NOIA
America's Offshore Energy Industry

GULF OF AMERICA

FORWARD:











A Strategic Vision of U.S. Offshore Energy Leadership

FALL 2025

CONTENTS

Introduction:

The Gulf of America: A Strategic National Energy Asset and Global Innovation Hub

Oil and Natural Gas Unlock the Modern World for Everyone, Everywhere

6 Energy Lifts Society
7 Access to Energy Correlates to Higher GDP
8 Access to Energy Correlates to Health and Education
9 Access to Energy Correlates to National Security & Global Competitiveness
10 Power Demand on the Rise
12 Powering Mobility in the U.S.
14 Oil & Natural Gas Touch Every Part of our Daily Lives
16 Farming & Agriculture
18 Supporting Energy Needs in the Developing World

Demand Continues for All Forms of Energy

20 Ensuring Home Grown Energy Production
20 Rising Middle Class Will Surge Energy Demand
21 The U.S. Relies on All Sources of Energy
22 The World Relies on All Sources of Energy – Especially Oil & Natural Gas

The Gulf of America: Driving Society, Elevating Lives

24 The Gulf of America: A Titan of Energy
25 The Gulf of America has been the premier offshore oil and gas region for decades
Spotlight: *The Gulf of America: A Resurgent Energy Giant*
28 The Gulf of America: A Global Offshore Energy Powerhouse
Breaking New Ground: *The Gulf of America's HPHT Revolution*
31 No Leases, No Production, No Progress
35 Powering Prosperity: How Gulf of America Oil and Gas Enhances Energy Affordability

Gulf of America: Fueling High-Skill, High-Wage Jobs

39 Fueling the Economy: How Gulf Energy Drives Domestic Growth
41 The Gulf of America Provides Accessible and High-Paying Jobs
Spotlight*: The Impact of Leasing Pauses on Jobs*
43 Accessible Jobs, for Everyone
47 Gulf of America: Unlocking STEM Potential
49 Fueling Futures: How Gulf of America Oil and Gas Empowers Trade Schools
Spotlight*: Lone Star College*

Technology Sets the Gulf of America Apart

53 The Gulf of America is a High-Tech Energy Basin

Environmental Stewardship: Gulf of America's Leadership in Low-Emission, Safe Energy Production

60 Gulf of America: Leading the Way in Lower-Carbon Intensity Oil Production
65 From Rigs to Reefs: Transforming Gulf of America Platforms into Marine Sanctuaries
67 Harmonious Coexistence: How the Gulf of America's Offshore Oil and Gas Industry Supports a Thriving Fishing Industry
69 Coexisting with Marine Mammals: Responsible Offshore Oil and Gas Operations in the Gulf of America
Seismic Surveys and Marine Mammals in the Gulf of America
73 Funding America's Future: How Gulf of America Offshore Oil and Gas Powers Conservation and Resilience
78 Great Neighbors: How Gulf of America Oil and Gas Companies Strengthen Coastal Communities
80 Safety First: The Gulf of America's Robust Framework for Responsible Offshore Oil and Gas Operations
Breakout: *Guardians of the Gulf –An Unrivaled Commitment to Safety*
Breakout: *Bowtie Risk Management and Real-World Validation in the Gulf of America*

National Security Benefits of Gulf of America Oil and Gas: Strengthening U.S. Energy Independence Amid Global Challenges

89 National Security Benefits of Gulf of America Oil and Gas: Strengthening U.S. Energy Independence Amid Global Challenges

The Gulf of America: Pioneering the Blue Economy Through Innovative Energy Technologies

94 Carbon Sequestration: Capturing Emissions Offshore
97 Hydrogen Production: Powering the Next Era of U.S. Energy Leadership
99 Securing Critical Minerals: Unlocking America's Offshore Potential
Spotlight*: Moana Minerals Advances Offshore Monitoring in the Cook Islands*
103 Aquaculture in the Gulf of America: Unlocking Sustainable Seafood Production
104 Offshore Nuclear: An Emerging Frontier
105 U.S. Offshore Wind: Powering Opportunity, Driven by Gulf of America Expertise

A Return to Normalcy: A Baseline Case for Energy Progress

112 A Return to Normalcy: A Baseline Case for Energy Progress

Long-Term Outlook: Keeping the Gulf Strong

122 Long-Term Outlook: Keeping the Gulf Strong

About NOIA

125 The Offshore Story
127 NOIA Foundational Environmental Social & Governance Principles



1 https://www.washingtonpost.com/opinions/neither-side-is-really-right-on-offshore-drilling/2017/05/07/ce4fe466-31cc-11e7-8674-437ddb6e813e_story.html

INTRODUCTION

The Gulf of America: A Strategic National Energy Asset and Global Innovation Hub

The Gulf of America stands as one of the most valuable and dynamic offshore energy regions in the world—an engine of innovation, economic strength, and national security. For decades, this region has been a cornerstone of America's energy independence, reliably delivering oil and gas with some of the lowest carbon intensities globally. Today, the Gulf is not only a leader in conventional energy, but also an emerging force in the development and deployment of next-generation solutions like offshore wind, carbon capture and storage (CCS), hydrogen, and subsea minerals.

America's offshore energy industry, rooted in the Gulf of America, is unmatched in its ability to scale technologies, mobilize world-class infrastructure, and execute safely in unique environments. Companies operating in the region have leveraged their expertise to pioneer advances in high-pressure drilling, deepwater engineering, and emissions reduction technologies that are now being exported around the globe.

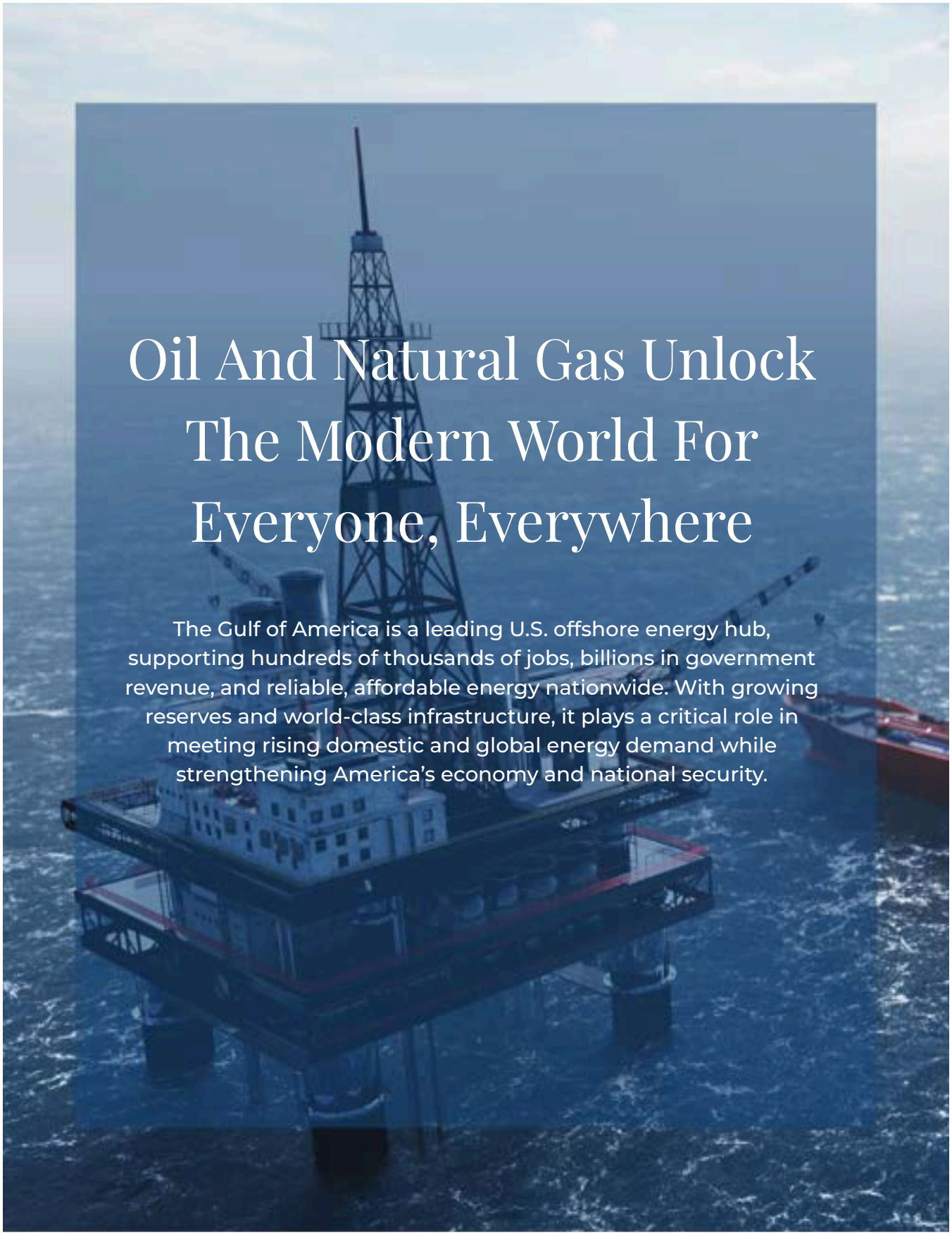
As global demand for energy rises—driven by population growth, AI-powered data centers, electrification, and industrial expansion—the Gulf of America is uniquely positioned to meet that challenge. It combines world-class reserves, advanced technology, a highly skilled workforce, and robust environmental stewardship to deliver secure, affordable, and lower-emission energy to Americans and U.S. allies.

But to fully realize this potential, the U.S. must treat the Gulf as the strategic energy asset it is. That begins with preserving a regular and reliable schedule of offshore lease sales—a foundational tool to maintain production, attract long-term investment, and ensure energy security. Equally critical is the need for modern, efficient, and science-based permitting and regulatory systems that support—not stifle—the dynamic innovation happening in the Gulf.

Regulatory frameworks must evolve in parallel with technological advancement, enabling the responsible deployment of emerging solutions like subsea CCS, offshore wind, ocean minerals, and offshore hydrogen.

The Gulf's contribution isn't limited to barrels and Btu. It powers high-wage jobs across all 50 states, fuels technological breakthroughs, supports coastal communities, and generates billions in public revenues that fund parks, schools, and environmental restoration.

The bottom line: The Gulf of America is not a legacy asset—it is a strategic platform for American energy leadership in a rapidly evolving global landscape. With consistent lease sales and forward-looking permitting and regulation, it will remain at the heart of America's energy security, economic prosperity, and industrial competitiveness for generations to come.



Oil And Natural Gas Unlock The Modern World For Everyone, Everywhere

The Gulf of America is a leading U.S. offshore energy hub, supporting hundreds of thousands of jobs, billions in government revenue, and reliable, affordable energy nationwide. With growing reserves and world-class infrastructure, it plays a critical role in meeting rising domestic and global energy demand while strengthening America's economy and national security.

Energy Lifts Society

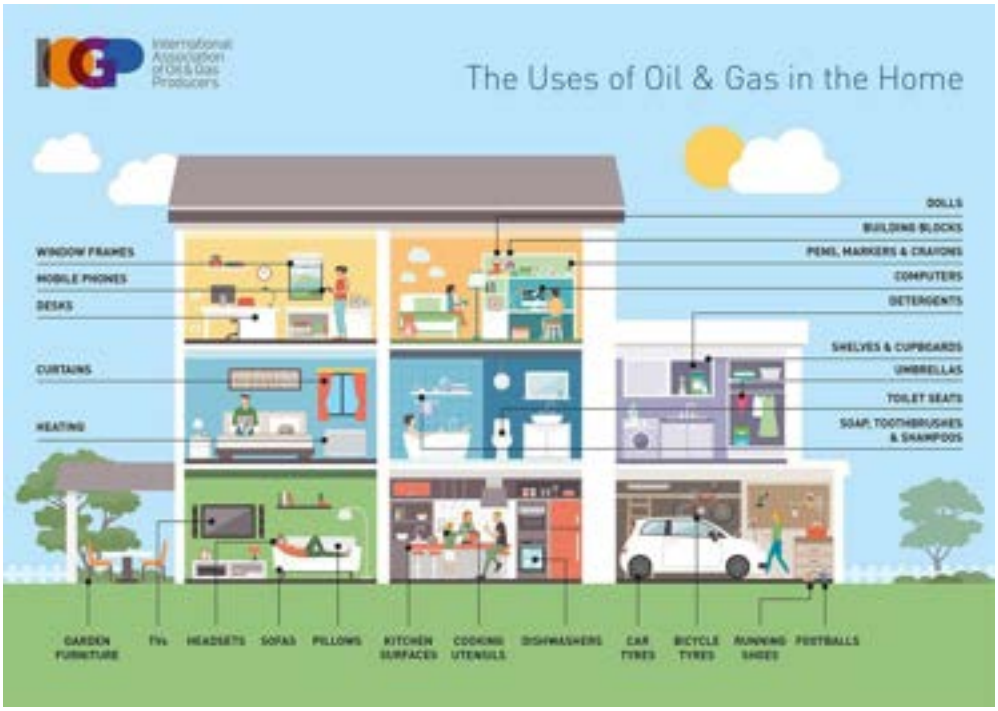
Affordable and reliable energy is the backbone of a thriving society, driving economic prosperity, improving health and education outcomes, and strengthening national security. The Gulf of America's oil and gas industry plays a critical role in ensuring these benefits are realized.

> "Everything that is fabricated, grown, operated or moved is made possible by hydrocarbons"
>
> **Mark Mills**
> Wall Street Journal, January 8, 2019[2]

Affordable, Reliable Energy is Essential for High Quality of Life

Energy is closely tied to economic progress. Higher GDP levels consistently align with increased fuel and electricity use, access, reliability, and affordability. Societal advancement undeniably requires greater energy consumption. History illustrates this clearly: before the Industrial Revolution, economies were limited by organic energy sources like firewood and human or animal labor. The advent of coal as an energy source, enabled by technological innovation, unleashed vast new production possibilities, driving exponential economic growth.

Access to reliable and cost-effective energy sources, such as those provided by Gulf of America oil and gas, underpins a high standard of living and drives mobility. It powers homes, businesses, and industries, creating opportunities for growth and stability[3].

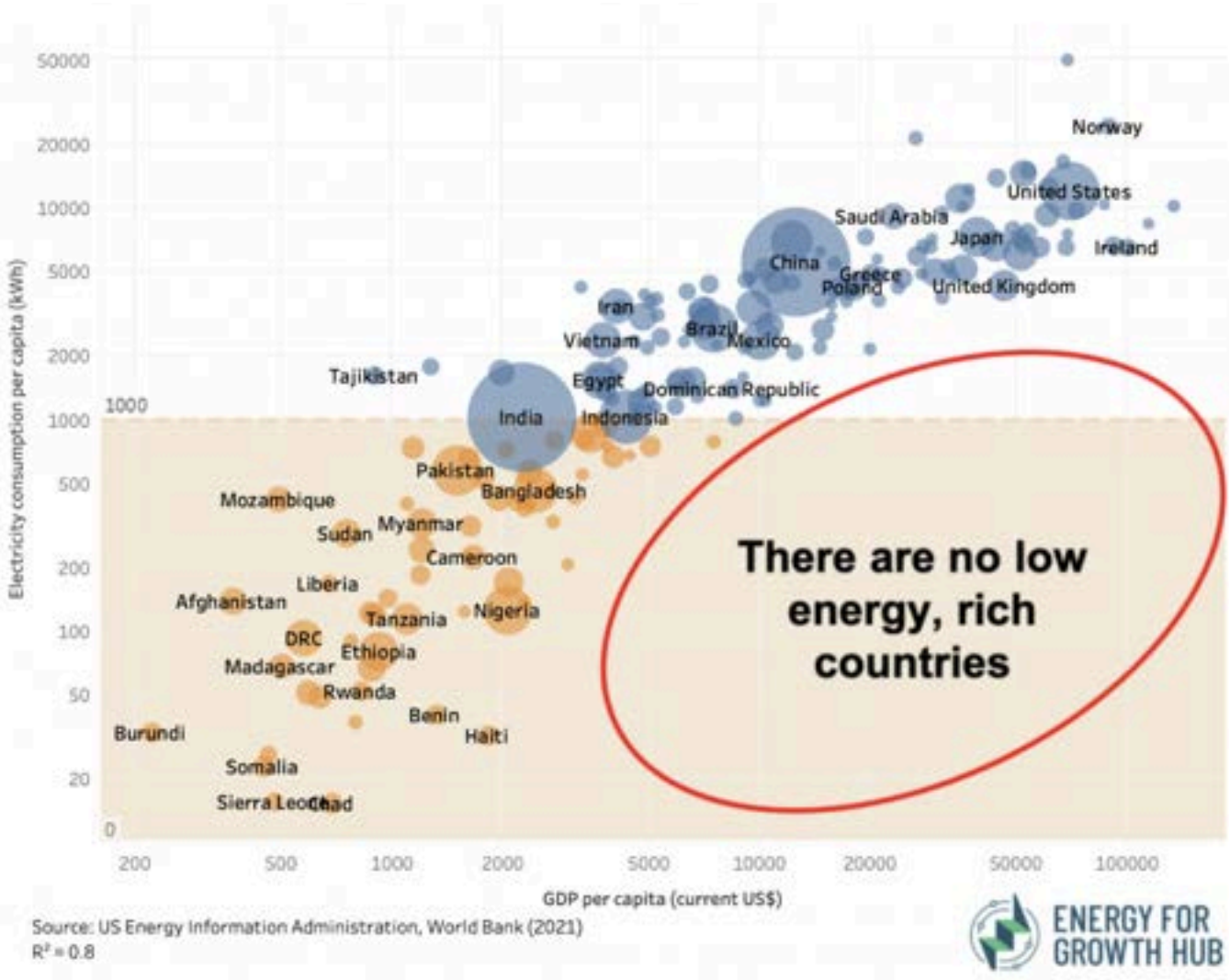


[2] https://www.wsj.com/articles/have-we-got-a-carbon-tax-dividend-for-you-11546992477
[3] https://www.iogp.org/bookstore/product/uses-of-oil-gas-in-the-home/

Access to Energy Correlates to Higher GDP

Energy availability is a key driver of economic output. Regions with robust energy access consistently demonstrate higher GDP per capita, as industries thrive, businesses expand, and jobs multiply. The Gulf of America's oil and gas production fuels this economic engine, supporting millions of livelihoods with essential energy and fostering prosperity.

Electricity consumption vs GDP per capita, 2021



Source: *https://energyforgrowth.org/article/how-does-energy-impact-economic-growth-an-overview-of-the-evidence/*

Access to Energy Correlates to Better Health

The Gulf of America's oil and gas industry powers more than just transportation and electricity—it underpins the functionality and advancement of healthcare and education, two pillars of societal well-being. Beyond providing reliable energy, the hydrocarbons produced in the Gulf are integral to the tools, equipment, and infrastructure that enable modern medical care and learning environments, driving progress and improving lives.

Our medical first responders can do their jobs thanks to oil and gas.

From safety equipment, like rubber gloves and masks, to advanced equipment, such as artificial limbs, MRI scanners and respirators, to research equipment, like microscopes and test tubes, and many other types of medical equipment are also built with hydrocarbons.[4]



[4] https://www.canadianenergycentre.ca/graphic-oil-and-gas-products-in-healthcare/

Access to Energy Correlates to National Security & Global Competitiveness

Energy independence and national security is a critical component of national security. The Gulf of America's oil and gas output—accounting for a significant portion of U.S. production—reduces reliance on unstable foreign suppliers, many of whom operate in volatile regions or hold conflicting interests. Our domestic supply shields the U.S. from global market disruptions, such as conflicts in Ukraine or the Middle East or sanctions-related shortages, ensuring stable fuel prices and uninterrupted access for critical sectors like transportation, industry, and defense.

Moreover, Gulf energy supports military readiness. The Department of Defense relies heavily on secure fuel supplies for operations, from powering naval fleets to fueling air and ground missions. Domestic production minimizes the risk of supply chain vulnerabilities, allowing the U.S. to maintain strategic autonomy and respond swiftly to global threats. By fostering economic stability through affordable energy, the Gulf also strengthens the broader economy, enabling investments in defense and infrastructure that further enhance national resilience.

The Gulf of America's energy production extends its benefits beyond U.S. borders, providing allies with a dependable alternative to adversarial suppliers. As a global energy leader, the U.S. exported over 4 million barrels per day of crude oil and petroleum products in 2024.[5] The United States exported an average of 11.9 billion cubic feet per day (Bcf/d) of liquefied natural gas (LNG) in 2024, maintaining its position as the world's largets LNG exporter. This represents a steady growth in U.S. LNG exports, driven by robust production and increasing global demand for natural gas. Allies in Europe, Asia, and the Americas rely on these exports to diversify their energy portfolios, reducing their exposure to coercive influence from nations like Russia or Iran.



Source: *Valaris*

[5] https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCREXUS2&f=M

Power Demand on the Rise

As emerging technologies and industrial growth drive unprecedented electricity demand, the Gulf of America's abundant natural gas resources stand ready to meet these long-term needs. From AI data centers to advanced manufacturing, Gulf energy can ensure the nation stays at the forefront of innovation and economic progress.

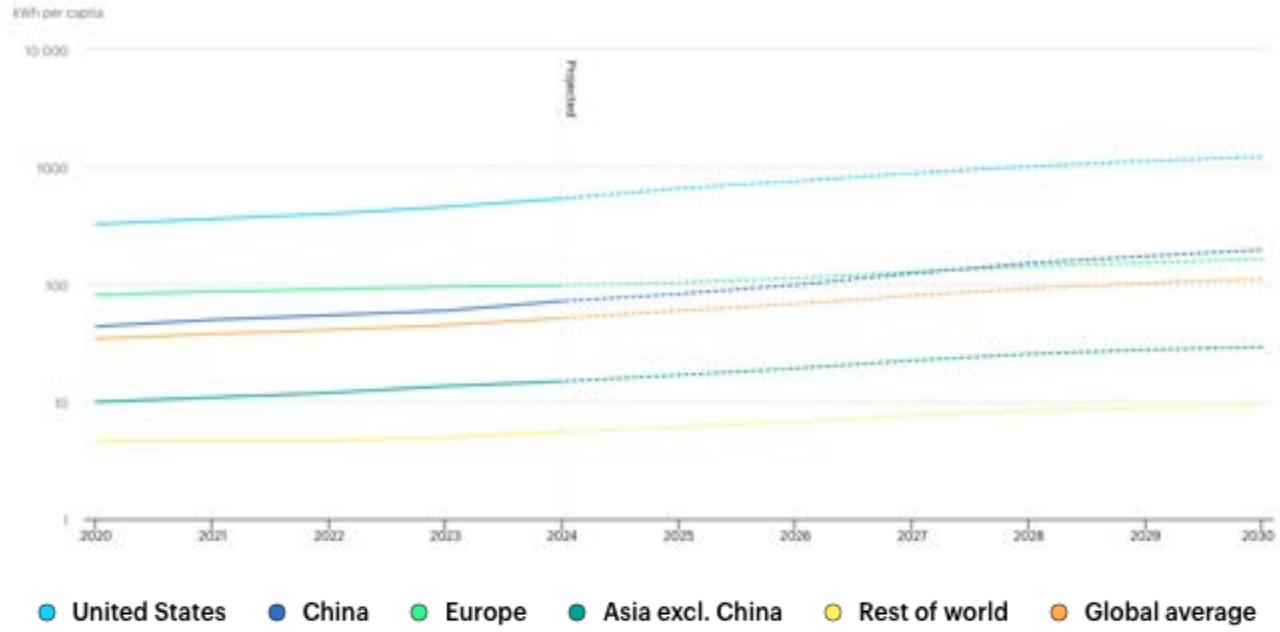
The Gulf's oil and gas production is a cornerstone of America's power-hungry future. With the capacity to fuel AI data centers, electrification, semiconductor manufacturing, and crypto mining, the region will be able to drive technological and economic advancement. As electricity needs escalate—projected to grow 15-20% by 2030—the Gulf remains an indispensable asset, powering America's ambition and global leadership with unmatched resilience[6].

AI/Data Centers

The explosion of artificial intelligence and cloud computing has driven unprecedented demand for power-hungry data centers. A single AI data center can consume as much electricity as a small city, with global data center demand increasing at a remarkable pace.

Data centre electricity consumption per capita by region, Base Case, 2020-2030

Last updated 10 Apr 2025



Source: https://www.iea.org/reports/energy-and-ai/energy-demand-from-ai

[6] https://www.eia.gov/todayinenergy/detail.php?id=56040

Electrification

The push for electrification—spanning electric vehicles (EVs), heat pumps, and industrial processes—is reshaping energy landscapes. All forms of energy are needed to keep up with the pace of growing demand.

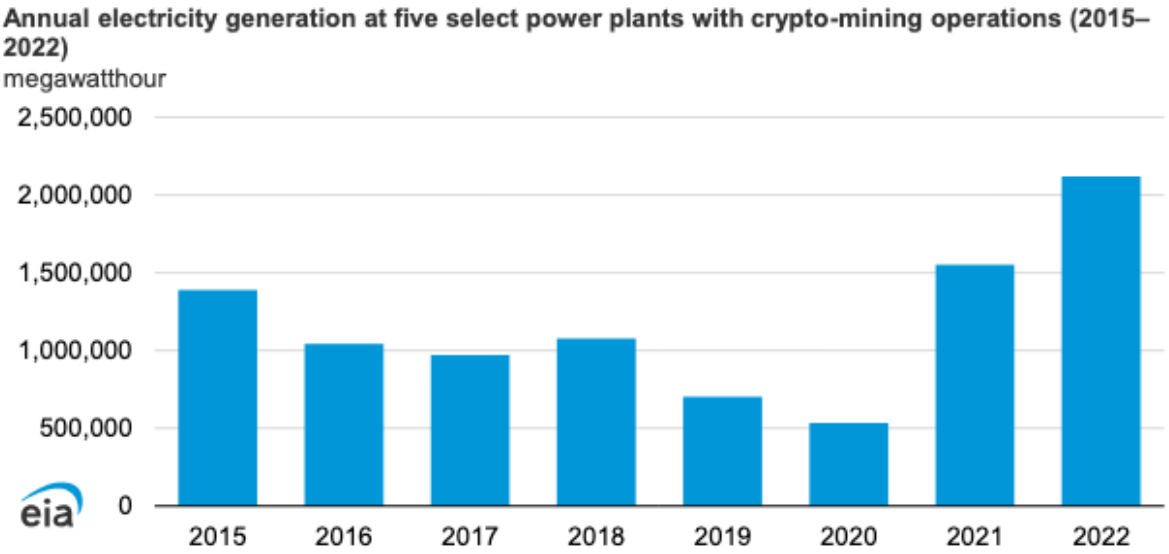
Advanced Manufacturing - Semiconductors

The resurgence of U.S. advanced manufacturing, particularly semiconductor production, relies heavily on consistent power. Semiconductor factories, or fabs, require uninterrupted electricity to operate complex machinery, with a single fab consuming as much power as 50,000 homes. The Gulf's energy ecosystem can help support this growth.

Crypto Mining

Cryptocurrency mining, known for its energy intensity, has found a home in the Gulf region due to its low-cost, abundant energy. Crypto operations consumed up to 2.4% of U.S. electricity, much of it in Texas[7]. While controversial, crypto mining contributes to local economies, and gas provides a practical solution to meet its demand without destabilizing the grid. The Gulf's energy production can effectively support innovation, as miners experiment with gas-powered microgrids, reducing reliance on public utilities.

For example, in Texas, the grid operator ERCOT has created its Large Flexible Load (LFL) program, which enlisted up to 1,530 megawatts (MW) of large industrial consumers to curtail their use during peak demand periods. Cryptocurrency miners are major participants in the LFL program, which also requires plant owners to inform the state of anticipated demand for electricity over a future five-year period. For example, operators of two large cryptocurrency mining facilities, located at the site of a former aluminum smelter in Rockdale, Texas, estimate that each can require up to 500 MW of electric capacity.



[7] https://www.eia.gov/todayinenergy/detail.php?id=61364

Powering Mobility in the U.S.

Mobility—whether personal, commercial, or industrial—is a cornerstone of modern life, and the Gulf of America's oil and gas production plays an indispensable role in keeping America moving. Affordable, reliable energy from the Gulf ensures that vehicles, planes, ships, and supply chains remain operational, supporting economic vitality, personal freedom, and national resilience. Importantly, keeping energy affordable can provide a substantial benefit to lower income families who spend a disproportionate amount of time and money on transportation, especially on their work commute.



Affordable American energy lets families spend more on what matters.

Energy as the Lifeblood of Mobility

Mobility depends on accessible and cost-effective energy, particularly liquid fuels like gasoline, diesel, and jet fuel derived from oil. In 2024, the U.S. transportation sector consumed roughly 7 million barrels of oil per day, accounting for nearly 70% of total U.S. petroleum use.[8]

This energy availability directly enhances quality of life. Affordable fuel enables Americans to commute to work, go to school, travel for leisure, and access essential services, fostering personal freedom and opportunity. For businesses, Gulf energy ensures cost-effective logistics, from trucking to air freight, keeping supply chains efficient and goods affordable. In rural and urban communities alike, mobility powered by Gulf fuels connects people to jobs, healthcare, and education, driving social and economic progress.

The Gulf of America's energy production is more than a resource—it's the fuel for mobility that drives American life. By keeping costs low, supply chains active, and defense ready, Gulf of America oil and gas enable people and goods to move efficiently, fostering economic growth, personal opportunity, and national strength. As mobility evolves, the Gulf's reliable energy will continue to pave the way forward.

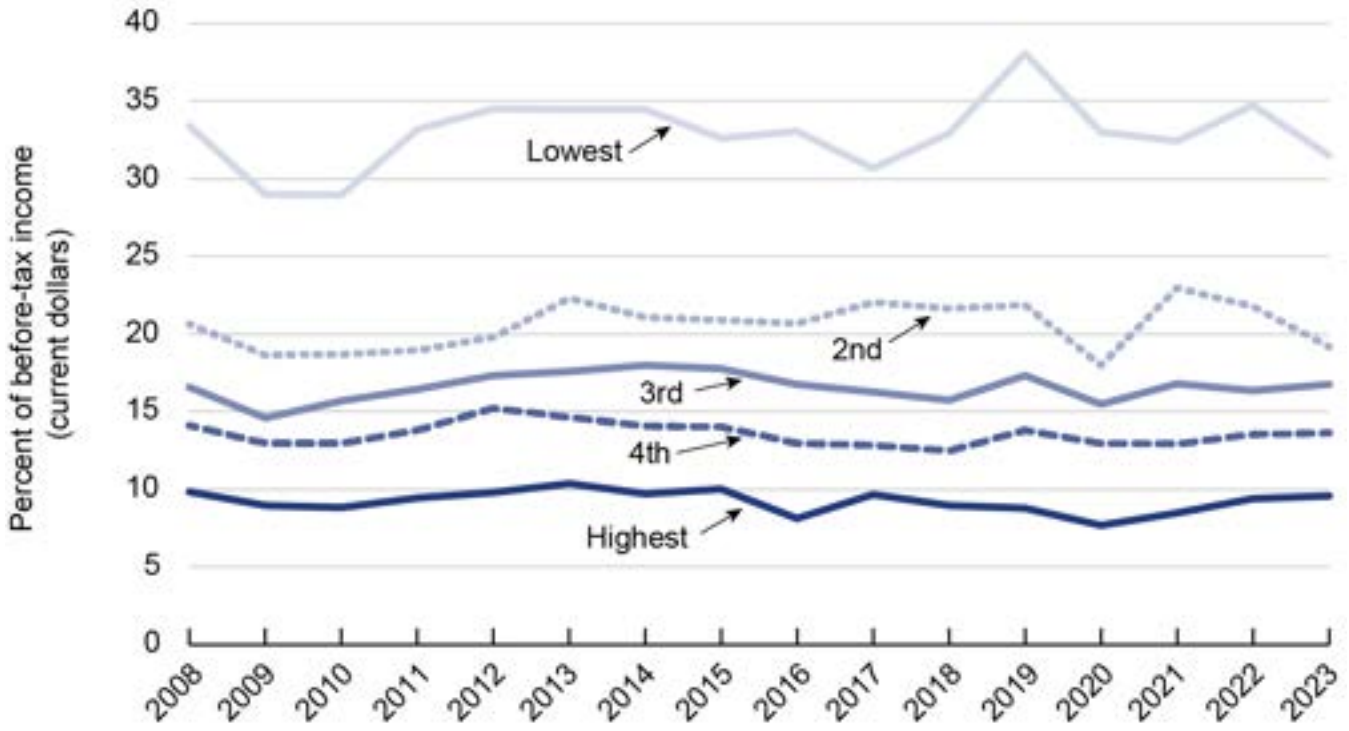
[8] https://afdc.energy.gov/

Fueling Mobility for Low-Income Communities

Mobility is a lifeline for low-income households, who often rely on personal vehicles or public transit to reach jobs, grocery stores, and healthcare. For low-income families, affordable fuel is critical, as they spend a higher percentage of their income on transportation compared to wealthier households.[9]

According to 2024 data, low-income households spent approximately 30-35 percent of before tax income on transportation. In contrast, high-income households spent less than 10% of their income on travel. Low-income individuals may be forced to live further from job centers due to limited affordable housing options, leading to longer commute times[10].

Percent of Before-tax Income Spent on Transportation by Income Group



[9] https://www.bts.gov/data-spotlight/transportation-cost-burden-falls-significantly-second-lowest-no-other-income-group#:~:text=The%20lowest%20income%20group%20also,statistically%20significant%20at%20p%20%3C%200.1.&text=3-,See%20U.S.%20Department%20of%20Transportation%2C%20Bureau%20of%20Transportation%20Statistics%2C%20%E2%80%9C,eyhe%20as%20of%20November%202024.&text=4-,See%20U.S.%20Department%20of%20Transportation%2C%20Bureau%20of%20Transportation%20Statistics%2C%20%E2%80%9C,respectively%2C%20as%20of%20November%202024

[10] https://nlihc.org/resource/research-finds-lack-affordable-housing-increases-commute-times#:~:text=On%20average%2C%20commute%20distances%20for%20lower%2Dwage%20workers.had%20a%20disproportionate%20impact%20on%20lower%2Dwage%20workers

Oil & Natural Gas Touch Every Part of our Daily Lives

We all know we depend on reliable and affordable gasoline to fill up our cars to go where we want to go, but that is only one of a myriad of benefits of oil and gas. Clothing, houses, smartphones, TV's, couches, shoes, soaps and countless other household goods are built with hydrocarbons as their building blocks. And the benefits do not end there.

The magnitude and diversity of products made from hydrocarbons underscores the critical importance of a steady pipeline of oil and gas supplies.

Ensuring continuous access to U.S. offshore oil and gas resources will bolster our ability to continue to manufacture and deliver the almost infinite products that make up modern life.[11]



Vehicles:
Gear oil, brake fluid, tires, fuels, car seats, bumpers, window seals, motorcycle helmets, boats, child safety seats, ambulances, helicopters, etc.



Fuel:
Kerosene, heavy fuel oils, marine fuels, diesel, gasoline, jet fuel, heating oil, etc.



Medical:
Pharmaceuticals, hoses, antiseptics, aspirin, hand sanitizer, anesthetics, x-ray, examination equipment, pacemakers, crutches, wheelchairs, bandages, etc.



Electronics:
Cable coatings, computers, TV sets, tablets, headsets, cameras, mobile phones, photographic film, etc.



Agriculture:
Propane, lubricants, greases, fungicides, fertilizers, pesticides, herbicides, insecticides, irrigation piping, gloves, etc.

[11] https://www.iogp.org/oil-natgas-in-everyday-life/



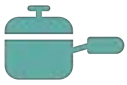
Construction:
Traffic cones, barrier tapes, asphalt, tarpaulins, paint, safety glasses, water pipes, tools, safety helmets, caulking, roofing shingles, plywood adhesive, paint rollers, etc.



Office:
Printing inks, pens, computers, glue, tape, etc.



Furniture:
Garden furniture, sun loungers, artificial fibers, carpet backing, rugs, upholsteries, curtains, pillows, lamps, refrigerator linings, candles, toilet seats, etc.



Household:
Exterior paints, thermal isolation, heating oils, window frames, kitchen surfaces, non-stick pans, plastic surfaces, detergents, TV sets, dishwashers, faucets, trash bags, mops, etc.



Clothing:
Outdoor clothing, clothing made out of polyethylene terephthalate (PET), artificial fibers, sweaters, leggings, rubber boots, running shoes, shoe soles, shoe polish, etc.



Beauty:
Nail polish, make-up, facial creams, perfumes, shampoos, soaps, shaving creams, hair curlers, toothbrushes, toothpaste, hair colorings, deodorants, hair dryers, etc. Accessories: Sunglasses, carrier bags, synthetic leather, umbrellas, jewelry, luggage, etc.



Sports:
Sports clothing, tennis balls, basketballs, footballs, surfboards, cleats, bicycles, parachutes, roller-skate wheels, golf bags, golf balls, helmets, lifesaving jackets, fishing rods, etc.



Toys:
Pacifiers, frisbees, crayons, balloons, dolls, etc.

Farming & Agriculture



American offshore energy benefits almost every aspect of life, including our farms and sources of food.

The Gulf of America's oil and gas production is a vital lifeline for U.S. agriculture, powering the machinery, infrastructure, and supply chains that sustain the nation's food security. Just as energy drives mobility, healthcare, and advanced industries, it underpins farming—a cornerstone of American life—ensuring farmers can produce abundant, affordable food to feed the nation and beyond.

U.S. farmers spent nearly $30 billion on direct energy expenditures (gasoline, fuels, and oils plus utility expenses) in 2022, a 24 percent increase over similar expense categories in 2017[12]. These expenditures made up just under seven percent of total farm production expenses in those years.

A 2020 report issued by the University of Vermont Farm and Energy Initiative found that average fuel spending on U.S. crop farms was about $8,500 in 2017, as compared to about $3,900 per average livestock farm, primarily due to more intense use of farm machinery in cultivating and harvesting fields.

Energy affordability supported by Gulf of America oil and gas production enables farmers to operate heavy equipment without crippling expenses, supporting their livelihoods and keeping food prices accessible for consumers.

[12] https://www.agweb.com/opinion/reducing-farm-energy-use-united-states

Fertilizers and Materials: The Hydrocarbon Backbone

Beyond fuel, Gulf oil and gas are critical to producing fertilizers and agricultural materials. Natural gas is a primary feedstock for ammonia-based fertilizers, which boost crop yields by replenishing soil nutrients.

The United States has robust domestic production and is the third largest ammonia producer (9% of global production) and third largest global processed phosphate producer in the world (11% of global production).

Without this input, global food production could drop threatening food security. Hydrocarbons also underpin other farm essentials. Pesticides, herbicides, and plastic products—like irrigation tubing, greenhouse films, and storage silos—are derived from oil and gas. These materials enhance productivity and protect crops, ensuring farms can meet the demands of a growing population. For instance, precision agriculture tools, often powered by petroleum-based electronics, allow farmers to optimize planting and conserve resources, further amplifying efficiency.

Without access to affordable energy inputs, U.S. farm production is vulnerable, broadly threatening our food security..



Abundant and reliable hydrocarbons keep our crops growing.

Supporting Energy Needs in the Developing World

The Gulf of America's oil and gas production not only powers the U.S. but also plays a critical role in addressing the urgent energy demands of the developing world. Access to affordable, reliable energy is essential for these nations to achieve economic growth, improve quality of life, and enhance global stability, and Gulf energy exports provide a vital resource to meet these needs.



The developing world needs more access to more energy.

In the developing world, energy scarcity is a major barrier to progress. Over 750 million people globally—mostly in sub-Saharan Africa and South Asia—lacked access to electricity in 2023,[13] while 2.4 billion relied on inefficient fuels like wood or dung for cooking.[14] This energy poverty stifles economic development, limits healthcare and education, and perpetuates inequality. Just as Gulf oil and gas drive U.S. prosperity, they can help unlock similar potential abroad.

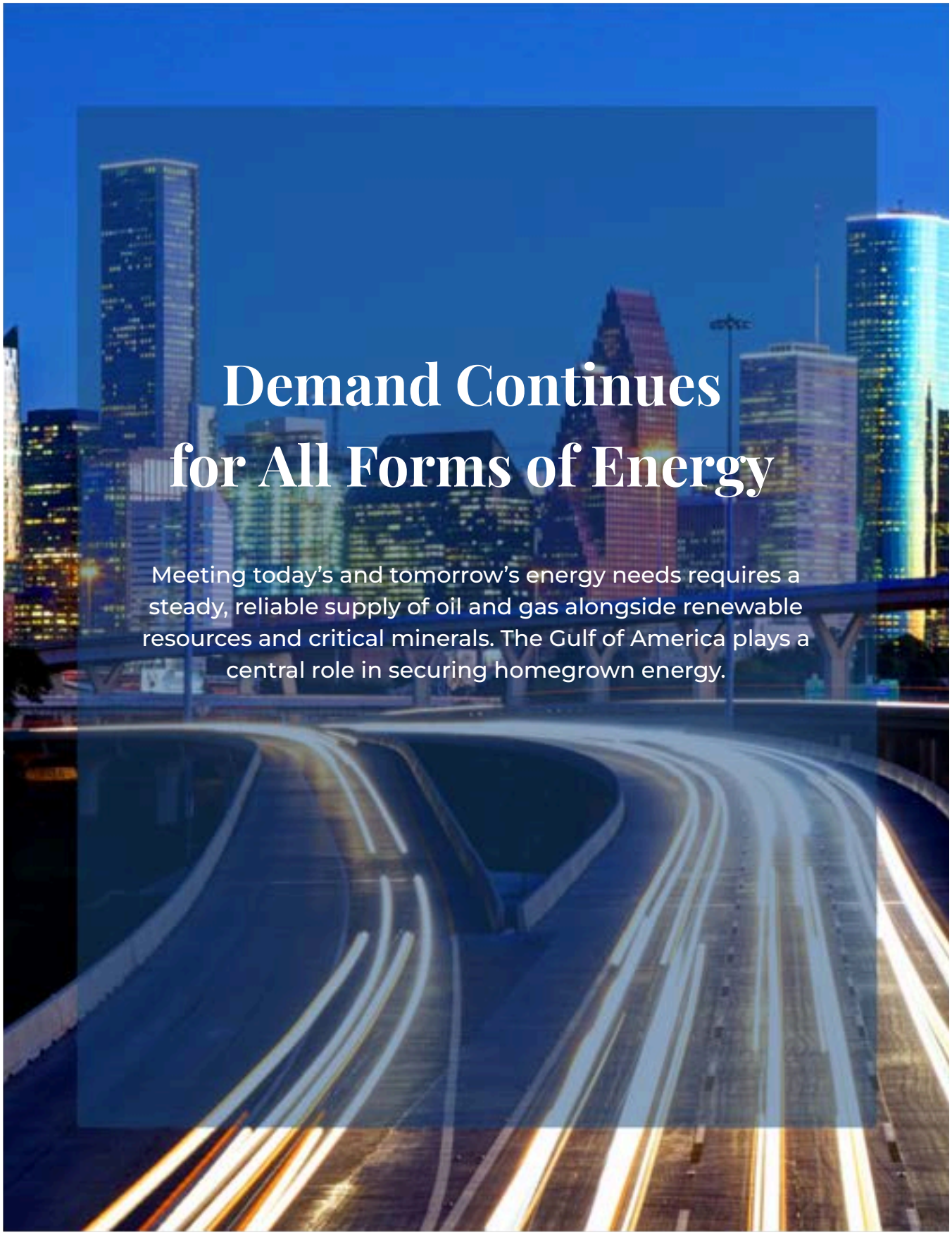
Energy access correlates strongly with GDP growth. Studies show that a 1% increase in energy consumption per capita boosts GDP by approximately 0.4% in developing nations.[15] For example, countries like India and Nigeria, with growing populations and economies, require massive energy inputs to industrialize, urbanize, and create jobs.

Expanded Gulf of America oil and gas production will position the U.S. as a key supplier to meet this demand through exports and ensure our allies have a stable, reliable, and responsible partner.

[13] https://www.iea.org/reports/sdg7-data-and-projections/access-to-electricity

[14] https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health#:~:text=Worldwide%2C%20around%202.1%20billion%20people,and%20gathering%20and%20preparing%20fuel

[15] https://www.energypolicy.columbia.edu/publications/energy-and-development-changing-world-framework-21st-century/#:~:text=As%20described%20earlier%20in%20Section,are%20raising%20standards%20of%20living

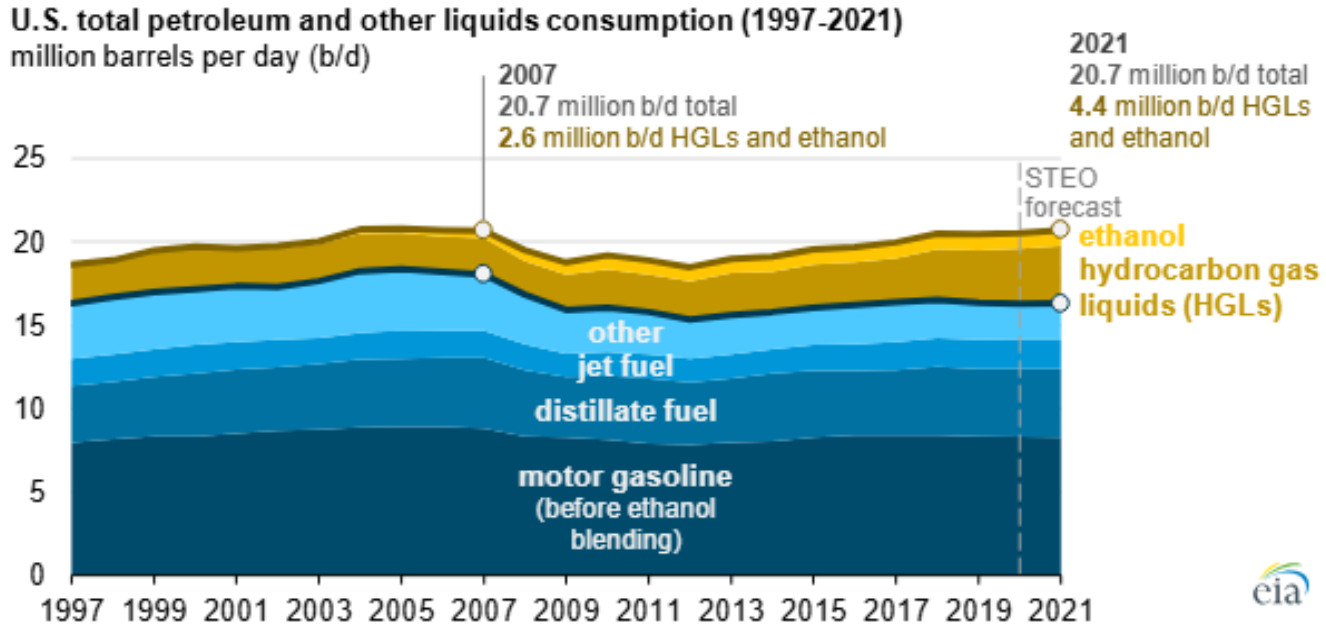


Demand Continues for All Forms of Energy

Meeting today's and tomorrow's energy needs requires a steady, reliable supply of oil and gas alongside renewable resources and critical minerals. The Gulf of America plays a central role in securing homegrown energy.

Ensuring Home Grown Energy Production

The U.S. consumes around 20.25 million barrels of oil per day.[16] Ensuring that supplies of U.S. oil and gas keep pace with strong and rising demand will be critical so that Americans of all walks of life have continued access to affordable and reliable energy.



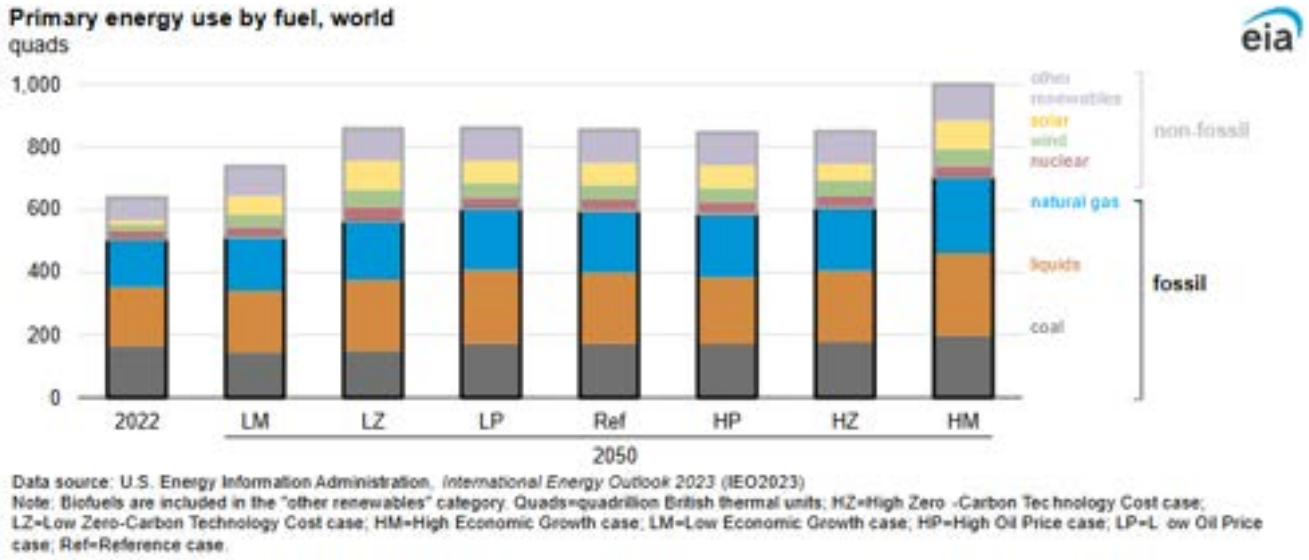
Source: https://www.eia.gov/todayinenergy/detail.php?id=43055

[16] https://www.eia.gov/tools/faqs/faq.php?id=33&t=6

Rising Middle Class Will Surge Energy Demand

The global middle class is projected to soar from 4 billion today to 5.3 billion by 2030. This rapid expansion will bring new demands as billions aspire to the same high living standards enjoyed by others—a shift that necessitates a robust increase in oil and gas production.

While renewable energy will play an increasingly vital role in our daily lives, oil and natural gas are poised to remain the backbone of global energy for decades to come.[17] Whether the world requires 100 million barrels of oil per day, or as few as 30, the Gulf of America stands unmatched as the premier region to secure reliable, future-ready energy supplies.



Data source: U.S. Energy Information Administration, *International Energy Outlook 2023* (IEO2023)
Note: Biofuels are included in the "other renewables" category. Quads=quadrillion British thermal units; HZ=High Zero -Carbon Tec hnology Cost case; LZ=Low Zero-Carbon Technology Cost case; HM=High Economic Growth case; LM=Low Economic Growth case; HP=High Oil Price case; LP=L ow Oil Price case; Ref=Reference case.

[17] https://www.eia.gov/outlooks/ieo/narrative/index.php

The U.S. Relies on All Sources of Energy

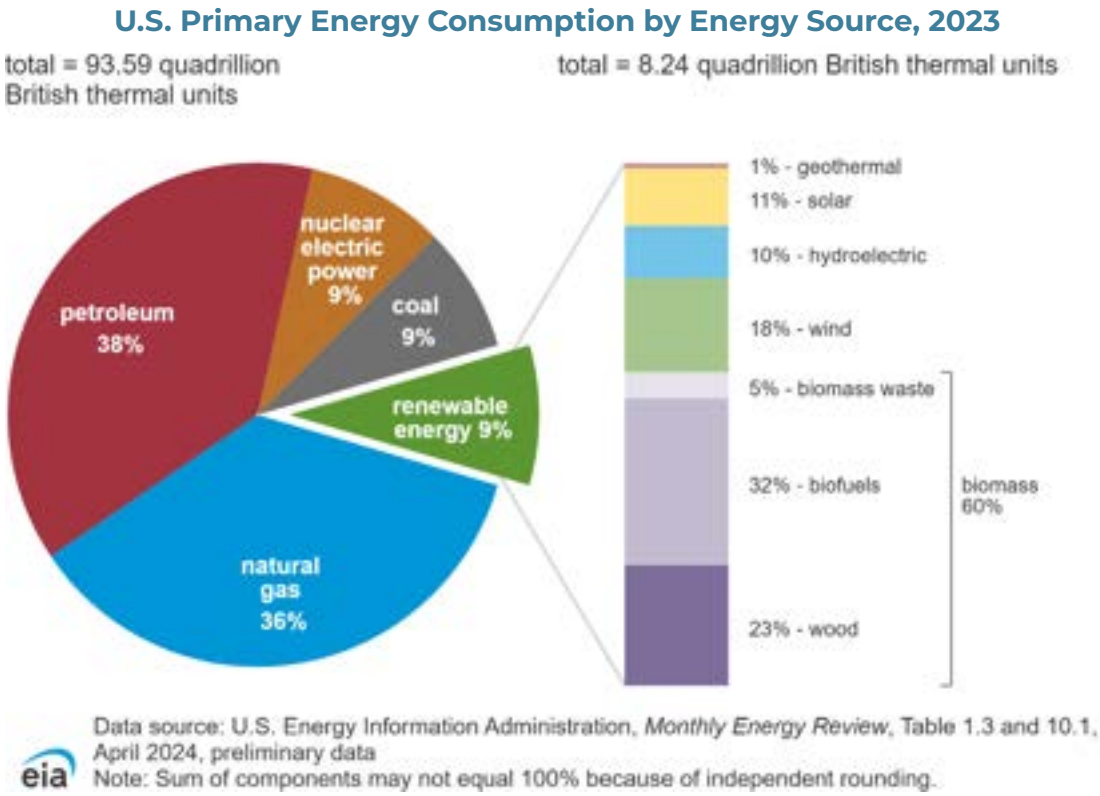
The U.S. will depend on oil and natural gas for the foreseeable future.

In 2023, oil and gas accounted for over two-thirds of total U.S. energy consumption, underscoring their indispensable role.[18] A diverse energy supply is a strategic priority for the U.S., but restricting domestic oil and gas production is neither practical nor prudent.

The U.S. Energy Information Administration (EIA) reports that the Gulf of America has consistently delivered over 1 million barrels of oil per day since 1997, with production surging to a record-breaking 2 million barrels per day in 2019.

The Gulf of America stands as a powerhouse energy basin, boasting world-class infrastructure, rigorous safety standards, and top-tier environmental protections. As a vital strategic asset, it demands recognition and support. U.S. policy must champion the Gulf's potential to bolster national security and deliver affordable energy to American consumers.

[18] https://www.eia.gov/energyexplained/us-energy-facts/



The World Relies on All Sources of Energy – Especially Oil & Natural Gas

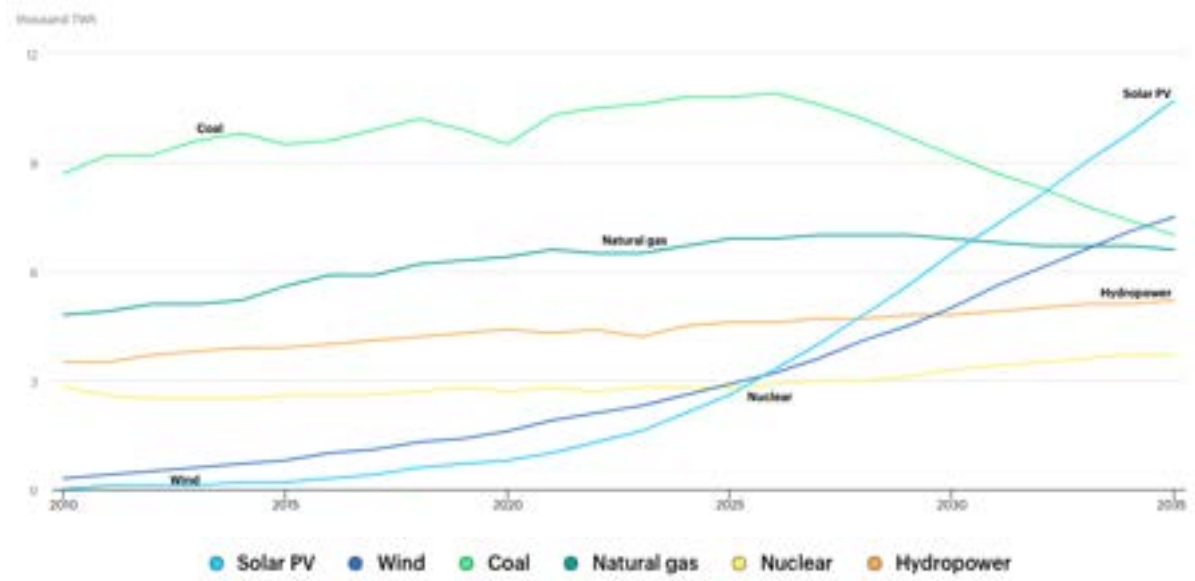
The Gulf of America is a premier energy basin to meet growing energy demand. With prolific resources, a gold-standard workforce, world-class infrastructure and one of the strongest regulatory regimes in the world, the Gulf of America is a globally competitive market for energy investment.

> Even with a large expansion of renewables,, the world will rely on oil and natural gas for the decades to come.

The International Energy Agency (IEA) forecasts global energy demand will continue to increase through 2050.[19] While renewable energy production is expected to see the largest growth, oil and natural gas will still be a dominant energy resource.

[19] https://www.iea.org/reports/world-energy-outlook-2024/executive-summary

World electricity generation in the Stated Policies Scenario, 2010-2035



Every advanced economy will need - and demand - safe and secure access to modern sources of energy to support economic development, prosperity, and a high standard of living. In developing countries, increased access to affordable, reliable, and environmentally sustainable energy is fundamental to reducing poverty and improving health, increasing productivity, enhancing competitiveness, and promoting economic growth.

In the context of the global energy market, the Gulf of America is an energy basin that provides the essential energy for lifting society.



The Gulf of America: Driving Society, Elevating Lives

The Gulf of America is a leading U.S. offshore energy hub, supporting hundreds of thousands of jobs, billions in government revenue, and reliable, affordable energy nationwide. With growing reserves and world-class infrastructure, it plays a critical role in meeting rising domestic and global energy demand while strengthening America's economy and security.

The Gulf of America: A Titan of Energy

Offshore energy is an American success story. In the Gulf of America, offshore production provides the lowest carbon intensity barrels of oil, generates millions of dollars in funding for parks and recreation programs for underprivileged urban communities, and supports hundreds of thousands of jobs located across every state.

The right policies – including resuming Gulf of America lease sales – to grow American energy, economic and environmental opportunities.

Along with immense Gulf Coast benefits, the national supply chain stretches through all 50 states. It is clear from the numbers: supporting energy production in the Gulf of America would benefit the economy of every state, supporting jobs, investments, and businesses across our nation.

In 2024:[20]

2.17 million
BOE/D

$35.9 Billion
in Industry Spending

$6.9 billion
in government revenues

Texas: $95.5 million
Louisiana $156.3 million
Mississippi $51.92 million
Alabama $9.8 million

GDP Impact National:
$36.2 billion

Texas $16.3 billion
Louisiana $9.8 billion
Mississippi $1.9 billion
Alabama $2.6 billion

Jobs National
428,000

Texas 186,300
Louisiana 115,435
Mississippi 25,105
Alabama 32,179

GOMESA
$353 million[21]

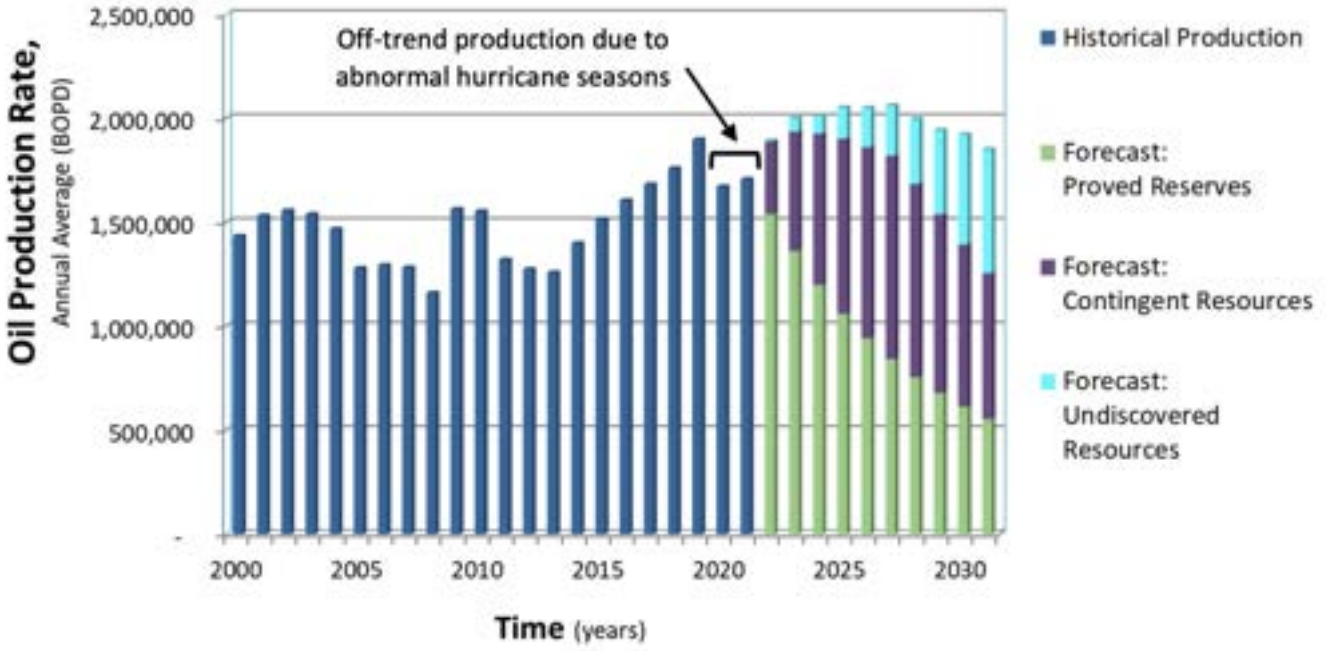
LWCF
$900 million[22]

[20] https://docs.house.gov/meetings/II/II06/20250211/117868/HHRG-119-II06-20250211-SD014.pdf
[21] https://www.onrr.gov/press-releases/Fiscal%20Year%202023%20GOMESA%20Disbursements%20Press%20Release.pdf
[22] https://www.doi.gov/sites/doi.gov/files/fy-2022-lwcf-funding-allocations-doi-508.pdf

The Gulf of America has been the premier offshore oil and gas region for decades.

There are more than 1,000 production facilities and thousands of miles of active pipelines in the Gulf of America. The Gulf of America offers a mix of world class infrastructure, thousands of companies and hundreds of thousands of workers with incredible experience and expertise, and a strong backdrop of safety regulations, standards, and practices.

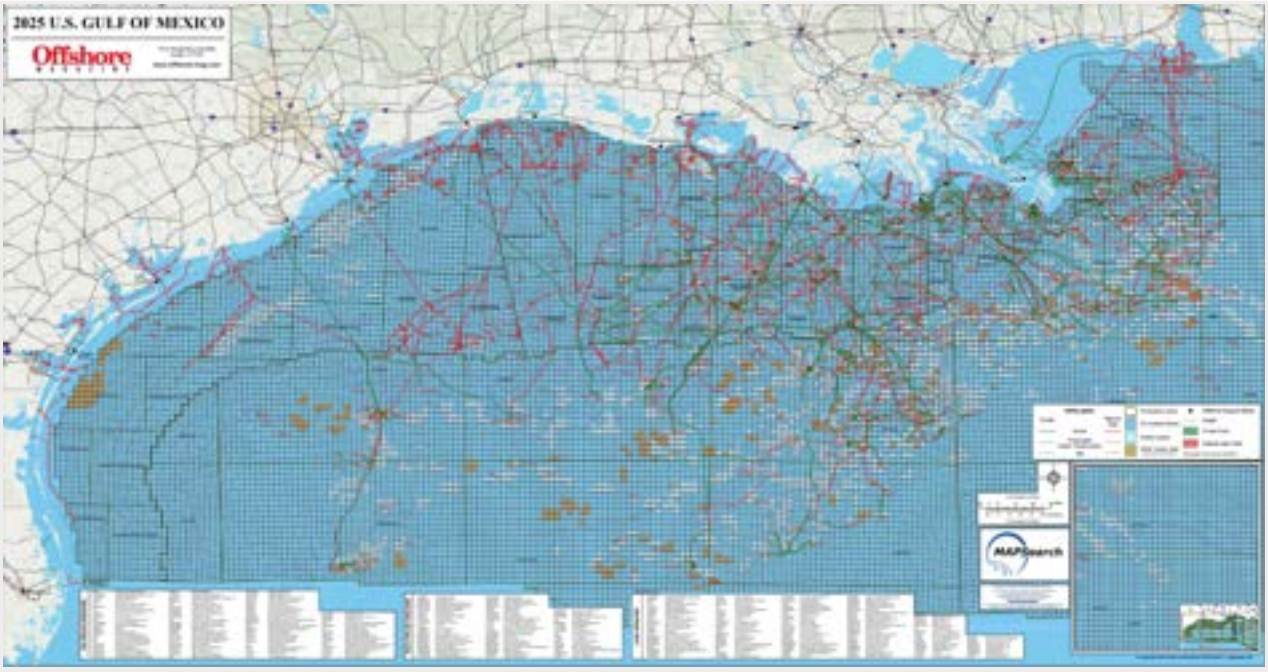
OCS, GOM Annual Oil Forecast



***Source**: U.S. Outer Continental Shelf Gulf of Mexico Region: Oil and Gas Production Forecast 2022-2031, OCS Report BOEM 2022-022 page 23*

Cumulative historic production in the Gulf of America from all fields accounts for more than 25 billion barrels of oil and 190.9 trillion cubic feet of gas.

BREAKOUT: The Gulf of America: A Resurgent Energy Giant



***Source**: Offshore Magazine*

In April 2025, the U.S. Department of the Interior announced a significant increase in estimated oil and gas reserves in the Gulf of America, underscoring the region's critical role in advancing our country's national security and American Energy Dominance.

The analysis from Bureau of Ocean Energy Management (BOEM) analysis reveals an additional 1.30 billion barrels of oil equivalent since 2021, bringing the total reserve estimate to 7.04 billion barrels of oil equivalent[23]. This includes 5.77 billion barrels of oil and 7.15 trillion cubic feet of natural gas—a 22.6% increase in remaining recoverable reserves.

BOEM's updated assessment evaluated over 140 oil and gas fields, identifying 18 new discoveries and analyzing more than 37,000 reservoirs across 1,336 fields in the Gulf. This comprehensive review added 4.39 billion barrels of oil equivalent in original reserves. After subtracting production of 3.09 billion barrels of oil equivalent since 2020–2021, the net increase reflects continued opportunity and momentum in offshore development.[24]

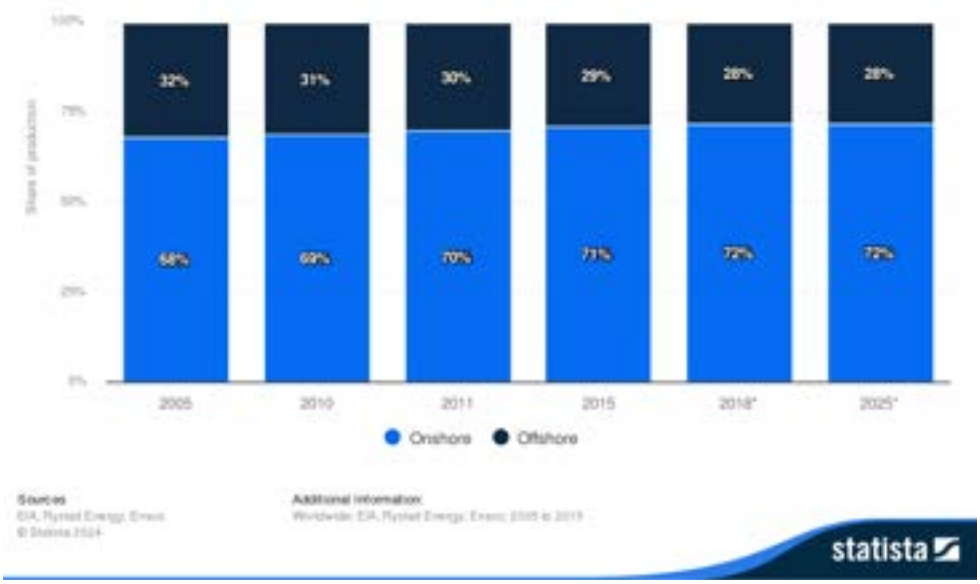
"The Gulf of America is a powerhouse, and by streamlining permitting and expanding access, we're not just powering our economy—we're strengthening our national security and putting thousands of Americans back to work."

Secretary of the Interior Doug Burgum
April 10, 2025

[23] https://www.doi.gov/pressreleases/interior-announces-major-increase-gulf-america-oil-and-gas-reserves
[24] https://www.boem.gov/newsroom/notes-stakeholders/boem-releases-estimated-oil-and-gas-reserves-gulf-mexico#:~:text=Cumulative%20production%20from%20all%20fields,trillion%20cubic%20feet%20of%20gas

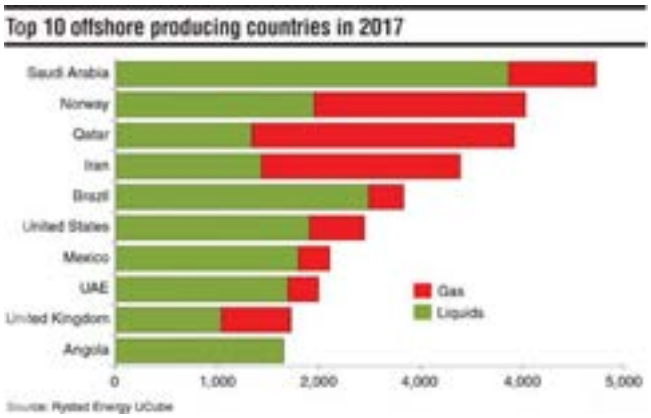
Globally, the offshore region is a major energy and oil supplier.

Distribution of Onshore and Offshore Crude Oil Production Worldwide
from 2005 to 2025



Source: https://www.statista.com/statistics/624138/distribution-of-crude-oil-production-worldwide-onshore-and-offshore/

While almost the entirety of U.S. offshore oil and gas production is isolated to the Western and Central Gulf of America, other countries have eagerly embraced their offshore oil and gas resources. Globally, offshore oil and gas production accounts for nearly 30% of all oil and gas production. In the U.S., 15% of oil production is from the offshore, and has been as high as 29%. U.S. offshore production at levels of 1 to 2 million barrels per day makes a real difference on the world stage.



Source: https://www.offshore-mag.com/production/article/16756124/top-10-offshore-producing-countries-in-2017

The Gulf of America: A Global Offshore Energy Powerhouse

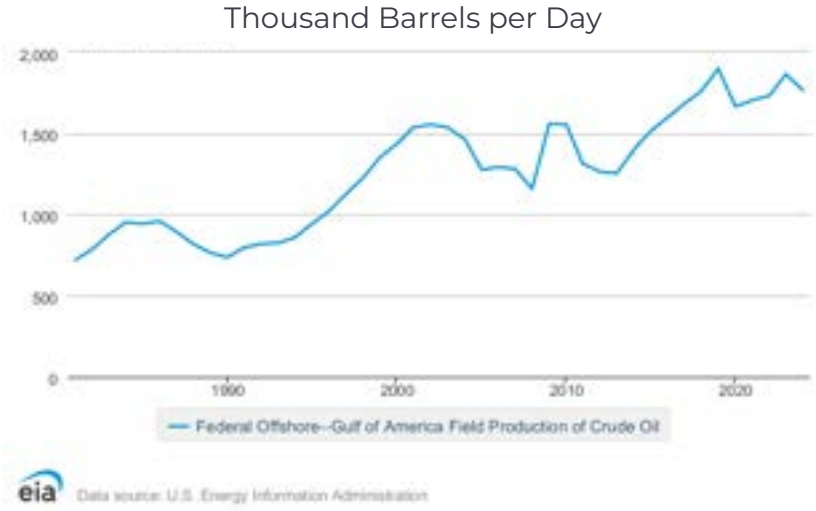
The Gulf of America continues to distinguish itself as one of the world's most prolific and strategic offshore energy basins. From 2015 to 2019, it ranked as the second most prospective offshore region globally, trailing only Guyana.[25] Over this period, the Gulf yielded an estimated 5.03 billion barrels of oil equivalent (boe) in new discoveries—valued at roughly $1.9 billion. In a significant update, the U.S. Bureau of Ocean Energy Management (BOEM) recently revised its reserve estimates upward by 1.3 billion barrels, bringing the Gulf's total estimated reserves to 7.04 billion boe.[26]

Much of this value stems from two major trends:

- **Infrastructure-led exploration (ILX)** is enabling rapid tiebacks to existing platforms, unlocking smaller but commercially viable fields.
- **High-Pressure, High-Temperature (HPHT) frontier development** is opening access to deep reservoirs once thought unreachable.

The Gulf of America's appeal lies not just in reserves, but in performance. The region consistently delivers long-life, low-decline-rate production, making it a dependable pillar of U.S. energy supply. In August 2019, Gulf production hit a record 2.04 million barrels per day, and it has sustained over 1 million barrels per day since 1997.[27]

Federal Offshore–Gulf of America Field Production of Crude Oil



[25] https://oilnow.gy/exploration/gulf-of-mexico-trails-guyana-for-most-prospective-offshore-region/#:~:text=Norway%2Dbased%20Rystad%20Energy%20says,since%202015%2C%20trailing%20only%20Guyana

[26] https://www.offshore-mag.com/regional-reports/us-gulf-of-mexico/article/14210414/boem-increases-gulf-of-mexico-oil-and-gas-reserves-estimates

[27] https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfp3fm2&f=m

BOEM estimates that the Gulf has now produced more than 25 billion barrels of oil since development began. And it's far from tapped out—new projects continue to flow from investment-ready leases, backed by infrastructure, workforce, and policy frameworks.

From Downturn to Rebound: Offshore Investment Is Surging

After a decade of tight oil dominance and a dramatic offshore downturn—from $340 billion in global offshore investment in 2014 to just $140 billion in 2021—the tides have turned[28]. Offshore project economics have strengthened, shale growth has slowed, and demand for long-term supply security is rising.

Rystad Energy projects global offshore investments will rebound to $250 billion by 2025[29], with the Gulf of America poised to lead that growth. This resurgence will be strengthened if the U.S. takes strategic steps to:



Streamline permitting and leasing processes



Expand access to proven basins



Support HPHT and ILX innovation



Secure domestic energy output amid global volatility

Powering a New Energy Era

As rising energy demand accelerates—driven by population growth, industrial activity, and especially data center expansion and AI infrastructure—the Gulf's importance only grows. These facilities are enormous power consumers, and offshore oil, gas, and even wind will play a crucial role in meeting demand without overwhelming land-based grids.

The Bottom Line: Secure, Strategic, Scalable

The Gulf of America isn't just a legacy basin—it's the future of American offshore energy. With smart, actionable policies, the U.S. can solidify the Gulf's global leadership, unlock new production, and position itself at the forefront of the world's offshore energy renaissance.

[28] https://www.rystadenergy.com/insights/from-shale-to-offshore-global-oil-and-gas-industry-dynamics-are-shifting
[29] https://www.offshore-mag.com/business-briefs/news/55136825/total-offshore-investments-to-reach-almost-250b-in-2025-rystad-reports

BREAKOUT SECTION:
Breaking New Ground: The Gulf of America's HPHT Revolution



Source: *Chevron*

Another pivotal factor in America's offshore resurgence is the novel development of High-Pressure, High-Temperature (HPHT) projects in the Gulf of America. These initiatives target reservoirs at extreme depths and conditions—pressures exceeding 15,000 psi and temperatures above 350°F—once deemed inaccessible. Advanced drilling and completion technologies now make these challenging environments viable, promising substantial yields. By tapping into these frontier zones, HPHT projects position the Gulf as a hub of innovation and growth, amplifying its capacity to bolster U.S. energy output.

Chevron's Anchor project, which achieved its first oil in August 2024, exemplifies the industry's commitment to innovation, safety, and efficiency. As the first deepwater high-pressure development to begin production, Anchor uses 20,000 psi subsea technology to tap into reservoirs at depths of 34,000 feet below the water surface.

This achievement required the collaboration of numerous companies. For instance, Chevron contracted Transocean's newly built Deepwater Titan, an eighth-generation drillship, to drill and complete the project's subsea high-pressure production wells. The Deepwater Titan and its sister ship are the first rigs in the world equipped with a 1,700-ton hoisting system, a 20,000-psi well control system, and a 10,000-psi mud system.

Other frontier HPHT projects, like Beacon Offshore Energy's Shenandoah Project and bp's Kaskida Project, are poised to follow and build upon the Gulf region's impressive resilience and status as a premier global energy basin.

No Leases, No Production, No Progress

Offshore oil and gas production begins with access. Like all forms of energy development, oil and gas production is impossible without acreage that companies can explore, develop, and bring into production. Leasing is the gateway—the essential first step in securing the acreage necessary to find and produce the energy America needs.



***Source**: Aries Marine*

Maintaining a consistent schedule of offshore lease sales is critical. Without regular opportunities to acquire new leases, production naturally declines over time, and the ability to respond to future demand spikes is lost. The broader the leasing program, the greater the potential to discover and responsibly develop new energy resources. [30]

[30] It is not true, however, that more leasing necessarily leads to more environmental impacts. As noted herein, many leases will not go into production, and for those that do, industry has continued to minimize the footprint necessary for production as it continues to do more with less.



Source: Transocean

The "Idle Lease" Myth: Misunderstanding How Energy Development Works

Critics often point to so-called "idle leases" as a reason to restrict future leasing, but this oversimplified narrative ignores the realities of offshore energy development.

Leases Are Exploration Opportunities—Not Guarantees:

Companies must bid on blocks with limited data, then conduct multi-year evaluations, including seismic surveys and exploratory drilling, before determining whether a block contains commercially viable resources.

Many Leases Will Never Produce—By Design:

There are no guarantees with exploration. Some leases are found to contain no recoverable oil or gas. Others may only become viable with future technological advancements or improved market conditions. These leases are returned to the government, which can reoffer them in future sales.

Companies Are Financially Incentivized to Produce:

Firms pay millions in upfront bonus bids and annual rental fees, often hundreds of thousands of dollars per lease. Holding a lease without producing offers no return—and significant cost. Federal rules require that leases be developed within a specific timeframe (typically 5 to 10 years) or be forfeited.

As the Congressional Research Service concluded during the Obama administration, a range of practical and regulatory factors—like permitting delays, equipment shortages, or ongoing evaluation—often account for leases being in non-producing status[31]. In truth, companies have every incentive to develop leases as quickly and efficiently as possible.

[31] https://crsreports.congress.gov/product/pdf/R/R40645

The Reality: Offshore Development Takes Time and Capital

Offshore oil and gas projects represent some of the most complex and capital-intensive infrastructure investments in the world. The average timeline from lease acquisition to first oil can exceed 7 to 10 years.

And all of this can result in a dry hole. Companies pursue these projects because they see value and the potential for energy production—but only where resources can be commercially and responsibly developed.

Efficiency Is Improving, But Access Remains Key

Despite long timelines and high costs, the offshore industry continues to deliver. Over the past decade (2011–2021), Gulf of Mexico oil production rose **38%**, even as the number of producing leases declined by **57%**. This reflects **continuous efficiency gains** and smarter development—but it also underscores the need for access to new, prospective acreage.

Typical development phases include:



1–2 years
for seismic surveying and data analysis



1+ year
to secure and schedule a drilling rig



6–10 months
to drill and complete an exploratory well



2–3 years
for delineation, permitting, and planning



1–2 years
for facility installation and development drilling

Exploration and development <u>costs are significant:</u>



Seismic surveys
can cost over **$200,000 per day**



Exploratory wells
range from **$25M to $100M+**



Deepwater production facilities
often exceed **$1 billion**

Doing More with Less: Fewer Leases and Less Acreage But More Oil & Gas

	Number of Active Leases	Acreage of Active Leases	Number of Producing Leases	Acreage of Producing Leases	Number of Non-producing Leases	Acreage of Non-producing Leases	Average Daily Production
December 2021	2,018	10,773,137	540	2,766,936	1,478	8,006,201	1.73 mbpd
December 2016	3,257	17,331,283	873	4,301,193	2,381	13,030,090	1.73 mbpd
December 2011	5,873	31,576,909	1,244	6,065,566	4,629	25,511,343	1.25 mbpd

Source: BOEM, EIA (As of March 2022, there are 1,997 active leases, with 479 producing leases, 1,518 non-producing leases in the Gulf of Mexico)

Without new lease sales, even the most advanced technology and efficient operations won't be enough to maintain long-term production.

A Strategic Imperative for Energy Security

The Gulf of America is one of the most productive offshore basins in the world, supporting tens of thousands of jobs, generating billions in government revenue, and providing a reliable supply of domestic energy. To preserve these benefits, policymakers must commit to a **robust, regular leasing program**, including biannual lease sales that allow companies to plan, invest, and develop with confidence.

A consistent leasing program means:



Greater investment certainty



More domestic energy production



Stronger national energy security



More innovation with less environmental impact

Offshore leasing isn't speculative—it's strategic.

No leases means less energy.

And less means less energy and economic security..

Powering Prosperity: How Gulf of America Oil and Gas Enhances Energy Affordability & Healthier Outcomes

The offshore oil and gas industry in the Gulf of America is a linchpin in ensuring energy affordability for Americans, delivering substantial cost savings by bolstering domestic production and stabilizing global energy markets. Over the past decade, the surge in U.S. oil and gas output, particularly from the Gulf of America, has driven down oil and gasoline prices, effectively drilling the nation's way to lower energy costs.

In 2024, the Gulf of America produced close to 2 million barrels of oil per day, accounting for about 15% of total U.S. crude oil production, placing it among the top oil-producing regions globally if considered as a standalone entity.[32] This robust output has been critical in countering global supply disruptions, such as those caused by geopolitical tensions or underinvestment in exploration, which have tightened oil and natural gas markets.

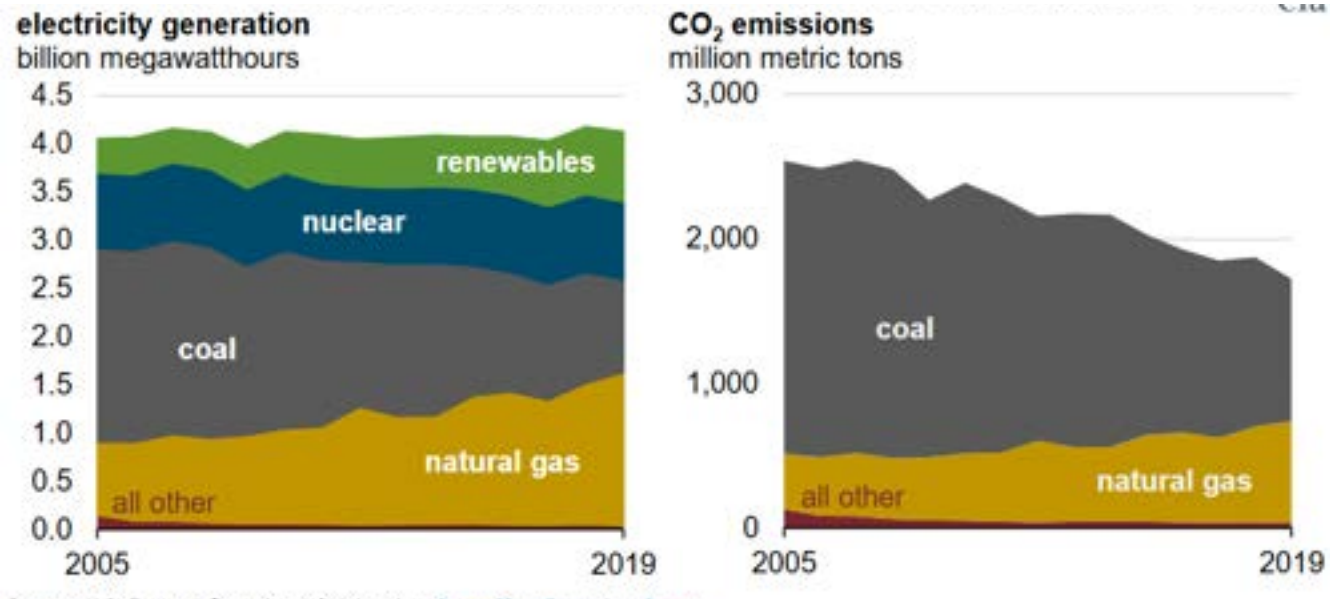
Affordable energy is especially vital for low-income communities, where energy costs consume a disproportionate share of household budgets—often 8-10% of income compared to 3% for higher earners.[33] By pursuing federal policies that enable growing production levels, the Gulf of America helps keep gasoline, heating, electricity, and consumer good prices in check, easing financial burdens for vulnerable populations.

The global energy landscape underscores the Gulf of America's critical role. As Daniel Yergin, Vice Chairman of S&P Global, noted in 2012 and reaffirmed in his 2022 Wall Street Journal op-ed, "America Takes Pole Position on Oil and Gas,"[34] U.S. production has shifted from marginal to pivotal, preventing tighter global markets and higher prices. Without the Gulf's contributions, the world would face a supply gap—projected by Wood Mackenzie to require 20 million barrels per day of new oil by 2030—driving prices even higher.[35] Rystad Energy estimates that $3 trillion in capital investment is needed by 2050 to meet global demand, highlighting the Gulf's importance in bridging this gap.[36]

Saudi Aramco CEO Amin Nasser, speaking at the Schlumberger Digital Forum in 2022, warned that chronic underinvestment in oil and gas—down 50% from $700 billion in 2014 to $300 billion in 2021—has left global spare capacity at a mere 1.5%, with declining fields requiring massive capital to sustain output[37]. The Gulf of America, with its record-high production and potential for growth, is uniquely positioned to address these challenges, exerting downward pressure on prices for gasoline and other petroleum products.

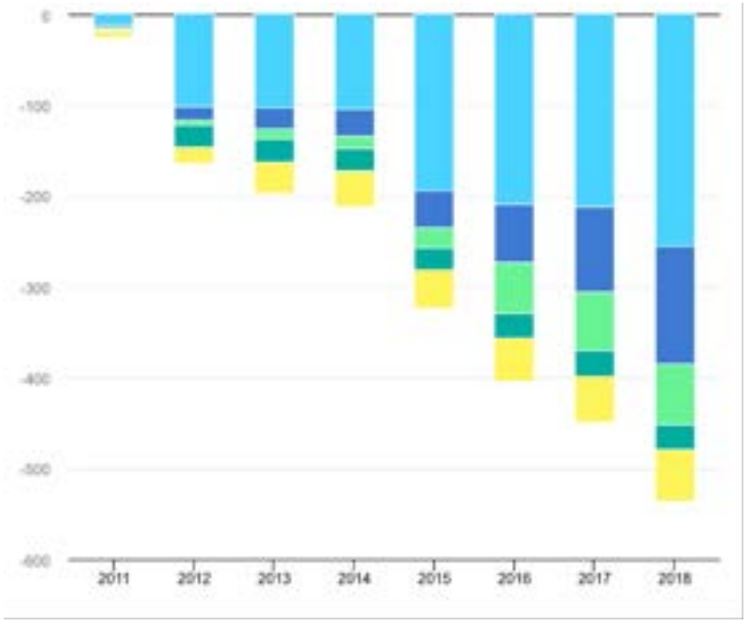
[32] https://www.eia.gov/special/gulf_of_america/
[33] https://www.aceee.org/press-release/2020/09/report-low-income-households-communities-color-face-high-energy-burden
[34] https://www.wsj.com/articles/america-takes-pole-position-on-oil-and-gas-11645108269
[35] https://www.woodmac.com/blogs/the-edge/is-the-world-sleepwalking-into-an-oil-supply-crunch/
[36] https://www.rystadenergy.com/newsevents/news/press-releases/oil-and-gas-exploration-3-trillion-investment-needed/
[37] https://www.aramco.com/en/news-media/speeches/2022/remarks-by-amin-h-nasser-at-schlumberger-digital-forum

U.S. Electric Power Sector Electricity Generation and CO2 Emissions
by source (2005-2019)



Source: U.S. Energy Information Administration, Power Plant Operations Report.
https://www.eia.gov/todayinenergy/detail.php?id=48296

CO2 savings from coal-to-gas switching in selected regions compared with 2010, 2018



Source: https://www.iea.org/reports/the-role-of-gas-in-todays-energy-transitions

Beyond oil, the Gulf of America's natural gas production enhances affordability and environmental benefits, offering a cleaner alternative to coal. Although current output hovers around 2 billion cubic feet per day, down from a peak of 5 billion in the late 1990s,

increased investment could significantly boost production, feeding domestic markets and liquefied natural gas (LNG) exports. As the U.S. leads global LNG exports, with demand soaring from allies facing supply constraints, Gulf of America gas helps stabilize prices and supports energy security. The U.S. Energy Information Administration (EIA) notes that natural gas emits 117 pounds of CO2 per million British thermal units, roughly half that of coal's 209 pounds, contributing to a 32% reduction in U.S. electric power sector CO2 emissions from 2005 to 2019.[38] This shift, driven by natural gas, has also reduced harmful pollutants like sulfur dioxide and mercury, improving public health[39]. In contrast, Europe's recent reversion to coal amid natural gas shortages illustrates the risk of insufficient gas supplies, which the Gulf of America can help mitigate.

Keeping Costs Low, Families Secure

High energy prices disproportionately burden low-income and minority communities, forcing difficult choices between essentials like food, healthcare, and utility bills. Businesses, too, rely on affordable energy to avoid layoffs and factory closures, as seen in Europe's 2022 energy crisis. Policies that promote Gulf of America oil and gas production not only enhance affordability but also create jobs and fuel economic stability. By leveraging its vast resources and investing in both traditional and emerging energy technologies, the Gulf of America ensures that American families and businesses benefit from reliable, cost-effective energy, fostering prosperity and resilience in an uncertain global market.

[38] https://www.eia.gov/environment/emissions/co2_vol_mass.php
[39] https://www.eia.gov/todayinenergy/detail.php?id=43295



Gulf of America: Fueling High-Skill, High-Wage Jobs

The Gulf of America's offshore oil and gas industry supports hundreds of thousands of high-paying, skilled jobs nationwide and drives billions in investment. From engineering to maritime trades, it powers careers across all backgrounds while growing America's future workforce through trade school and STEM partnerships.

Source: Oceaneering

Fueling the Economy: How Gulf Energy Drives Domestic Growth

Offshore oil and gas development—especially in the Gulf of America—is among the most capital-intensive industrial undertakings in the world. According to a 2021 study by the Energy & Industrial Advisory Partners (EIAP), titled *The Gulf of Mexico Oil & Gas Project Lifecycle: Building an American Energy & Economic Anchor,*[40] the total lifetime cost of a single deepwater project averages $8.8 billion, with annual spending near $295 million. The most capital-intensive phases include subsea development and decommissioning. Even shallow-water projects see lifetime spending around $1.3 billion, with annual operating expenses of approximately $27.5 million.



***Source**: Morrison Energy*

Billions at Stake: The Risk of Reduced or Delayed Leasing

In another 2022 EIAP report, *The Economic Impacts of a 5-Year Leasing Program Delay*, analysts projected that Gulf of America offshore oil and gas spending in 2022 alone would exceed $30.3 billion.[41]

Looking forward, the industry is expected to invest an average of $30.6 billion annually through 2040—but only if regular lease sales continue without disruption.

Industry Spending by Project Segment

	2021	2022
G&G	$192	$236
Drilling Tangibles	$863	$1,234
Trees	$506	$558
Manifolds	$261	$290
Other Subsea Hardware	$90	$135
Control Umbilical, Flying Leads	$308	$354
Infield PL	$68	$119
Export PL	$358	$734
Infield Risers	$33	$67
Export Risers	$14	$29
Fixed Platforms & Facilities	$86	$168
Floating Production Units & Facilities	$1,760	$1,670
Installation	$1,038	$1,638
OPEX	$10,474	$13,548
Decommissioning CAPEX	$858	$785
Drilling	$4,883	$6,790
Engineering CAPEX	$679	$847
Engineering OPEX	$686	$891
Natural Gas Processing and Transportation	$104	$137
Total	$26,369	$30,272

***Source**: Energy & Industrial Advisory Partners,* The Economic Impacts of a 5-Year Leasing Program Delay for the Gulf of Mexico Oil and Natural Gas Industry, *March 29, 2022. Page 59*

[40] https://www.noia.org/noia-reports/#flipbook-df_218475/1/
[41] https://www.noia.org/noia-one-pagers-infographics/#flipbook-df_223664/1/

The report warns that delays or cancellations in federal offshore leasing significantly undermines investment. A prolonged leasing freeze could:

- Slash capital expenditure by $10 billion in the peak year
- Result in $100 billion in lost investment over the 2022–2040 forecast period

This drop would reverberate across the U.S. economy, stalling growth not only in energy production but in the massive supply chain that supports it.

An Investment That Reaches Every State

The economic ripple effect of Gulf of America oil and gas spending extends well beyond the Gulf Coast. While Louisiana and Texas anchor much of the offshore infrastructure and workforce, the supply chain stretches nationwide.

Industry Spending by Project Segment

	2016	2017	2018	2019	2020	2021	2022	2023	2024
Texas	166,737	158,715	155,767	147,462	133,381	136,682	158,256	169,253	164,634
Louisiana	98,247	94,932	95,089	94,621	89,432	89,175	98,473	107,040	106,535
Mississippi	21,524	20,740	20,926	20,415	19,110	19,116	21,593	23,268	22,947
Alabama	29,595	28,870	29,053	28,011	25,157	26,508	29,250	30,871	30,276
Other U.S. States	65,041	60,861	59,631	54,989	43,624	52,990	63,954	63,667	59,865
Total	**381,144**	**364,119**	**360,465**	**345,498**	**310,703**	**324,472**	**371,525**	**394,099**	**384,257**

***Source**: Energy & Industrial Advisory Partners,* The Economic Impacts of a 5-Year Leasing Program Delay for the Gulf of Mexico Oil and Natural Gas Industry, *March 29, 2022. Page 59*

In a 2021 EIAP study, *The Economic Impacts of the Gulf of Mexico Oil and Natural Gas Industry*, researchers identified over 2,400 companies across all 50 states that provide products or services to the offshore sector—including engineering, manufacturing, logistics, safety equipment, IT systems, and more[42]. EIAP noted that this count is conservative, underscoring how deeply embedded offshore energy is in the broader U.S. economy.

With U.S. and global energy demand projected to rise through 2045, continued investment in offshore oil and gas will be essential—not just for energy security, but for economic growth. Lease sales drive that investment. Without them, the flow of capital that sustains thousands of businesses, jobs, and tax revenues across the country would slow to a trickle. In short, offshore oil and gas is more than energy—it's a national economic engine. And leasing is the key that keeps it running.

[42] https://www.noia.org/noia-one-pagers-infographics/#flipbook-df_223664/1/

The Gulf of America Provides Accessible and High-Paying Jobs



***Source**: Oceaneering*

Offshore oil and gas development is widely recognized as an employment engine that provides good-paying jobs. The study, *The Economic Impacts of a 5-Year Leasing Program Delay for the Gulf of Mexico Oil and Natural Gas Industry*, estimates offshore oil and natural gas employment numbers with no interruption in lease sales at an average of 372,012 jobs per year throughout the forecast period of 2022-2040:

	2016	2017	2018	2019	2020	2021	2022	2023	2024
Texas	166,737	158,715	155,767	147,462	133,381	136,682	158,256	169,253	164,634
Louisiana	98,247	94,932	95,089	94,621	89,432	89,175	98,473	107,040	106,535
Mississippi	21,524	20,740	20,926	20,415	19,110	19,116	21,593	23,268	22,947
Alabama	29,595	28,870	29,053	28,011	25,157	26,508	29,250	30,871	30,276
Other U.S. States	65,041	60,861	59,631	54,989	43,624	52,990	63,954	63,667	59,865
Total	**381,144**	**364,119**	**360,465**	**345,498**	**310,703**	**324,472**	**371,525**	**394,099**	**384,257**

	2025	2026	2027	2028	2029	2030	2031	2032
Texas	168,823	171,201	176,391	179,528	184,119	178,814	168,823	157,130
Louisiana	108,625	110,246	112,832	114,379	116,248	114,839	111,109	106,689
Mississippi	23,447	23,748	24,349	24,675	25,165	24,710	23,765	22,605
Alabama	30,713	30,922	31,489	31,855	32,460	31,972	31,020	29,808
Other U.S. States	60,641	60,881	61,335	62,846	65,014	62,801	58,175	53,819
Total	**392,249**	**396,997**	**406,396**	**413,284**	**423,006**	**413,136**	**392,892**	**370,050**

	2033	2034	2035	2036	2037	2038	2039	2040
Texas	150,541	142,724	135,170	120,756	135,144	142,858	148,587	151,886
Louisiana	103,567	100,503	97,262	95,642	96,386	99,700	101,946	103,580
Mississippi	21,901	21,106	20,333	19,889	20,198	20,982	21,564	21,916
Alabama	29,166	28,325	27,531	27,014	27,432	28,141	28,694	29,009
Other U.S. States	51,622	48,733	45,040	43,496	46,369	49,944	51,839	53,838
Total	**356,797**	**341,392**	**325,336**	**306,798**	**325,529**	**341,625**	**352,631**	**360,229**

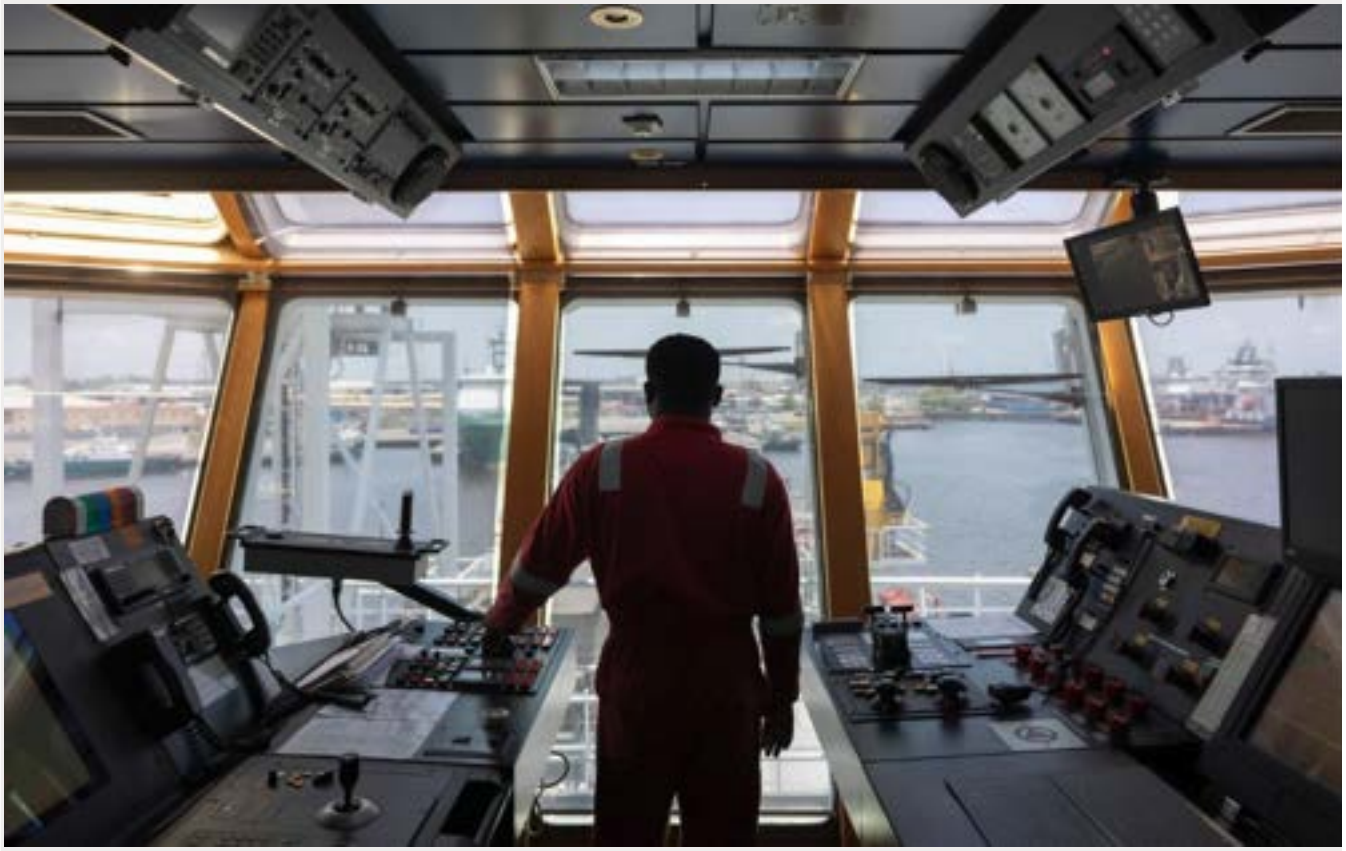
Source: Energy and Industrial Advisory Partners

While a significant portion of these jobs are concentrated along the Gulf Coast, the reach of the offshore industry is truly national. From shipbuilding in Pennsylvania to high precision measurement solutions in the Pacific Northwest to forging manufacturing in Ohio to weather management solutions in Connecticut, the Gulf of America's energy activity supports between 40,000 and 65,000 jobs annually outside the Gulf region. These jobs span manufacturing, engineering, logistics, technology, and countless other sectors—making offshore energy development a nationwide economic multiplier.

In short, investing in offshore energy doesn't just power the nation—it employs it. Maintaining a steady leasing program and a regulatory environment that is not politically driven is critical to sustaining this workforce and the economic opportunity it delivers from coast to coast.

Accessible Jobs, for Everyone

The 2021 EIAP report, *The Gulf of Mexico Oil & Gas Project Lifecycle: Building an American Energy & Economic Anchor*, describes the sizable economic and employment footprint of shallow-water and deepwater project life cycles to provide a foundation for developing employment estimates. EIAP establishes the credibility of its numbers, basing them on a vast database that allows analysts to break down offshore energy development into five distinct stages: pre-development, development, operations, infill drilling and tiebacks, and abandonment and decommissioning. Each stage is further segmented to identify individual activities, types of equipment, primary company and supplier types, sub-supplier types, and types of employment. Finally, the study describes the fields of work, occupations, and wages for workers throughout the life cycle of a lease.



***Source**: Halliburton*

One of the things that differentiates a Gulf of America project from other types of construction efforts is that it has a massive economic impact over their entire project life cycle. EIAP identified more than 200 types of jobs involved in Gulf of America oil and gas production. Together, the women and men who fill these positions work to safely produce lower-emission, environmentally responsible barrels of oil and natural gas.

An average deepwater project produces about $3 billion in total direct wages. Direct employment associated with a modern deepwater project development averages over 1,435 jobs across the project's 30-year lifecycle. Indirect and induced employment is projected to account for an average of over 2,200 additional jobs.

While employment during the first two years of a project's lifecycle is estimated at only an average of 880 jobs, during the most active years of the project employment impacts peak at nearly 14,400 jobs. During normal operations, total supported employment is projected at around 1,900 jobs. While these numbers are associated with just one project, the Gulf of America is illustrated by dozens of such projects and an investment horizon that could span several decades.

Offshore oil and gas jobs are varied and high paying, with an average industry wage of $69,650, or 29% higher than the national average. Every U.S. state has jobs and investments supported by the Gulf of America oil and gas industry.

The study also covered the economic impacts of a shallow water project, which results in, on average, $16.2 million in annual direct wages, 230 direct jobs supported annually, 390 indirect and induced jobs supported annually, and the same high average annual wage of $69,650. BSEE reported in 2019 that there were more than 900 producing platforms in the shallow water of the Gulf of America.

The offshore industry provides jobs to Americans of all walks of life in communities throughout the Gulf Coast and the country. Our industry includes companies owned and managed by all demographics, including women, African Americans, Latinos, Native Americans, and veterans. Offshore leasing will continue on a global scale over the coming decades. The offshore oil and gas industry further provides new workers with the knowledge, skills, and abilities that will be essential for not only oil and gas projects, but also for renewable energy development.

BREAKOUT SECTION:
The Impact of Leasing Pauses on Jobs

Importantly, jobs and spending for offshore oil and gas projects begin well before a lease is signed with the federal government. Geologists, geophysicists, computer scientists, petroleum engineers, accounting and finance professionals and economists are all needed during the pre-lease phase to prepare for the lease sale and later phases. These women and men review and reprocess existing seismic and well data, provide prospect identification and analysis, and figure out lease valuation. These jobs are directly tied to lease sale activities.

The report includes more than 200 job types needed throughout the offshore oil and gas lifecycle, the quantity needed by year (for both deepwater and shallow water projects) and as well as the projected wages.

The following table shows jobs that are required in Year 1 of project development and their annual median wage.

Job Title	Annual Median Wage
Architectural & Civil Drafters	$58,564
Architectural & Engineering Managers	$144,293
Civil Engineers	$99,278
Electrical Engineers	$102,438
Mechanical Engineers	$91,501
Project Management Specialists	$81,674
Secretaries & Administrative Assistants	$50,137
Software Developers	$102,042
Surveyors, Surveying and Mapping Technicians	$61,823

Source: https://www.noia.org/gulfanchor/

TYPES OF CAREERS



Mariners

Mariners navigate and operate advanced vessels, from supply boats to drillships ensuring safe transport of crews and equipment across the Gulf's deepwater fields. They use GPS and dynamic positioning systems to support critical Gulf of America projects.



Petroleum Geologists

Petroleum geologists unlock the Gulf's 7.04 billion barrels of reserves by analyzing rock formations to locate oil and gas deposits. They use AI and seismic data to guide drilling, boosting efficiency and sustainability. Their expertise fuels American energy dominance and supports high-tech exploration worldwide.



Geophysicists

Geophysicists harness advanced seismic technologies to map complex Gulf reservoirs beneath salt canopies. They enhance drilling accuracy for projects positioning the Gulf as a global leader in geophysical innovation.



Divers

Divers perform critical underwater maintenance, inspecting pipelines and installing subsea equipment. In today's environment, they can also work with ROV-assisted tools to ensure safe operations. Their high-skill work protects Gulf ecosystems and fuels American energy leadership with precision and expertise.



Roustabouts

Roustabouts keep Gulf platforms running, handling equipment and maintenance tasks on rigs. They support high-tech operations, from AI-driven platforms to electrified systems. Their hands-on role ensures reliable energy production, powering communities and small businesses across America.



Electricians

Electricians maintain and install electrified systems on platforms, vessels, and facilities. They drive sustainability and efficiency, ensuring the Gulf leads in high-tech, environmentally responsible energy production.

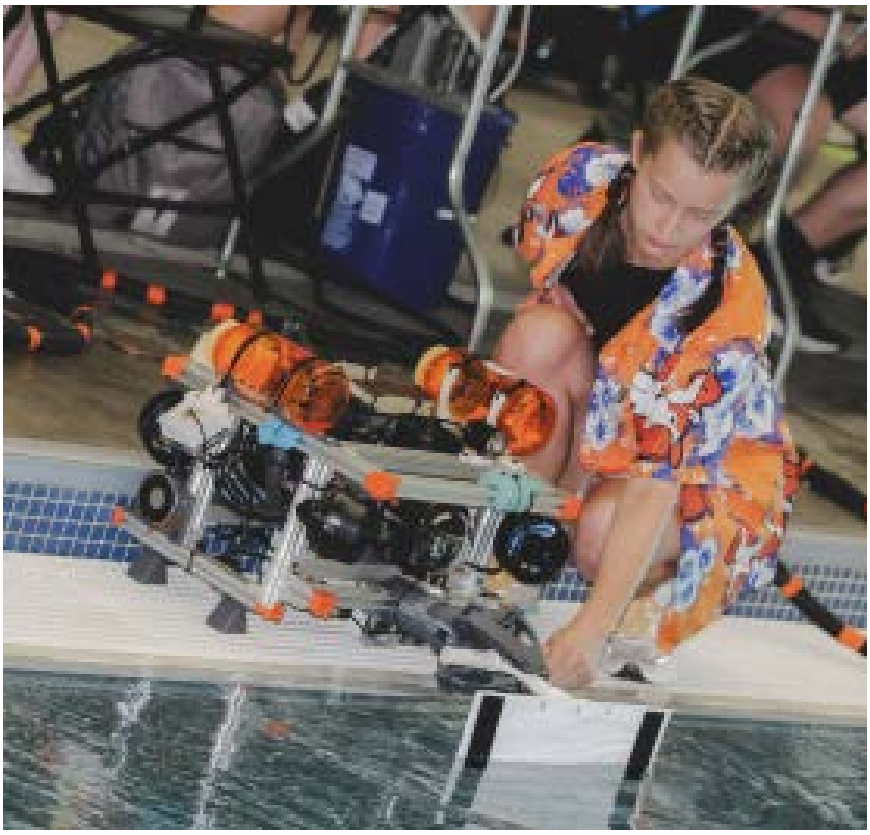


Welders

Welders craft and repair critical infrastructure, from pipelines to platforms. They ensure structural integrity and powers America's energy security and showcases Gulf craftsmanship on a global stage.

Gulf of America: Unlocking STEM Potential

The offshore oil and gas industry in the Gulf of America serves as a dynamic force in advancing STEM (Science, Technology, Engineering, and Math) education, igniting innovation and opportunity across Gulf Coast communities. Industry leaders like Shell, bp, Chevron, and ExxonMobil pour significant resources into K-12 schools, providing grants, state-of-the-art lab equipment, and hands-on programs that make learning tangible—think coding kits, 3D printers, and robotics clubs that spark curiosity.



Source: https://materovcompetition.org/blog/2024-post-wc

By forging partnerships with universities like Louisiana State University and Texas A&M, alongside technical schools, the industry connects classroom lessons to real-world challenges, offering internships, workforce training, and scholarships that pave the way for careers in high-demand fields such as petroleum engineering, marine technology, and data analytics.

A prime example is the MATE ROV Competition, where students design and build remotely operated vehicles (ROVs) inspired by offshore technology. Supported by industry sponsors like Ocean News & Technology (managed by NOIA-member Continental Shelf Associates) and NOIA-member Fugro, this competition challenges students to apply physics, math, and engineering skills to workplace-inspired problems. Mentors, including teachers and industry professionals, guide students to focus on learning and creative problem-solving rather than just winning, fostering a passion for STEM.

Similarly, the ExxonMobil Foundation's $17 million Open Doors Project, in partnership with Khan Academy, delivers free, Texas standards-aligned math and science courses for grades 3-12, complete with teacher guides tailored to the Texas Essential Knowledge and Skills (TEKS) standards. This initiative, targeting areas like Houston, the Permian Basin, and the Gulf Coast, equips students and educators with resources to nurture the next generation of scientists and engineers.

The industry also champions diversity, ensuring STEM opportunities reach underrepresented groups. Chevron Phillips' Introduce a Girl to Engineering Day, held annually in February at facilities like Cedar Bayou, inspires high school girls by showcasing how engineers shape the world, doubling as a kickoff for Women's History Month.

> By championing STEM, the offshore oil and gas sector not only builds its future workforce but also empowers students to shape a technology-driven, innovative tomorrow.



Source: https://baytownsun.com/local/chevron-phillips-chemical-inspiring-the-next-generation-of-females-in-stem/article_6ed9945a-ec46-11ee-a321-870bbdb7a055.html

Fueling Futures: How Gulf of America Oil and Gas Empowers Trade Schools

The offshore oil and gas industry in the Gulf of America is a cornerstone of economic and educational opportunity, significantly benefiting trade schools across Gulf Coast communities by equipping students with the skills needed for high-demand, well-paying careers. Many companies partner with institutions such as Delgado Community College in Louisiana and Lone Star College in Texas to fund programs tailored to the industry's technical needs, including welding, instrumentation, pipefitting, and offshore safety.

These partnerships provide trade schools with state-of-the-art equipment, such as welding simulators and subsea technology trainers, ensuring students gain hands-on experience with tools used in real-world operations. Industry-sponsored scholarships and apprenticeships enable students to earn while they learn, reducing financial barriers and fast-tracking entry into careers like rig technicians or marine logistics specialists.

Additionally, as the industry evolves toward sustainability, trade schools receive funding to train students in emerging fields like offshore wind maintenance and carbon capture technologies, preparing them for energy diversification.



Source: Western Carolina University

SPOTLIGHT:
Lone Star College

Lone Star College (LSC), based in the Houston area, stands out as a premier trade school partner for the Gulf of America's offshore oil and gas industry, leveraging its strategic location and robust programs to prepare students for upstream energy careers. Through its Lone Star Petroleum Service Technology programs, LSC offers targeted training in drilling operations, hydraulics/pneumatics, electrical circuits, and petroleum instrumentation, directly aligned with the needs of offshore platforms. The college's Drilling Services Technology Center in Tomball, opened in September 2020, features a customized training rig and modular facilities, providing hands-on experience with equipment used in offshore drilling. This $12.6 million facility, funded partly by a 2014 bond referendum, was developed in consultation with industry leaders like Baker Hughes, which also partners with LSC to provide students access to a real oil rig for training one week each month. LSC's Oil & Gas Drilling/Floor-Hand program prepares students for entry-level roles in just eight weeks, covering rig equipment, casing design, and safety protocols. The college's virtual simulator for oil and gas drilling systems, available for daily or weekly rental, allows students to practice complex operations in a controlled environment, enhancing their readiness for offshore work.

LSC's partnerships with oil and gas companies ensure its curriculum reflects current industry demands. Additionally, LSC's collaboration with the University of Texas' Petroleum Extension (UT-PETEX) enhances its ability to deliver customized training in upstream, midstream, and downstream operations, positioning students for roles across the oil and gas value chain. By offering flexible training options—on-campus labs, online theory, or on-site at industry facilities—LSC meets the needs of both students and employers. With over 80,000 students enrolled each semester and an annual economic impact of nearly $3 billion, Lone Star College is a linchpin in training the next generation of offshore oil and gas professionals, driving economic mobility and energy innovation in the Gulf Coast region.



Technology Sets the Gulf of America Apart

The Gulf of America is one of the world's most advanced offshore energy regions, powered by cutting-edge technologies like AI, advanced seismic imaging, subsea processing, and remote-operated systems. These innovations make Gulf of America production safer, more efficient, and lower in emissions, setting a global standard for high-tech, responsible offshore energy.

The Gulf of America is a High-Tech Energy Basin



***Source**: Oceaneering*

American innovation is unmatched, and nowhere is this clearer than in the Gulf of America. Companies are investing billions in cutting-edge satellite systems, augmented reality, artificial intelligence (AI), and machine learning. These technologies deliver real-time, high-resolution data to engineers both offshore and onshore, enabling predictive decision-making that identifies issues before they escalate. This ensures the Gulf remains a safe, sustainable energy hub for all stakeholders.

> *Our industry generates staggering data volumes—a single well can produce over 10 terabytes daily. By scaling digital technologies and integrating workflows, studies show projects can achieve 10% cost reductions, 70% faster decision-making, and over 50% lower carbon emissions. These advancements not only enhance safety and efficiency in the Gulf but also position U.S. innovations as game-changing exports, benefiting energy consumers worldwide..*

Technological progress is also minimizing the offshore industry's environmental footprint. The U.S. offshore sector produces more energy with a smaller physical presence, preserving the Gulf's status as a low-emissions basin. Innovations like advanced seismic imaging, smarter subsea tiebacks, and optimized infrastructure drive a new era of productivity, delivering more energy with greater efficiency and lower environmental impact.



Offshore production is a global energy cornerstone. Multi-billion-dollar projects yield vast quantities of oil and natural gas, and technological breakthroughs enable fields to produce cleaner, more abundant energy for longer. These advancements ensure the Gulf of America remains a model of efficiency, sustainability, and American ingenuity.

Deployment of Digital Operations

The offshore energy sector is undergoing a transformational shift through the rapid deployment of digital and autonomous technologies across both well construction and production operations.

One of the most impactful innovations is the electrification of offshore infrastructure. Replacing traditional diesel turbines with electric systems—like Shell's pioneering Vito platform—not only enhances operational precision and reliability but also significantly reduces maintenance downtime and emissions. Electrification extends the reach of subsea tiebacks, enabling operators to maximize existing assets, as demonstrated by TotalEnergies' North Platte project, without the need for new surface facilities.

Intelligent completions are further advancing the efficiency frontier. These systems enable real-time monitoring and control of reservoir zones, reducing the number of wells required and allowing operators to economically access complex, lower-permeability reservoirs—delivering both cost savings and environmental benefits.

The evolution continues on the seabed. Subsea processing technologies—including seabed pumping and compression—are driving a step-change in recovery rates and cost-efficiency. Gulf of America operators are deploying these systems to reduce infrastructure costs. By easing backpressure, these technologies extend field life and boost production.

These innovations are being integrated through strategic partnerships—such as those with SLB's OneSubsea—allowing Gulf operators to implement cutting-edge solutions with greater speed and impact. The result is a more agile, efficient, and sustainable offshore industry.

The Gulf of America isn't just meeting today's energy demands—it's defining the future of offshore innovation.

The Rise of AI in the Offshore

In the Gulf of America, artificial intelligence (AI) is revolutionizing offshore oil and gas, driving unprecedented efficiency, safety, and sustainability. As a global leader in deepwater production, the region leverages AI to process vast datasets, optimize operations, and predict outcomes across the energy value chain—from exploration to delivery.

Gulf of American energy companies are deploying AI to unlock complex reservoirs, reduce downtime, and enhance energy security, contributing billions to the economy. By integrating AI with advanced sensors, digital twins, and automation, the Gulf is setting a new standard for high-tech energy production, balancing innovation with environmental responsibility.

The volume of data generated by offshore platforms—sensors, drilling logs, and maintenance records—far exceeds human processing capabilities. AI and machine learning (ML) excel in this environment, analyzing historical trends, optimizing real-time operations, and forecasting future risks. These technologies enable predictive maintenance, automate routine tasks, and strengthen asset integrity, saving costs and protecting workers.

> *For example, one supermajor estimated that a 1% improvement in platform availability across its global fleet could yield $300 million annually, with safer conditions for engineers and stronger returns for shareholders.*

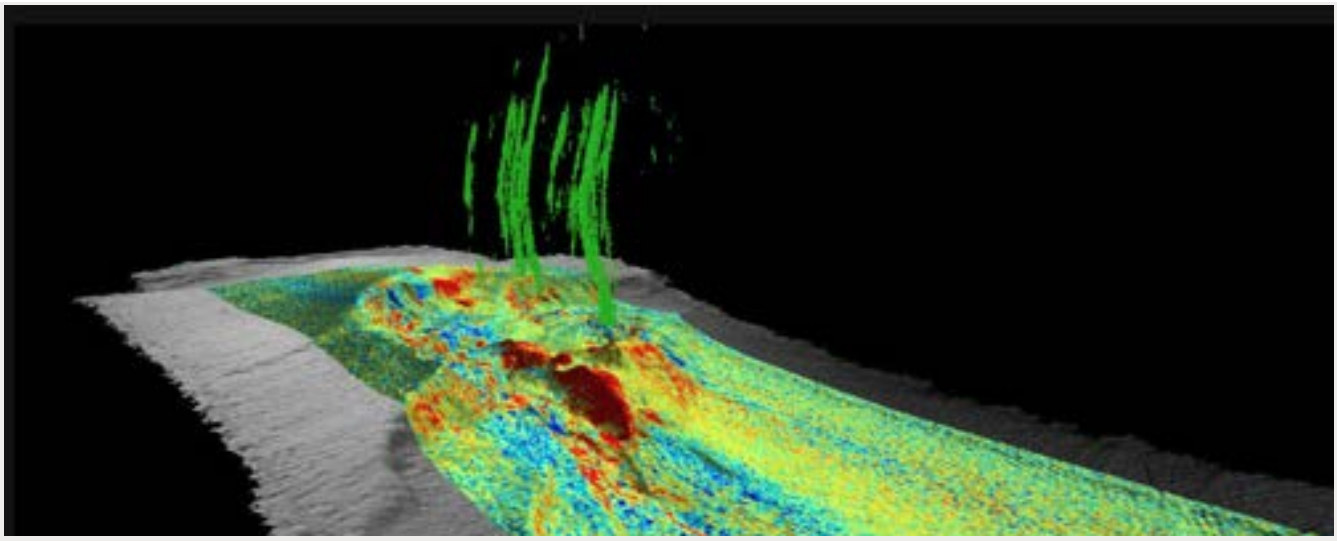
Gulf operators have long embraced digital transformation, equipping assets with dense instrumentation and fostering data-driven cultures. Teams of data scientists have built predictive AI models to tackle challenges like equipment failures or production bottlenecks.

However, scaling these models from pilot to production has proven complex. Issues like data streaming, model retraining, and alert management often hinder deployment, with many models failing to meet operational success criteria. To overcome these hurdles, companies are now adopting tailored AI solutions designed for oil and gas, capable of seamless integration across entire fleets.

> ***A compelling case study illustrates AI's potential:***
>
> *One Gulf operator tested an outsourced AI platform on a marquee platform's separator system, notorious for unexpected failures in glycol units and export compressors, which caused 80% of the platform's downtime. Using two to three years of historical data, the AI model accurately predicted 75% of past failures, providing an average of nine days' advance warning. Once fully deployed, this solution was implemented at the company's onshore remote control center, offering 10-minute diagnostics, real-time alerts, and enhanced visibility. A critical alert on an export compressor, triggered by escalating risk levels, prevented significant production deferrals, showcasing AI's ability to safeguard operations.*

By reducing downtime, enhancing safety, and optimizing output, these technologies reinforce the Gulf's role as an energy powerhouse. From preventing costly failures to enabling proactive maintenance, AI is not just a tool—it's the backbone of a smarter, more resilient offshore industry, ensuring the Gulf of America remains at the forefront of global energy innovation.

Subsurface Imaging



***Source**: Fugro*

Subsurface imaging is rapidly evolving, offering exploration and development teams unprecedented clarity and precision in understanding the complex geology of the Gulf of America. Today's breakthroughs combine next-generation seismic acquisition with

advanced imaging technologies to deliver dramatically improved subsurface models—particularly beneath challenging environments like salt canopies. Ultra-Long Offset Ocean Bottom Node (OBN) programs are at the forefront of this transformation. These programs significantly enhance seismic wavefield illumination, enabling clearer imaging of deep and geologically complex plays. The latest OBN surveys also incorporate low-frequency seismic sources—such as Gemini—which allow for deeper wavefield penetration. This deeper reach, combined with cutting-edge imaging techniques like Elastic Full Waveform Inversion (eFWI), provides more accurate, higher-resolution images of the subsurface.

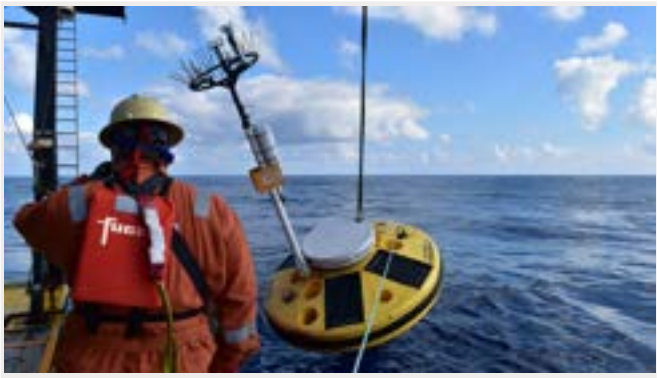
eFWI leverages the broader bandwidth and improved illumination of modern OBN datasets to produce highly detailed velocity models, helping both exploration and development teams to identify optimal drilling targets and reduce geological uncertainty.

The integration of geophysical imaging with advanced production engineering is driving a new era of efficiency and output in offshore energy. As new technologies continue to be commercialized, this synergy is propelling Gulf of America oil production to new heights—safely, economically, and with greater precision than ever before.



Source: TGS
https://www.tgs.com/seismic/marine-acquisition/sources/gemini

Remote Operations Are Evolving with ROV and AUV Advancements



Source: Fugro

The integration of geophysical imaging with advanced production engineering is driving a new era of efficiency and output in offshore energy. As new technologies continue to be commercialized, this synergy is propelling Gulf of America oil production to new heights—safely, economically, and with greater precision than ever before.

In the Gulf of America, remote operations are transforming oil and gas production through cutting-edge advancements in Remotely Operated Vehicles (ROVs) and Autonomous Underwater Vehicles (AUVs). These technologies enhance safety, reduce costs, and enable access to deepwater and ultra-deepwater environments previously out of reach. By

leveraging AI, advanced sensors, and real-time data, ROVs and AUVs are redefining how the industry inspects, maintains, and monitors offshore assets.

- Enhanced Precision and Safety: Modern ROVs use AI-driven navigation and 3D imaging to perform complex tasks—such as valve operations or pipeline inspections—at depths exceeding 3,000 meters. This minimizes human exposure to hazardous conditions, cutting risk on platforms where ROVs handle subsea tiebacks.
- Autonomous Efficiency: AUVs operate without tethers, surveying vast seabed areas with sonar and machine learning to map reservoirs or detect or even predict leaks.
- Real-Time Data Integration: Both ROVs and AUVs now stream high-definition video and sensor data to onshore control centers, enabling instant decision-making.
- Environmental Impact: These vehicles support sustainability by detecting methane leaks early and monitoring marine ecosystems.

The Gulf of America's embrace of ROV and AUV advancements it as a global leader in remote operations. From routine maintenance to pioneering deepwater exploration, these tools drive efficiency and safety, ensuring the region's energy production remains robust and responsible.

New Drillships Expand Capabilities



***Source**: Beacon Offshore Energy*

As exploration drilling moves into deeper waters and more remote locations, drillships are addressing increasingly diverse demands presented by regulations, drilling challenges, and project economics. Drillships must provide the technical capability to drill in difficult

conditions, and prevent, manage, and react to emergency situations. In remote and marginal fields, the vessels must also contribute to the greatest possible efficiency and production enhancement.

To address this complex set of criteria, a new class of drillship designed for remote deepwater exploration offers a significant departure from conventional drillship models. The approach emphasizes versatility with closed-loop managed pressure drilling (MPD) drilling technologies for extreme wellbore conditions, oil storage and handling capabilities for production for demanding logistics, and oil spill response capability.

Advanced drilling technology enables an array of methodologies that are increasingly critical to the safety and success of deepwater drilling, including MPD, underbalanced drilling (UBD), riser gas handling (RGH), and downhole event detection capability.

Moreover, new designs, such as new equipment layouts, leverage inherent safety benefits by locating hazardous duty equipment toward the stern, as far as possible from personnel accommodations, further improving the safety journey for our industry.

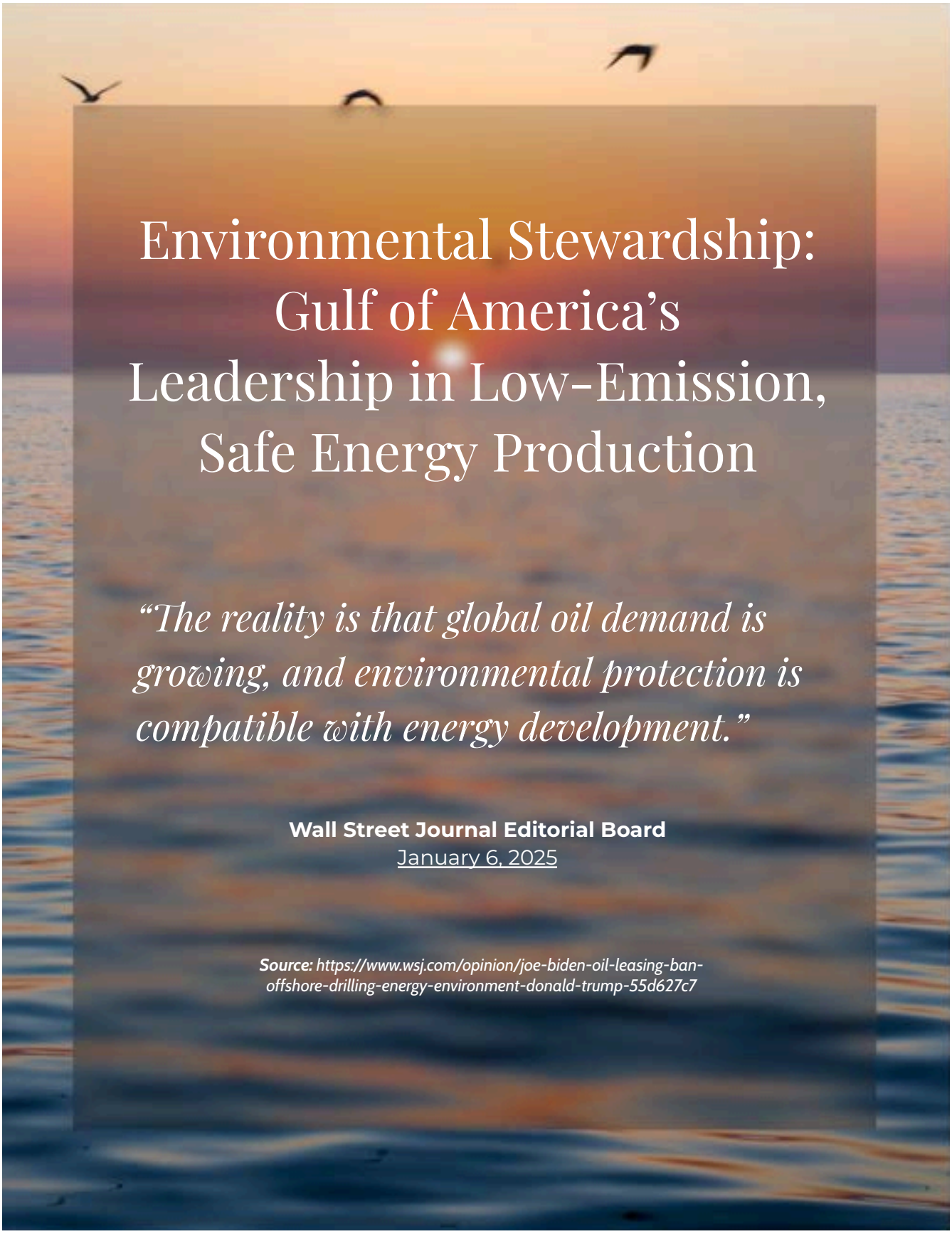
BREAKHOUT:

Transocean 8th Generation Drillships

Transocean's 8th-generation *Deepwater Atlas* and *Deepwater Titan* drillships, rated to work in 12,000-ft water depths and drill to 40,000-ft depths, entered operations in 2022 and 2023, respectively. The *Atlas*, initially rated for 15,000-psi operations but later upgraded for 20,000-psi operations, went under contract to Beacon Offshore Energy for work in the ultra-HP/HT Shenandoah development in the Walker Ridge area of the Gulf of America, and the 20,000-psi-rated Titan started operations on Chevron's Anchor development.



***Source**: Transocean*



Environmental Stewardship: Gulf of America's Leadership in Low-Emission, Safe Energy Production

"The reality is that global oil demand is growing, and environmental protection is compatible with energy development."

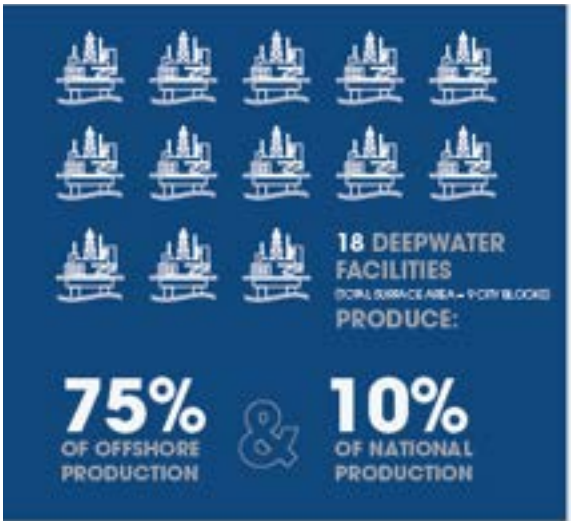
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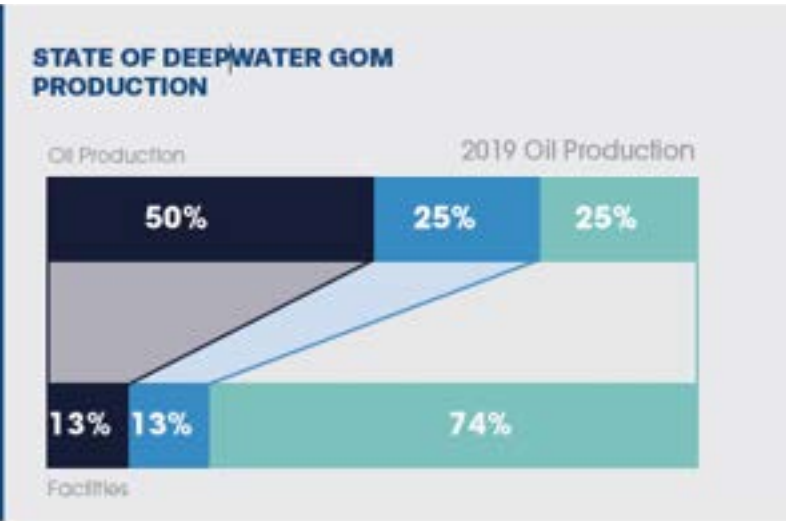
Source: *https://www.wsj.com/opinion/joe-biden-oil-leasing-ban-offshore-drilling-energy-environment-donald-trump-55d627c7*

Gulf of America: Leading the Way in Lower-Carbon Intensity Oil Production

The offshore oil and gas industry in the Gulf of America operates under one of the world's most stringent regulatory frameworks, delivering energy with significantly lower environmental impact than many global producing regions. The carbon intensity of Gulf of America production is much lower than the global average, driven by high-volume output from a compact footprint and advanced technological practices.

Offshore energy is a true story of accomplishing more with less – creating more energy with less environmental impact. Offshore production platforms are incredible edifices of continuously evolving technology that allow enormous amounts of energy to be produced through a relatively small footprint. Incredibly, 18 deepwater facilities, which equate to about the size of only nine city blocks, produce about the same amount of oil as the entire state of North Dakota.



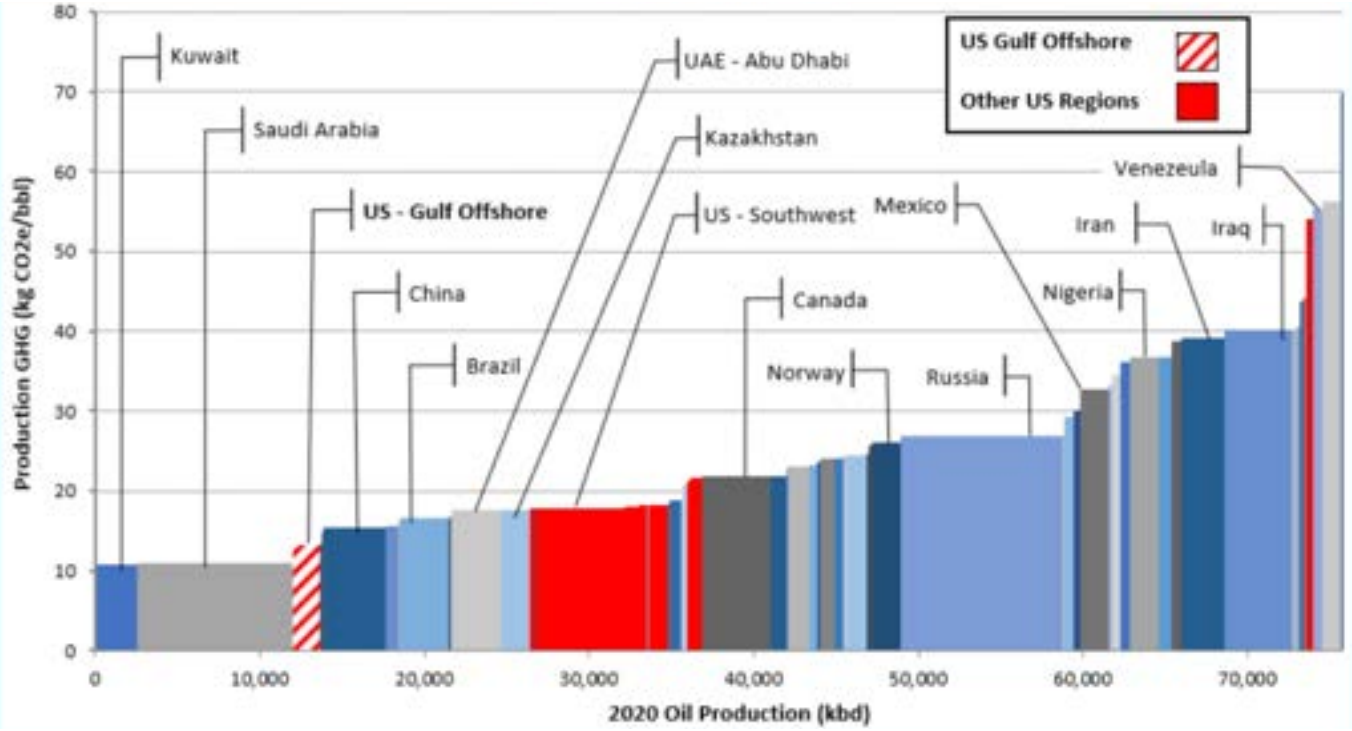


A May 2023 report by ICF, commissioned by NOIA, titled, *GHG Emission Intensity of Crude Oil and Condensate Production,*[43] highlights that increasing Gulf of America production to offset foreign crude could reduce the average carbon intensity of displaced oil volumes by 46%, removing 11.3 kg CO2e per barrel from the global non-U.S./Canada average of 24.4 kg CO2e.

[43] https://www.noia.org/noia-report-ghg-emission-intensity-of-crude-oil-and-condensate-production/

Comparison of Production Volumes and Production GHG Emission Intensity for Gulf of Mexico and Other US Regions and Other Countries Crude Oil

Across all API Gravity Categories



Furthermore, substituting foreign crude with the Gulf's dominant crude category (API Gravity 37.5) could cut emissions intensity by 50%, or 12.8 kg CO2e per barrel, positioning the Gulf of America as a global leader in low-carbon oil production.

This efficiency is critical as global oil and gas demand is projected to remain robust for decades, with the International Energy Agency (IEA) forecasting oil demand will still be north of 105 million barrels per day in 2030.[44] Gulf of America production to meet this demand safely, ensuring energy security for the U.S. and its allies while minimizing environmental impact.

[44] https://www.iea.org/news/slowing-demand-growth-and-surging-supply-put-global-oil-markets-on-course-for-major-surplus-this-decade

BREAKOUT:
Methane Production

The Gulf of America's environmental advantage stems from rigorous safety and emissions standards, innovative technologies, and proactive industry practices. Unlike regions where flaring is routine, most natural gas produced in the Gulf is sold to local markets, minimizing emissions. Modern facility designs reduce methane leakage, and high-throughput wells limit energy-intensive processes like drilling. Operators adhere to strict regulations under 30 CFR 250 Subpart K, which tightly control flaring and venting, and have shifted to instrument air systems, eliminating methane emissions from pneumatic devices. Gas detection systems further enable rapid leak identification and repair. In 2019, despite accounting for 15% of U.S. oil production, Gulf of America offshore operations contributed only 2.6% of nationwide venting and flaring emissions and less than 1% of total U.S. methane emissions, per EIA[45] and EPA data[46]. These practices underscore the region's leadership in methane reduction, a critical factor given methane's potent greenhouse effect.

Other Observers Confirm Our Daily Experience – The Gulf of America Leads in Lower Carbon Barrel



***Source**: Exmar*

Sustained global demand for oil and gas necessitates policies that prioritize Gulf of America production to meet energy needs responsibly while reducing global emissions. The

[45] https://www.eia.gov/dnav/ng/ng_prod_sum_a_EPG0_VGV_mmcf_a.htm
[46] https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf

Technology Sets the Gulf of America Apart

Breakthrough Institute's 2023 report, Oil and Gas Assets at Risk, projects that even in aggressive decarbonization scenarios aligned with the Paris Agreement, 10 million barrels per day of new oil production will be needed by 2050. The report emphasizes that U.S. production, particularly from the Gulf of America, is among the lowest-carbon globally, and policies restricting it could increase reliance on higher-emitting foreign basins, undermining climate goals.[47]

Wood Mackenzie's analysis reinforces this, noting that reducing Gulf of America output would raise the global average emissions rate, as higher-carbon sources like Venezuelan heavy crude or Iraqi flared oil fill the gap.[48]

> *Using our recently updated Emissions Benchmarking Tool, which profiles emissions for more than 2,800 oil and gas assets around the world, [researchers] Oberstoetter and Usoro were able to compare the carbon intensity of the principal sources of crude used in the US. Numerous factors drive the differences in intensity: emissions in Venezuela, Colombia and Canada are driven by the more energy-intensive processes needed to produce the heavier crude qualities, while in Iraq flaring is the big problem. The overall picture is clear, however: the deep water of the Gulf of Mexico is one of the lowest-carbon sources of oil used in the US, with only Saudi Arabia coming in lower. In the light of that, Oberstoetter and Usoro argue, restrictions on US production in the Gulf could end up having a counterproductive impact on global emissions. "Removing or handicapping a low emitter hurts the collective global average.*

McKinsey's 2023 report, "How the Gulf of Mexico Can Further the Energy Transition", projects that a decline in Gulf production by 800,000 barrels per day by 2040, without new projects, would increase global emissions by 50-100 million metric tons of CO2e as higher-emitting regions compensate.[49]

> *First, in contrast to other regions where flaring natural gas without a market is more commonplace, most of the natural gas produced in the Gulf of Mexico is sold to local markets, which results in minimal routine flaring and, consequently, less GHG emissions. Second, the facilities have efficient, modern designs that minimize methane leakage. Third, wells and production facilities have a high throughput, minimizing the number of energy-intensive processes required to bring on new supply, such as drilling. And fourth, operators have made active decarbonization efforts to stay in line with environmental sustainability goals and in compliance with regulations.*

[47] https://thebreakthrough.org/articles/oil-and-gas-assets-at-risk-impacts-of-declining-fossil-production-in-climate-scenarios-in-the-us
[48] https://www.woodmac.com/news/the-challenge-of-negative-emissions/
[49] https://www.woodmac.com/news/the-challenge-of-negative-emissions/

McKinsey also points out other significant, adverse consequences if America moves away from deepwater Gulf of America oil production, "A shift in production from the Gulf of Mexico to other basins could also have broader implications for the U.S. economy, including the loss of more than 100,000 jobs and a $30 billion to $40 billion reduction in federal government revenue from reduced royalties and lease-sale proceeds."[50]

Policies that hinder Gulf of America production risk higher global emissions, economic losses, and energy insecurity for the U.S. and its allies. President Biden's 2024-2029 offshore leasing program analysis by BOEM found that a "no lease sale" scenario would reduce net benefits.[51]

> *Based on current and projected demand and consumption patterns, a National OCS Program with no lease sales for 2024– 2029 would result in lower net benefits for the American public because substitute energy sources would be needed to meet projections for continued domestic oil and natural gas demand, and reliance on these sources is estimated to result in less net economic value, greater environmental and social costs, and reduced net consumer surplus.*

By contrast, supporting Gulf of America production ensures access to low-carbon energy, strengthens domestic energy security, and supports allies facing supply constraints, particularly in Europe, where coal use surged in 2022 amid gas shortages. Responsible development, coupled with innovations like carbon capture and offshore wind integration, positions the Gulf of America to meet decades-long energy demand sustainably. Failure to prioritize this region could lead to supply shortages, price spikes, and increased emissions, harming U.S. consumers and global partners. By championing safe, efficient, and low-carbon production, the Gulf of America drives a stronger, cleaner, and more prosperous future for America and beyond.

[50] Brown, Di Fiori, Smith, and Yanosek, "Deepwater Gulf of Mexico's role during the energy transition," McKinsey, September 2022,
[51] https://www.boem.gov/sites/default/files/documents/oil-gas-energy/leasing/2024-2029_NationalOCSProgram_PFP_Sept_2023_Compliant.pdf

From Rigs to Reefs: Transforming Gulf of America Platforms into Marine Sanctuaries



Source: BSEE

From the moment an offshore platform is installed, it begins its transformation into a flourishing marine ecosystem. BSEE states, “A typical eight-leg structure provides a home for 12,000 to 14,000 fish, according to a study by the Coastal Marine Institute. A typical four-leg structure provides two to three acres of habitat for hundreds of marine species.” Concerns raised by fishermen, divers, and coastal states about potential damage to marine life should offshore structures that had developed into marine ecosystems be removed led to the Rigs to Reefs program, which was formalized by Congress as the National Fishing Enhancement Act in 1984. This act supports the development of artificial reefs and establishes a permitting program for formally converting offshore facilities into artificial reefs.

According to BSEE, the Rigs to Reefs program provides the following benefits.[52]

- For the environment, repurposing obsolete structures saves fuel emissions that otherwise would be expended transporting and disposing of the structure. It also enriches the marine life in the area.
- For oil and gas companies, repurposing obsolete structures saves them the costs of removing, transporting, and disposing of them onshore. BSEE regulations require that, within one year of a lease's expiration, the obsolete structure must be removed.
- For states, the artificial reefs attract marine life that enhance fisheries and contribute to the economy by attracting recreational and commercial fishing and diving
- For divers and recreational and commercial fishers, artificial reefs create a rich diversity of marine life.
- For marine species, the artificial reefs provide habitat, shelter, food, and other necessary elements for biodiversity and a productive ocean.

Isabelle Gerettsen, of the BBC, reported on artificial reefs in January 2021.[53]

> *Offshore rigs are among the most productive fish habitats in the world, according to marine biologist Milton Love who has spent 20 years studying fish populations around oil and gas platforms in California. They provide marine wildlife with food, shelter from predators and a safe breeding ground.*
>
> *For some species, the rigs are even better nurseries than natural reefs, says Love. The towering pylons are the perfect spawning grounds for tiny fish larvae. "A lot of them are just drifting," says Love. "They want to settle." The 500 ft (150m) high underwater structures provide an opportunity for just that.*
>
> *One of the big beneficiaries is rockfish, stocks of which have been heavily depleted due to overfishing along the US West Coast. These fish are found in abundance around oil platforms. For instance, the platforms have helped revive the critically endangered bocaccio rockfish. "We've found a very high density of young bocaccio at platforms, around 400,000 at six platforms. We didn't see that at natural reefs," says Love, adding that the number of juvenile bocaccio found at rigs was enough to boost the adult stock of the Pacific Coast population by around 3%.*

According to a study conducted by Love and others and published in the Proceedings of the National Academy of Sciences, "Oil and gas platforms off the coast of California have the highest secondary fish production per unit of area of seafloor of any marine habitat that has been studied, about an order of magnitude higher than fish communities from other marine ecosystems."[54]

As of year-end 2024, more than 600 offshore facilities had been reefed in the Gulf of America. Research continues to demonstrate that offshore artificial reefs develop into among the most flourishing marine ecosystems.

[52] https://www.bsee.gov/what-we-do/environmental-compliance/environmental-programs/rigs-to-reefs
[53] Gerretsen, Isabelle, "As offshore oil and gas platforms come to the end of their working lives, the remarkable ecosystems beneath the waves come into their own," January 26, 2021.
[54] Claisse, Pindell, et. al. "Oil platforms off California are among the most productive marine fish habitats globally." Proceedings of the National Academy of Sciences. October 28, 2014.



Other industries thrive with offshore energy.

Harmonious Coexistence: How the Gulf of America's Offshore Oil and Gas Industry Supports a Thriving Fishing Industry

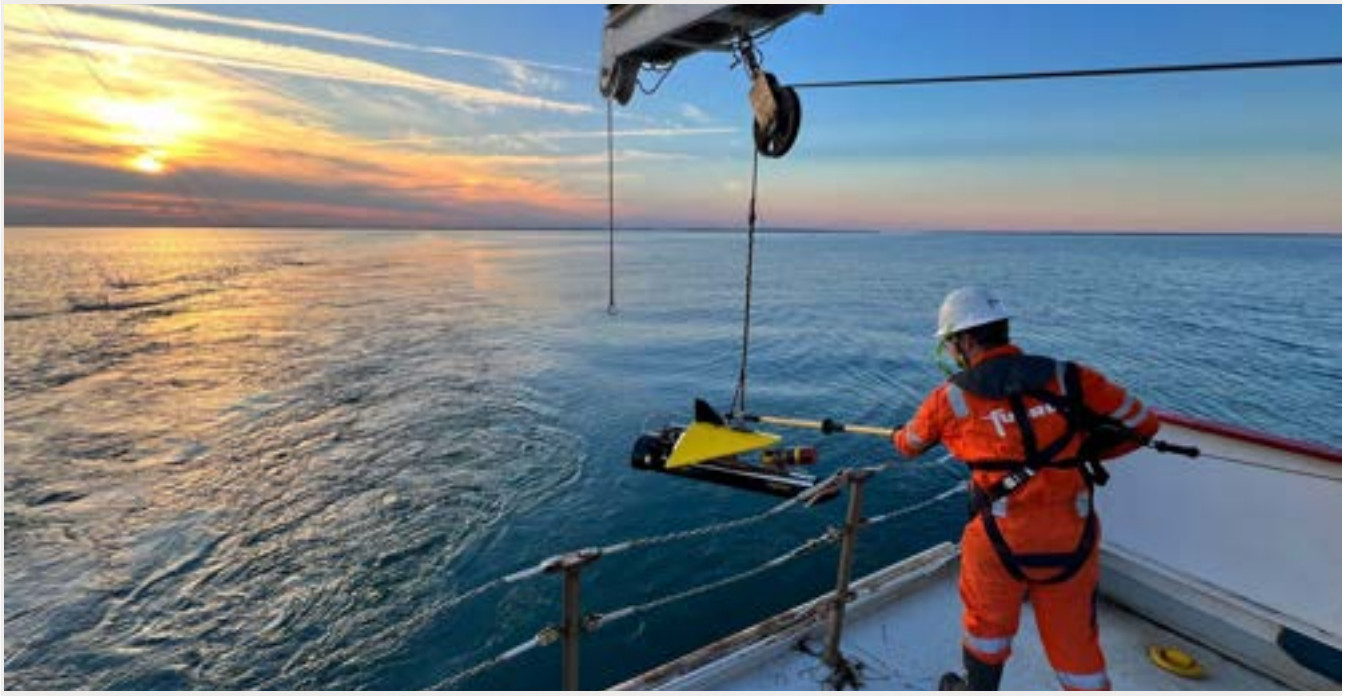
In the Gulf of America, the offshore oil and gas industry and the fishing industry coexist in a mutually beneficial relationship, fostering economic vitality and ecological synergy while sustaining vibrant coastal communities.

According to recent data, across the Gulf of America, commercial fishing resulted in excess of 146,000 jobs, which captured more than $21.5 billion in sales of domestically caught and imported seafood. Additionally, jobs related to the recreational sector exceeded 107,000 across Texas, Louisiana, Mississippi, Alabama, and western Florida, representing 19.7 million individual trips and $12 billion in direct commerce.[55]

Offshore platforms serve as artificial reefs, attracting a diverse array of marine life such as red snapper, grouper, and amberjack, which are critical to both commercial and recreational fisheries. The Bureau of Ocean Energy Management (BOEM) notes that these structures enhance fish populations by providing hard substrates in the otherwise soft-bottomed Gulf, creating habitats that boost biodiversity and fish biomass by up to 50 times compared to surrounding areas.[56]

[55] https://gulfseafoodnews.com/2017/05/10/noaa-releases-2015-fisheries-economics-report-253000-jobs-good-gulf/
[56] https://link.springer.com/chapter/10.1007/978-1-4939-3447-8_7

The oil and gas industry collaborates closely with fishermen to minimize conflicts and ensure sustainable operations. Through stakeholder engagement, companies adhere to stringent environmental regulations under the National Marine Fisheries Service and the Gulf of Mexico Fishery Management Council, protecting critical habitats and migration routes.[57]



FOG side scan sonar | ***Source**: Fugro*

Spatial planning ensures that drilling activities avoid key fishing areas, while advanced technologies like seismic surveys are conducted with minimal disruption to marine life. Fishermen benefit from the infrastructure provided by offshore platforms, which serve as navigational markers and safe havens during storms, enhancing operational efficiency. Additionally, oil and gas companies invest in coastal restoration projects, like Louisiana's Coastal Wetlands Planning, Protection, and Restoration Act, which has restored over 100,000 acres of wetlands critical to shrimp and oyster habitats.[58]

Policies that support responsible offshore production ensure this balance continues, preventing supply disruptions that could raise energy costs and indirectly harm fishing-dependent economies. By fostering marine biodiversity, funding conservation, and engaging with fishing communities, the Gulf of America's oil and gas industry not only coexists but actively enhances the fishing industry.

[57] https://www.fisheries.noaa.gov/southeast/sustainable-fisheries/sustainable-fisheries-gulf-america
[58] https://lacoast.gov/new/about/

Coexisting with Marine Mammals: Responsible Offshore Oil and Gas Operations in the Gulf of America

The Gulf of America is not only a cornerstone of our nation's energy production—it is also home to a rich diversity of marine life, including protected species like dolphins, whales, and sea turtles. Offshore oil and gas operations here have long been governed by rigorous regulations and best practices designed to protect these vital species and their habitats. Through careful planning, continuous monitoring, and evolving mitigation measures, the offshore industry demonstrates that energy development and environmental stewardship can go hand in hand.

In the Gulf of America, protecting marine life isn't optional—it's the standard.



***Source**: Fugro*

Protected Species Observers (PSOs)

One of the most important safeguards in offshore operations is the use of Protected Species Observers (PSOs)—trained experts stationed on vessels and platforms. PSOs monitor the waters around active operations for the presence of marine mammals and sea turtles. If protected species are spotted within designated safety zones, PSOs have the authority to delay, adjust, or shut down operations to avoid harm.

These observers follow strict, science-driven protocols and provide real-time reports to ensure regulatory compliance. Their work is critical in balancing offshore activities with the protection of the Gulf's remarkable wildlife.

Mitigation Measures and Best Practices

Offshore operators in the Gulf of America implement a wide range of **mitigation measures** to reduce potential impacts on marine life, including:

- **Soft-start procedures** for seismic activities, gradually ramping up sound to allow animals to vacate the area.
- **Exclusion zones** where operations are paused if a marine mammal or sea turtle is detected nearby.
- **Seasonal and spatial restrictions** to avoid sensitive breeding, calving, and migration periods.
- **Quieting technologies** and **sound-dampening techniques** to reduce underwater noise impacts.
- **Passive acoustic monitoring** systems that detect animals even when they are not visible.

Many companies voluntarily adopt enhanced practices that go beyond what regulations require, underscoring the industry's commitment to conservation leadership.

BREAKOUT:
Seismic Surveys and Marine Mammals in the Gulf of America

Seismic surveys are a vital tool for offshore energy development, allowing companies to precisely locate oil and natural gas resources and minimize unnecessary drilling or other activities.[59] In the Gulf of America, seismic surveys have been conducted safely for decades alongside a thriving marine ecosystem.

Scientific research and operational experience spanning more than 50 years show no evidence that sound from properly mitigated seismic surveys has caused physical harm or biologically significant impacts on marine mammal populations.[60]

Key points:

- **Low Risk**:
  Decades of worldwide seismic activity confirm that there is no risk of direct physical injury to marine mammals from seismic sound.
- **Biologically Safe**:
  Peer-reviewed studies and long-term monitoring show no biologically significant adverse effects on marine mammal populations from seismic surveys.
- **Strong Mitigation Measures**:
  Offshore operators implement robust protection strategies, including:
  - **Marine Mammal Observers** onboard every seismic vessel to monitor for animals.
  - **Exclusion Zones**, where operations are paused immediately if a marine mammal enters the designated area, and only resume after a minimum 30-minute clear period.
  - **Ramp-up Procedures** at the start of operations, gradually increasing sound levels to allow marine life to move away from the area comfortably.
  - **Species-Specific Considerations**: Not all marine life hears the same frequencies equally. Just as humans, bats, and dogs hear differently, some marine mammals are more sensitive to high frequencies while others respond to lower ones. Seismic surveys are designed with these differences in mind.
  - **Ongoing Research and Adaptation**: The industry continually monitors the effectiveness of its mitigation strategies and funds scientific research to further understand and minimize interactions with marine life.

Marine seismic surveys are critical to safely and efficiently unlocking offshore energy resources while protecting the Gulf's marine environment. Based on the best available science and decades of operational history, seismic surveys pose no demonstrated significant threat to marine mammal populations in the Gulf of America.

[59] https://energeoalliance.sharepoint.com/sites/EnerGeoAlliance.org/Shared%20Documents/Forms/AllItems.aspx?id=%2Fsites%2FEnerGeoAlliance%2Eorg%2FShared%20Documents%2FPublic%20Docs%2FFact%20Sheets%2F2022%2Fseismic%5Fsurveys%5F%5F%5Fmarine%5Fmammals%5FFINAL%5F10%2E2017%5FMammals%2Epdf&parent=%2Fsites%2FEnerGeoAlliance%2Eorg%2FShared%20Documents%2FPublic%20Docs%2FFact%20Sheets%2F2022&p=true&ga=1

[60] https://energeoalliance.org/wp-content/uploads/2019/07/iagc_seismicfactsheet_2017_07_13_-_yellow_dot2.pdf

Strong Regulatory Framework

The offshore energy sector in the Gulf of America operates under one of the **strongest environmental frameworks in the world**. Oversight is provided by agencies like the Bureau of Ocean Energy Management (BOEM), the Bureau of Safety & Environment Enforcement (BSEE), and the National Marine Fisheries Service (NMFS), ensuring that operations comply with:

- The **Marine Mammal Protection Act (MMPA)**, which safeguards marine mammals from harm.
- The **Endangered Species Act (ESA)**, protecting threatened and endangered species and their habitats.
- **Opinions** and **Incidental Take Authorizations** define clear operational boundaries and mitigation measures to minimize risk to wildlife.

Environmental impact assessments, scientific reviews, and public consultations are mandatory, keeping conservation at the heart of offshore planning and operations.

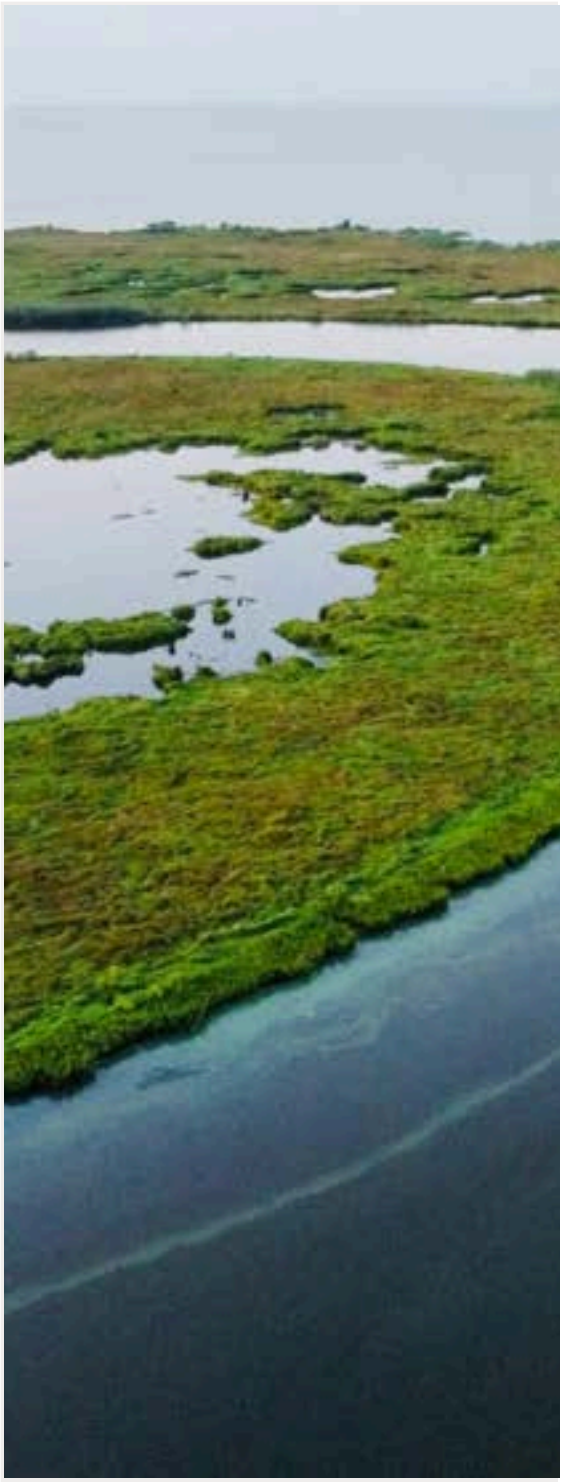
A Model of Responsible Development

Decades of experience have shaped offshore oil and gas development in the Gulf of America into a model of responsible environmental stewardship. By integrating advanced technologies, strict regulations, and on-the-water vigilance, the industry proves that protecting marine ecosystems and fueling the nation's energy future are goals that can—and must—work together.

The Gulf of America stands as a testament to how America can lead by example, showing the world that innovation, prosperity, and conservation can thrive side by side.



***Source**: Port Fourchon*



Coastal restoration is just one type of project supported by offshore oil and gas.

Funding America's Future: How Gulf of America Offshore Oil and Gas Powers Conservation and Resilience

The offshore oil and gas industry in the Gulf of America generates substantial federal and state revenue, channeling billions of dollars into conservation, recreation, and coastal resilience through programs like the Land and Water Conservation Fund (LWCF), the Great American Outdoors Act (GAOA), the Outdoor Recreation Legacy Partnership (ORLP) Program, and the Gulf of Mexico Energy Security Act (GOMESA). These programs, funded primarily by royalties, lease bonuses, and rental payments from offshore oil and gas activities, supports national parks, urban green spaces, and coastal restoration without relying on taxpayer dollars. The largest portion goes to the General Fund of the U.S. Treasury, which benefits all U.S. citizens through funding of daily operations of the Federal Government. However billions more dollars are dedicated to conservation, parks, and coastal resiliency programs.

In Fiscal Year 2024, federal revenues from offshore oil and gas activities totaled more than $7 billion.[61] Since 1964, winning bids alone – so not counting royalties from production or rents from non-producing lease blocks – have totaled more than $86 billion for the U.S. Treasury.[62]

[61] https://www.boem.gov/regions/gulf-america-ocs-region/oil-and-gas-gulf-america#:~:text=The%20Gulf%20continues%20to%20be,OCS%20oil%20and%20gas%20activities

[62] https://www.boem.gov/sites/default/files/documents/about-boem/All-Lease-Offerings.pdf

Key Conservation and Resilience Programs

The Gulf of America's revenues directly fund transformative programs that enhance public access to nature, restore ecosystems, and strengthen coastal communities:



3-Coastal Restoration - Amelia Loadout | ***Source**: Danos*

Land and Water Conservation Fund (LWCF):

Established in 1964, the LWCF is America's most important program to conserve irreplaceable lands and improve outdoor recreation opportunities throughout the nation. The program works in partnership with federal, state and local efforts to protect land in our national parks, national wildlife refuges, national forests, national trails, and other public lands; to preserve working forests and ranchlands; to support state and local parks and playgrounds; to preserve battlefields and other historic and cultural sites; and to provide the tools that communities need to meet their diverse conservation and recreation needs.[63] It has preserved nearly 7 million acres and funded over 40,000 state projects. On August 4, 2020 the Great American Outdoors Act (GAOA) was signed into law, authorizing $900 million annually in permanent funding for LWCF. Prior to the passage of the GAOA, funding for LWCF relied on annual Congressional appropriations.[64]

Every county in every state has received LWCF funding, meaning stakeholders far and away from the Gulf of America directly benefit from offshore oil and gas activities:

- This past year, Ocmulgee Mounds National Historical Park received $2.8 million from LWCF to protect the Lamar Mounds. The project will not only connect two separated areas of the park to ease public access, but also preserve a significant Native American cultural site. Ocmulgee Mounds contains 17,000 years of Indigenous history and artifacts, and acquisition of this new area will ensure permanent protection of the ancestral homeland of The Muscogee (Creek) Nation.
- The Nature Conservancy in Washington is partnering with the Okanogan Wenatchee National Forest on a project to protect 12,000 irreplaceable acres in the Taneum watershed. With support from the Land and Water Conservation Fund

[63] https://lwcfcoalition.org/
[64] https://www.doi.gov/lwcf

this project would transfer 12,000 acres of privately owned parcels to the National Forest. In addition to the outdoor recreation opportunities in the area, the forest lands of the Taneum are important habitat for fish and wildlife and are a precious water source near the headwaters of the Yakima River. This watershed supports agriculture, outdoor recreation and natural resource economies – both up in the Central Cascades and downstream in the Yakima Valley.

Great American Outdoors Act (GAOA):



Yellowstone National Park | ***Source**: Department of the Interior*

Enacted in 2020, GAOA is a historic investment in the protection and sustainment of our public lands and Bureau of Indian Education (BIE)-funded schools. As of February 2025, the GAOA has addressed $5.9 billion in deferred park maintenance, supporting 17,000 jobs annually, and contributing $1.9 billion to GDP annually. Through Fiscal Year 2025, the GAOA Land Legacy Restoration Fund is planning to fund 396 projects across 50 states and 5 U.S. territories.[65]

Project Spotlights

- Maintenance Action Team at Jewel Cave National Monument
- Replace, Repair, and Consolidate McGregor District Headquarters and Facilities at Upper Mississippi River National Wildlife and Fish Refuge
- Rehabilitate the Interior and Exterior of First Bank at Independence National Historical Park
- 300-Jack Wilson Headquarters Repairs & Uninterruptible Power Supply Replacement at National Interagency Fire Center
- Maintenance Action Team at Back Bay National Wildlife Refuge

[65] https://www.doi.gov/media/document/doi-gaoa-program-impact-one-pager



Urban parks far from the Gulf coast receive funding through offshore oil and gas revenues, creating urban "oases."

Outdoor Recreation Legacy Partnership (ORLP) Program:
This LWCF initiative targets underserved urban communities. Over $488 million in ORLP grants have been awarded to improve close-to-home access to the outdoors. Some notable examples are $150 million in 2021 to develop parks in cities like Atlanta and Newark. A $750,000 grant revitalized Philadelphia's Mifflin Square Park, serving 13,500 residents, while Newark's Jesse Allen Park enhances youth recreation, promoting environmental justice.[66]

[66] https://lwcfcoalition.org/orlp

Gulf of Mexico Energy Security Act (GOMESA):
Since 2006, GOMESA has directed Gulf of America revenues to Alabama, Louisiana, Mississippi, Texas, and their coastal communities. In 2024, GOMESA disbursements totaled more than $353 million. With 2024's disbursement, the Interior has now distributed more than $2 billion to the states and their coastal political subdivisions (CPS), such as counties and parishes, since GOMESA funds were first shared in 2009.[67]

- In 2024, Alabama Governor Kay Ivey announced approximately $30 million in funding for 25 projects in Coastal Alabama, which are supported by funds from GOMESA These projects focus on environmental education and outreach, sewer and stormwater infrastructure, water quality improvements, recreational access improvements, and other important projects.[68]
- In 2023, Alabama's Baldwin County Commission was awarded $4,820,000 in GOMESA funds for the construction of a new boat launch and park, The Launch at CR6, on the Bon Secour River which was part of a $67 million for 27 projects announcement.[69]
- In 2025, Louisiana announced several GOMESA-funded projects. These projects enhance coastal resilience, protect infrastructure, and restore ecosystems, leveraging federal revenues to address Louisiana's coastal challenges,[70] and include:
    - **Vermilion Parish:**
      $1.27 million to extend a rock breakwater on Vermilion Bay.
    - **Lafourche Parish:**
      $1.11 million for 20,000 linear feet of earthen terraces along State Route 1 to protect the roadway and levees near Port Fourchon, a critical oil and gas hub.
    - **St. Tammany Parish:**
      $2 million for two projects—$1 million for a breakwater to protect the Tchefuncte River Lighthouse and $1 million for wetlands restoration on Lake Pontchartrain in Mandeville, including marshes, a rock berm, and a weir to safeguard a cypress swamp and manage stormwater.
    - **Tangipahoa Parish:**
      $850,000 for hydrologic restoration at Lee's Landing along the Powerline Canal to improve drainage and wetland connectivity on the Manchac Landbridge.
    - **Terrebonne Parish:**
      $775,000 for the Raccourci Bay Terraces project, adding 18,000 feet of earthen terraces to reduce wave energy and expand wetlands.

[67] https://onrr.gov/press-releases/Fiscal%20Year%202024%20GOMESA%20Disbursements%20Press%20Release.pdf
[68] https://governor.alabama.gov/newsroom/2024/08/governor-ivey-announces-30-million-in-gomesa-funded-projects/
[69] https://governor.alabama.gov/newsroom/2023/07/governor-ivey-announces-67-million-in-gomesa-funded-projects/
[70] https://press-herald.com/louisiana-coastal-protection-agency-announces-matching-fund-projects/

Great Neighbors: How Gulf of America Oil and Gas Companies Strengthen Coastal Communities

The oil and gas industry in the Gulf of America is a cornerstone of economic vitality and community support across the Gulf Coast, acting as a great neighbor through philanthropy, environmental stewardship, and deep-rooted engagement. Companies based in Louisiana, Texas, Mississippi, and Alabama exemplify this commitment, investing in education, disaster relief, coastal restoration, and workforce development to uplift residents from Mobile to Houston. By integrating their efforts with the region's cultural and environmental priorities, they ensure that responsible energy production enhances the quality of life, building a stronger, more vibrant Gulf Coast.

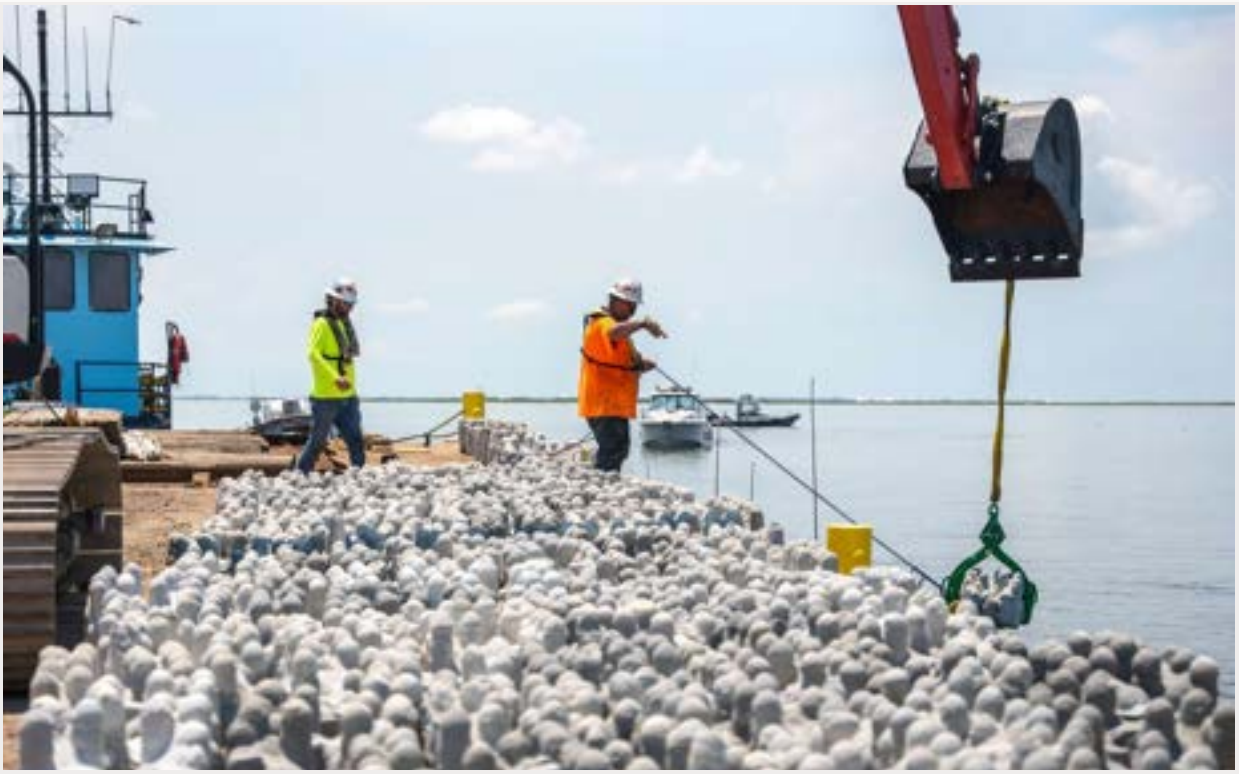
Chevron, for example, has partnered with the South Louisiana Wetlands Discovery Center in Houma, Louisiana, and launched the Coastal Classroom Education Program and educate students in South Louisiana on the challenges of our coast. The Coastal Classroom brings hands-on activities to students from third grade through high school to learn interactively about coastal restoration and the importance of wetlands.[71]

South Louisiana is also known for its abundant fisheries and wildlife, and ConocoPhillips has made the protection of threatened species and wildlife habitats a priority in their community investments. The company awarded a $100,000 grant to the Coastal Louisiana Array Project, which tracks radio-tagged birds throughout South Louisiana's wetlands. The project is a joint effort by the Louisiana Department of Wildlife and Fisheries, the Louisiana Wildlife and Fisheries Foundation, and the Thibodaux-based Barataria-Terrebonne National Estuary Program.[72]

Danos, a family-owned energy services provider headquartered in Gray, Louisiana, has supported Gulf of America oil and gas operations for over 77 years, with 75% of its business in the Gulf. Beyond its economic impact, Danos is a model of community care through the Danos Foundation, which drives employee-led giving across Louisiana and Texas. In 2023, the foundation awarded $150,000 in grants to nonprofits, including the Bayou Community Foundation for disaster recovery in Louisiana and the Houston Food Bank for Texas relief efforts, while employees logged over 1,500 volunteer hours.

[71] https://www.lmoga.com/news/gulf-oil-and-gas-industry-invests-in-coastal-communities
[72] https://static.conocophillips.com/files/resources/17-0488-coastal-wetlands-brochure-022018-comp1.pdf

SPOTLIGHT:
Strengthening the Gulf Coast Ecosystem: Cajun Coral[73]



***Source**: Hotel Sid Artificial Reef Install*

Danos, a Louisiana-based energy services company, is a leader in coastal restoration, enhancing marine habitats across the Gulf Coast through innovative artificial reef systems. Partnering with organizations like Natrx and Reefmaker, Danos produces and installs advanced reef products, such as the 3D-printed Cajun Coral modules and limestone-based Super Reefs, covering over 50,000 square feet. These cost-effective, scalable structures minimize environmental impact, support biodiversity by fostering oyster seeding and fish populations, and restore habitats lost to natural and human causes.

By protecting barrier islands and marshes, Danos' efforts reduce storm surge risks, benefiting coastal communities. These projects also boost local economies by supporting fisheries, recreational fishing, tourism, and job creation in fabrication and installation. With direct access to the Gulf of America, Danos promotes sustainable growth, ensuring long-term ecological health and resilience for the region's ecosystems and communities.

[73] https://www.noia.org/esg/the-offshore-energy-industrys-innovation-workforce-excellence-report/#Danos

Safety First, Safety Always: The Gulf of America's Robust Framework for Responsible Offshore Oil and Gas Operations



***Source**: Halliburton*

The offshore oil and gas industry in the Gulf of America operates under one of the world's most stringent safety and environmental frameworks, ensuring responsible energy production through advanced engineering, cutting-edge technology, rigorous regulatory oversight, and proactive incident prevention and response systems. Companies in the Gulf, producing nearly 2 million barrels of oil per day, prioritize safety through state-of-the-art design processes, equipment, and monitoring systems, supported by comprehensive regulations and industry standards from the American Petroleum Institute (API).

Robust prevention measures, such as the Drilling Safety Rule and Well Control Rule, are complemented by intervention and containment capabilities led by consortia like the Marine Well Containment Company (MWCC) and HWCG. This multifaceted approach, enforced by the Bureau of Safety and Environmental Enforcement (BSEE) and backed by continuous innovation, positions the Gulf of America as a global leader in safe, environmentally responsible offshore operations, protecting workers, communities, and the marine environment while meeting America's energy needs.

Engineering and Design: Building Safety from the Ground Up



***Source**: Oceaneering*

Safety begins with meticulous engineering and design processes tailored to the Gulf of America's unique deepwater and subsea environments. Operators employ advanced materials, such as corrosion-resistant alloys, and cutting-edge technologies, including 3D seismic imaging and digital twin simulations, to design drillships, production platforms, and blowout preventers (BOPs) that withstand extreme pressures and conditions. Facilities are engineered for resilience, with modular designs that minimize environmental footprints while maximizing operational reliability.

API, accredited by the American National Standards Institute, has published in total over 800 exploration and production standards, covering subsea safety valves, well integrity, and offshore safety programs.[74] These standards, developed with input from academia, government, and industry, are regularly updated and cited in over 100 federal regulations, ensuring that engineering practices reflect the latest advancements.[75]

Equipment, Facilities, and Monitoring: Technology-Driven Safety



***Source**: Oceaneering*

The Gulf of America's offshore operations rely on state-of-the-art equipment and facilities, underpinned by sophisticated monitoring systems to ensure safety and prevent incidents. Equipment like subsea safety valves, remotely operated vehicles (ROVs), and high-pressure BOPs is rigorously tested and maintained under BSEE regulations, with independent

[74] https://www.api.org/products-and-services/standards
[75] https://100yearsofstandards.api.org/article-14.html

third-party verification ensuring compliance with API Standard 53. Facilities incorporate advanced control systems, such as real-time pressure and temperature sensors, to detect anomalies instantly. Monitoring is multifaceted:

- **Remote Monitoring:**
  Satellite-linked systems provide 24/7 oversight of well conditions, with data streamed to onshore control centers for real-time analysis. Companies like Oceaneering International have pioneered remote operations, integrating robotic technologies and cloud-based systems to monitor offshore assets from centralized hubs. For example, Oceaneering's Remote Operations Center uses real-time data feeds and augmented reality to guide offshore personnel, reducing on-site risks and enhancing decision-making.[76]
- **Physical Inspections:**
  BSEE conducts over 21,000 annual inspections across 1,800 drilling and production facilities and 25,000 miles of pipelines, ensuring operational integrity.[77]
- **Software Solutions:**
  Advanced software platforms leverage artificial intelligence (AI) and machine learning to enhance safety and operational efficiency. For example, SparkCognition, a Texas-based AI technology provider, has deployed its Visual AI Advisor across Gulf of America offshore facilities to monitor equipment and detect anomalies in real time. Integrated with existing CCTV systems, this software identifies potential safety hazards, such as gas leaks or equipment malfunctions, and has reduced unplanned downtime by 30% for operators like a major Gulf producer in 2022. By combining visual analytics with predictive maintenance, SparkCognition's tools improve health, safety, and environmental (HSE) outcomes, minimizing risks to workers and the environment.[78]
- **BSEE's Ohmsett facility:**
  The largest in the U.S., the facility tests oil spill response equipment under simulated marine conditions, ensuring tools like dispersants and skimmers are effective. These technologies collectively minimize risks, enabling rapid response to potential issues.

[76] https://oceannews.com/featured-stories/advancing-remote-operations-on-the-gulf-coast/
[77] https://www.doi.gov/sites/doi.gov/files/uploads/fy2021-bib-bh025.pdf
[78] https://www.offshore-mag.com/business-briefs/equipment-engineering/article/14292952/sparkcognition-ai-tools-improving-hse-reducing-unplanned-downtime

Robust Regulatory Framework: A Multi-Layered Safety Net

The Gulf of America operates under a comprehensive regulatory framework, enforced by BSEE, the Bureau of Ocean Energy Management (BOEM), and the U.S. Coast Guard, encompassing over 24 statutory authorities, 80 Code of Federal Regulation parts, and 26 significant permits. Companies are subject to extensive environmental reviews at multiple stages, including leasing programs, individual lease sales, and applications to drill, ensuring compliance with laws such as the National Environmental Policy Act (NEPA), Marine Mammal Protection Act (MMPA), Endangered Species Act (ESA), and Migratory Bird Treaty Act (MBTA). These reviews assess impacts on marine life, habitats, and coastal ecosystems, requiring mitigation measures to minimize environmental risks.



Source: *Beacon Offshore Energy*

Key regulations include:

- **Drilling Safety Rule (2010):**
  Mandates mechanical barriers, cementing practices, and independent verification of BOPs, ensuring well integrity.
- **Well Control Rule (2023):**
  Requires two independent barriers for each annular flow path, certified casing designs, and regular BOP testing.
- **Well Screening Tool:**
  Evaluates well designs for risk, ensuring compliance before drilling begins.
- **Safety and Environmental Management Systems (SEMS):**
  Operators must implement SEMS, audited by independent third parties, to integrate safety into all operations. BSEE SEMS
- **Permitting:**
  Overlapping permits from BSEE, BOEM, and the Coast Guard serve as a backstop, requiring detailed risk assessments and environmental compliance. NEPA mandates Environmental Impact Statements (EIS) for leasing programs and lease sales, while MMPA and ESA ensure protections for marine mammals and endangered species. These layered requirements, enforced across the project lifecycle, ensure comprehensive environmental stewardship[79].

[79] https://www.boem.gov/environment/environmental-analyses

BREAKOUT:
Breakout: Safety and Environmental Management Systems (SEMS):

Safety and Environmental Management Systems (SEMS) are required by the Bureau of Safety and Environmental Enforcement (BSEE) to be implemented by every offshore operator. This approach establishes an integrated program for safety management that empowers workers to promote and participate in safety decisions. Offshore operators are required by regulation to undergo audits by independent third parties to verify the efficacy of their safety programs.

SEMS is a performance-based tool for integrating and managing offshore operations. The purpose of SEMS is to enhance the safety of operations by reducing the frequency and severity of accidents.

There are four principal SEMS objectives:

- Focus attention on the influences that human error and poor organization have on accidents;
- Continuous improvement in the offshore industry's safety and environmental records;
- Encourage the use of performance-based operating practices ; and
- Collaborate with industry in efforts that promote the public interests of offshore worker safety and environmental protection

Prevention: Proactive Measures to Mitigate Risks

Prevention is the cornerstone of Gulf of America safety, with regulations and industry practices designed to eliminate incidents before they occur. The Drilling Safety Rule and Well Control Rule mandate rigorous well design, cementing, and BOP protocols, with independent verification ensuring equipment suitability. BSEE's well screening tool assesses risks pre-drilling, while SEMS fosters a culture of safety through employee training and hazard analysis. Operators deploy advanced tools like acoustic leak detection systems and automated shut-in valves to preempt failures. The industry also invests in spill prevention, with enhanced oil spill response plans incorporating dispersants, in-situ burning, and mechanical recovery systems, tested at facilities like Ohmsett.



HWCG's contracted response assets include Helix's Q4000 vessel

Intervention and Containment: Rapid Response Capabilities

In the rare event of an incident, the Gulf of America industry is supported by advanced intervention and containment systems, led by the Marine Well Containment Company (MWCC) and HWCG. The Bureau of Safety and Environmental Enforcement (BSEE) mandates that companies demonstrate adequate staffing and access to equipment for deploying well-capping and hydrocarbon-capture systems. Compliance is verified through contracts or memberships with MWCC or HWCG. BSEE has also introduced stricter requirements for calculating worst-case blowout discharge scenarios and proving response capabilities.



Response vessels for MWCC

Since 2010, MWCC and HWCG have provided rapidly deployable capping stacks and containment systems to control subsea well flows. MWCC's Extended Reach Capping Stack can be deployed within days, supported by annual operator training. HWCG offers comparable systems, including subsea dispersant tools and containment domes. The industry has further strengthened its response capabilities through enhanced oil spill response planning, increased availability of dispersants, in-situ burning, mechanical recovery, and shoreline protection measures. Operators must maintain access to these systems and submit detailed worst-case discharge response plans to meet BSEE standards.



Source: HWCG

BREAKOUT:
Guardians of the Gulf: An Unrivaled Commitment to Safety

The Gulf of America, our nation's energy epicenter, pulses with opportunity and responsibility. The Helix Well Containment Group (HWCG), the Marine Well Containment Company (MWCC), and the technological powerhouse, Trendsetter Engineering, have redefined containment, transforming the Gulf of America into a global model of resilience, safety, and environmental stewardship.

A Unified Shield for Rapid Response

HWCG and MWCC are the industry's vanguards. Together, they form an unbreakable line of defense, ready to respond with precision and speed.

Their capabilities are unmatched. HWCG's dual-ram capping stacks, rated at 15,000 and 20,000 psi, tackle high-pressure wells in 10,000-foot depths, with a flowback capacity of 130,000 barrels of fluid and 220 million cubic feet of gas daily. MWCC's arsenal includes three capping stacks, two modular capture vessels handling 100,000 barrels and 200 million cubic feet of gas daily, and advanced subsea systems. In March 2025, MWCC awarded a multimillion contract to W-Industries for the engineering, fabrication, and delivery of its new drillship deployed containment system.[80] This new equipment will further strengthen MWCC's ability to respond to potential deep water well control incidents—an essential safeguard for the offshore oil and gas industry.

Their readiness is proven: HWCG deployed a capping stack in just 3.6 days during a 2023 drill. MWCC's 2020 exercise mobilized a 20,000-psi stack with 46 responders, mastering complex scenarios like capping wells under tension leg platforms (TLPs). This is the Gulf of America's reality: risk managed with relentless preparation.

Trendsetter Engineering: The Innovation Catalyst

Trendsetter Engineering, Houston's subsea trailblazer, is a backbone of this transformation. Trendsetter built MWCC's first capping stack in just seven and a half weeks, unlocking the

[80] https://www.marinetechnologynews.com/sponsored/pressrelease/mwcc-partners-with-windustries-on-a-multimillion-dollar-project-100280

Gulf of America's drilling future. Six weeks later, HWCG received a custom stack for independents, restoring industry confidence. These rapid deliveries were more than engineering triumphs—they were lifelines for the Gulf of America.

Trendsetter's innovations empower both HWCG and MWCC. Its 15,000- and 20,000-psi capping stacks, built for 350°F extremes, are compact and versatile, ready for Arctic, TLP, or deepwater challenges. The Trident Open Water Intervention Riser System (OWIRS), upgraded 20,000-psi hydraulic connectors, and high-pressure composite riser pipes supercharge HWCG's response capabilities.[81] Trendsetter doesn't just equip the Gulf of America—it fortifies its future.



***Source**: New Industries*

HWCG, MWCC, and Trendsetter aren't just safeguarding our waters—they're proving that innovation and determination can secure a legacy. Let's champion their leadership and ensure the Gulf of America thrives as a cornerstone of American strength, safety, and sustainability.

A Gold Standard for Safety

The Gulf of America's offshore oil and gas industry sets a global benchmark for safety, combining advanced engineering, rigorous monitoring, and a robust regulatory framework with proactive prevention and rapid response capabilities. BSEE's oversight, industry standards, and industry innovations like MWCC and HWCG ensure that operations are conducted with the highest regard for worker safety and environmental protection.

[81] https://www.trendsetterengineering.com/news/trendsetter-completes-load-out-of-20k-manifold/

In the Gulf of America, this risk-based mindset is not theoretical—it's put to the test. In 2023 and again in 2024, the Bureau of Safety and Environmental Enforcement (BSEE) conducted unannounced capping stack drills to evaluate the industry's real-world ability to respond to a subsea well control event. Each of the drills lasted between three and five days and were mobilized by Beacon Offshore Energy and Chevron, along with their mutual aid partners to deploy, and install equipment to cap a blowout in deep water off the coast of Louisiana. These no-notice drills simulated a loss-of-well-control scenario and tested the full spectrum of response capabilities, from team mobilization and communications to equipment readiness and capping procedures.

Both drills were successfully completed, confirming that industry plans, personnel, and systems are prepared to respond rapidly and effectively in high-pressure situations. BSEE described the exercises as demonstrating "strong coordination and performance" between regulators and operators, affirming the operational value of the bowtie model and the industry's ability to execute under real-world conditions.

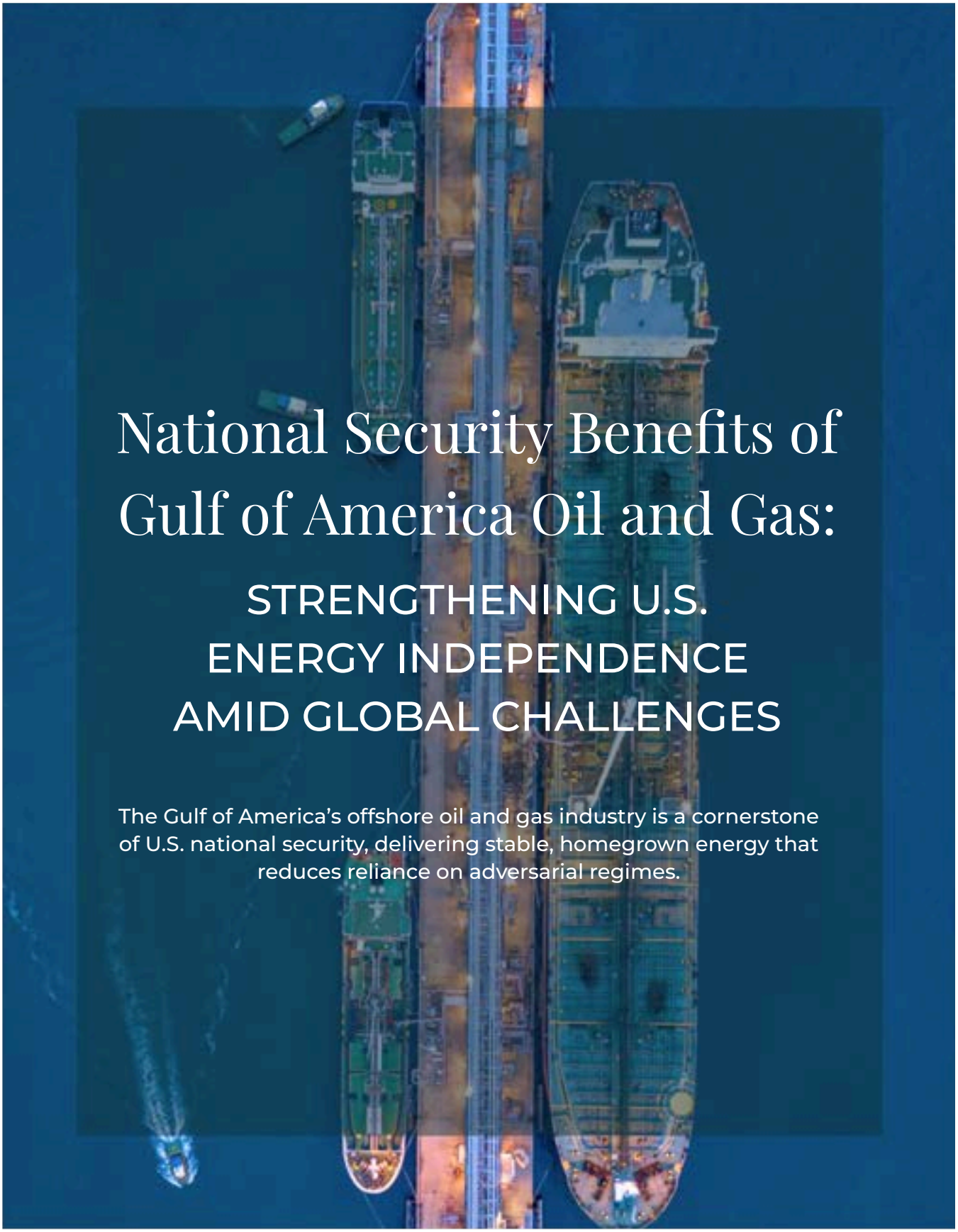
BREAKOUT:
Bowtie Risk Management and Real-World Validation in the Gulf of America

In offshore energy operations, managing risk isn't left to chance—it's structured through the bowtie method, a widely adopted framework that places a potential hazard at the center and surrounds it with layers of defense. On the left side of the "knot" are preventive barriers that reduce the likelihood of an incident. On the right are mitigation measures that minimize the consequences if an incident occurs. This approach provides operators, regulators, and response teams with a clear, actionable structure for protecting lives, the environment, and offshore infrastructure.

The bowtie framework ensures that prevention measures—such as well design standards, real-time monitoring, and trained personnel—are robust. At the same time, mitigation strategies like regional containment systems, capping stacks, and deployment protocols are fully integrated into operational plans. Success in the BSEE drills reflects not only technical capability, but a safety culture grounded in planning, accountability, and continuous improvement.



With energy demand rising and offshore development expanding, the Gulf of America remains a model of responsible offshore operations. The successful completion of these unannounced drills reinforces that prevention and preparedness are not just aspirational goals—they're operational realities in the Gulf today.



National Security Benefits of Gulf of America Oil and Gas:

STRENGTHENING U.S. ENERGY INDEPENDENCE AMID GLOBAL CHALLENGES

The Gulf of America's offshore oil and gas industry is a cornerstone of U.S. national security, delivering stable, homegrown energy that reduces reliance on adversarial regimes.

National Security Benefits of Gulf of America Oil and Gas:

STRENGTHENING U.S. ENERGY INDEPENDENCE AMID GLOBAL CHALLENGES

The Gulf of America's offshore oil and gas industry is a vital pillar of U.S. national security, delivering a secure, domestic energy supply that reduces reliance on foreign sources, drives economic resilience, and strengthens America's geopolitical influence amid global instability. Producing nearly 2 million barrels of oil per day the Gulf powers the nation while countering the strategic ambitions of adversaries like China and Russia, particularly in the wake of Russia's 2022 invasion of Ukraine.

By ensuring energy independence and security, generating critical revenues, and sustaining a robust industrial base, the Gulf's operations enable the U.S. to maintain military readiness, support allies, and navigate great power competition. Geopolitics change overnight, and the U.S. should have reliable and durable sources of energy.

> *The extraordinary growth in U.S. oil and gas production is a geopolitical and economic asset for the U.S. that contributes to global energy security. As the domestic oil-and-gas industry continues to rebound from the spring 2020 price collapse caused by the onset of Covid, the U.S. is again the world's top oil producer—almost 20% above the other two largest producers, Saudi Arabia and Russia—and the world's top natural-gas producer. The global oil market, which was drowning in oversupply less than two years ago, has tightened dramatically as the world emerges from Covid shutdowns. That makes the market vulnerable to crisis. Russia's push on Ukraine, a rebounding global economy, major weather events, or a surprise event could send prices soaring.*[82]
>
> **Daniel Yergin,** Vice Chairman of S&P Global

Curtailing Gulf production would not eliminate global oil demand but would shift supply to nations like Russia, China, and Iran, undermining U.S. security, increasing energy costs, and ceding low-carbon production to less-regulated regimes.

Energy Independence: Shielding America from Global Risks

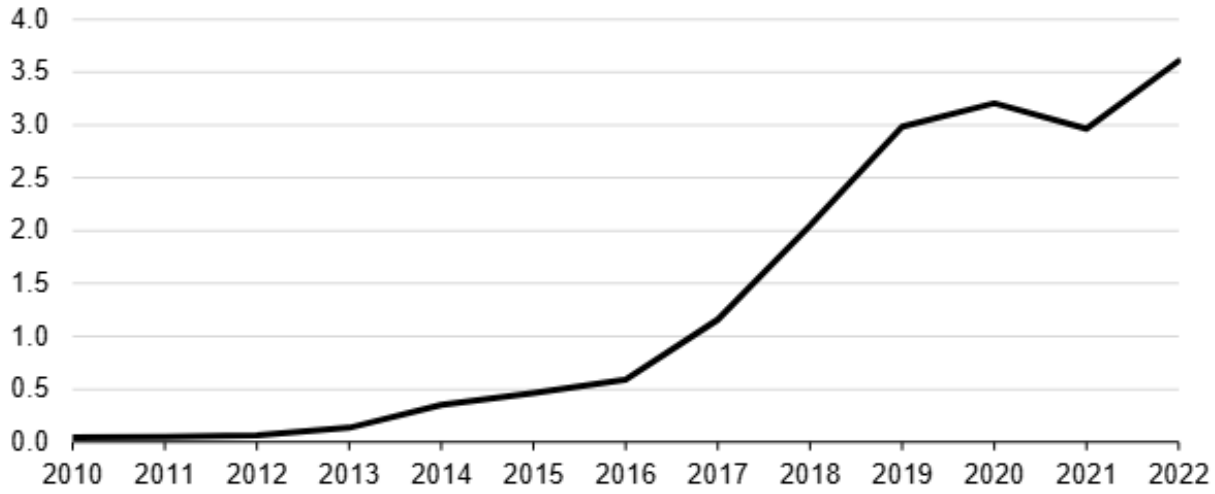
Russia's invasion of Ukraine, launched in February 2022, underscored the dangers of energy dependence on hostile actors. The invasion disrupted global energy markets, with Europe facing severe shortages after sanctions curtailed Russian oil and gas exports. The U.S., bolstered by Gulf of America production, stepped in as a key supplier, exporting 3.6 million

[82] Yergin, "America Takes Pole Position on Oil and Gas," Wall Street Journal, February 14, 2022.

barrels per day of crude oil globally and refined products to Europe in 2023, stabilizing allied economies and reducing Russia's energy leverage.[83]

Annual U.S. Crude Oil Exports

(2010-2022) million barrels per day



Source: EIA

American offshore production enables U.S. sanctions on Russian energy, which have slashing Moscow's profits by 50%.[84] Moreover, Houthi attacks, fueled by Iran's oil sales to China, threaten global energy markets.[85] Stable domestic energy production provides our policymakers a powerful tool to counter global instability and provides a way to gain market dominance over bad actors who are using energy exports to fund their agendas.

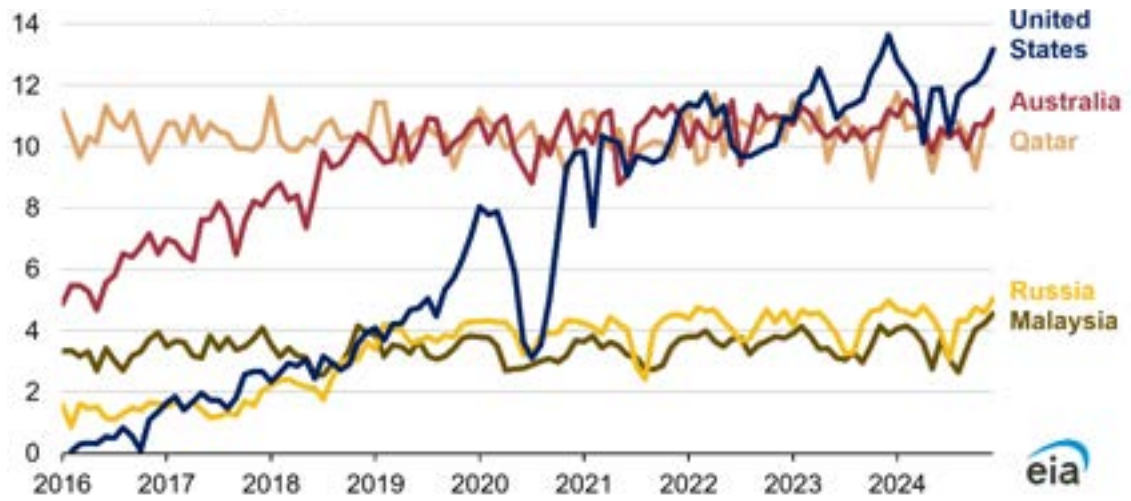
U.S. LNG Exports from the Gulf Coast: Bolstering Global Energy Security

The Gulf Coast is a linchpin of U.S. liquefied natural gas (LNG) exports, driving energy security for the U.S. and its allies while countering adversarial influence from nations like Russia and China. In 2024, the Gulf Coast's LNG facilities, including major terminals in Louisiana (Sabine Pass, Cameron LNG) and Texas (Freeport LNG, Corpus Christi LNG), exported 11.9 billion cubic feet per day of LNG, remaining the world's largest exporter.[86]

[83] https://www.eia.gov/todayinenergy/detail.php?id=56020
[84] https://energyandcleanair.org/march-2025-monthly-analysis-of-russian-fossil-fuel-exports-and-sanctions/
[85] https://www.wsj.com/world/middle-east/u-s-accuses-china-of-helping-the-houthis-target-their-attacks-e56264da
[86] https://www.eia.gov/todayinenergy/detail.php?id=64844

Monthly Liquified Natural Gas Exports

from Select Countries (Jan 2016-Dec 2024) billion cubic feed per day

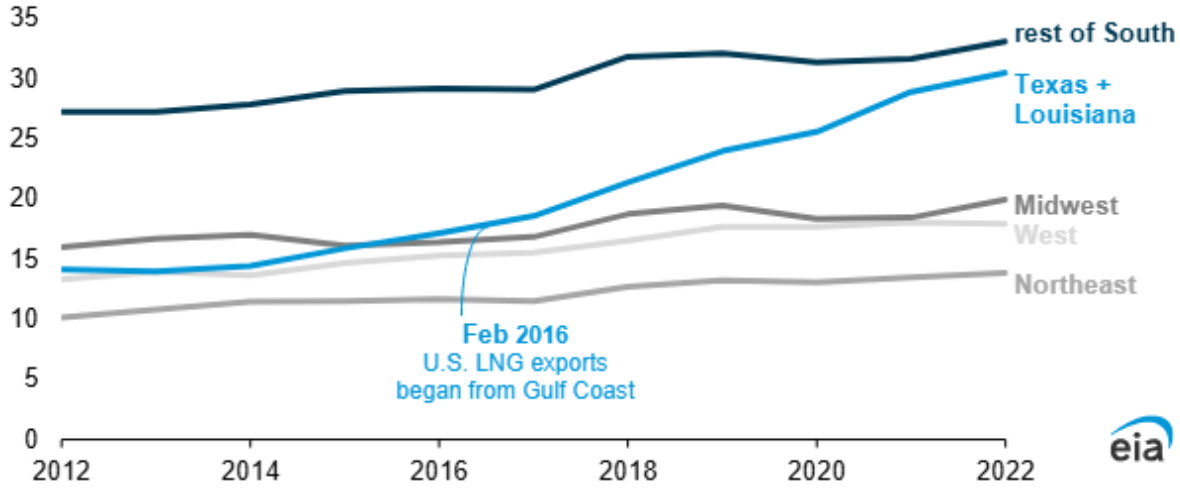


Source: EIA

These exports have been critical since Russia's 2022 invasion of Ukraine, which disrupted European gas supplies. The Gulf Coast is a major supplier of U.S. LNG exports. Demand in the Gulf Coast states of Louisiana and Texas grew by 116%, or 16.0 Bcf/d, driven largely by increased demand for feedgas for liquefied natural gas (LNG) exports.[87] Furthermore, 5 of the 8 U.S. export terminals are along the Gulf Coast.

Annual U.S. Natural Gas Demand

by select regions (2012-2022) billion cubic feed per day



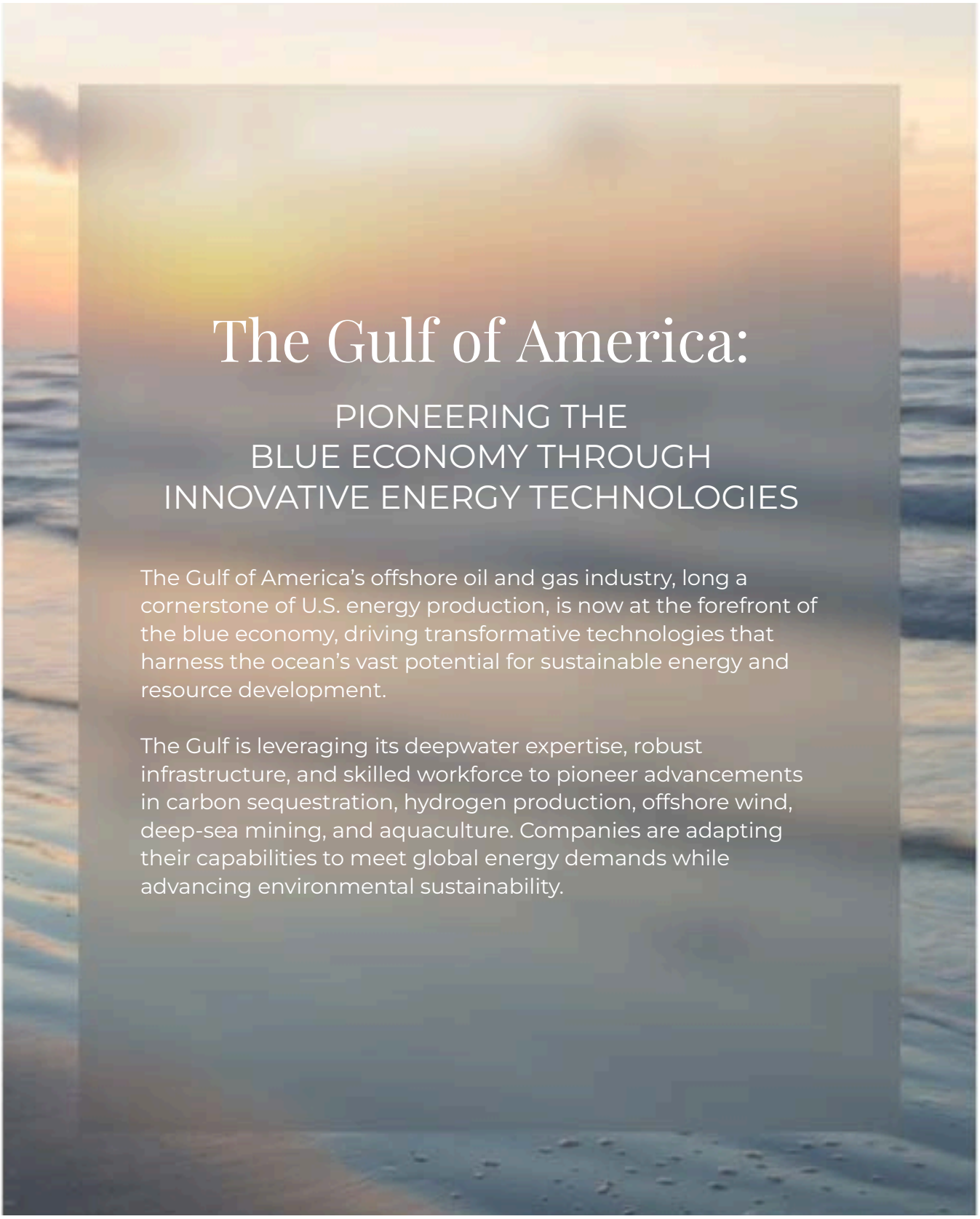
Source: EIA

[87] https://www.eia.gov/todayinenergy/detail.php?id=56940

The Gulf's LNG infrastructure also counters China's energy ambitions, as Beijing seeks to expand into global gas markets through partnerships with nations like Russia.[88] By providing reliable LNG to our allies, the Gulf Coast mitigates China's influence and supports global stability.

Moreover, the expansion of U.S. exports of LNG has made a substantial contribution to the U.S. economy. In 2023, the sector directly or indirectly supported 222,450 jobs, generating $23.2 billion in labor income for workers across various industries. Additionally, it contributed $43.8 billion to the U.S. GDP, underscoring its role as a key economic driver. The sector also generated $11.0 billion in tax and royalty revenues, providing significant benefits to federal, state, and local governments and supporting public services and infrastructure critical to national and regional economies.[89]

[88] https://www.reuters.com/markets/commodities/china-is-set-import-more-russian-lng-2025-ambassador-says-2025-04-15/
[89] https://nam.org/wp-content/uploads/2024/10/Quantifying-Americas-Economic-and-Energy-Opportunity-through-LNG-Exports.pdf



The Gulf of America:

PIONEERING THE BLUE ECONOMY THROUGH INNOVATIVE ENERGY TECHNOLOGIES

The Gulf of America's offshore oil and gas industry, long a cornerstone of U.S. energy production, is now at the forefront of the blue economy, driving transformative technologies that harness the ocean's vast potential for sustainable energy and resource development.

The Gulf is leveraging its deepwater expertise, robust infrastructure, and skilled workforce to pioneer advancements in carbon sequestration, hydrogen production, offshore wind, deep-sea mining, and aquaculture. Companies are adapting their capabilities to meet global energy demands while advancing environmental sustainability.

Carbon Sequestration: Capturing Emissions Offshore

Reducing industrial emissions while maintaining strong economic and energy output requires scalable, proven solutions. Carbon capture and storage (CCS) is one such tool—designed to significantly cut CO_2 emissions from major sources while leveraging existing workforce expertise and infrastructure, particularly in offshore environments.

What Is CCS?

CCS captures carbon dioxide emissions from industrial facilities, power plants, and even directly from the atmosphere. Once captured, CO_2 is compressed and transported for permanent storage deep underground or for use in commercial processes. By intercepting CO_2 before it reaches the atmosphere, CCS reduces total emissions while keeping critical industries operating.

Why It Matters

CO_2 is a common industrial greenhouse gas, produced by key sectors like manufacturing, refining, steelmaking, and cement. CCS offers a way to reduce these emissions without disrupting operations or output—making it a practical solution for states and industries balancing economic development with regulatory and market demands for lower emissions.



***Source**: Equinor*

U.S. Leads in CCS

The U.S. has long led the world in CCS innovation and deployment. As of 2019, 10 of the world's 19 active CCS projects were located in the U.S. According to the National Petroleum Council, this success stems from:

- Decades of operational experience
- Investment in CO_2 pipelines and storage
- A supportive regulatory environment
- Strong public-private partnerships
- World-class engineering and research capabilities

Offshore CCS: Technically Proven, Commercially Viable

Offshore CCS has a 25+ year track record. Norway's Sleipner project, launched in 1996, has stored more than 20 million metric tons of CO_2 under the North Sea. The next generation of offshore projects—like Northern Lights—aims to scale even further, storing up to 5 million metric tons annually by 2027.

The global CCS market is growing rapidly, expected to rise from $4.5 billion in 2025 to $14.5 billion by 2032.

The Gulf of America: A Sleeping CCS Giant

With its vast offshore geology, dense industrial footprint, and existing pipeline infrastructure, the Gulf of America is uniquely positioned to lead on offshore CCS.Numerous projects onshore and in state waters along the Gulf Coast are moving forward:

- **Baytown CCS Project**:
  ExxonMobil secured a 271,000-acre offshore lease in Texas state waters in 2024, the largest U.S. CO2 storage site, aiming to capture and store 7.5 million metric tons annually from its Baytown refinery by 2026.[90]
- **Houston Ship Channel Hub**:
  A proposed $100 billion CCS hub to capture 100 million metric tons of CO2 yearly by 2040 is backed by companies like Shell, Chevron, ExxonMobil, and others.[91]
- **Bayou Bend CCS Project**:
  Bayou Bend is a joint venture owned by Chevron, TotalEnergies and Equinor with the goal of developing a carbon capture and storage facility in Southeast Texas. The

[90] https://corporate.exxonmobil.com/news/news-releases/2024/10102024_exxonmobil-secures-largest-carbon-offshore-storage-site-in-the-us
[91] https://www.upstreamonline.com/energy-transition/proposed-houston-ccs-hub-gains-supermajor-support/2-1-1149392

140,000 acre site off Texas is expected to have a storage capacity of over 1 billion metric tons of CO2.[92]

- **Williams and ION Clean Energy**:
  Williams invested in ION's carbon capture technology in 2024 to decarbonize natural gas operations, focusing on Gulf Coast pipelines and storage sites.[93]

The Gulf's CCS ecosystem also spans a diverse supply chain, with companies adapting offshore expertise to scale projects:

- **Service Providers**:
  Oceaneering deploys ROVs for CO2 injection and monitoring.[94] Subsea 7 designs CO2 pipelines, with a 2024 pilot connecting onshore emitters to offshore sites.[95] SLB uses end-to-end digital solutions to support global offshore CCS work.[96]
- **Drilling Operators**:
  Transocean repurposes rigs for CO2 injection wells,[97] while Noble Corporation retrofits rigs for CO2 compatibility.[98]
- **Logistics**:
  ABS is providing onboard CCS process design, evaluation, and optimization among other support to boost global offshore CCS.[99]

What's Needed: Federal Regulatory Certainty

Despite clear momentum, full-scale deployment hinges on finalizing offshore permitting and leasing rules under the Outer Continental Shelf Lands Act. Originally slated for 2022, federal regulations remain delayed—holding back investments and job creation in CCS across the Gulf.

Unlocking offshore CCS will support U.S. emissions goals, energy reliability, and job growth—without sacrificing industrial output or energy security.

[92] https://www.chevron.com/newsroom/2023/q1/bayou-bend-expands-carbon-capture-project-to-onshore-southeast-texas#:~:text=The%20total%20acreage%20holds%20estimated,one%20of%20the%20largest%20industrial
[93] https://www.williams.com/2024/10/16/williams-invests-in-carbon-capture-tech-company/
[94] https://www.oceaneering.com/renewable-energy-solutions/carbon-capture-and-storage/
[95] https://www.offshore-mag.com/subsea/news/55278778/subsea7-subsea7-starts-engineering-for-northern-lights-phase-2-co2-pipeline
[96] https://www.slb.com/solutions/carbon-capture-and-storage/digital-solutions-for-ccus
[97] https://jpt.spe.org/transocean-selected-to-drill-carbon-injection-wells-for-northern-lights#:~:text=Offshore%20driller%20Transocean%20has%20been,Equinor%2C%20Shell%2C%20and%20TotalEnergies
[98] https://www.offshore-mag.com/drilling-completion/article/55273291/co2-grade-drilling-package-addresses-safety-concerns-of-ccs-wells
[99] https://ww2.eagle.org/en/Products-and-Services/sustainability/ccus.html#tabs-c9e715f402-item-09bac85b58-tab

Hydrogen Production: Powering the Next Era of U.S. Energy Leadership



***Source**: Ramboll*

The Gulf of America can rapidly become a national hub for hydrogen production, leveraging its vast natural gas reserves, offshore infrastructure, and world-class industrial base. Using electrolysis powered by renewables or natural gas paired with carbon capture and storage (CCS), the region can produce scalable, low-carbon hydrogen for industrial, transportation, and energy sectors.

Built for Hydrogen at Scale

The Gulf Coast is already the energy capital of the world, home to: [100]

- Over 1,000 miles of dedicated hydrogen pipelines—the largest network in the U.S.
- Significant hydrogen production and storage capacity, including three of the world's six hydrogen salt caverns
- The nation's largest renewable energy market, with 36 GW of wind and 15 GW of solar powering growth

This unmatched infrastructure positions the Gulf to lead in cost-effective, reliable hydrogen production—delivering lower emissions without sacrificing performance or energy reliability.

[100] https://www.reuters.com/business/energy/us-gulf-coast-natural-fit-clean-hydrogen-industry-2024-05-23/#:~:text=Summary,world's%20six%20salt%20storage%20caverns.



Source: HyVelocity

HyVelocity: America's Hydrogen Superhub

The HyVelocity Hub, one of seven federally designated hydrogen hubs under the H2Hubs Program, is expected to be among the largest.[101] Backed by up to $1.2 billion in federal funding from the Infrastructure Investment and Jobs Act, the project will:

- Leverage the Gulf's existing pipelines, refineries, and gas facilities
- Add new hydrogen pipelines, liquefaction plants, and carbon capture integration
- Serve as a model for all-of-the-above energy development rooted in American innovation

HyVelocity is led by GTI Energy in collaboration with The University of Texas at Austin, Center for Houston's Future, and Houston Advanced Research Center. The hub is supported by over 190 public and private partners, including Shell, GM, Bosch, Energy Transfer, Port Houston, the Texas Governor's Office, and others.

Economic Growth and Community Investment

According to McKinsey, hydrogen demand in Texas could reach 21 million metric tons per year. Their study projects that:

- Up to 60% of hydrogen projects in the region will be located in historically disadvantaged communities
- The industry could create 180,000 direct, indirect, and induced jobs
- Hydrogen development could contribute $100 billion in GDP by 2050

With abundant feedstock, deep expertise, and built-in demand, the Gulf Coast offers everything needed to make clean hydrogen a global-scale American industry.

> "The Gulf Coast is the most attractive region in the world to produce hydrogen—cheap feedstock, existing infrastructure, strong domestic demand, and world-class expertise."
>
> **Nikhil Ati**
> Partner, McKinsey & Company

[101] https://www.hyvelocityhub.com/#:~:text=The%20Gulf%20Coast%20is%20the%20energy%20capital,to%20expand%20energy%20options%20for%20regional%20industries.

Securing Critical Minerals: Unlocking America's Offshore Potential



***Source**: Moana Minerals*

The demand for critical minerals like cobalt, nickel, manganese, and rare earth elements is accelerating rapidly, driven by their essential role in technologies that power everything from advanced manufacturing and clean energy to defense systems and medical devices.

Yet today, the United States remains heavily reliant on foreign-controlled supply chains, with China dominating global production and processing.[102] Without urgent action, this overdependence poses a serious threat to America's economic competitiveness and national security.

Why Critical Minerals Matter

These minerals are not just rare—they're foundational:

- Cobalt is essential for batteries, superalloys, magnets, catalysts, and medical devices
- Nickel is critical for stainless steel, battery production, armor plating, and desalination
- Manganese is used in steelmaking, water treatment, agriculture, and battery technology
- Rare earth elements enable high-performance magnets, defense electronics, and renewable energy systems

[102] https://www.foreignaffairs.com/united-states/troubled-energy-transition-yergin-orszag-arya

America's Offshore Opportunity

According to the U.S. Bureau of Ocean Energy Management (BOEM), the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Geological Survey (USGS), many of these critical minerals—along with all rare earth elements—occur on the U.S. Outer Continental Shelf (OCS) and the high seas (200 miles beyond national coastlines).[103] Though commercial deep-sea mining has yet to begin, U.S. offshore energy companies are uniquely positioned to lead.



With decades of experience operating in deepwater, high-risk marine environments, America's offshore energy sector brings the tools, talent, and track record needed to safely develop these resources:

- Advanced geophysical mapping and seafloor characterization
- Subsea robotics and remote operations
- AI-driven analytics and digital twin technologies
- Proven offshore engineering and marine logistics

[103] https://www.boem.gov/marine-minerals/national-offshore-critical-minerals-inventory

A Strategic National Imperative

Developing a domestic offshore critical minerals industry will:

- Strengthen supply chain security for the U.S. and allies
- Support high-skilled, high-wage jobs in engineering, technology, and maritime services
- Reduce dependency on adversarial nations for materials essential to defense and energy resilience

America's offshore energy industry is already among the most regulated and technologically advanced in the world. The same innovation, environmental safeguards, and safety culture that have driven success in offshore oil and gas will enable responsible, sustainable deep-sea mineral exploration. The United States must act now to unlock its offshore mineral resources and reclaim leadership in this strategic sector.

SPOTLIGHT:
Moana Minerals Advances Offshore Monitoring in the Cook Islands

The Cook Islands marked a major step forward in its deep-sea exploration efforts with the successful deployment of three deep-sea environmental monitoring mooring arrays north of Aitutaki. The operation—conducted under approved exploration licenses—was a collaborative effort between Moana Minerals Limited (MML) and Cobalt Seabed Resources Limited (CSR).

From February 16–23, 2025, the mooring arrays were deployed aboard the research vessel MV Anuanua Moana, operated by Kiva Marine. Oversight was provided by three inspectors from the Seabed Minerals Authority (SBMA), while four independent Cook Islands observers participated to gain hands-on experience and insight into this pioneering work.

Why It Matters

The deployment of environmental moorings is recognized globally as a best practice for establishing long-term marine baselines in areas of exploration.[104] Each mooring system is anchored to the seafloor and suspended vertically by floats, designed to host a range of oceanographic instruments.

These devices will collect valuable data on:

- Ocean temperature and salinity
- Natural sedimentation and turbidity levels
- Ocean current patterns and strength
- Baseline ambient underwater sound

Science-First Approach

"These moorings will play a vital role in establishing baseline environmental conditions, supporting ongoing scientific research and informed decision-making in the sector," said Tanga "TJ" Morris, SBMA Knowledge Management Officer and expedition inspector.

This milestone underscores our industry's commitment to responsible, science-based exploration and builds capacity for future research and marine resource management.

[104] https://www.oceanminingintel.com/news/science/landmark-deepsea-environment-moorings-successfully-deployed-in-the-cook-islands

Aquaculture in the Gulf of America: Unlocking Sustainable Seafood Production



***Source**: Oregon State University*

The Gulf of America is poised to become a national leader in offshore aquaculture, offering a strategic opportunity to enhance domestic seafood production, bolster coastal economies, and leverage the region's existing maritime infrastructure.

NOAA's Aquaculture Opportunity Areas (AOAs) Initiative

In November 2024, NOAA Fisheries released a Draft Programmatic Environmental Impact Statement (DPEIS) proposing the designation of Aquaculture Opportunity Areas (AOAs) in federal waters of the Gulf. This initiative aims to identify zones suitable for environmentally responsible aquaculture development, including marine finfish, shellfish, and seaweed farming. The proposed AOAs encompass four locations—one off the coast of Louisiana and three off the coast of Texas—ranging from 500 to 2,000 acres each, totaling approximately 6,500 acres.[105]

These areas were selected based on favorable oceanographic conditions, minimal conflicts with other ocean uses, and potential to support multiple commercial aquaculture operations. The initiative is part of NOAA's broader effort to expand sustainable aquaculture production in U.S. federal waters.

[105] https://www.fisheries.noaa.gov/southeast/aquaculture/gulf-america-aquaculture-opportunity-area-programmatic-environmental-impact-statement

Economic and Environmental Benefits

Developing offshore aquaculture in the Gulf offers several advantages:

- **Economic Growth:** Establishing aquaculture operations can create jobs and stimulate economic activity in coastal communities.
- **Seafood Security:** Increasing domestic seafood production reduces reliance on imports and enhances food security.
- **Environmental Sustainability:** Offshore aquaculture can be designed to minimize environmental impacts, with proper siting and management ensuring compatibility with marine ecosystems.

Next Steps

NOAA is currently seeking public input on the DPEIS to inform the final selection of AOAs. Stakeholders, including industry representatives, environmental groups, and the public, are encouraged to participate in the comment process to shape the future of aquaculture in the Gulf.

For more information and to submit comments, visit NOAA Fisheries' Aquaculture Opportunity Areas webpage.[106]

[106] https://www.fisheries.noaa.gov/national/aquaculture/aquaculture-opportunity-areas



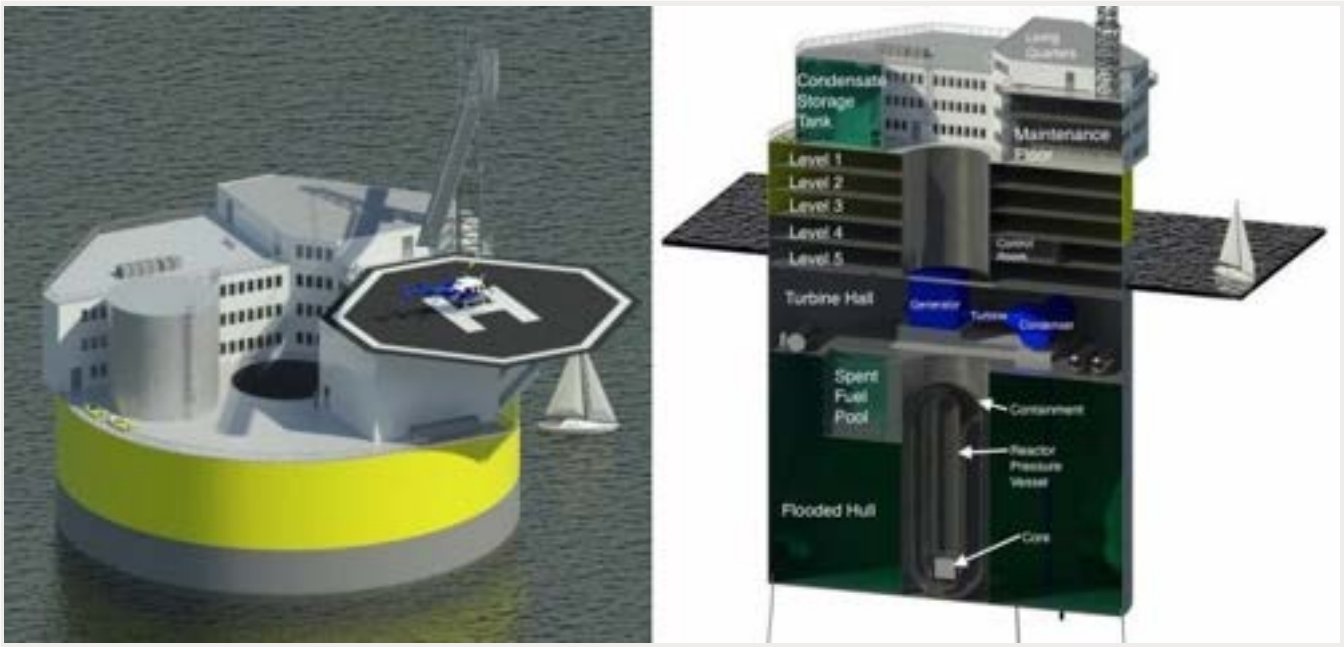
Source: Moana Minerals


Source: Moana Minerals


Source: The Metals Company


Source: The Metals Company

Offshore Nuclear: An Emerging Frontier



***Source**: World Nuclear News*

The Gulf of America—and America's broader offshore region—could play a central role in the next wave of nuclear energy development, with advanced reactor technologies paving the way for clean, compact, and reliable offshore power generation. As the U.S. looks to diversify its energy mix while ensuring reliability and national energy security, offshore nuclear is gaining momentum as a compelling solution.

Why Offshore Nuclear?

In other regions of the world, the offshore oil and gas industry is already exploring nuclear power, particularly small modular reactors (SMRs), to decarbonize operations and reduce environmental impact. Companies like CORE POWER, Saipem, and Viaro Energy are evaluating the feasibility of using SMRs to generate power and heat for offshore platforms.[107]

- **Powering Offshore Operations**: Nuclear reactors could reduce the need for diesel generators on offshore platforms, cutting emissions and operating costs.
- **Supporting Hydrogen and Desalination**: High-heat applications of nuclear energy are ideal for producing hydrogen or fresh water offshore.
- **Grid Stability for Coastal Regions**: Small offshore reactors could supplement power to hurricane-prone areas or provide backup power during grid outages.

[107] https://www.offshore-energy.biz/saipem-exploring-nuclear-tech-as-new-frontier-in-offshore-oil-gas-for-emission-free-energy/#:~:text=Given%20that%20it%20sees%20nuclear,power%20and%20heat%20with%20very

U.S. Innovation and Industry Momentum

The Gulf's extensive infrastructure, industrial hubs, and skilled energy workforce make it a natural testbed for offshore nuclear innovation.

- Core Power and TerraPower are exploring floating nuclear power stations using molten salt reactor technology to provide continuous, emissions-free energy offshore.
- X-Energy and NuScale Power have proposed using their advanced reactor designs for maritime or offshore industrial applications, including support for hydrogen production, desalination, and offshore oil and gas electrification.
- Department of Energy (DOE) and national labs are actively funding research into the maritime applications of nuclear energy, including resilience to extreme weather and remote deployment.[108]

Offshore nuclear energy represents a bold new frontier in American energy leadership. With continued R&D, regulatory readiness, and industry collaboration, the U.S. can pioneer the safe and scalable deployment of offshore reactors—bringing reliable power to hard-to-reach places and advancing a more resilient, energy-secure future.

[108] https://www.energy.gov/ne/articles/5-things-you-should-know-about-nuclear-and-maritime-shipping#:~:text=Nuclear%20Power%20Could%20Be%20Used%20for%20Multiple%20Applications&text=Advanced%20nuclear%20reactors%20have%20the,make%20carbon%2Dneutral%20synthetic%20fuels.

U.S. Offshore Wind: Powering Opportunity, Driven by Gulf of America Expertise

America's offshore wind industry is scaling up rapidly, offering a generational opportunity to strengthen domestic energy production, create high-quality jobs, and diversify the nation's maritime and industrial supply chains. At the center of this momentum are companies from the Gulf of America—many of which built their reputations in offshore oil and gas and are now applying decades of offshore engineering, construction, and logistics expertise to wind energy.



Source Ørsted

Gulf Companies Leading the Way

The Gulf region's companies are not just participating in offshore wind—they're building it. From project development and installation to supply chain logistics and workforce training, Gulf-based firms are driving U.S. offshore wind deployment on both coasts.

- Subsea 7 and Oceaneering—leaders in subsea engineering—are leveraging their expertise to support turbine foundation installation and subsea cable work.

- Gulf Island Fabrication and Kiewit Offshore Services, known for building oil and gas platforms, have diversified their fabrication yards to support offshore wind structures, such as turbine foundations and substations.
- Keystone Engineering designed the first U.S. offshore wind turbine foundation at the Block Island Wind Farm and continues to play a key role in new projects.
- Falcon Global is deploying marine construction equipment originally designed for energy exploration to support offshore wind installation and heavy lift work.

These companies' involvement reflects the Gulf's unique capability: adapting proven industrial know-how to meet the demands of emerging offshore wind markets, creating new opportunities without reinventing the wheel.

Investing in American Shipbuilding and Maritime Jobs



Source: Ørsted

Offshore wind is fueling a shipbuilding renaissance in the U.S., helping to revitalize American yards and supporting thousands of skilled maritime jobs. Gulf Coast shipyards, long central to oil and gas vessel construction, are now seeing new demand for specialized wind vessels.

- Edison Chouest Offshore (LA) is constructing multiple Jones Act-compliant vessels, including the ECO Edison, the first U.S.-built Service Operation Vessel (SOV) for offshore wind.
- Candies Shipbuilders (LA) has completed critical vessel retrofits and specialty barges.
- Metal Shark Boats (LA) and Breaux Brothers Enterprises (LA) are producing next-generation Crew Transfer Vessels (CTVs) for American Offshore Services and other providers.
- Bollinger Shipyards (MS & LA) is building hybrid feeder barges and tugboats to support Maersk's innovative turbine installation system for Empire Wind.

Shipbuilding Boom: Jobs, Investment, and American Strength

According to the Oceantic Network:

- 35 vessels have already been completed for the U.S. offshore wind market—23 are newbuilds, and 12 are retrofits
- 23 more vessels are under construction or announced, with more than $1.8 billion in vessel orders and $12.2 million in shipyard upgrades already tracked
- The ECO Edison alone supported 600 jobs across Louisiana, Mississippi, and Florida, with a supply chain touching 30 states and major components sourced from Texas, Alabama, North Carolina, and Ohio
- Charybdis, the first U.S.-built Wind Turbine Installation Vessel (WTIV), being constructed in Brownsville, TX, is a $715 million investment supporting 1,200+ jobs

Resilience Through Diversification

Offshore wind helps stabilize Gulf shipbuilders and service providers traditionally tied to oil and gas price cycles. By tapping into this fast-growing clean energy sector, Gulf companies can:

- Maintain steady workstreams during fossil fuel downturns
- Preserve industrial jobs in shipbuilding and marine services
- Attract new private investment into fabrication, steel, and logistics infrastructure
- Train and employ the next generation of maritime workers



Presidential Support for U.S. Shipbuilding: The offshore wind shipbuilding can enhance Trump-era executive orders, which called for strengthening domestic shipbuilding capacity to support national security and industrial resilience. These directives laid the groundwork for stronger federal support of U.S. maritime industry revitalization—can be amplified by an offshore wind buildout.

Offshore wind development is breathing new life into U.S. shipyards, offering a vital economic engine for Gulf Coast companies historically tied to oil and gas markets. But this is about more than jobs and diversification—it's about meeting the moment.

As energy demand surges nationwide, driven by population growth, manufacturing expansion, and the explosive rise of data centers and AI infrastructure, the U.S. must bring new, scalable energy sources online. Offshore wind is uniquely positioned to deliver—providing clean, reliable power where it's needed most, near major coastal load centers.

At the same time, this growth fuels a new chapter for American maritime manufacturing. Investments in offshore wind vessels are helping shipbuilders weather oil and gas downturns, retool yards, and retrain workers for a future-proof industry.

With decades of offshore engineering experience, world-class fabrication yards, and a skilled maritime workforce, the Gulf of America is not just participating—it's leading. From powering next-gen industries to revitalizing coastal economies, offshore wind is proving to be one of the most strategic energy investments the U.S. can make.

Meeting Rising Energy Demand: Offshore Wind's Role in Powering America's Future

America is entering a new era of energy demand—driven not just by population and industrial growth, but by the explosive rise of artificial intelligence, data centers, and advanced manufacturing. Offshore wind stands out as a scalable, domestic solution capable of meeting this challenge while strengthening energy security and economic competitiveness.

The stakes are clear:

- U.S. power consumption by data centers alone is projected to account for nearly half of all electricity demand growth by 2030.[109]
- Individual AI data centers can require as much electricity as a small city—or even a small country.[110]
- Global energy demand for AI infrastructure could quadruple by 2030, according to leading forecasts.[111]

In response, the U.S. government has made AI energy infrastructure a national priority:

- The January 2025 "Stargate Initiative" committed $500 billion over four years to accelerate AI infrastructure.[112]

[109] https://www.iea.org/news/ai-is-set-to-drive-surging-electricity-demand-from-data-centres-while-offering-the-potential-to-transform-how-the-energy-sector-works
[110] https://www.canarymedia.com/boon-or-bane-what-will-data-centers-do-to-the-grid#:~:text=Each%20data%20center%20can%20use,are%20scrambling%20to%20keep%20pace
[111] https://www.iea.org/news/ai-is-set-to-drive-surging-electricity-demand-from-data-centres-while-offering-the-potential-to-transform-how-the-energy-sector-works
[112] https://openai.com/index/announcing-the-stargate-project/

- Executive Orders have followed to support coal (April 2025[113]) and nuclear (May 2025[114]) development to ensure energy reliability for AI.
- A January 2025 directive established it as U.S. policy to maintain global leadership in artificial intelligence—explicitly linking digital dominance with energy infrastructure.[115]

What's needed is a broader portfolio of domestic energy sources, with offshore wind offering a compelling path forward.

With 14 GW of offshore wind capacity under development and 5 GW of commercial-scale projects currently under installation, the U.S. offshore wind sector is poised to play a major role in powering the digital economy.

Offshore wind is:

Scalable:

Utility-scale projects can bring large volumes of clean energy online rapidly.

Local:

Projects are sited near major coastal demand centers—where AI, tech, and manufacturing hubs are growing fastest.

Reliable & Predictable:

Offshore wind provides consistent generation patterns that complement other forms of energy.

Additive:

It strengthens the U.S. grid without displacing existing energy sources—supporting coal, nuclear, gas, and renewables in tandem.

The Gulf of America is leading the charge—applying its world-class offshore engineering, shipbuilding, and logistics capabilities to support America's offshore wind buildout. This is not only helping to meet urgent energy demand, but also reindustrializing U.S. ports and shipyards and fortifying domestic supply chains critical to energy resilience and national competitiveness.

As AI reshapes the economy, America must ensure it has the energy to power it. Offshore wind is a strategic asset in that mission—fueling the data-driven future while delivering jobs, reliability, and long-term affordability.

Countering China: Offshore Wind as a Strategic Industrial Imperative

America's offshore wind buildout isn't just an energy opportunity—it's a national security and industrial competitiveness priority. As China rapidly expands its offshore energy fleet and manufacturing dominance, the U.S. must act decisively to strengthen its own offshore capabilities and reduce reliance on foreign suppliers for critical energy components.

[113] https://www.whitehouse.gov/presidential-actions/2025/04/reinvigorating-americas-beautiful-clean-coal-industry-and-amending-executive-order-14241/
[114] https://www.whitehouse.gov/fact-sheets/2025/05/fact-sheet-president-donald-j-trump-deploys-advanced-nuclear-reactor-technologies-for-national-security-f872/#:~:text=The%20Order%20directs%20the%20Secretary,nuclear%20reactors%20on%20military%20installations
[115] https://www.whitehouse.gov/presidential-actions/2025/01/removing-barriers-to-american-leadership-in-artificial-intelligence/

- In 2023, China added 6.3 gigawatts of offshore wind—nearly 60% of all global offshore wind additions—for the sixth consecutive year.
- China's offshore wind capacity now totals 38 GW, exceeding Europe's and reflecting its aggressive push to dominate next-generation energy manufacturing.[116]
- In 2024, Chinese companies held the top three global positions in wind turbine manufacturing—a clear signal of Beijing's strategic intent to lead the global clean energy economy.[117]
- Meanwhile, U.S. commercial shipbuilding has shrunk to fewer than five vessels per year, down from 70 in 1975. In contrast, China builds 1,700 ships annually.[118]

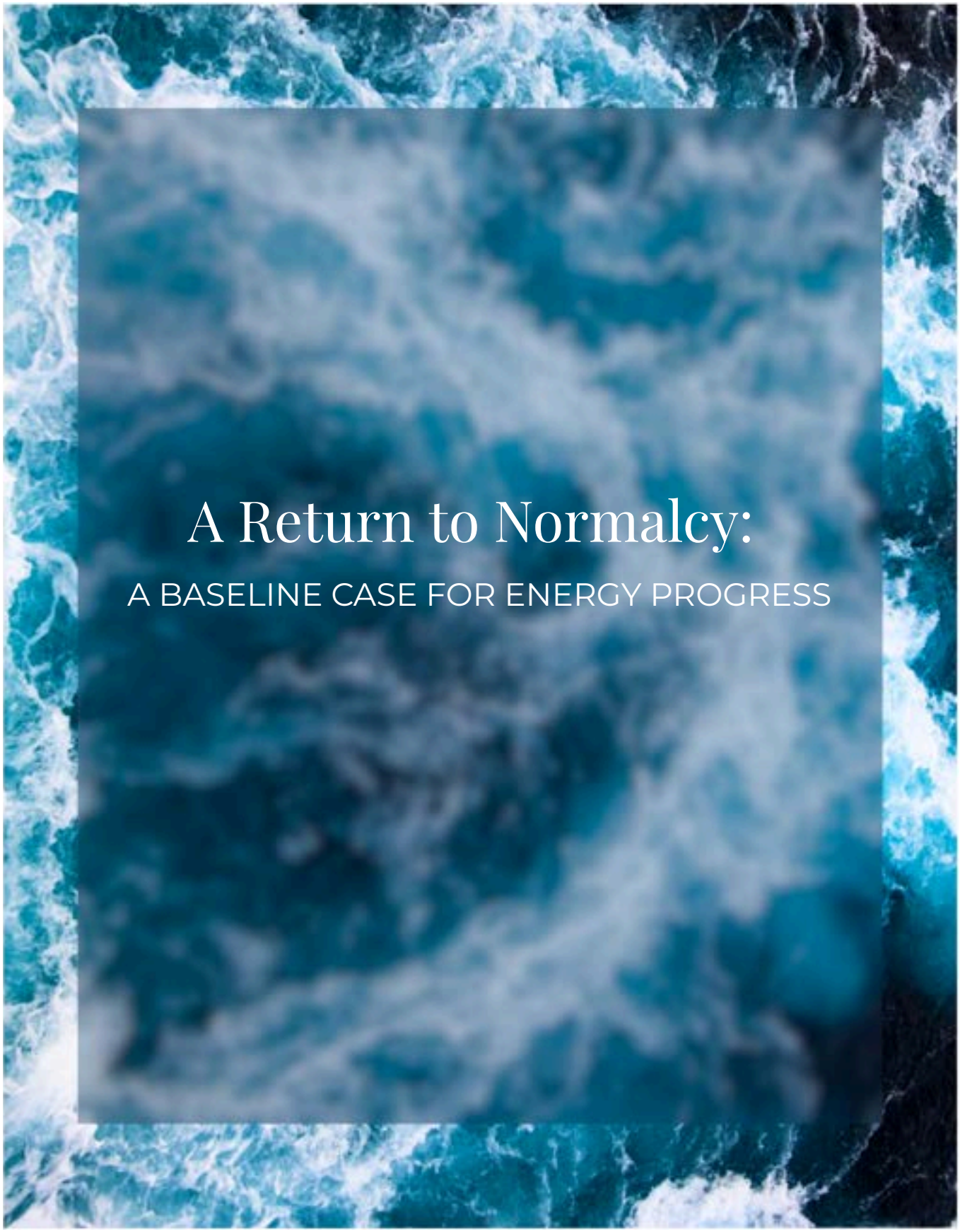
If the U.S. fails to accelerate domestic offshore wind development, it risks ceding critical industrial ground to geopolitical rivals. Offshore wind is an opportunity to rebuild American supply chains, reinvest in maritime manufacturing, and anchor energy security in U.S. ports, shipyards, and fabrication yards.

By scaling up offshore wind:

- The U.S. reduces dependence on foreign manufacturers for strategic energy infrastructure
- Revitalizes shipbuilding and heavy manufacturing, especially in the Gulf of America
- Aligns with bipartisan goals to "Make It In America Again" and restore national industrial strength
- Strengthens domestic supply chains critical to energy, transportation, and national defense

The Gulf of America's leadership in offshore construction, marine engineering, and shipbuilding gives the U.S. a powerful head start—but only if we act now. A strong, American-made offshore wind sector helps ensure that the future of clean energy is built in the U.S., not imported from strategic competitors.

[116] https://www.mandg.com/investments/institutional/en-us-onshore/insights/2025/q1/chinas-outsized-role-in-decarbonising-the-world#:~:text=Making%20waves%20in%20offshore%20wind,China's%20dominance%20in%20this%20field
[117] https://www.woodmac.com/press-releases/2024-press-releases/chinese-oems-sweep-the-global-wind-podium-for-the-first-time/
[118] https://prospect.org/blogs-and-newsletters/tap/2025-01-17-how-china-dominates-global-shipbuilding/


A Return to Normalcy:
A BASELINE CASE FOR ENERGY PROGRESS

A Return to Normalcy: A Baseline Case for Energy Progress

In January 2025, Energy & Industrial Advisory Partners (EIAP) released a study, commissioned by API, entitled, The Economic Impacts of a Consistent Offshore Oil and Natural Gas Legislated Leasing Program. The study modeled three leasing scenarios:

1. **Base Case:**
   Current federal five-year program with one Gulf of America lease sale every other year, and no Alaska lease sales.
2. **Legislative Leasing Case:**
   A proactive approach featuring two Gulf of America lease sales per year and semi-annual lease sales in Alaska's Cook Inlet.
3. **No Leasing Case:**
   Ending offshore leasing after the current program concludes.

The passage of the One Big Beautiful Bill Act (OBBBA) in 2025 now mandates an average of two lease sales per year in the Gulf of America for 15 years. This is not a radical change—it reflects the long-standing norm upheld by Republican and Democratic administrations alike for decades. For the offshore industry, this provides something it has been missing for years: normalcy and predictability.

The EIAP study underscores just how important this certainty is. A consistent leasing program delivers billions in capital investment, hundreds of thousands of high-paying jobs, billions in government revenues, and higher production that secures U.S. energy independence.

Table 1: 10-Year Key Findings (2025-2034)

		Legislated Leasing Program Case Impacts		
Economic Impact	Base Case Average (2025-2034)	Average Impact (2025-2034)	End of Forecast Impact (2034)	Cumulative Impact (2025-2034)
Capital Investment and Spending ($ Billions)	$32.2	$1.4	$4.4	$13.9
Employment	387,100	15,600	49,000	N/A
Contributions to GDP ($ Billions)	$33.1	$1.3	$4.1	$13.1
Government Revenues ($ Billions)	$7.6	$0.2	$0.5	$2.3
Oil and Natural Gas Production (MMBOED)	2.5	0.04	0.14	134 Million Barrels

Source: Energy and Industrial Advisory Partners

Key Findings: 2025–2034 Impact (10-Year Reconciliation Window)

Under a Legislative Leasing Program:

- **Capital Spending**: Annual offshore oil and gas investment would rise by $1.4 billion on average.
- **Employment**: Nearly 16,000 more jobs would be supported annually.
- **GDP Growth**: Annual contributions to GDP would increase by $1.3 billion.
- **Government Revenues**: Federal revenue would rise by an average of $230 million per year.
- **Production Growth**: Offshore production would be 40,000 barrels of oil equivalent (BOE) per day higher on average—and 140,000 BOE per day higher by 2034.

Even Greater Gains Beyond 2034: Full Forecast Period (2025–2040)

Over the full forecast horizon, the benefits compound significantly:

- **Annual Capital Investment**: Increases by $4.8 billion by 2040.
- **Employment Growth**: 56,000 additional jobs supported by 2040.
- **GDP Contribution**: $4.6 billion more annually by 2040.
- **Government Revenues**: An additional $1.7 billion per year by 2040.
- **Production Growth**: Offshore oil and gas production would be 510,000 BOE per day higher by 2040—securing U.S. energy independence and supply resilience.

The Bottom Line: Certainty Unlocks Growth

Offshore oil and gas development is a decades-long endeavor requiring massive upfront investment, complex engineering, and long-term confidence. With OBBBA mandating lease sales at a predictable cadence, the U.S. offshore industry now has a stable foundation to build on its world-class expertise and its strategic national importance.

But leasing certainty alone is not enough. These benefits will only be realized if the permitting and regulatory regime keeps pace. Permitting reform is one of the few areas of genuine bipartisan agreement in Congress. By streamlining offshore permitting processes, aligning agency reviews to avoid unnecessary delays, and ensuring consistent, science-based regulatory oversight, policymakers can pair leasing certainty with regulatory clarity.

That means:

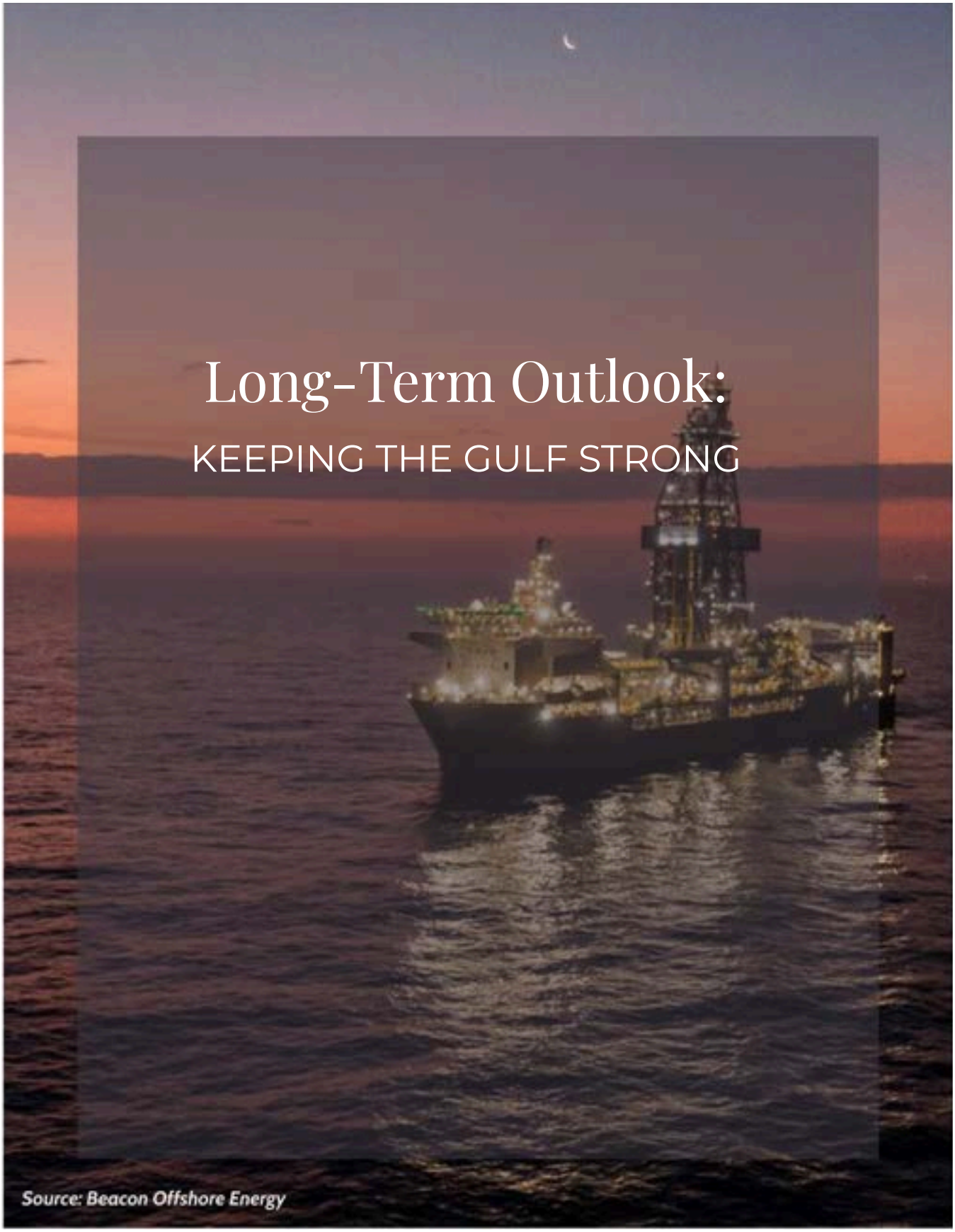
- Streamlining offshore permitting processes
- Aligning agency reviews to avoid unnecessary delays
- Ensuring science-based, consistent regulatory oversight
- Enabling technology innovation and safe project delivery

When leasing stability and permitting reform are aligned, the Gulf of America will continue to set the global standard—strengthening U.S. energy security, boosting jobs and revenues, and cementing America's role as the world leader in responsible offshore energy production.

When paired with regulatory clarity, a stable leasing program will:

- Provide investment certainty
- Strengthen U.S. energy security
- Boost employment and GDP
- Maximize government revenues
- Sustain long-term domestic production capacity

Restoring and maintaining offshore leasing to a predictable, bipartisan norm—backed by smarter, modernized regulatory systems—is **essential to powering America's energy and economic future.**


Long-Term Outlook:
KEEPING THE GULF STRONG
Source: Beacon Offshore Energy

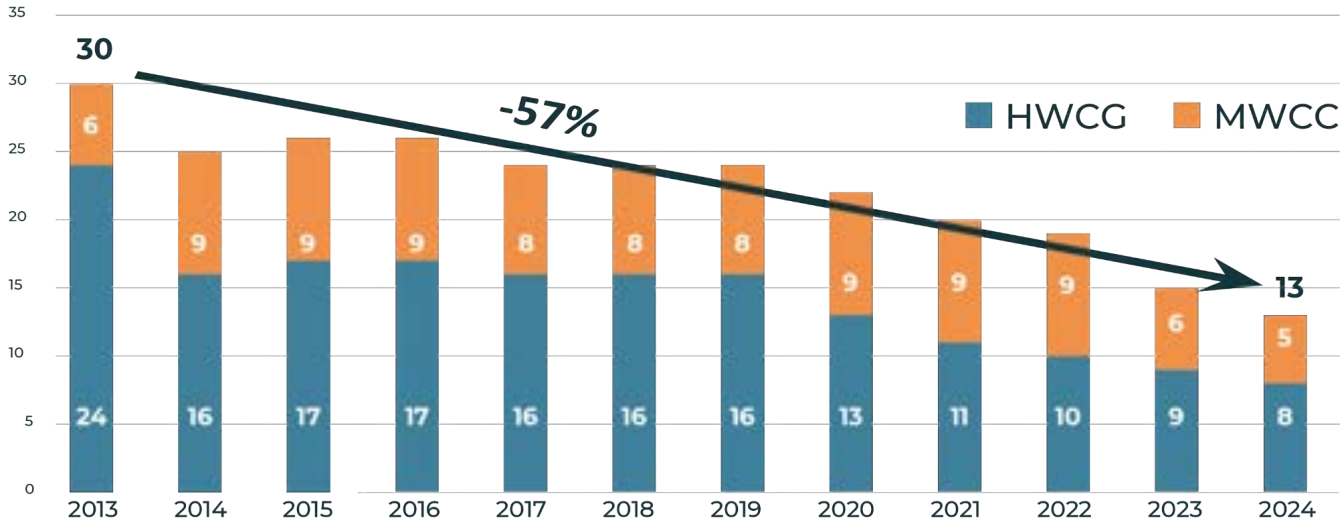
Long-Term Outlook: Keeping the Gulf Strong

The Gulf of America has long been a cornerstone of U.S. energy security, but sustaining that leadership will require confronting a new set of challenges head-on. Today, the number of active offshore operators is down by more than half compared to a decade ago, putting greater pressure on those who remain. The service sector has been thinned by bankruptcies, consolidations, and an aging fleet of rigs and vessels. Equipment and materials face longer lead times and higher costs, while tariffs and supply constraints further strain development.

Key Gulf of America Data Points

- 30 active deepwater operators in 2014 → 13 in 2024
- 12 rig contractors → consolidated to 4
- Offshore service vessel fleet aging (last newbuild was more than 10 years ago)
- Offshore helicopter providers down from 5 → 2

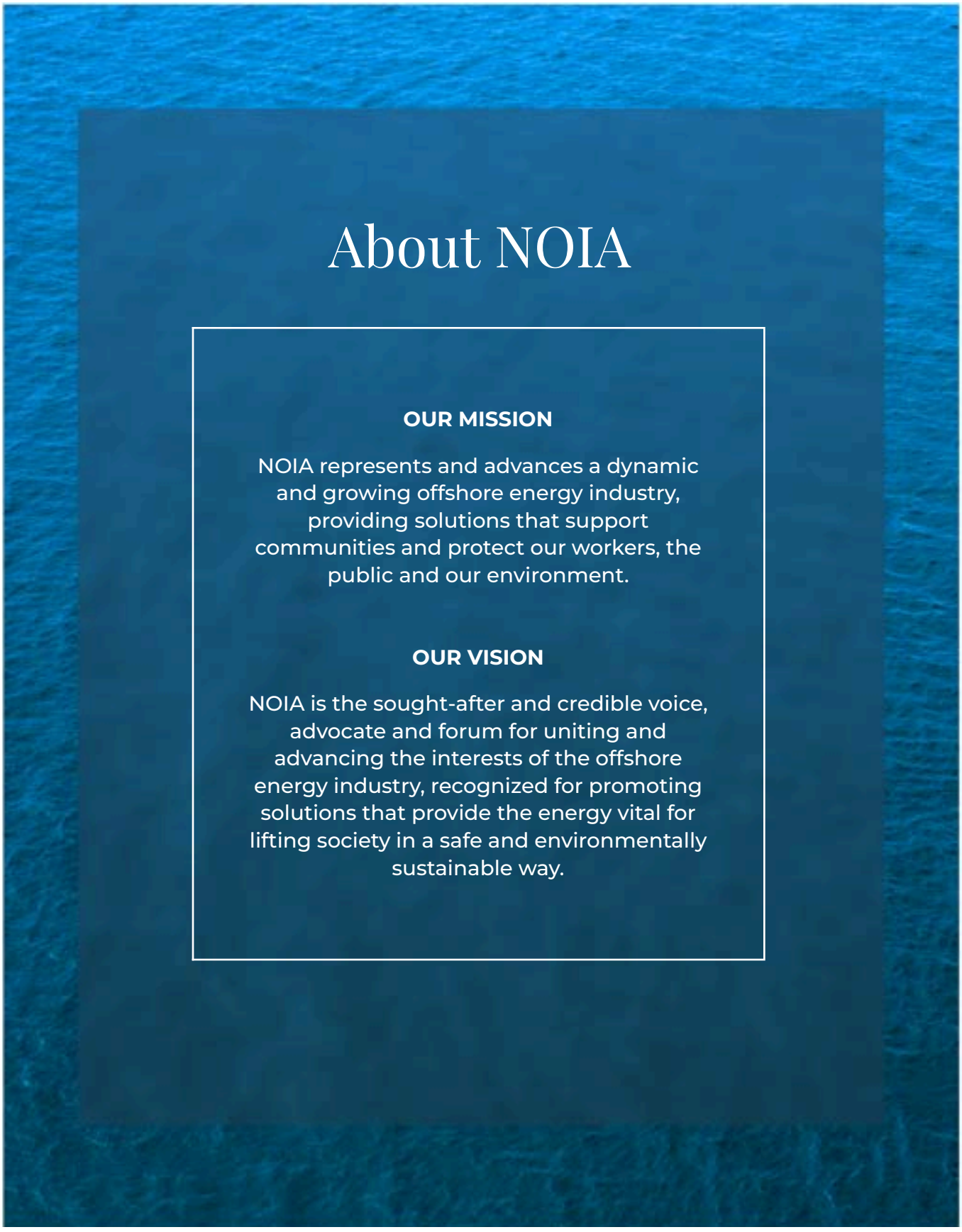
Gulf of America Active Deepwater Operators



All operators involved in deepwater drilling on the U.S. Outer Continental Shelf (OCS) are required by law to have a demonstrated well containment plan. Membership in either HWCG and Marine Well Containment Company (MWCC) is the most common way for deepwater operators to meet this requirement.

Just as pressing are workforce challenges. The industry is navigating the "big crew change," with fewer seasoned professionals and limited training opportunities for the next generation.

Still, the story of the Gulf has always been one of resilience and innovation. With stable leasing, permitting reform, renewed investment in workforce development, and a stronger service base, the Gulf of America can remain a world-class energy hub, and a strategic national asset, for decades to come.



About NOIA

OUR MISSION

NOIA represents and advances a dynamic and growing offshore energy industry, providing solutions that support communities and protect our workers, the public and our environment.

OUR VISION

NOIA is the sought-after and credible voice, advocate and forum for uniting and advancing the interests of the offshore energy industry, recognized for promoting solutions that provide the energy vital for lifting society in a safe and environmentally sustainable way.

The Offshore Story

We lift society by producing the energy that is essential for a high quality of life, helping to reduce poverty and hunger and improving health and well-being.

The offshore energy industry will help meet future energy needs. Through offshore oil and gas, wind, carbon sequestration, subsea minerals, hydrogen, and other segments, a growing U.S. and global population will continue to rely on offshore energy resources for decades to come.

We support hundreds of thousands of high-paying jobs found in every state across our nation.

We support and fund educational opportunities and institutions.

We are the innovators, focusing on cutting-edge technologies, including artificial intelligence, data analytics, subsea robotics, modern geophysical mapping, and the invention of new products and systems to solve the greatest energy challenges.

From our experience, offshore safety has been enhanced through modern geosciences, leading-edge engineering design, improved subsea and remote technologies, shared best practices, information technology, and innovative safety systems.

We continuously improve the safety and environmental performance of our operations so that our workers and communities are protected and that our environmental footprint continues to decrease.

The offshore energy industry operates pursuant to robust regulation and enforcement. We promote and enhance U.S. national security and geopolitical stability by producing oil and natural gas here at home, decreasing our reliance on foreign, potentially adversarial, energy sources.

We supply the U.S. and the world with lower carbon intensity energy sources. This includes barrels of oil that are among the lowest carbon intensity in the world from the Gulf of America, new wind projects off our coasts, and other energy solutions such as offshore carbon sequestration.

Our energy production provides tremendous revenues for federal, state, and local governments, the Land and Water Conservation Fund, urban outdoor recreation programs and facilities, coastal resiliency and restoration, and upkeep and modernization for our national parks.

NOIA ESG PARTICIPATION PLEDGES



NOIA Foundational Environmental Social & Governance Principles

- NOIA member companies provide the energy that is essential for our everyday lives and raises the quality of life of our communities, reducing poverty and hunger while promoting good health and well-being.
- We operate in coastal and ocean environments with safety, health, environmental protection and sustainability as core values.
- We share a commitment to a high standard of corporate citizenship and continuous improvement in environmental, social and governance performance.
- We recognize the risks of climate change and the need for continued action. As innovators, we are committed to contributing solutions and best practices to optimally balance societal and environmental needs.

Environmental Principles

NOIA and its Members commit to:

- Using energy efficiently;
- Managing water and waste responsibly;
- Advancing best practices to reduce environmental impact and promote ecosystem health.

NOIA Climate Change Principle:

NOIA and its member companies commit to a collaborative approach with all stakeholders in providing solutions that balance environmental, social, economic, energy, and national security needs for society. We contribute to the advancement of principles of innovation, conservation, efficiency, resiliency, mitigation, and adaptation that must be part of a systematic approach to addressing the climate challenge. See NOIA Climate Change Position for detailed position with principles.

Social Principles

NOIA and its Members commit to:

- Diversity and inclusion in hiring and employment practices;
- Safe and healthy working conditions for employees and partners;
- Improving communities where we work and live.

Governance Principles
NOIA and its Members commit to:

- Operate in an ethical manner and in compliance with laws and regulations.
- Implementing processes that incorporate ESG principles and practices.
- Manage risk through appropriate controls.













