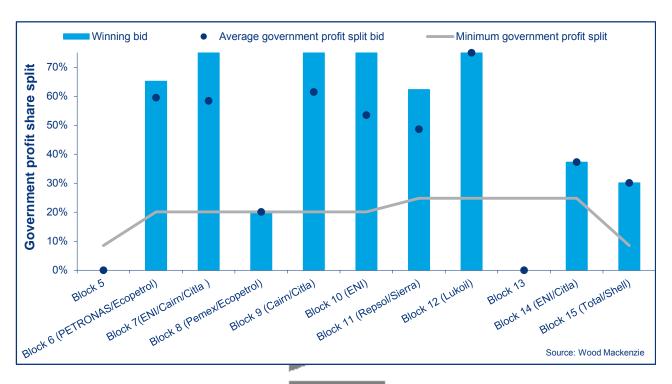
Competition was heated in the Salinas Sureste blocks

Block	Participant	Government profit share bid	Well commitment	Cash Bonus (US\$MM)
Block 5 - winner	No bid			
Block 5 - runner up	No bid			
Block 6 - winner	PETRONAS/Ecopetrol	65.19%	1	
Block 6 - runner up	Murphy/Talos/Ophir	64.75%	1	
Block 7 - winner	ENI/Cairn/Citla	75.00%	2	
Block 7 - runner up	Repsol/Premier/Sierra	69.58%	1	
Block 8 - winner	Pemex/Ecopetrol	20.10%		
Block 8 - runner up	No bid			
Block 9 - winner	Cairn/Citla	75.00%	2	30
Block 9 - runner up	ENI	75.00%	2	20
Block 10 - winner	ENI	75.00%	2	
Block 10 - runner up	DEA/Diavaz	68.73%		
Block 11 - winner	Repsol/Sierra	62.28%		
Block 11 - runner up	CNOOC	35.00%		
Block 12 - winner	Lukoil	75.00%	1	
Block 12 - runner up	No bid			
Block 13 - winner	No bid			
Block 13 - runner up	No bid			
Block 14 - winner	ENI/Citla	37.27%		
Block 14 - runner up	No bid			
Block 15 - winner	Total/Shell	30.11%		
Block 15 - runner up	No bid			
Source: Wood Mackenzie				

Source: Wood Mackenzie

Mexico's oil production has historically been concentrated in the Salinas Sureste area. Several blocks that were in this basin had been previously nominated by industry. Consequently, nearly all bids were concentrated in this region. Winning bids reflected the prospectivity of the blocks. They ranged from Ecopetrol and Pemex's 21% to the cap of 75%.

Only two Salinas Sureste blocks went unawarded

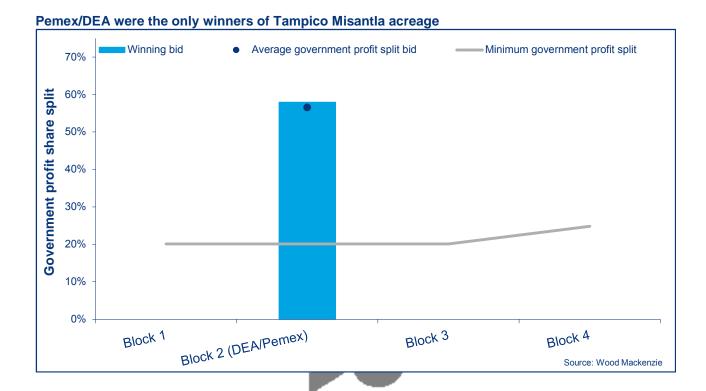


Tampico Misantla

The DEA/Pemex consortium picked up the only block in Tampico Misantla

Block	Participant	Government profit share bid	Well commitment		
Block 1- winner	No bid				
Block 1 - runner up	No bid				
Block 2 - winner	DEA/Pemex	57.92%	1		
Block 2 - runner up	ENI/Lukoil	55.14%	2		
Block 3 - winner	No bid				
Block 3 - runner up	No bid				
Block 4 - winner	No bid				
Block 4 - runner up	No bid				
Source: Wood Mackenzia					

While most of the attention focused on the Salinas-Sureste basin, one block in the Tampico-Misantla basin did receive bids. Given the gas-prone nature of these blocks, we expected competition to be subdued given the long term availability of cheap gas imports from the United States. The block was won by DEA and Pemex, who narrowly outbid an ENI-led consortium. We suspect that the acreage may hold deeper potential than the gas finds that Pemex has made in the area, although DEA's long experience in gas development and production may have been a factor in its bidding. It is no longer part of the integrated RWE-DEA group that worked along the gas value chain from exploration to electricity utilities, but perhaps sees an opportunity for acquiring and commercialising low-cost gas into Mexico's fragmented power market.



Conclusion

Despite the low oil price environment and explorers' tight budgets, Mexico succeeded in drawing big players into its Round Two shallow-water closing with the award of two-thirds of the blocks. The round claimed the highest number of bids of any offshore licensing round in Mexico. This highlights Mexico's ability to fine tune licensing terms, demonstrating the benefits of holding smaller, more frequent licensing rounds, which has allowed regulators to apply lessons learned from each round to the next and prevent mistakes seen in Round One.

Mexico's corporate landscape further matured. With Shell's entry, all-seven Majors now hold assets. Drawing the industry's largest players speaks to the size and scale of the opportunity in Mexico's upstream sector. NOCs Repsol and Ecopetrol also made their debut this round. With global opportunities competing for their investments, their entry into Mexico reaffirms the potential of Mexico's shallow-water. Pemex rose as one of the most dynamic participants in the licensing round. The company was the most active bidder, having participated through three consortia as well as individually. The NOC is taking advantage of opportunities in the Energy Reform to enhance its portfolio via partnerships. It also shows that the company is adapting to the country's newly competitive upstream landscape.

Fiscally, Mexico continues to make improvements. The government's willingness to listen to industry and apply learnings was evident in the round. The calibration of the minimum and maximum acceptable government profit share bid worked well. Companies' bids were unhindered by this variable and we witnessed the first use of a signature bonus tiebreaker. Work commitments, though, were absent from many bids. We see this as a key variable to incentivise future exploration, and Mexico would do well to increase the bid weighting of additional work commitments moving forward.



Client Helpdesk	Europe	Americas	Asia Pacific
support@woodmac.com	+44 131 243 4477	+1 713 470 1700	+65 6518 0888

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