Federal Offshore Gulf of America Analysis

Final report - Prepared for American Petroleum Institute

Rystad Energy Advisory

June 24th, 2026

Deepwater will continue to drive Gulf of America production and investment; shelf production will decline as decommissioning costs rise

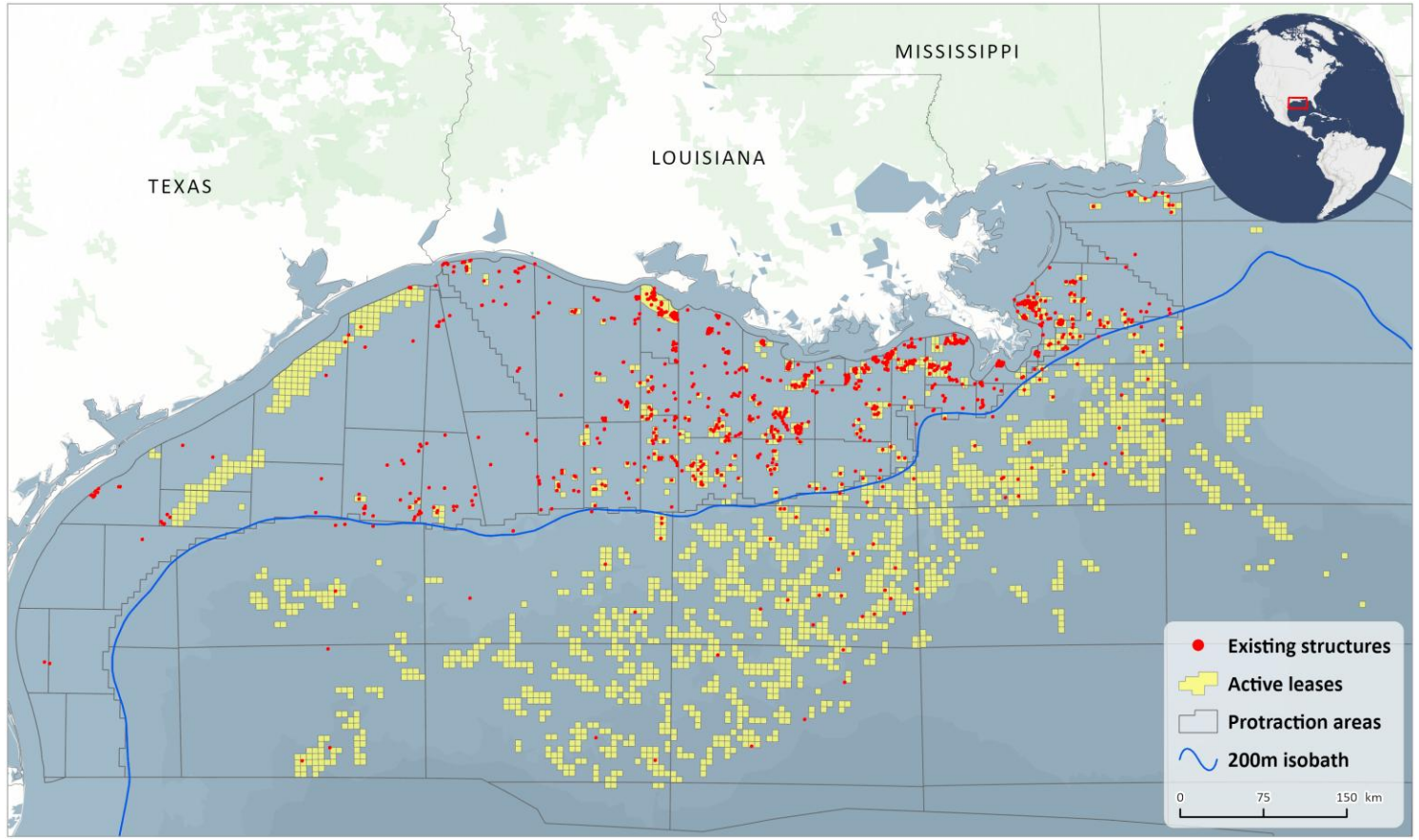
Finding	Details
1 **Deepwater drives Gulf of America production and investment**	• Deepwater production has grown 64% since 2000, while shelf production has declined 95%; shelf represents 6% of production today and will represent less than 2% by 2030 • Deepwater accounted for 95% of 2025 capital expenditures and is projected to account for 96% of 2026-2035 Gulf of America capital expenditures • Only 3% of the $7.4B in Gulf of America high-bid dollars since 2012 has gone to shelf acreage
2 **Shelf infrastructure is aging out and decommissioning costs are rising as a share of shelf revenues**	• Of the 1,300+ existing structures in the Gulf of America, ~95% sit on the shelf; since 2000, more than 3,800 shelf structures have been removed • 58% of the remaining shelf structure inventory exceeds 40 years in age • Shelf decommissioning costs are climbing, accounting for 26% of shelf revenue in 2024 and 15% in 2025
3 **Gulf of America deepwater generates substantially more reinvestment and free cash flow per dollar of revenue**	• In deepwater, capex amounts to 40% of production revenues; on the shelf, capex amounts to just 29% of revenues[1] • Operating expenditures, including decommissioning costs, consume 49% of revenue on the shelf, compared to 25% of revenue in deepwater[1] • Future deepwater investment is supported by a robust pipeline of greenfield and brownfield opportunities

1: 2016-2025
Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy research and analysis; BOEM

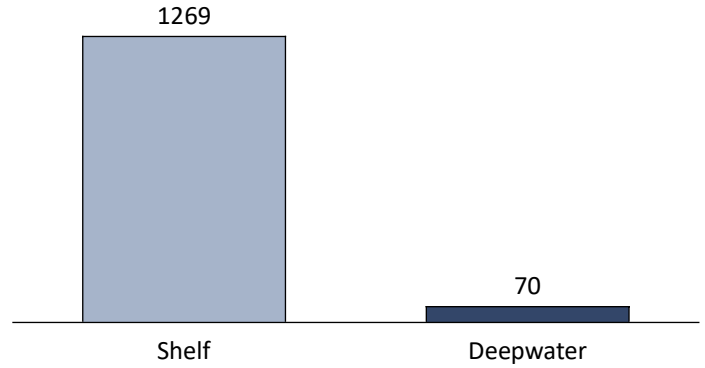
Table of contents

There are over 1,300 structures in the Gulf of America – 95% reside on the shelf

Gulf of America active leases and existing structures



Gulf of America existing structures

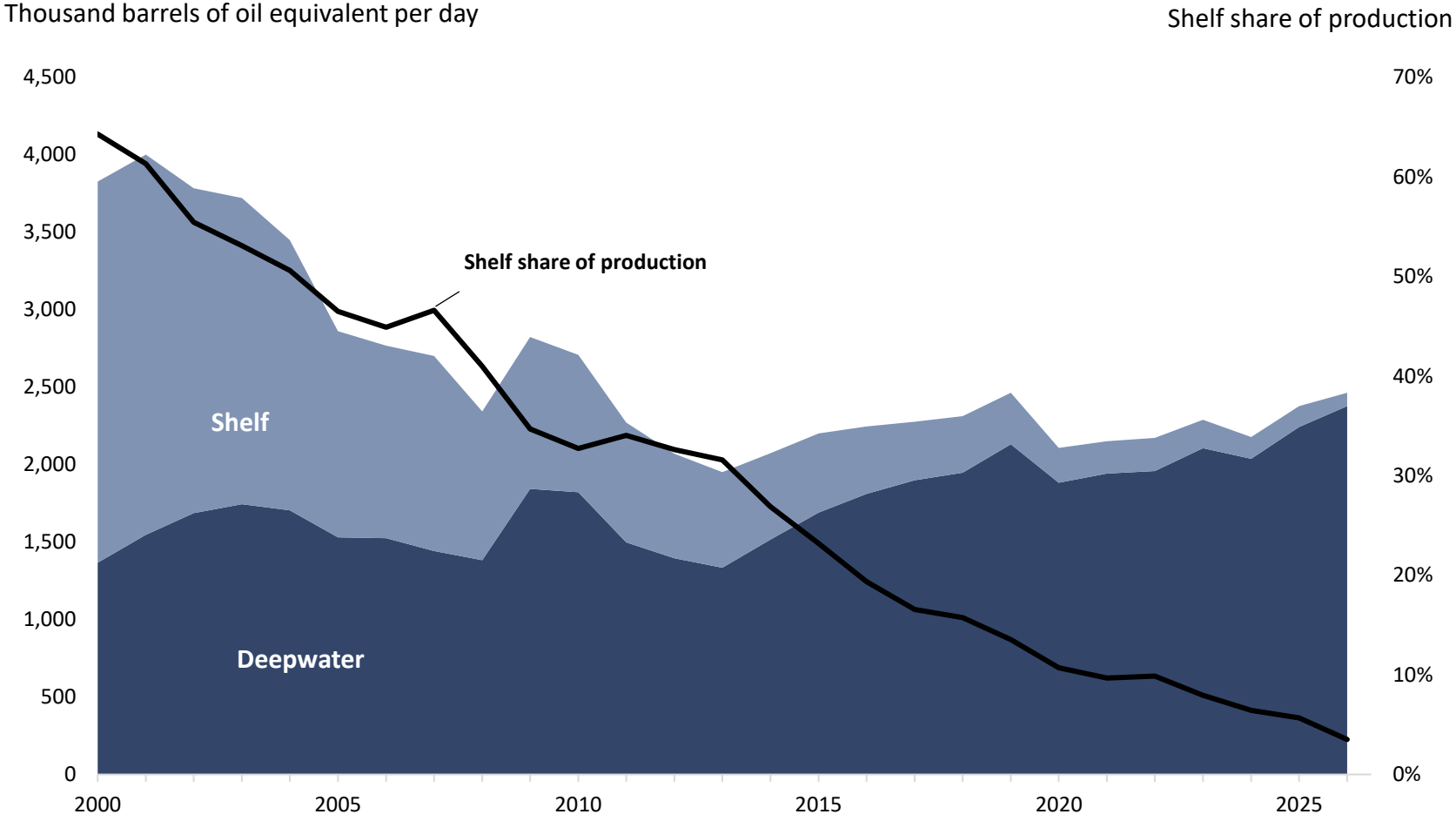


- The shelf dominates the current platform stock, making up 94.8% of all currently installed structures, while deepwater only accounts for just 5.2% of total structures
- The bulk of shelf infrastructure is also aging with over 500 structures between 40-60 years old based on reported installation age, indicating an aging infrastructure base
- The continued aging of shelf infrastructure is expected to sustain elevated decommissioning activity across the shelf

Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy research and analysis; BOEM platform structure data

The shelf's share of Gulf of America production has fallen from 64% in 2000 to under 6% in 2025

US Gulf of America total production by water depth, 2010-2026
Thousand barrels of oil equivalent per day

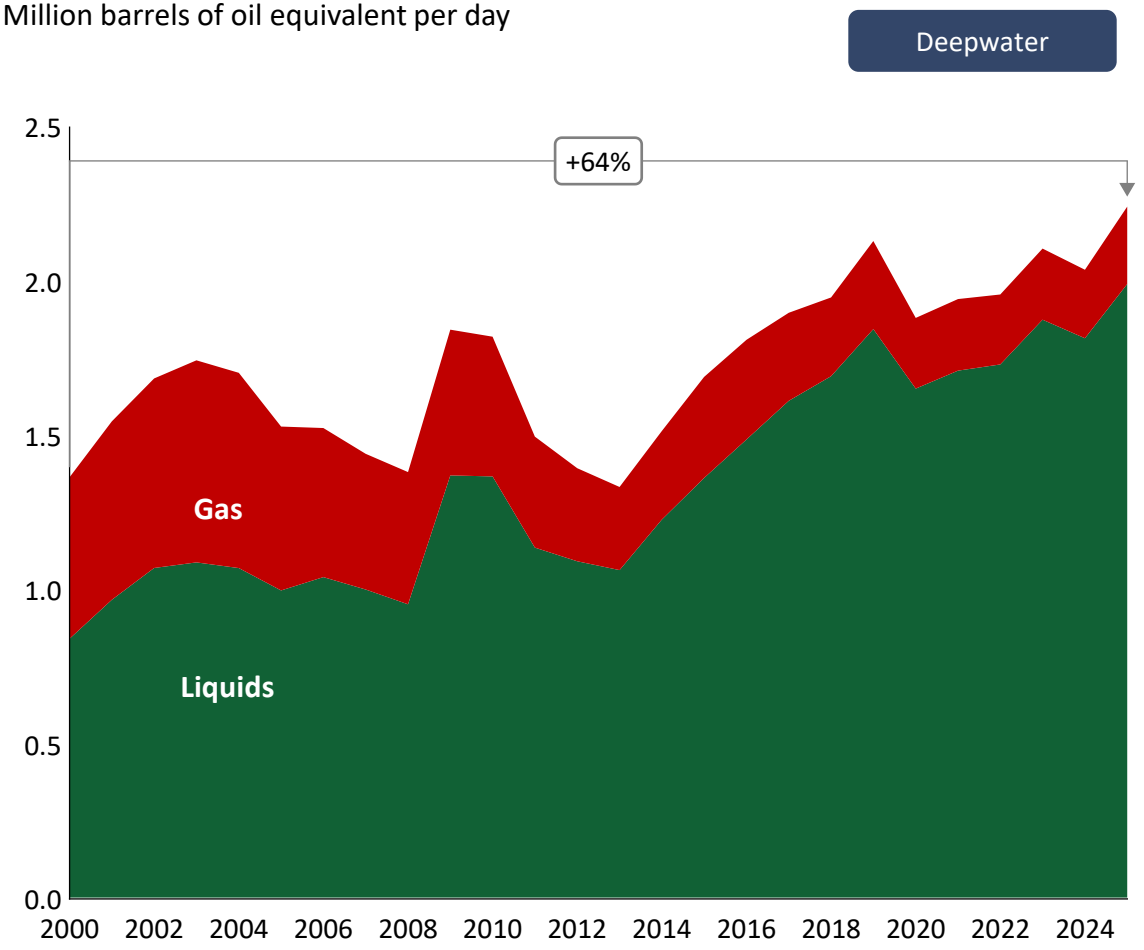


- US Gulf of America production has shifted decisively toward deepwater, with shelf output declining sharply over the past two decades. Total production fell from around 3,800 thousand boe/d in 2000 to approximately 2,400 thousand boe/d by 2025, driven by a steep drop in shelf volumes.
- The shelf's share of total production has plunged from nearly 65% in 2000 to less than 10% by the mid-2020s, and now stands below 6% in 2026, underscoring the natural decline and maturity of shelf assets
- Deepwater production, by contrast, has remained relatively resilient and now dominates output. With shelf infrastructure continuing to age and production economics deteriorating, decommissioning activity across shelf areas is expected to remain elevated in the years ahead.

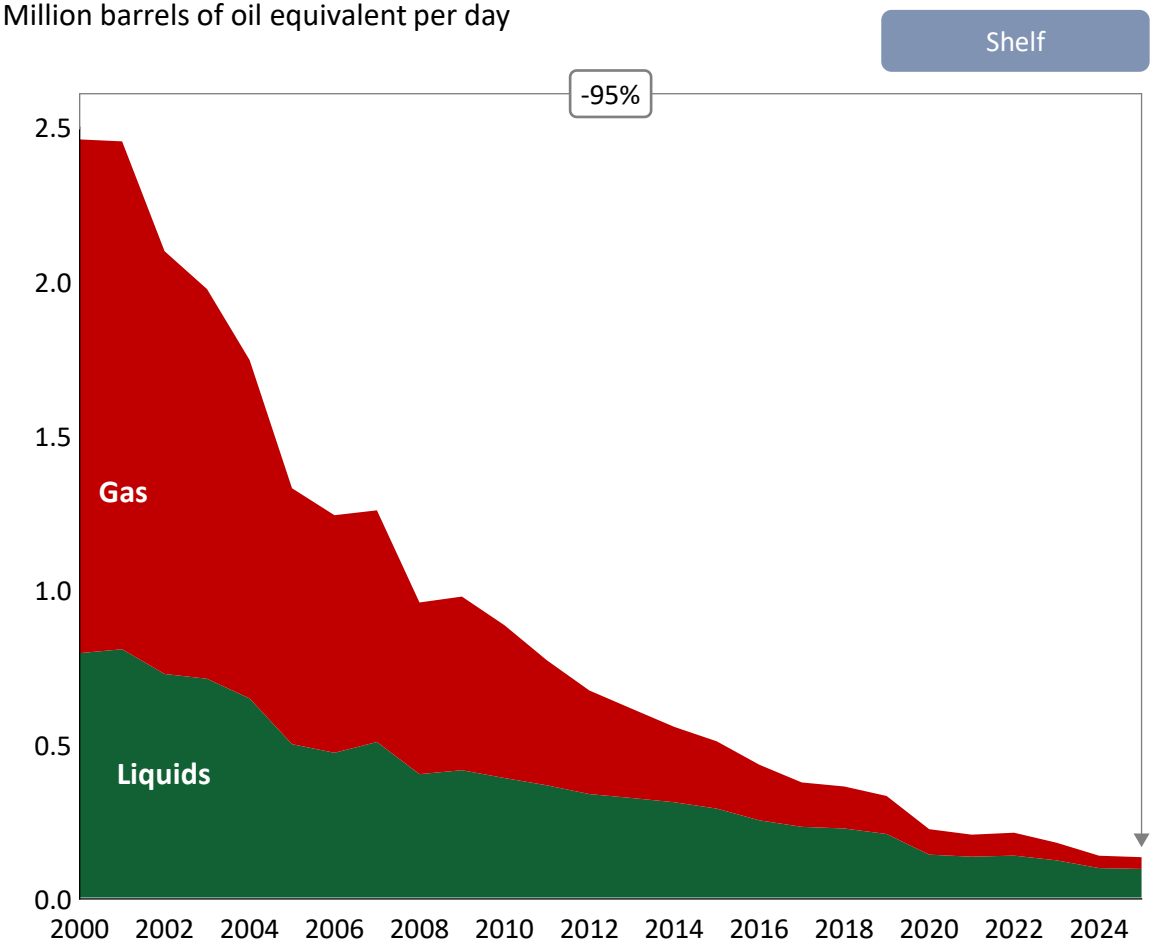
Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

Deepwater production has grown 64% since 2000, while shelf production has declined 95%

US Gulf of America deepwater production by oil and gas group, 2000-2025
Million barrels of oil equivalent per day



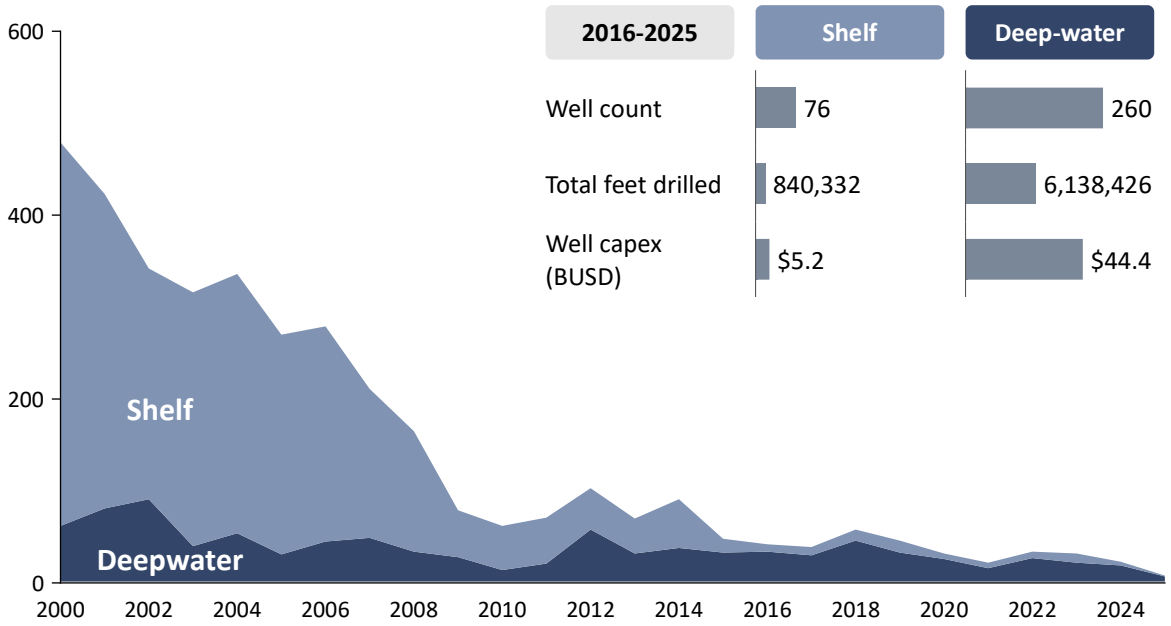
US Gulf of America shelf production by oil and gas group, 2000-2025
Million barrels of oil equivalent per day



Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

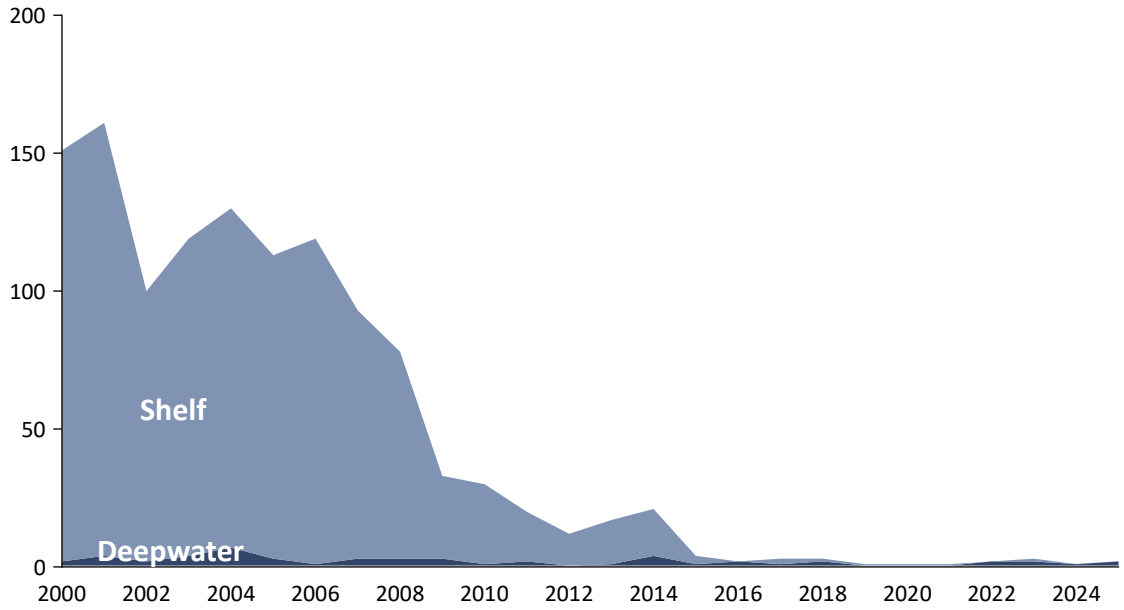
Drilling on the shelf has slowed down and platform installations on the shelf have stalled

US Gulf of America spudded wells by water depth, 2000-2025[1]
Spudded well count



- Shelf drilling activity has declined dramatically since its peak in the early 2000s, with spudded well counts falling from over 250 annually to near zero by the mid-2020s.
- Since 2016, only 76 shelf wells have been drilled compared to 260 in deepwater, with shelf well capex totaling just $5.2bn against $44.4bn for deepwater — underscoring the near-complete withdrawal of investment from shelf drilling.

US Gulf of America structure installations by water depth, 2000-2025
Count of installed structures

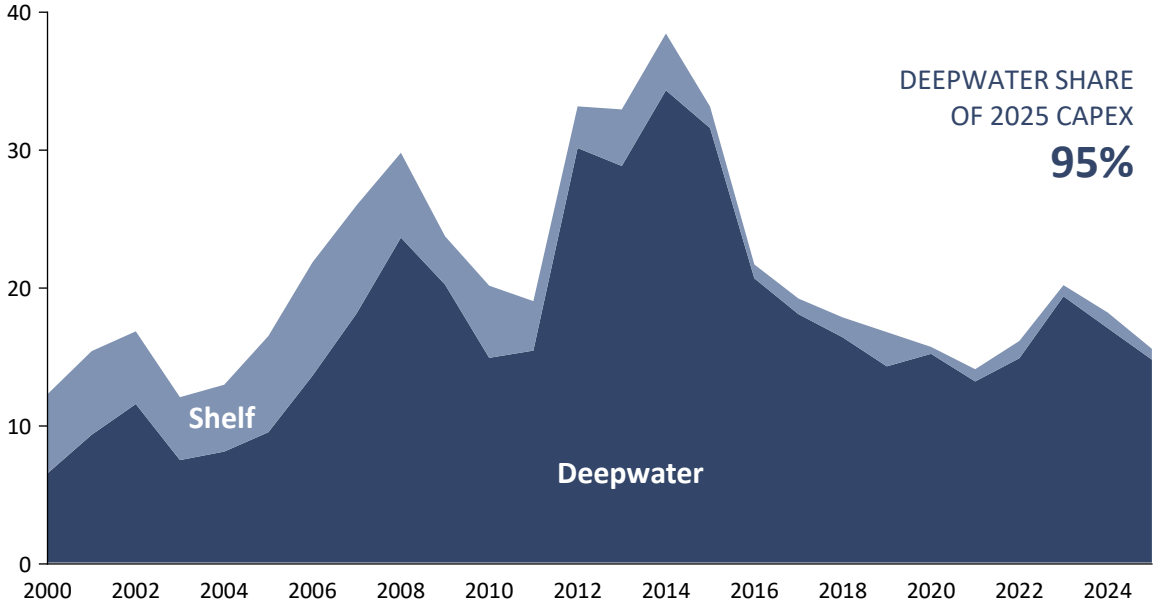


- New structure installations on the shelf have followed a similar trajectory, declining sharply from a peak of around 150 in the early 2000s to negligible levels today.
- With virtually no new infrastructure being installed, the existing shelf asset base continues to age with little replacement, reinforcing the outlook for sustained decommissioning activity across shelf areas in the years ahead.

1: Excludes sidetrack wellbores
Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy ShaleWellCube; Rystad Energy Ucube; BOEM platform structure data

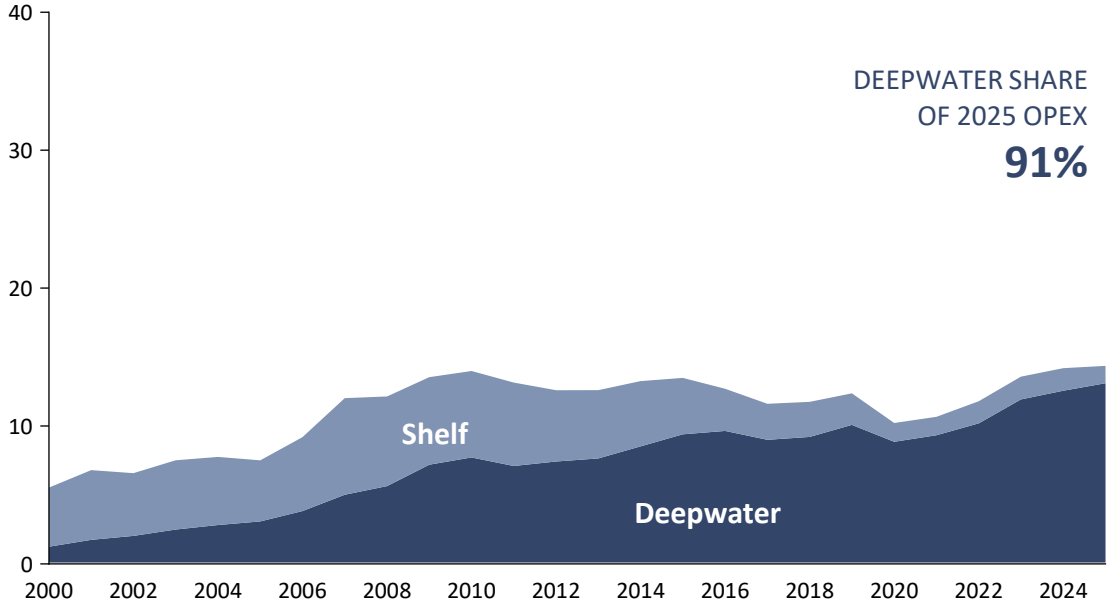
Deepwater accounted for 95% of Gulf of America capex and 91% of opex in 2025

US Gulf of America capital expenditures by water depth, 2000-2025[1]
Billion USD (nominal)



- While total capex peaked around $38Bn in 2014 before declining sharply, deepwater has maintained its dominant share throughout, representing 95% of basin capex in 2025, reflecting continued investment in major developments
- Shelf capex, by contrast, has declined to a negligible residual — reflecting the near-complete withdrawal of capital from shelf drilling and development activity

US Gulf of America operating expenditures by water depth, 2000-2025
Billion USD (nominal)

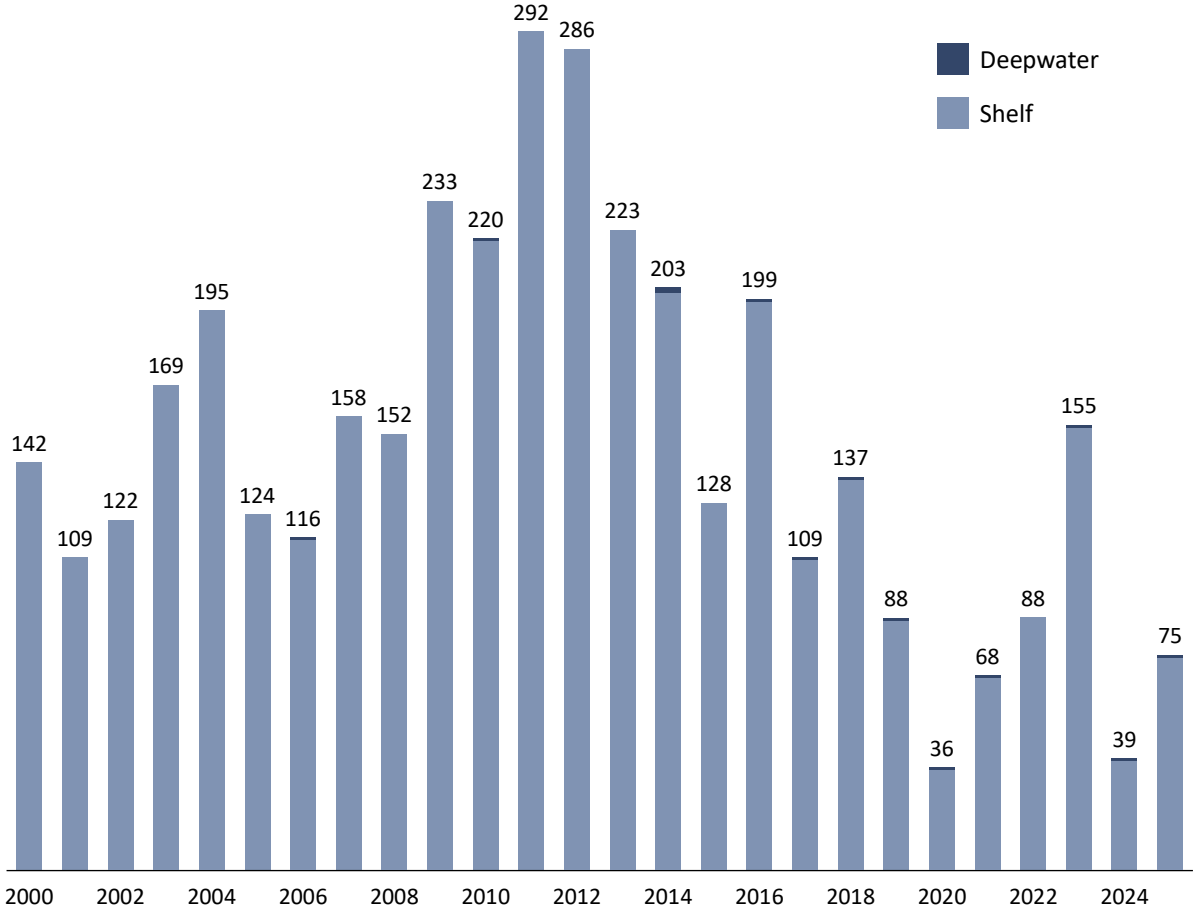


- Unlike capex, total Gulf of America operating expenditure has remained broadly stable and has grown modestly through the 2020s, with deepwater accounting for 91% of basin opex in 2025
- Shelf opex has declined gradually despite the sharp fall in productive activity, reflecting the persistent cost burden of maintaining ageing infrastructure

Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy Ucube

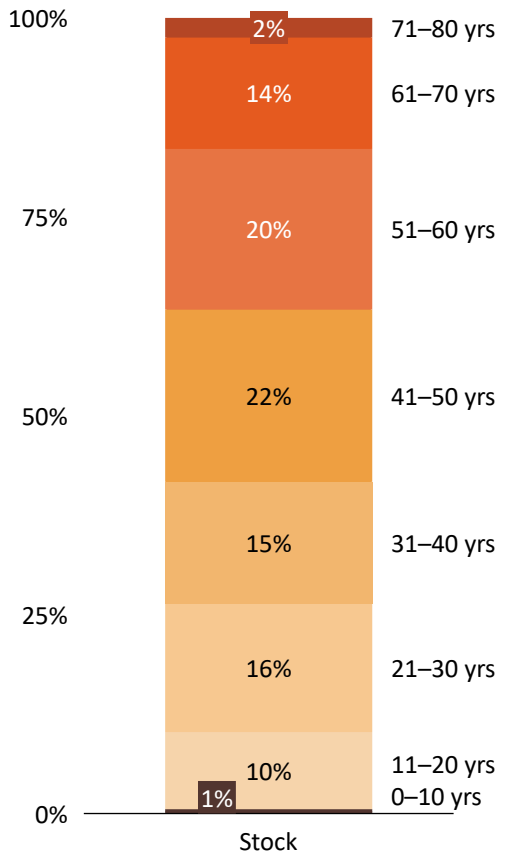
Since 2000, more than 3,800 shelf structures have been removed — with 58% of remaining inventory exceeding 40 years of age

US Gulf of America structure removals by water depth, 2000-2026
Count of structures



Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: BOEM platform structure data

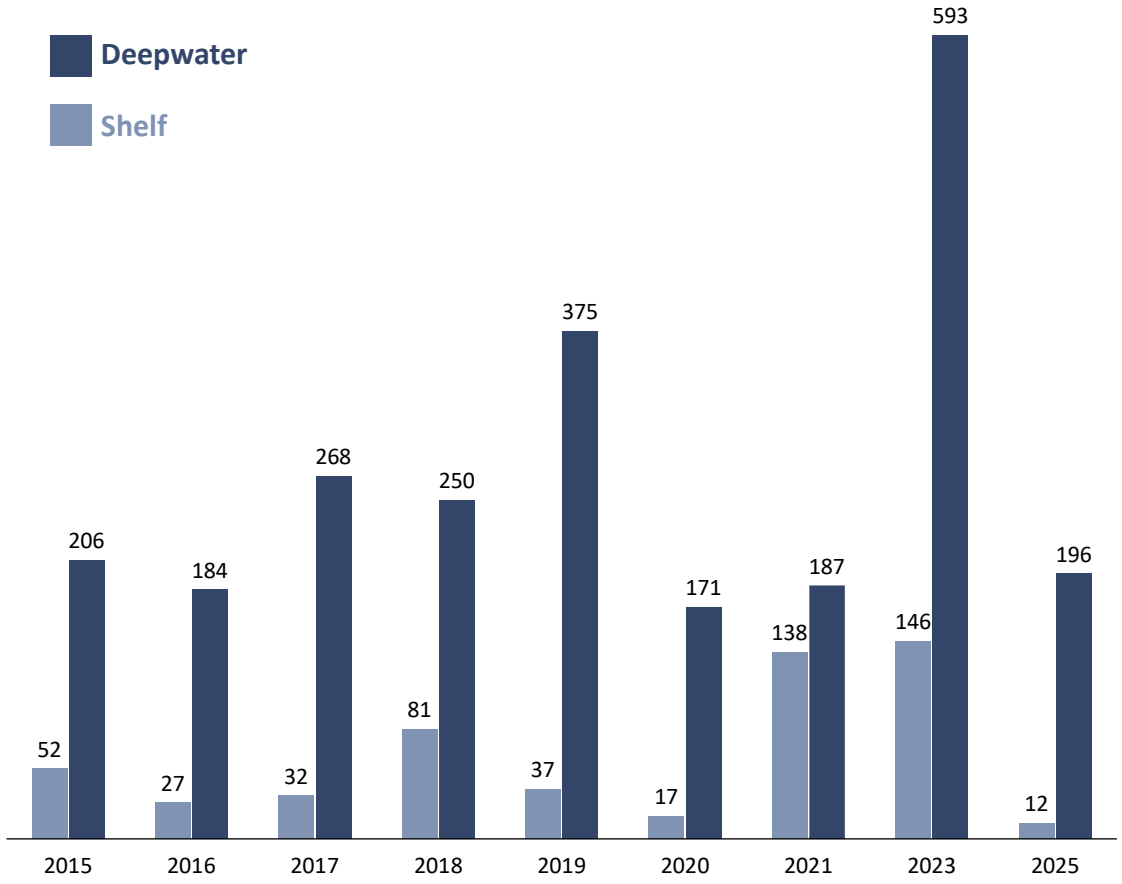
US Gulf of America shelf platform stock by installation age
% of total active structures



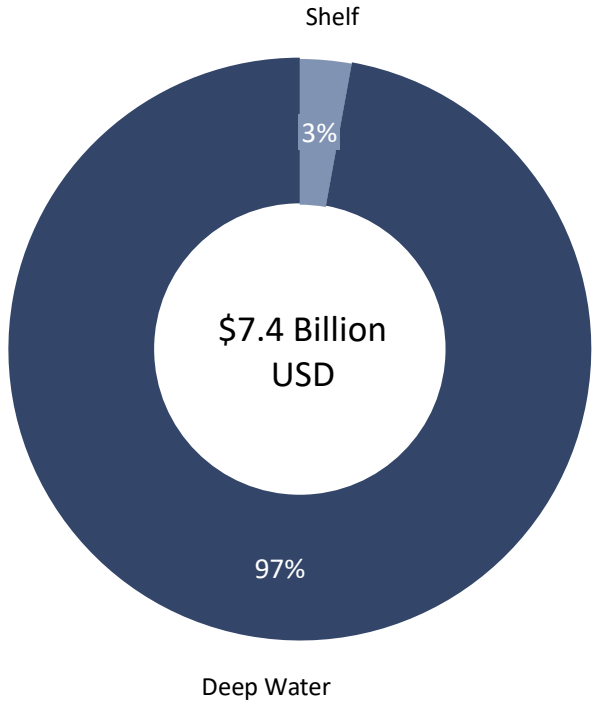
- Over 1,200 platforms across shelf waters have no designated removal date in BOEM's platform structure data.
- Analyzing these platforms by installation age shows that over 35% of active platforms on the shelf exceed 50-years in age.
- Relative to the mid-2000s, decommissioning activity has declined while the platform stock continually ages underscoring the increasing need for more decommissioning activity across the shelf

Shelf leasing activity has accounted for only 3% of $7.4 billion Gulf of America high bid dollars since 2012

US Gulf of America high bid counts by water depth
High bid count



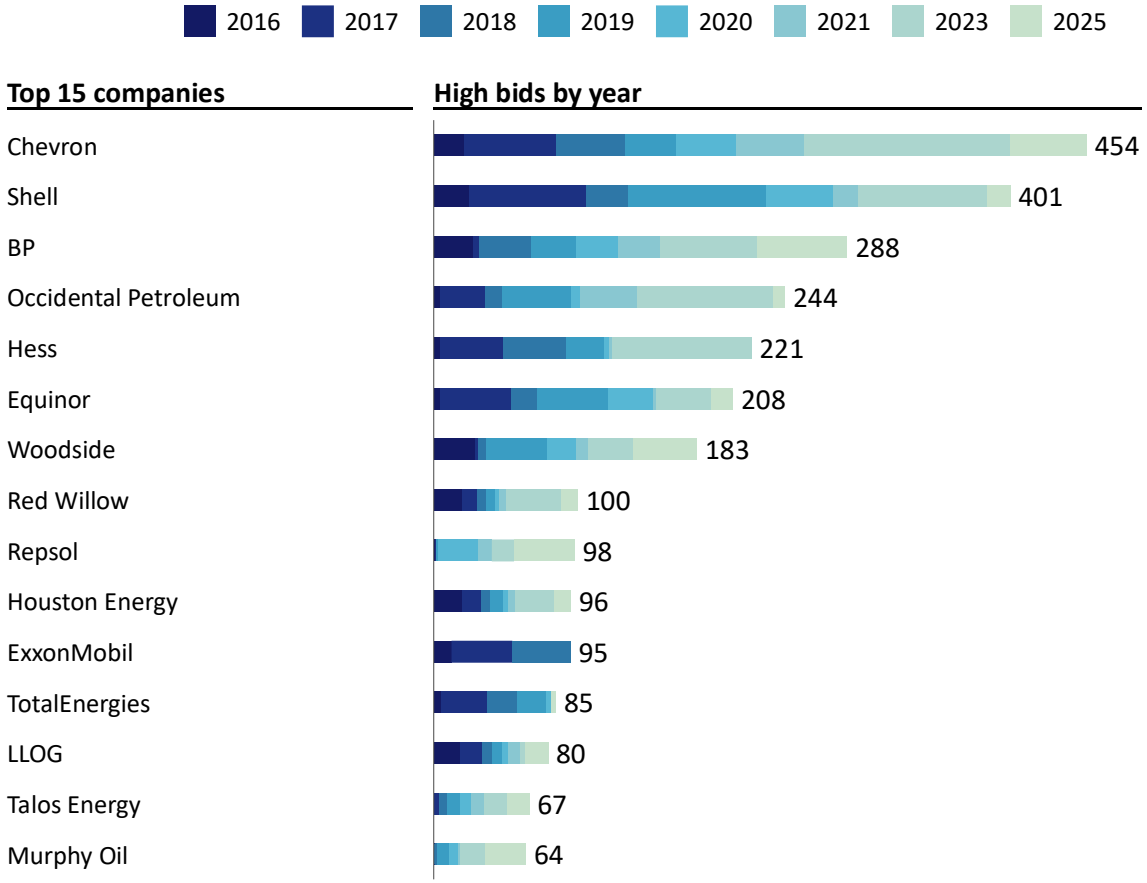
US Gulf of America high bid dollars by water depth
Billion USD



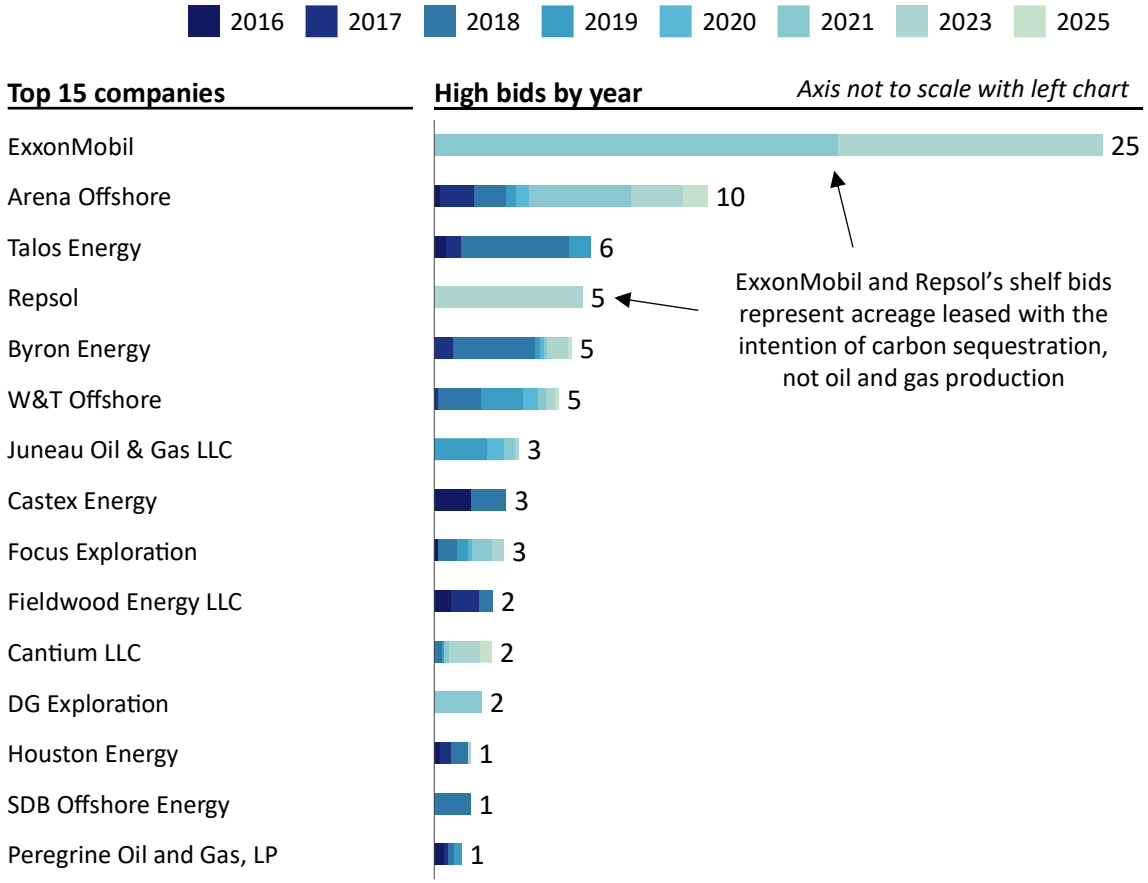
Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: BOEM lease sale statistics

There is little overlap between top deepwater bidders and top shelf bidders over the past decade

High bids by year and company, deepwater
Million USD, 2016-2025



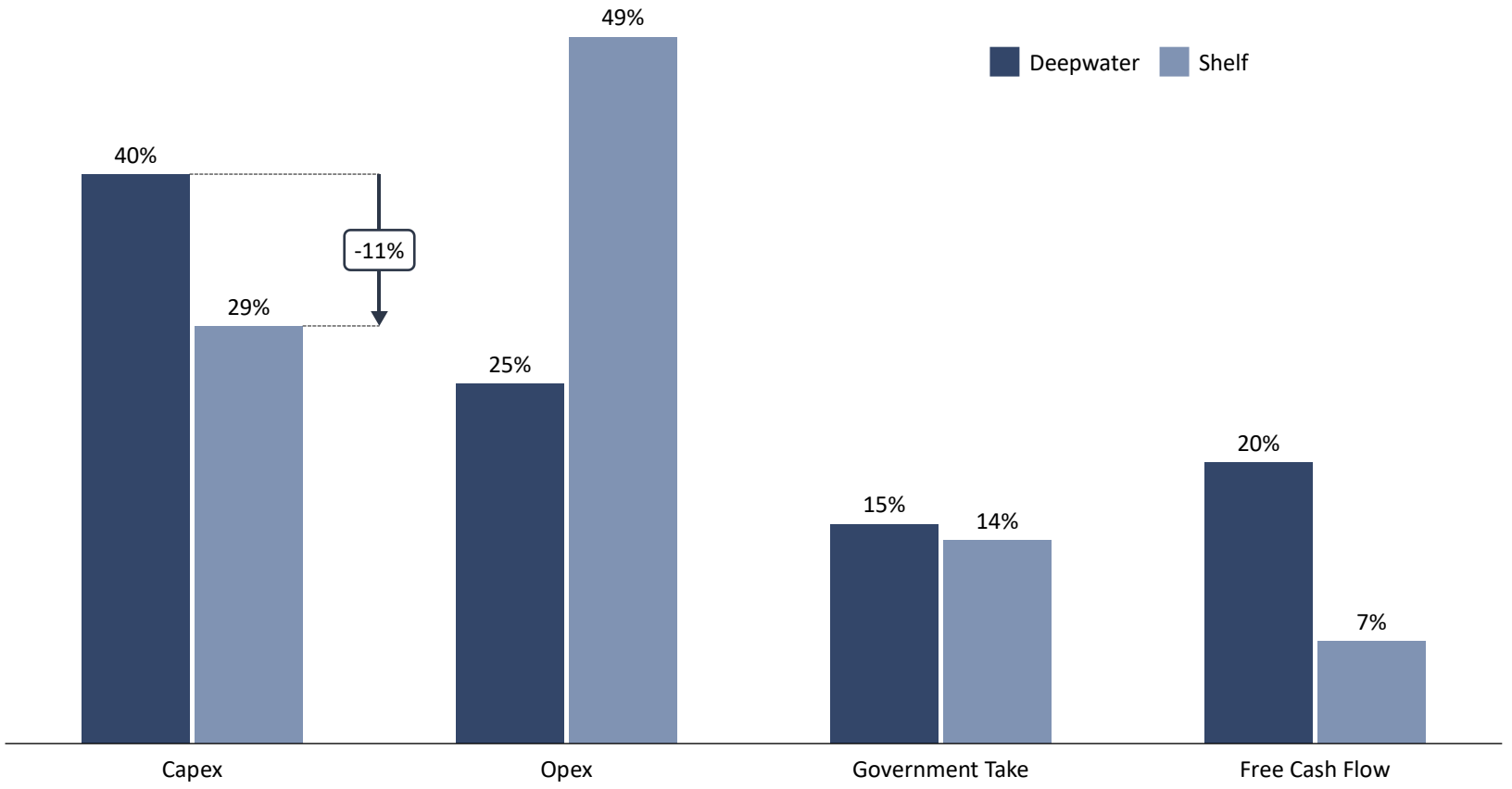
High bids by year and company, shelf
Million USD, 2016-2025



Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy research and analysis; BOEM

In deepwater, capex amounts to 40% of production revenues; on the shelf, capex amounts to just 29% of revenues

Distribution of revenue by economic category, 2016-2025
% of production revenue

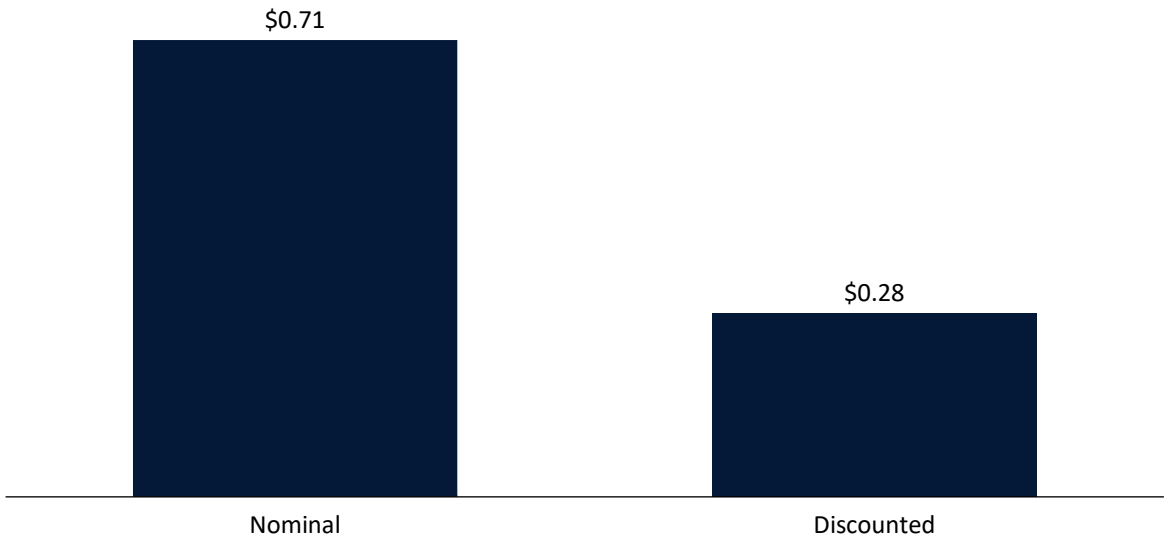


- Deepwater operations reinvest a significantly higher share of production revenues than the shelf, reflecting the capital-intensive nature of offshore development at greater water depths and the number of available opportunities. Over the 2016–2025 period, deepwater operators directed 40% of revenues back into capex compared to just 29% on the shelf.
- Shelf operations consumed 49% of revenues in operating costs against 25% for deepwater, highlighting the relative inefficiency of ageing shelf infrastructure and the growing cost burden of maintaining legacy assets
- Despite higher reinvestment and opex, deepwater generates a markedly stronger free cash flow yield at 20% of revenues, nearly three times the shelf's 7%.
- Government take is broadly comparable across both water depths at 15% and 14% respectively. Taken together, the economics strongly favor deepwater — higher reinvestment, lower relative operating costs, and superior cash generation — further reinforcing the structural shift of Gulf of America activity away from the shelf.

Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

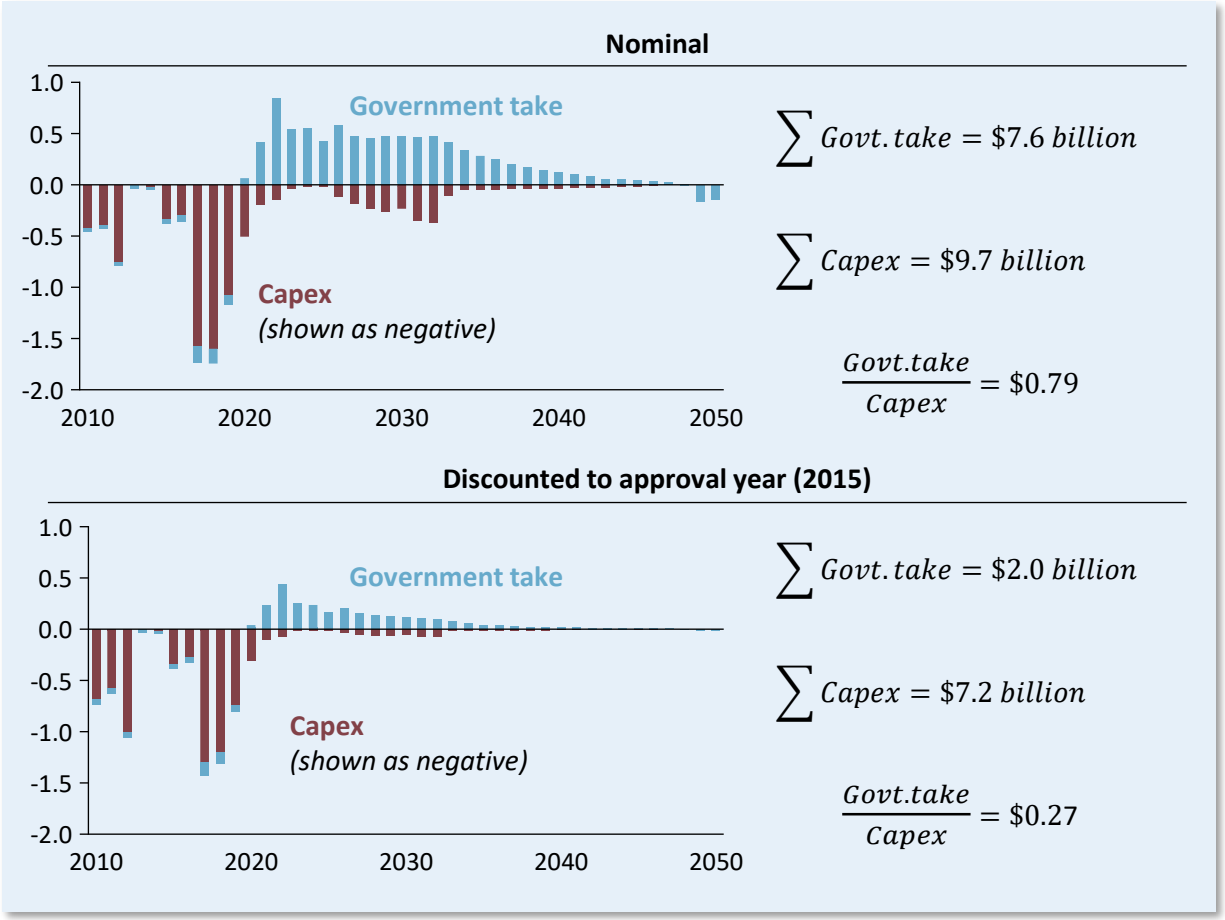
Each dollar of investment in deepwater Gulf of America generates 71 cents of direct government royalties, bonus payments, rents, and corporate income taxes (in nominal terms)

Dollars of direct government take per dollar of direct investment[1]
Deepwater Gulf of America



- Gulf of America investment generates substantial government take, which includes government revenues such as royalties, bonus payments, rents, and corporate income taxes
- Based on analysis of deepwater projects with 2000-2025 approval years, each dollar of capital expenditure generates 71 cents of government revenues in nominal terms. Discounted to project approval year, each dollar of capex generates 28 cents of government revenues.

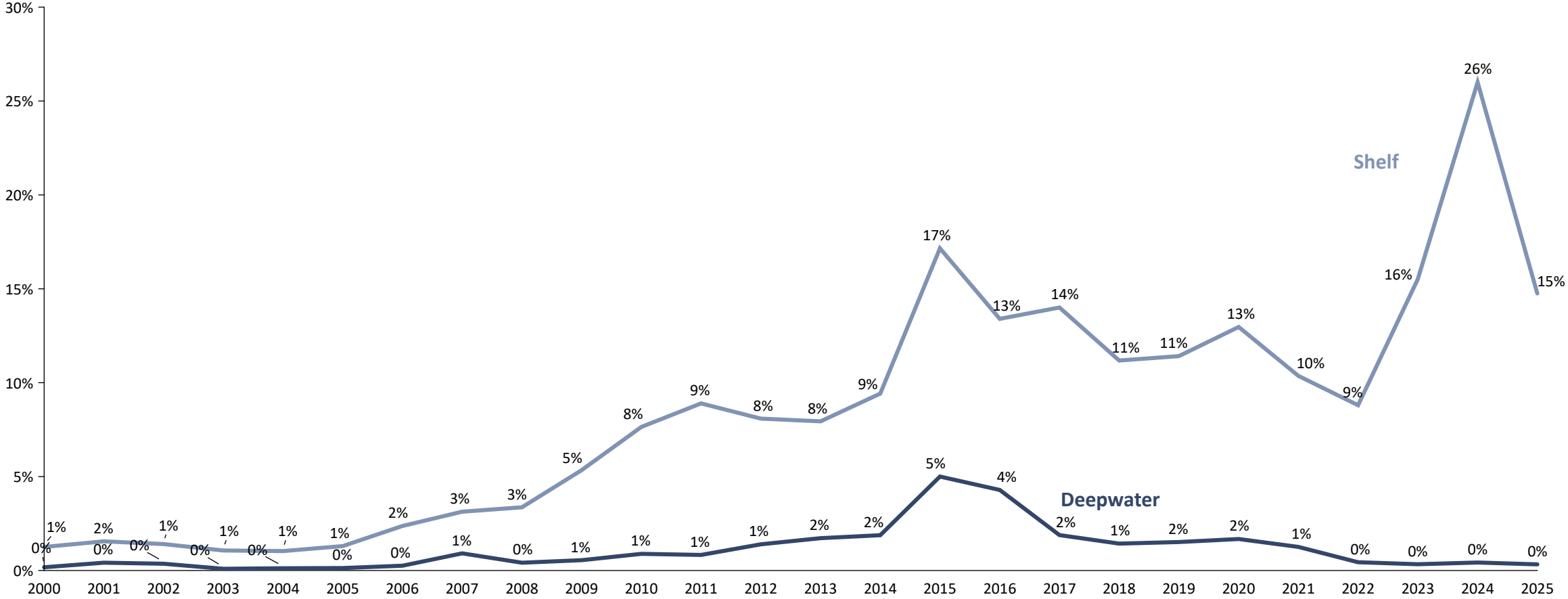
Example: Capex and government take for a single asset



1: Calculated from deepwater Gulf of America assets with 2000-2025 approval years, including Rystad forecasts of capex and government take in future years. Capex includes exploration and development capex. Discounted values reflect capex and government take discounted to approval year at a 10% discount rate.
Source: Rystad Energy research and analysis; Rystad Energy UCube

Shelf decom costs are climbing, accounting for 26% of shelf revenue in 2024 and 15% in 2025

US Gulf of America abandonment cost as a share of revenue by water depth
Share of annual production revenue

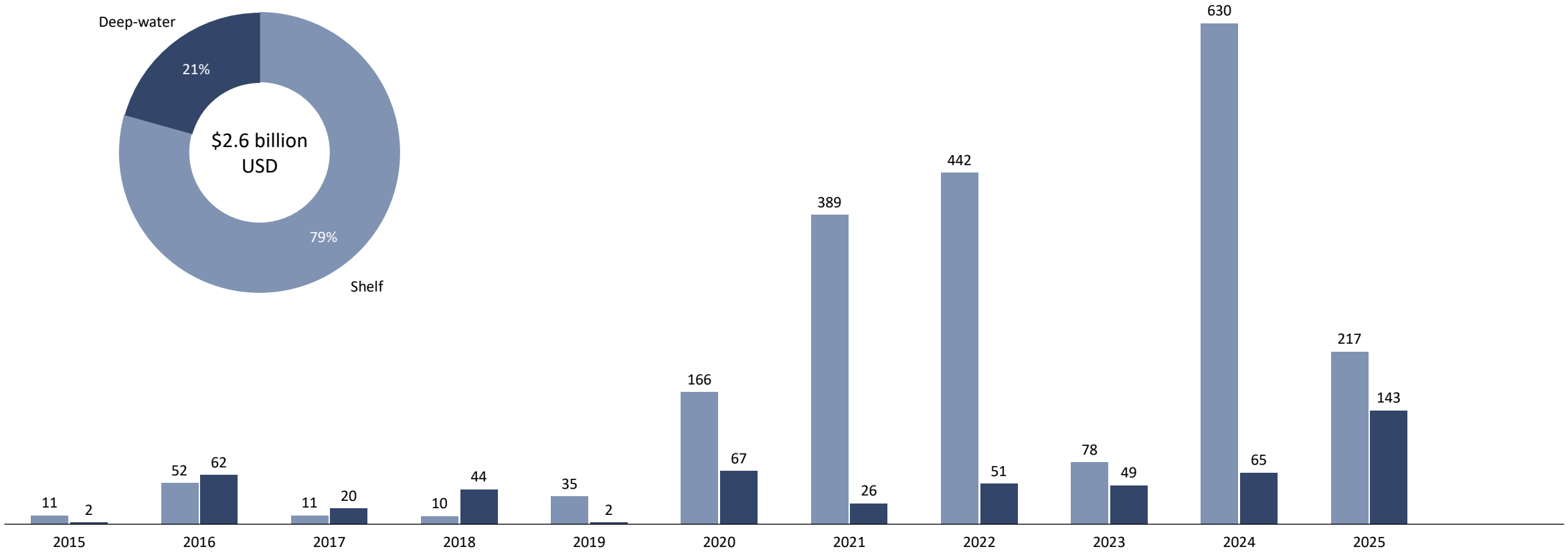


Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

RystadEnergy

BSEE decommissioning estimates show ~80% of estimated historical decommissioning costs have driven by decommissioning on the shelf

Estimated decommissioning costs by lease expiry year by water depth[1]
Million USD

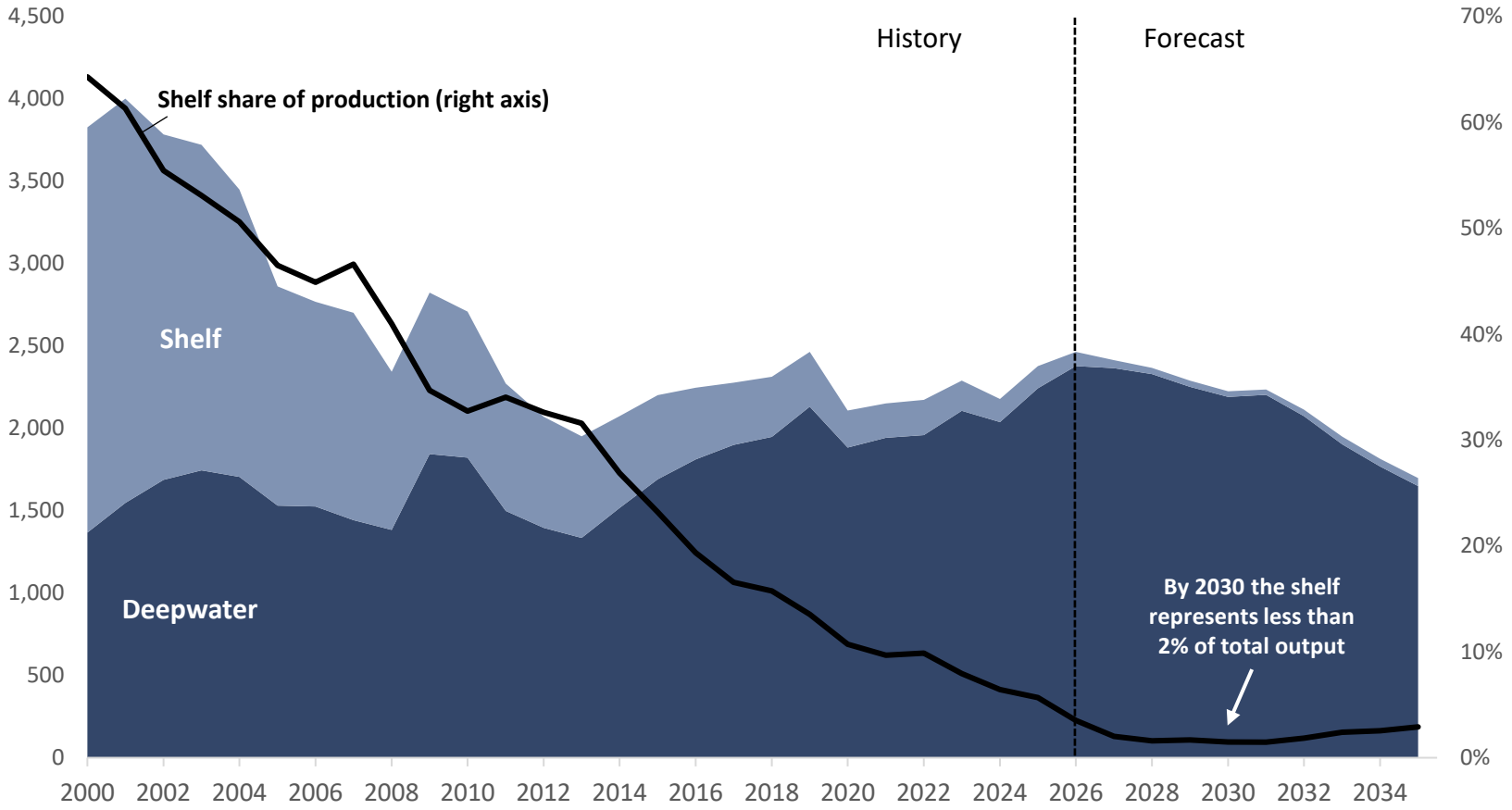


Note: Chart excludes 'No Expiry' leases — active production leases with no set expiration date . Only 10% P50 of total P50 cost estimates is on leases with defined expiry years. Lease expiry years were applied utilizing BOEM's lease area block dataset. Costs shown are BSEE's P50 estimates.
Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: BSEE decommissioning cost estimate data; BOEM lease area block dataset

Table of contents

Shelf production will decline by 64% over the next decade and comprise just 2-3% of Gulf of America output

US Gulf of America total production by water depth, 2015-2035
Thousand barrels of oil equivalent per day



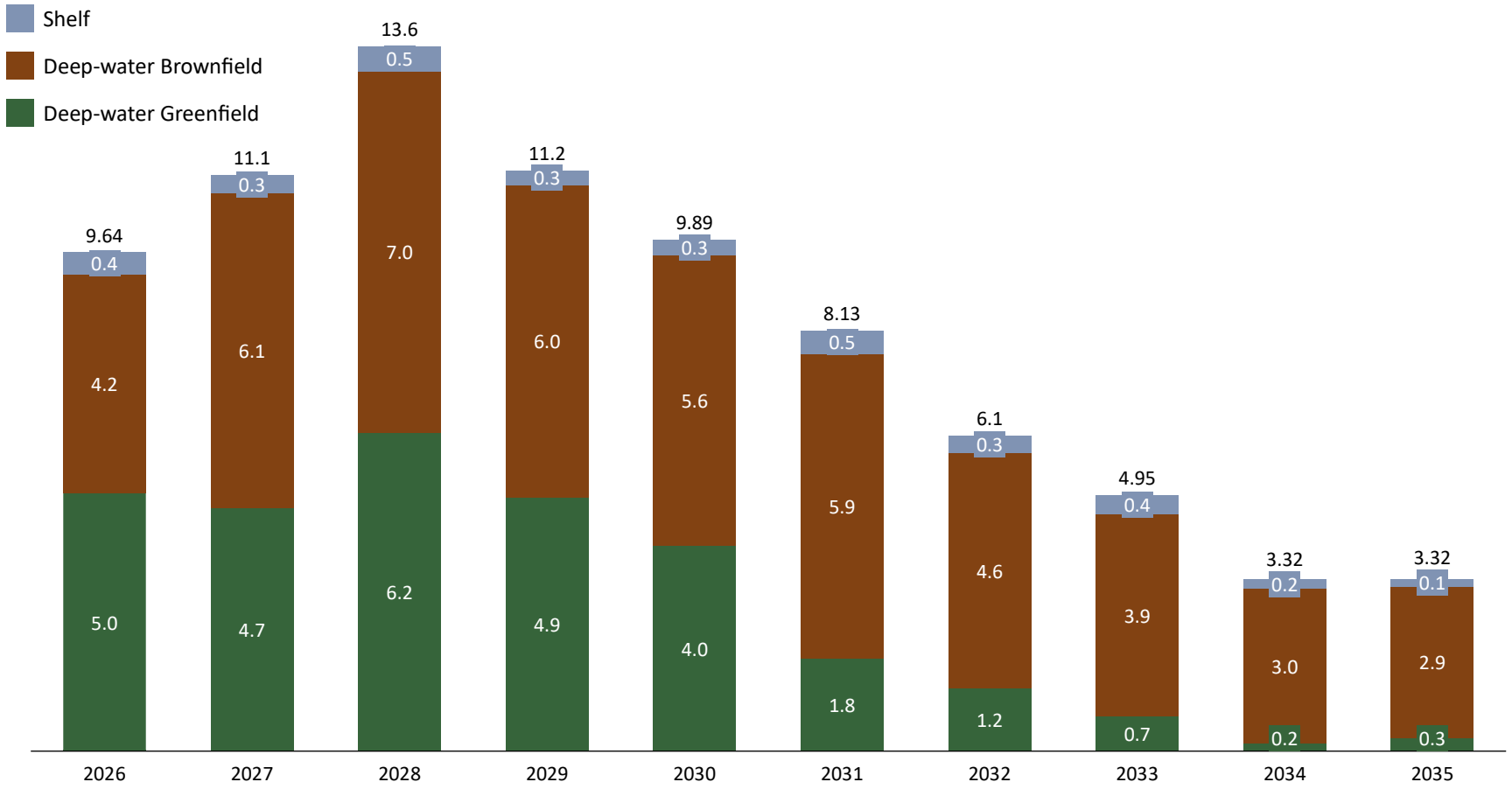
Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

- Shelf production has been in structural decline for over a decade and is forecast to become almost entirely negligible as a share of total Gulf of America output. From representing over 20% of total basin production in 2015, the shelf's share has fallen continuously and is projected to drop below 2% by 2030
- In absolute terms, shelf volumes are forecast to decline sharply through the late 2020s before stabilizing at minimal levels through to 2035. Deepwater, by contrast, sustains total Gulf of America production at broadly stable levels across the forecast period, with output supported by the new developments .
- The divergence between the two is irreversible — the shelf's contribution to Gulf production is effectively drawing to a close, reinforcing the increasing need for decommissioning across shelf assets in the years ahead.

Gulf of America investment is overwhelmingly deepwater, sustained by new developments and tieback extensions

US Gulf of America capital expenditures by water depth category

Billion USD

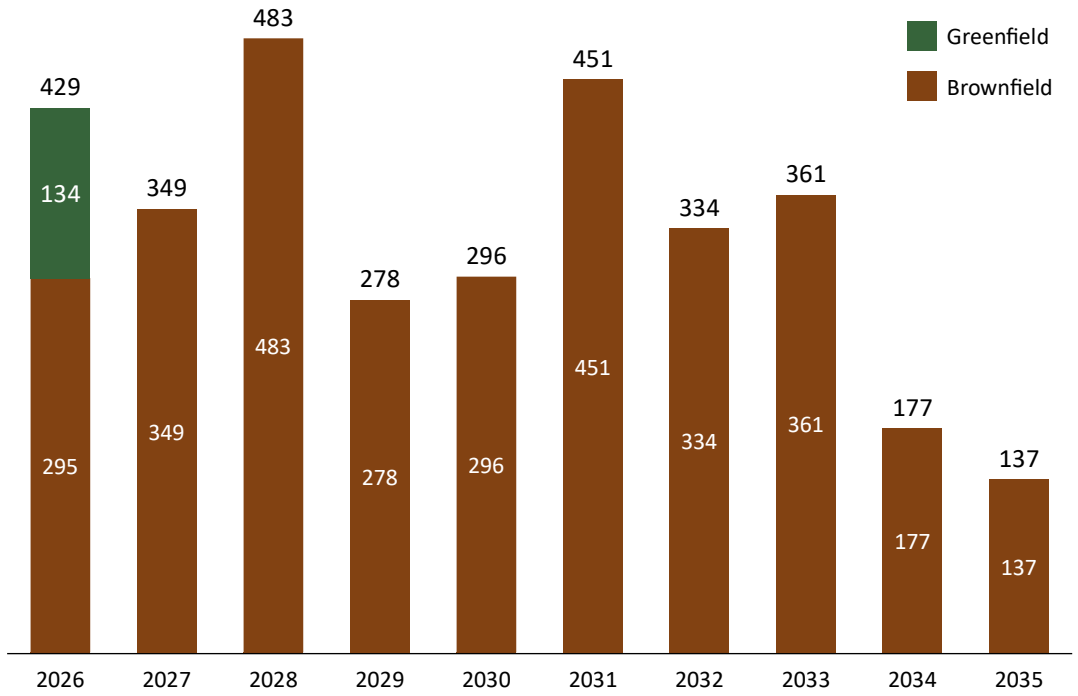


Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

- Deepwater dominates the Gulf of America capital expenditure outlook, accounting for the vast majority of total investment across the 2026–2035 forecast period. Total Gulf of America capex peaks at $13.6Bn in 2028 before declining to $3.32Bn by 2034–2035, driven primarily by the maturation of the deepwater project pipeline.
- Deepwater greenfield investment is the single largest component in the near term, reflecting a slate of new development sanctions and tieback extensions that sustain activity through the late 2020s. Deepwater brownfield spend remains a consistent and meaningful contributor throughout the period, underpinned by ongoing maintenance and infill drilling on existing producing assets.
- Shelf capex, by contrast, remains marginal across the entire forecast window — consistently below $0.5Bn per year — reinforcing the stark contrast between the shelf's declining investment profile and the continued capital commitment directed toward deepwater.

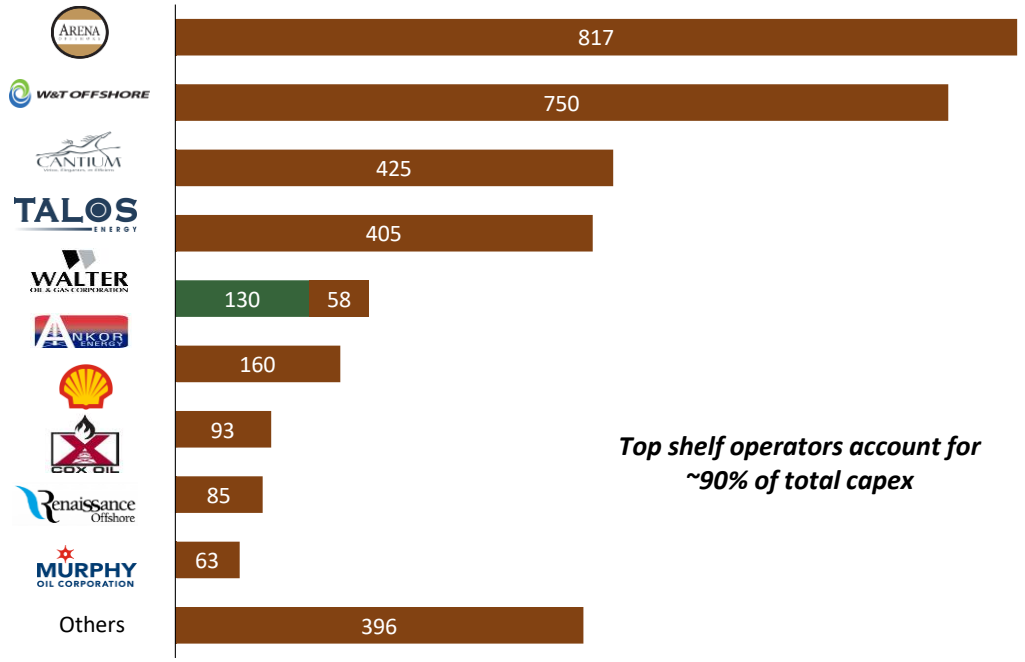
Residual shelf investment is confined to brownfield activity among a small group of operators

US Gulf of America shelf capex split by brownfield-greenfield, 2026-2035
Million USD



- Shelf capex over the 2026–2035 period is almost entirely brownfield in nature, with greenfield investment accounting for a negligible share of total spend throughout the forecast window.
- Total capex peaks at $483M in 2028 before declining steadily to $137M by 2035, reflecting the gradual exhaustion of remaining development opportunities on an ageing asset base with little prospect of new field development.

US Gulf of America shelf capex split by top shelf operators, 2026-2035[1]
Million USD



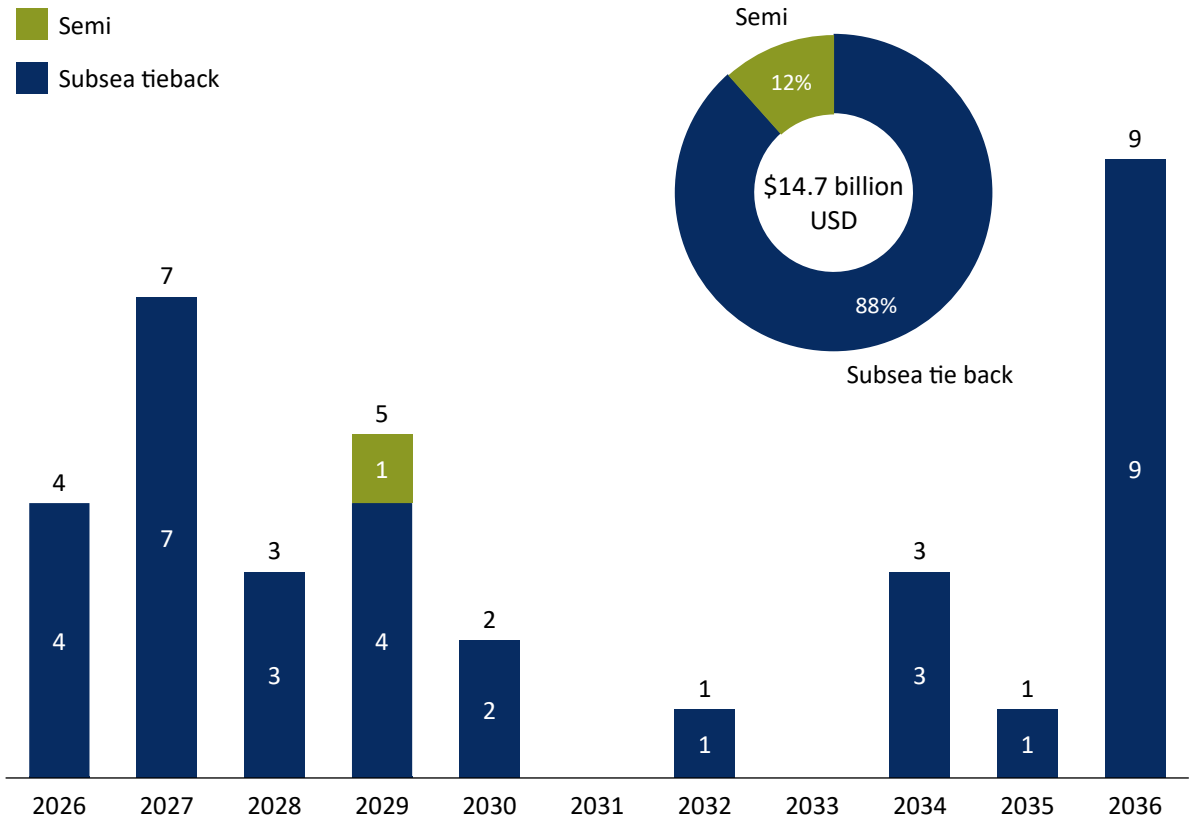
Top shelf operators account for ~90% of total capex

- Investment activity is highly concentrated among a small group of specialist independents, with the top operators accounting for ~90% of total shelf capex. Arena Offshore and W&T Offshore lead at $817M and $750M respectively, with Cantium and Talos contributing a further $425M and $405M.
- The near-complete withdrawal of major IOCs from the shelf has left this limited operator group sustaining the vast majority of remaining activity, further underscoring the structural maturity of shelf assets and the increasingly decommissioning-driven outlook for the basin.

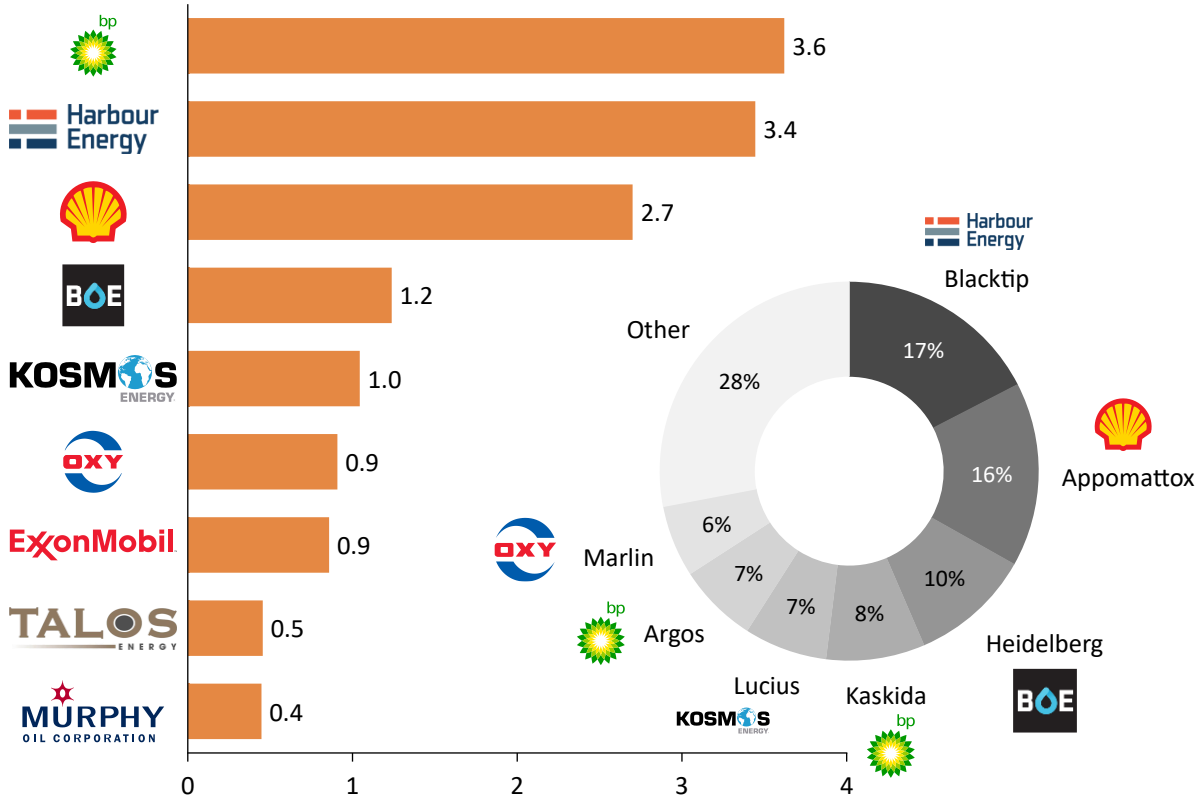
[1] "Others" includes 39 operators with smaller total investments: GOM Shelf LLC, RAAM Global Energy Company, Chevron, Ridgewood, Castex Offshore, Sanare Energy Partners, Peregrine Oil and Gas LP, GoMex Energy Offshore, Byron Energy, Tana Exploration, ExxonMobil, Petro Ventures, Black Elk Energy Offshore Operations, BP, ConocoPhillips, APA Corporation, Occidental Petroleum, CNX Resources Corporation, PetroQuest Energy, Hoactzin Partners, Freeport-McMoRan, AMCO Energy, Devon Energy, Diamond Offshore Drilling, Helis Oil and Gas, Humble Oil & Refining Company, Osaka Gas, Petsec Energy, Pure Transportation Company, Skelly Oil Company, TDC Energy Corporation, Eni, Ovintiv, EOG Resources, National Fuel Gas, Pure Oil Company, Taylor, and Union Exploration Partners.; Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

Majors and large independents drive deepwater investment, supported by a robust project pipeline

US Gulf of America deepwater sanctioning activity by approval year, 2026-2036
Project count



US Gulf of America deepwater greenfield capex by top 10 operators and host facilities[1]
Billion USD



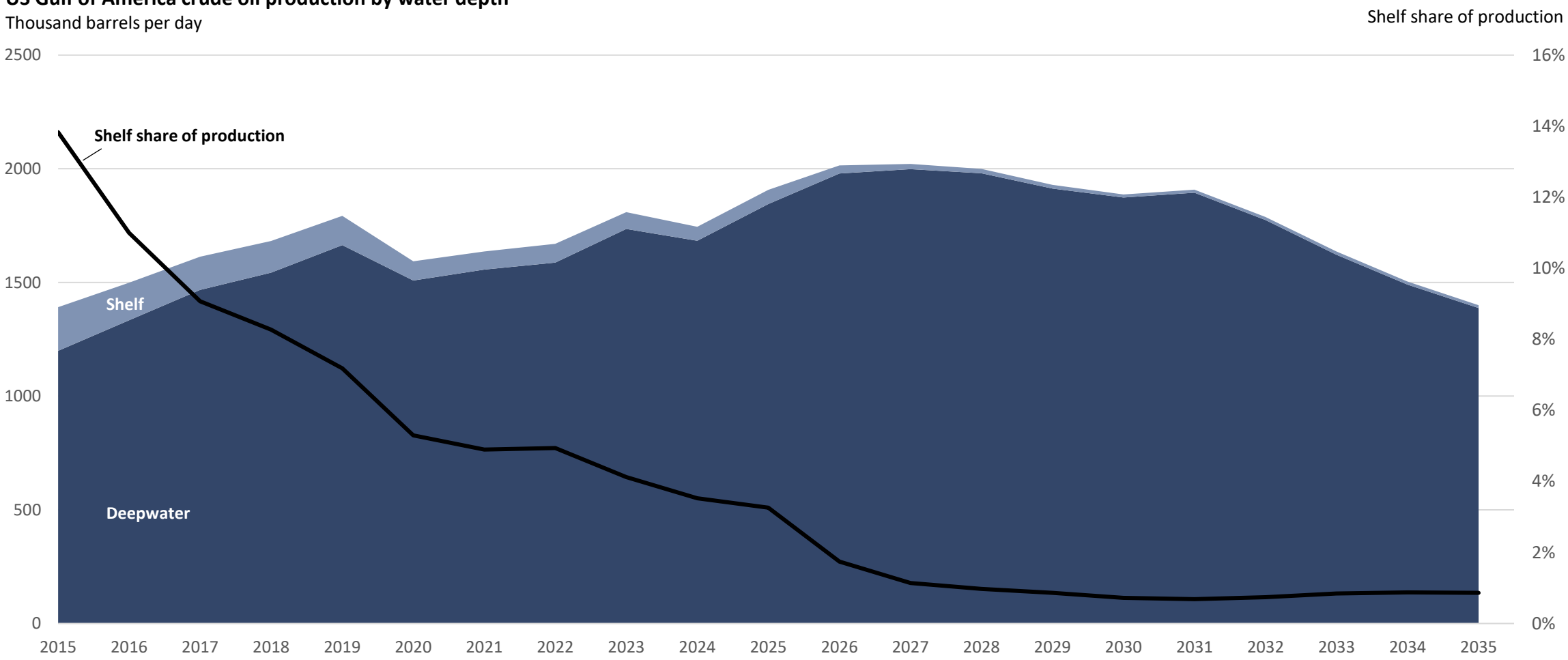
[1] Anticipated greenfield capex for projects with forecasted approval years between 2026-2036; Company logos reflect the companies that will invest in either host facilities or their associated tiebacks. Note that a company logo may not always match the host facility operator — this occurs when a tieback is slated to be developed by a different company.
Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy Ucube

Table of contents

Appendix | Oil production

US Gulf of America crude oil production by water depth

Thousand barrels per day

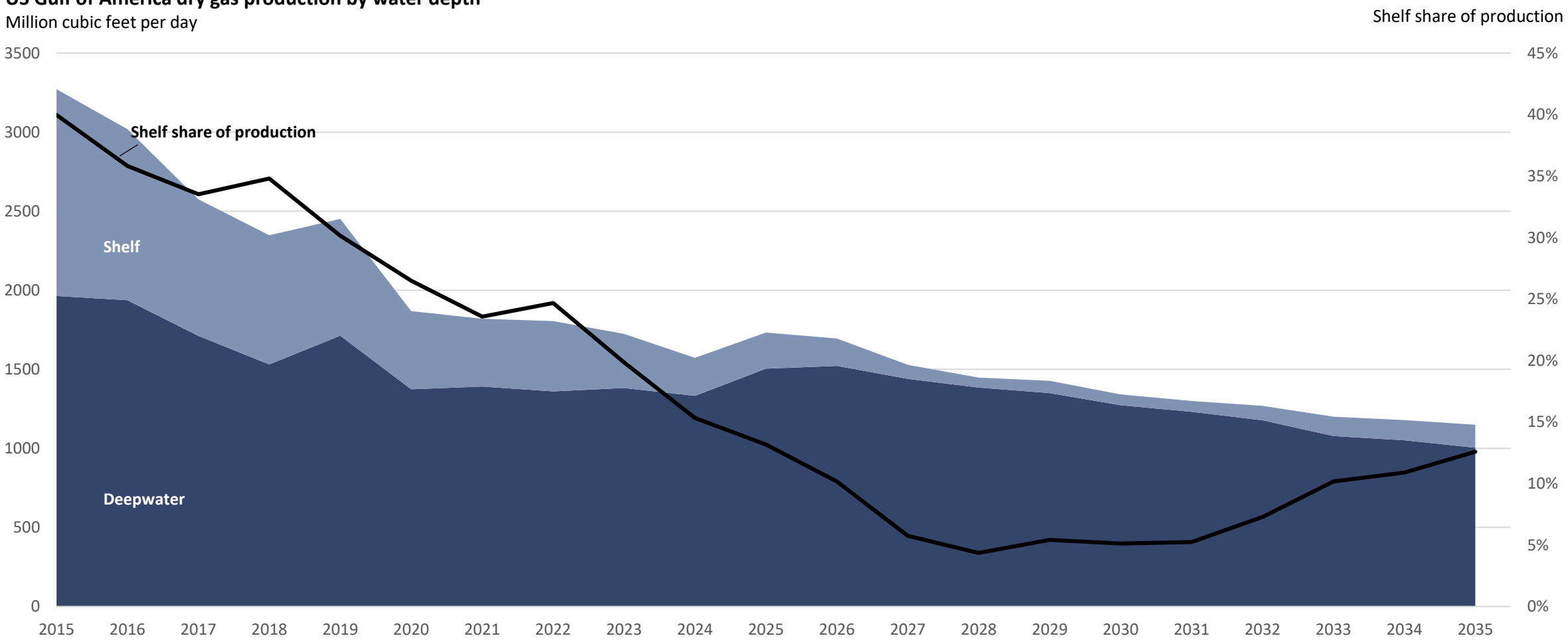


Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

Appendix | Gas production

US Gulf of America dry gas production by water depth

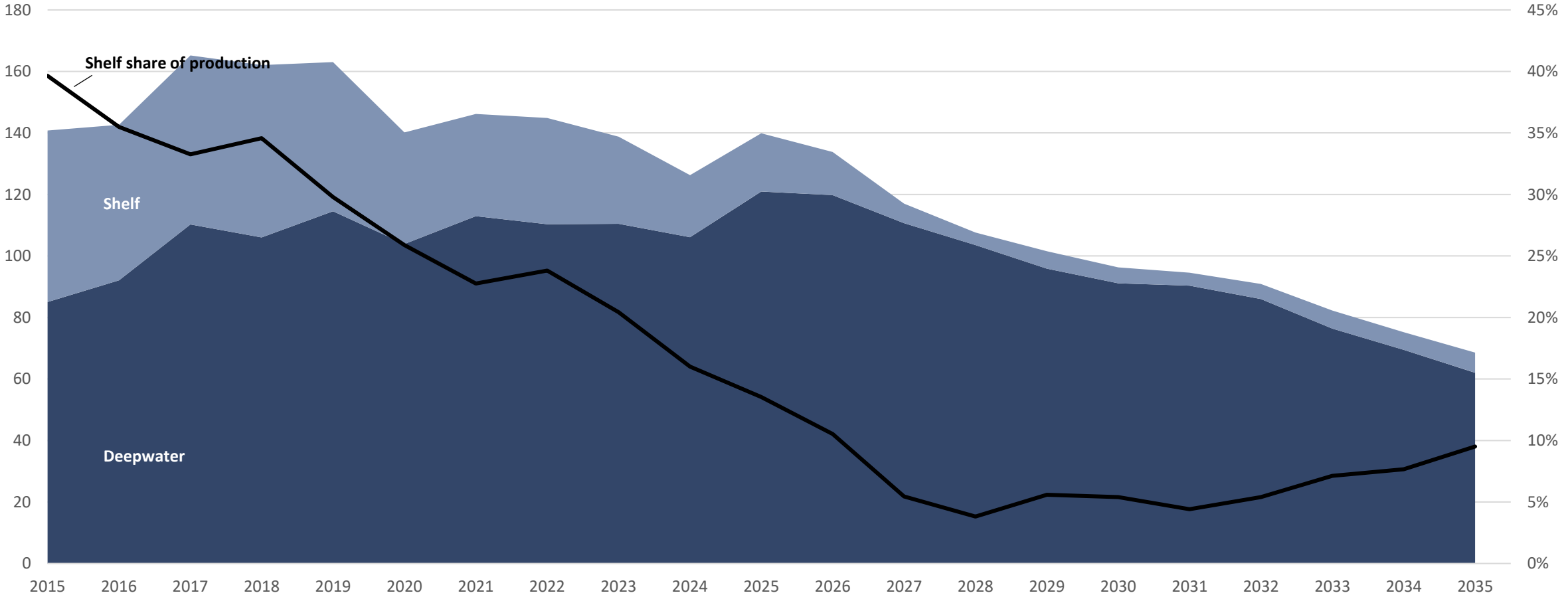
Million cubic feet per day



Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

Appendix | NGL production

US Gulf of America NGL production by water depth
Thousand barrels per day

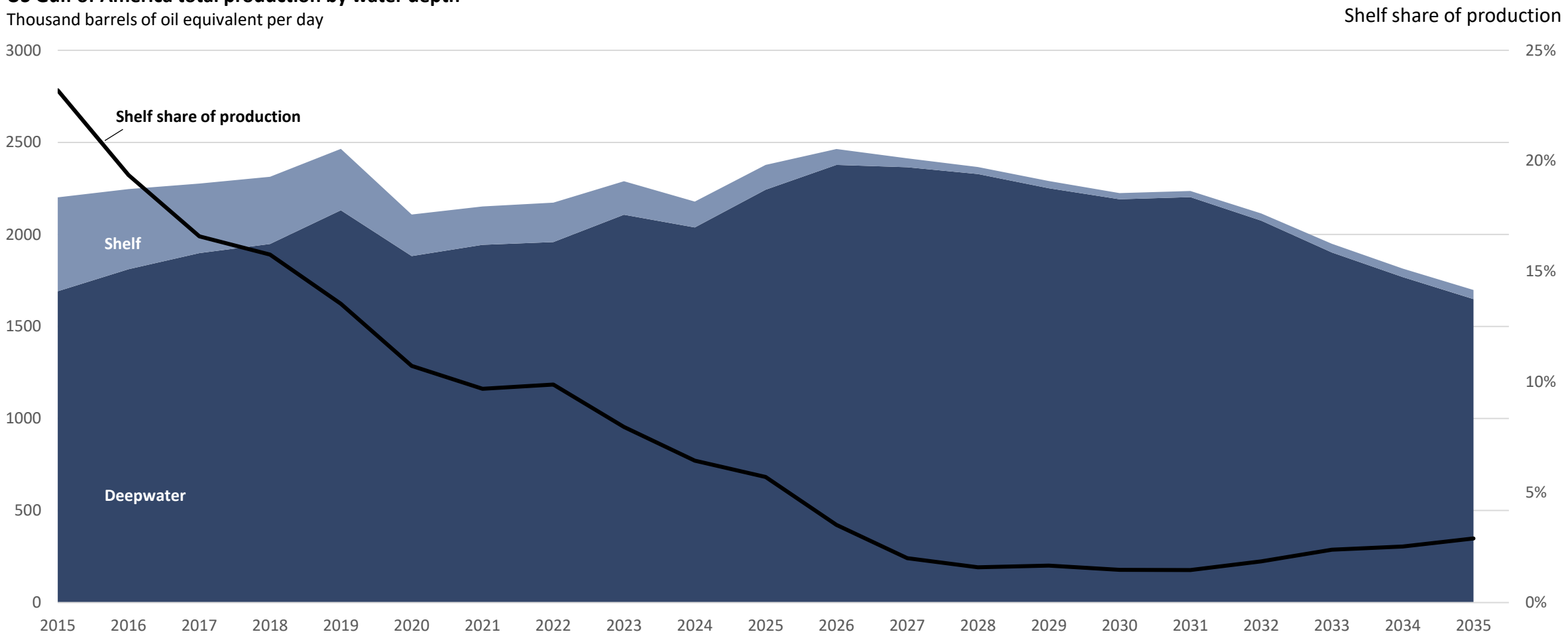


Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

Appendix | Total production

US Gulf of America total production by water depth

Thousand barrels of oil equivalent per day

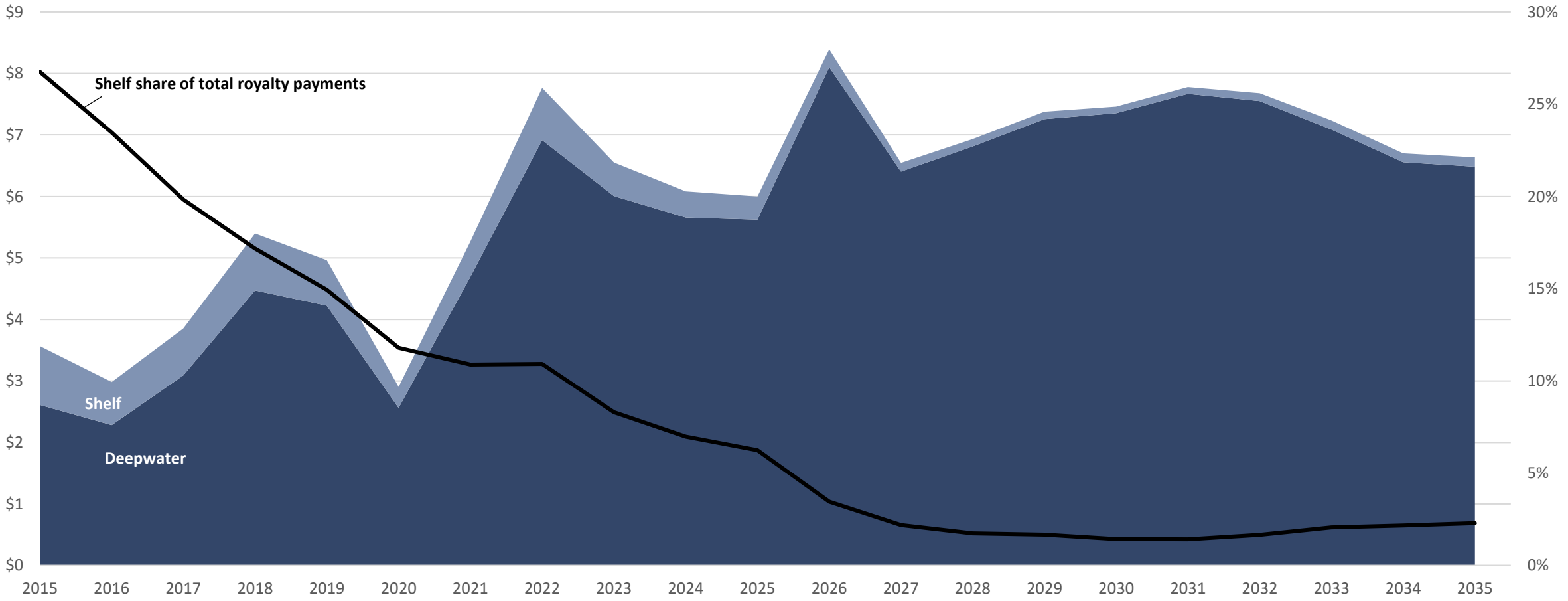


Note: Shelf defined as ≤ 200 meters or 656 feet water depth

Source: Rystad Energy UCube

Appendix | Royalty payments

US Gulf of America royalty payments by water depth
Billion USD (nominal)

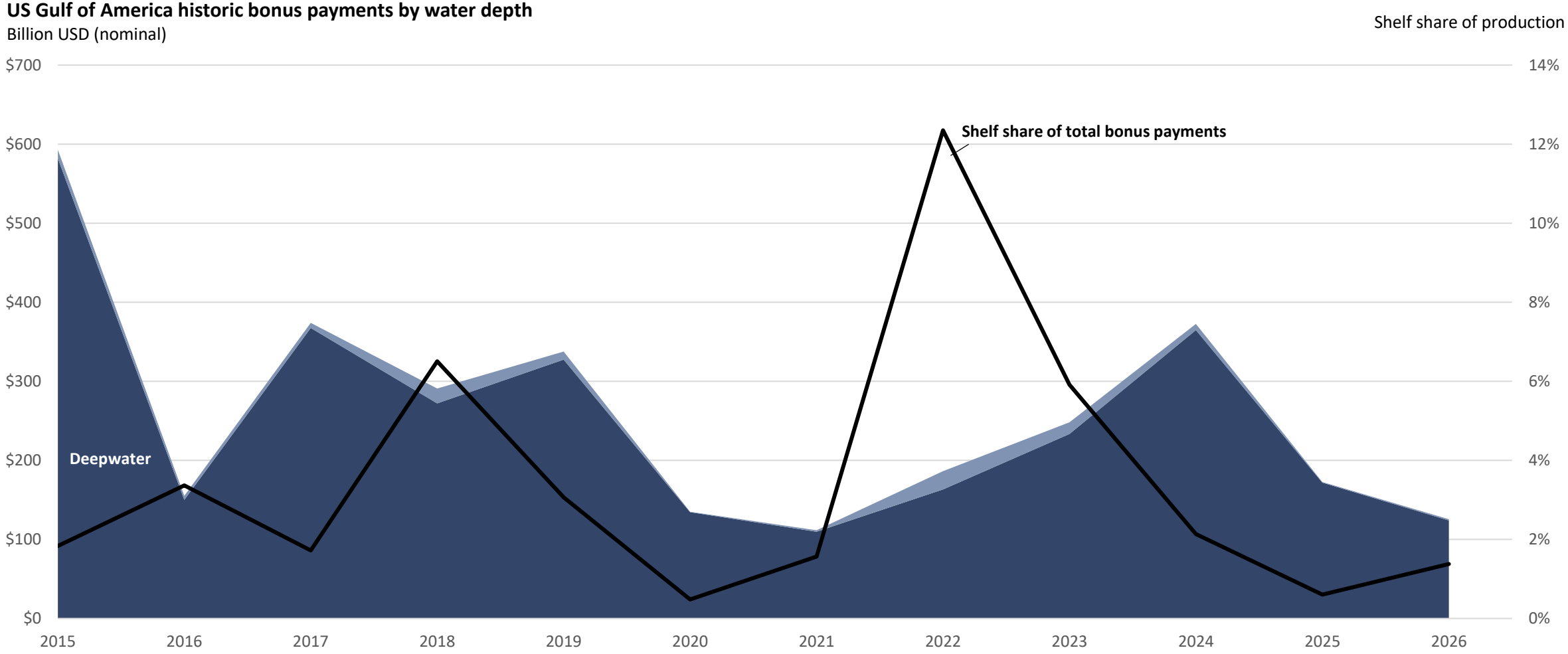


Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

Appendix | Bonus payments

US Gulf of America historic bonus payments by water depth

Billion USD (nominal)



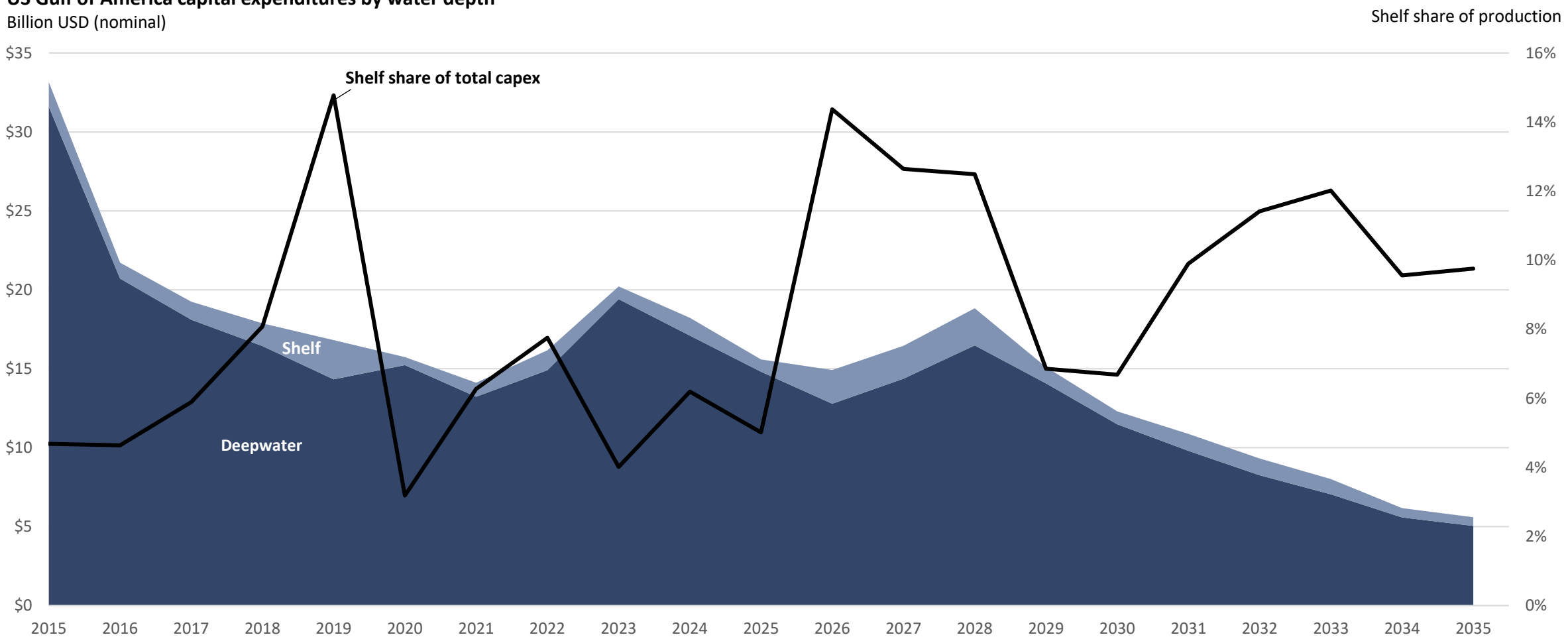
Note: Shelf defined as ≤ 200 meters or 656 feet water depth

Source: Rystad Energy UCube

Appendix | Capital expenditures

US Gulf of America capital expenditures by water depth

Billion USD (nominal)

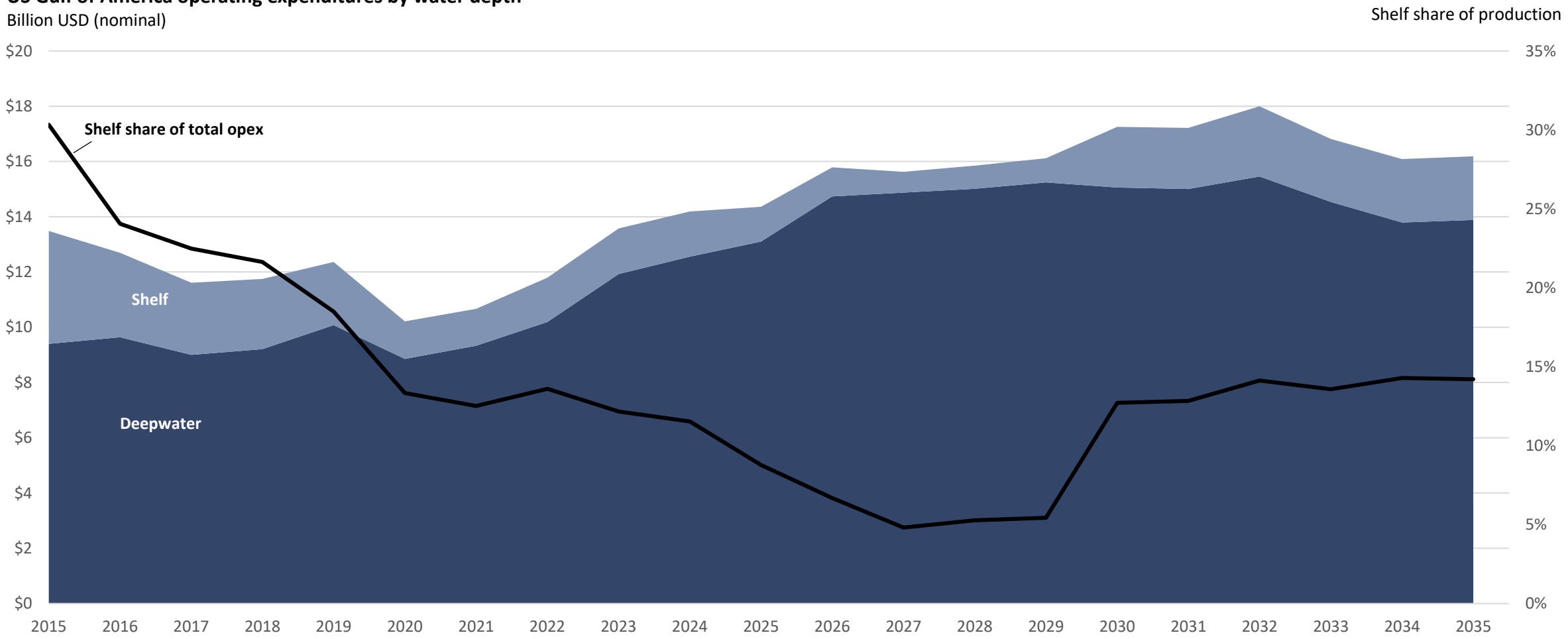


Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

Appendix | Operating expenditures

US Gulf of America operating expenditures by water depth

Billion USD (nominal)

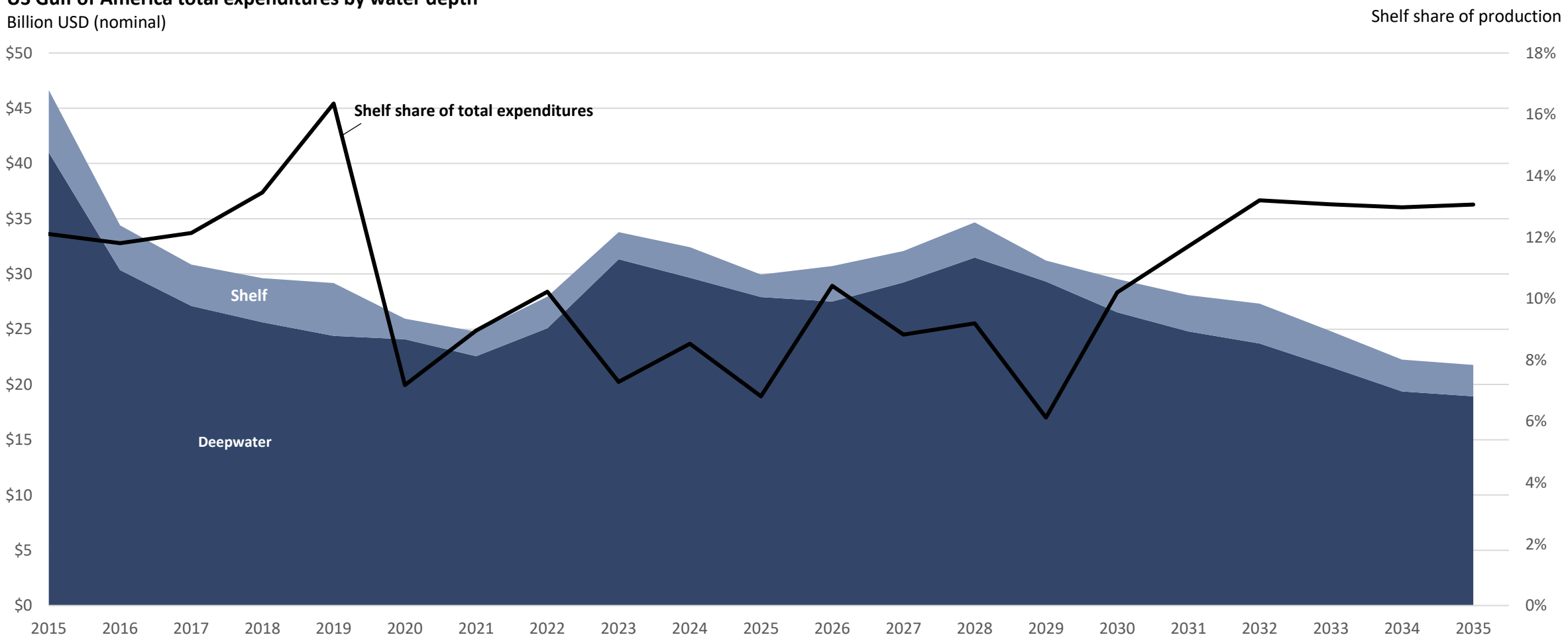


Note: Shelf defined as ≤ 200 meters or 656 feet water depth
Source: Rystad Energy UCube

Appendix | Total expenditures

US Gulf of America total expenditures by water depth

Billion USD (nominal)



Note: Shelf defined as ≤ 200 meters or 656 feet water depth

Source: Rystad Energy UCube

Appendix | BOEM-estimated reserve

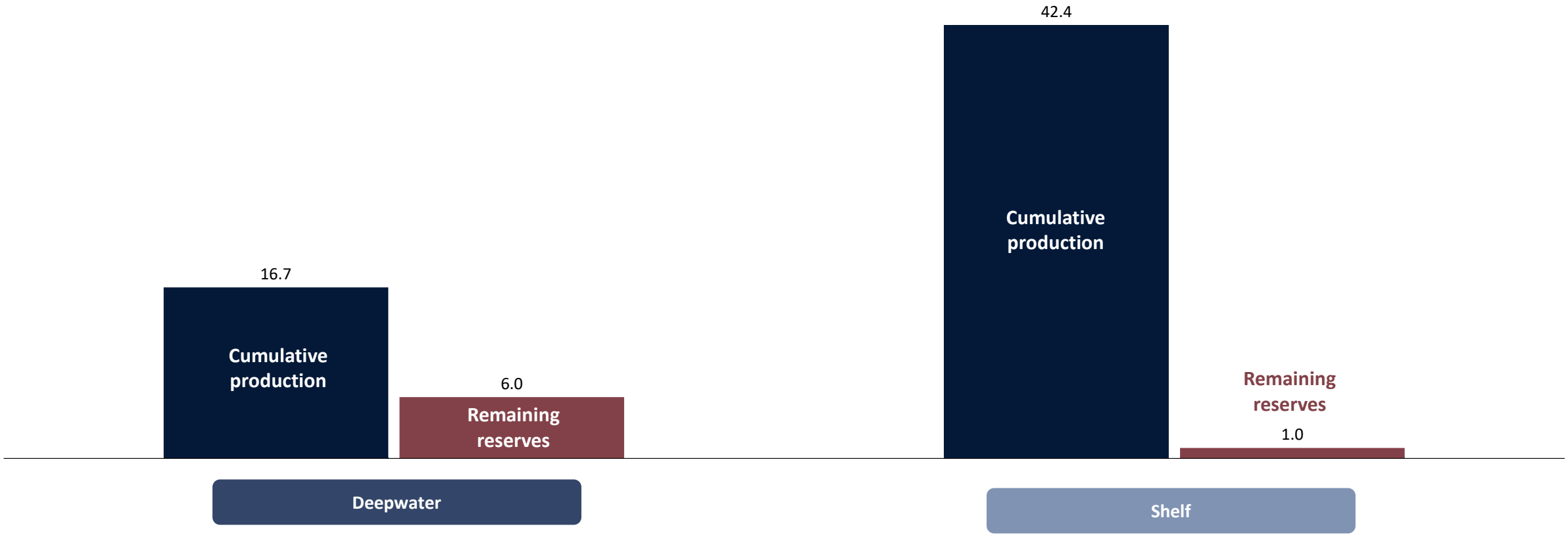
BOEM historic field counts, original reserves, cumulative production and reserves by reporting year

Year	Number of fields included	Original Reserves			Historical Cumulative Production			Reserves		
		Oil (Bbbl)	Gas (Tcf)	BOE (Bbbl)	Oil (Bbbl)	Gas (Tcf)	BOE (Bbbl)	Oil (Bbbl)	Gas (Tcf)	BOE (Bbbl)
1975	255	6.6	59.9	17.3	3.82	27.2	8.66	2.8	32.7	8.6
1980	435	8.0	88.9	23.9	4.99	48.7	13.7	3.1	40.2	10.2
1985	575	10.6	116.7	31.4	6.58	71.1	19.2	4.1	45.6	12.2
1990	782	10.6	129.9	33.8	8.11	93.8	24.8	2.5	36.1	9.0
1995	899	12.0	144.9	37.8	9.68	117.4	30.6	2.3	27.5	7.2
2000	1,050	14.9	167.3	44.7	11.9	142.7	37.3	3.0	24.6	7.4
2005	1,196	19.8	181.8	52.2	14.6	163.9	43.8	5.2	17.9	8.4
2010	1,282	21.5	191.1	55.5	17.1	179.3	49	4.4	11.8	6.5
2015	1,312	23.1	193.8	57.6	19.6	186.5	52.8	3.5	7.3	4.8
2016	1,315	23.7	194.6	58.4	20.2	187.5	53.6	3.6	6.8	4.8
2017	1,319	24.7	195.2	59.7	20.8	188.9	54.2	3.9	6.3	5.0
2018	1,319	24.9	195.5	59.7	21.4	189.8	55.2	3.4	5.7	4.5
2019	1,325	26.8	197.0	61.8	22.1	190.9	56.1	4.7	6.1	5.7
2023	1,336	30.4	201.2	66.2	24.7	194.0	59.2	5.8	7.2	7.0

Oil and gas reserves and cumulative production at end of year, 1975-2023, Gulf of America, Outer Continental Shelf and Slope. "Oil" includes crude oil and condensate; "gas" includes associated and non-associated gas. Reserves estimated as of December 31 each year.
Source: BOEM 2025 Estimated Oil and Gas Reserves Report Gulf of America OCS Region

Appendix | BOEM-estimated reserve

Cumulative production and mean remaining reserves, by water depth
Billion boe, 2023



Source: BOEM 2025 Estimated Oil and Gas Reserves Report Gulf of America OCS Region

Disclaimer

This presentation has been prepared by Rystad Energy (the "Company"). All materials, content and forms contained in this report are the intellectual property of the Company and may not be copied, reproduced, distributed or displayed without the Company's permission to do so. The information contained in this document is based on the Company's global energy databases and tools, public information, industry reports, and other general research and knowledge held by the Company. The Company does not warrant, either expressly or implied, the accuracy, completeness or timeliness of the information contained in this report. The document is subject to revisions. The Company disclaims any responsibility for content error. The Company is not responsible for any actions taken by the "Recipient" or any third-party based on information contained in this document.

This presentation may contain "forward-looking information", including "future oriented financial information" and "financial outlook", under applicable securities laws (collectively referred to herein as forward-looking statements). Forward-looking statements include, but are not limited to, (i) projected financial performance of the Recipient or other organizations; (ii) the expected development of the Recipient's or other organizations' business, projects and joint ventures; (iii) execution of the Recipient's or other organizations' vision and growth strategy, including future M&A activity and global growth; (iv) sources and availability of third-party financing for the Recipient's or other organizations' projects; (v) completion of the Recipient's or other organizations' projects that are currently underway, under development or otherwise under consideration; (vi) renewal of the Recipient's or other organizations' current customer, supplier and other material agreements; and (vii) future liquidity, working capital, and capital requirements. Forward-looking statements are provided to allow stakeholders the opportunity to understand the Company's beliefs and opinions in respect of the future so that they may use such beliefs and opinions as a factor in their assessment, e.g. when evaluating an investment.

These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause actual performance and financial results in future periods to differ materially from any projections of future performance or result expressed or implied by such forward-looking statements. All forward-looking statements are subject to a number of uncertainties, risks and other sources of influence, many of which are outside the control of the Company and cannot be predicted with any degree of accuracy. In light of the significant uncertainties inherent in such forward-looking statements made in this presentation, the inclusion of such statements should not be regarded as a representation by the Company or any other person that the forward-looking statements will be achieved.

The Company undertakes no obligation to update forward-looking statements if circumstances change, except as required by applicable securities laws. The reader is cautioned not to place undue reliance on forward-looking statements.

Under no circumstances shall the Company, or its affiliates, be liable for any indirect, incidental, consequential, special or exemplary damages arising out of or in connection with access to the information contained in this presentation, whether or not the damages were foreseeable and whether or not the Company was advised of the possibility of such damages.

RystadEnergy

Navigating the future of energy

Rystad Energy is an independent energy consulting services and business intelligence data firm offering global databases, strategic advisory and research products for energy companies and suppliers, investors, investment banks, organizations, and governments.

Headquarters: Rystad Energy, Fjordalléen 16, 0250 Oslo, Norway
Americas +1 (281)-231-2600
EMEA +47 908 87 700
Asia Pacific +65 690 93 715
Email: support@rystadenergy.com