



**Texas
Independent
Producers and
Royalty Owners
Association**

NEW TIPRO ANALYSIS DETAILS TEXAS OIL & GAS WORKFORCE TRENDS

Rising production of oil and natural gas in the Lone Star State is opening new doors for Texans seeking employment opportunities with energy companies. A new analysis released this week by the Texas Independent Producers & Royalty Owners Association (TI PRO) indicates the Texas oil and natural gas industry had approximately 90,700 job postings so far this year during the months of January and

February, of which 15,375 job listings were unique. Employment opportunities for the state's oil and gas industry have been most concentrated in the cities of Houston and Midland, which are central to much of the energy activity and business engagements for the Texas oil and gas industry.

According to TI PRO, industry employment postings have held a posting intensity of 6-to-1, meaning that for every six postings, there has been one unique job posting. This is close to the posting intensity for all other occupations and companies in the region (5-to-1), indicating an average effort toward hiring for these positions. The posting intensity for the upstream sector is 7-to-1, which suggests more difficulty in filling positions.

TI PRO's new analysis also lists the highest number of open industry positions, as posted by occupation, so far in 2019, which have been heavy and tractor-trailer truck drivers (1,020), retail salespersons (775), accountants and auditors (603).

TI PRO's latest report also shows leading skills sought for open jobs in the energy sector, which include oil and gas expertise (19 percent), followed by valid driver's license (15 percent), and accounting (10 percent).

Other highlights from TI PRO's employment analysis include:

- From January through February, the Crude Petroleum Extraction sector posted the highest number of open positions (3,980).
- The city of Houston had the highest number of unique positions posted for the industry (4,973), followed by Midland (1,019) and San Antonio (684).
- The highest number of open positions by job title was customer service associates (734), followed by truck drivers (383).
- The top hard skill listed for open oil and gas positions was oil and gas expertise (19 percent), followed by valid driver's license (15 percent), and good driving record (10 percent).
- The top common skill listed for open oil and gas positions was management (42 percent), followed by operations (32 percent), and communications (29 percent).
- The top qualification sought for listed open positions was commercial driver's license (979), followed by Master of Business Administration (226), and Transportation Worker Identification Credential (TWIC) Card (181).
- The leading posting source for open oil and natural gas positions was Nexxt.com (6,491), followed by Workintexas.com (5,218), and My.jobs (3,170).

As the leading organization in Texas representing independent producers and royalty owners in Texas, TI PRO regularly tracks and analyzes a broad array of data for the state's E&P sector, including industry employment and workforce trends. Ed Longanecker, president of the association, described the organization's engagement efforts helping to connect Texas oil and gas companies with prospective employees, commenting: "Our goal with TI PRO's workforce analysis, reporting and related advocacy is multifold. By promoting the available positions and positive contributions from the Texas oil and gas industry, we hope to make a connection between employers and available talent. Our work is also intended to identify the challenges facing employers and how we can effectively address those challenges through collaboration, funding, and training at the local and state levels to prepare, attract and retain talent. TI PRO continues to support workforce development efforts by promoting existing training programs, facilities and related resources and working with the Texas legislature and state agencies to advance policy initiatives that will help support the long-term workforce needs."

See TI PRO's complete workforce analysis by visiting http://bit.ly/TIPRO_Workforce_Report.

For additional information on industry wages, employment figures, and other oil and gas insights, also be sure to check out TI PRO's 2019 'State of Energy Report' at: <https://bit.ly/2TDjF9v>.



PRESIDENT'S MESSAGE

TIPRO Members,

On behalf of our association's membership, I was pleased to testify before the House Ways & Means Committee this week in support of House Bill 1558, legislation that looks to help Texas operators bring inactive oil and gas wells back into production. The bill, authored by House Energy Resources Chairman Chris Paddie, is a priority for TIPRO this session.

As I explained to the committee, Texas is currently home to 129,000 inactive wells. Many of these wells remain inactive due to their uneconomic viability related to market conditions, primarily with fluctuations in commodity prices. House Bill 1558 would help operators bring inactive wells back into production by reinstating a program that provided a severance tax exemption for qualified inactive wells. But unlike the previous program, this would offer a severance tax exception for five years versus 10 years. Further, we believe that this policy will provide economic benefit through increased oil and gas employment, sales tax, production and royalty income, and ultimately offer increased severance tax revenue for the state once the exemption expires.

This program would also help to reduce the number of inactive wells that could eventually become classified as orphaned and potentially the responsibility of the state for plugging. Our state currently has approximately 6,500 orphaned wells and the Texas Railroad Commission is working diligently to get ahead of the number of wells plugged as compared to the number they incur or inherit on an annual basis. Last year, the agency was able to successfully plug 1,400 around the state. So, any support we can provide to reduce or delay the number of wells that become orphaned in the state is also of benefit. This will help to extend the life of viable wells and prevent the premature plugging of wells that still hold value for operators, royalty owners and the state of Texas.

Following invited testimony on the bill this past Wednesday, the Ways & Means Committee for the time has left the legislation as pending in committee. Meanwhile, the companion legislation in the Senate -- Senate Bill 533 authored by Senate Natural Resources Committee Chairman Brian Birdwell -- is progressing in the upper chamber. This legislation already was successfully voted out of committee last week with a vote of 11-0.

While we continue to navigate our way through the 86th Regular Legislative Session, TIPRO's team in Austin is proud to serve as the leading voice of independent producers and royalty owners at the capitol. Our organization continues to offer key insight and knowledge to state officials as lawmakers work to evaluate policy proposals, including those that could directly impact members of the Texas oil and gas sector. TIPRO will continue to work to protect the ability for independents to explore for and produce oil and natural gas in our great state.

Thank you,
Ed Longanecker



Ed Longanecker

WHITE HOUSE SELECTS NEW CHIEF TO LEAD REGULATORY AFFAIRS

Paul Ray has been named as the new acting leader of the White House Office of Information and Regulatory Affairs (OIRA), a senior administration official confirmed this week. Ray takes over the role from Neomi Rao, who was sworn in this week to the U.S. Court of Appeals for the District of Columbia Circuit, replacing the seat that previously was vacated by new Supreme Court Justice Brett Kavanaugh. Ray previously worked as OIRA's associate administrator for less than a year, and before that, served as counselor to Labor Secretary Alex Acosta. He also formerly worked as an associate for the law firm Sidley Austin LLP, wherein he assisted clients that included industry groups like the U.S. Chamber of Commerce, National Association of Manufacturers and the American Chemistry Council.

As head of OIRA, Ray will be responsible for execution of President Donald Trump's deregulatory agenda, which looks to cut government red tape and extend regulatory rollbacks for U.S. industries, including lifting restrictions that better enable American energy development. Since President Trump took office, he has prioritized deregulation of burdensome government rules, and even issued an executive order mandating that for every one new regulation, two old regulations must be eliminated. This initiative is largely spearheaded by the White House's internal OIRA office, of which Ray takes over control.

TIPRO Calendar of Events

MARCH 27-28, 2019 MIDLAND — Roseland Oil & Gas West Texas 2019 Expo, Horseshoe Pavilion. For info, call: (903) 787-7544.	APRIL 10, 2019 HOUSTON — IPAA/TIPRO Leaders in Industry Luncheon, 11:30 a.m. Houston Petroleum Club. For info, call: (202) 857-4733.	MAY 8, 2019 HOUSTON — IPAA/TIPRO Leaders in Industry Luncheon, 11:30 a.m. Houston Petroleum Club. For info, call: (202) 857-4733.	JUNE 12, 2019 HOUSTON — IPAA/TIPRO Leaders in Industry Luncheon, 11:30 a.m. Houston Petroleum Club. For info, call: (202) 857-4733.
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TOP ENERGY ISSUES BEING DEBATED AT THE CAPITOL

With the 2019 legislative session nearly at the half-way point, several key energy issues have emerged as leading topics of discussion under the pink dome in Austin. From addressing infrastructure challenges to reworking the state's eminent domain laws, below are some of the dominant issues receiving attention by the Texas legislature of which TIPRO is engaged on:

Eminent Domain

Senate Bill 421 by Senator Lois Kolkhorst is one of a number of eminent domain bills that has been filed at the capitol this year, but SB 421 is the most detrimental to the oil and gas industry. The passage of SB 421 will cause significant issues for infrastructure projects in Texas. Infrastructure projects will experience burdensome, unnecessary regulations and increased litigation, and Texans will miss out on the benefits pipelines provide, such as job growth, increased revenues for schools and roads, and reduced traffic and lower emissions. Despite ongoing, good faith negotiations between land owner groups and the Coalition for Critical Infrastructure (CCI) -- a body of diverse public and private entities including TIPRO -- the Senate Committee on State Affairs voted out Senator Kolkhorst's SB 421 last week. A letter from our coalition was emailed and hand delivered to the Lt. Governor's office and all members of the Senate regarding the bill and our concerns. TIPRO along with CCI continue to work "to establish a process that compensates property owners fairly and fully for the value of their property without raising legal or litigation costs, which ultimately must be borne by consumers and taxpayers," and we can use your help. Please contact your state senator and tell them to oppose CSSB 421. It is heavy-handed government regulation that will cripple infrastructure projects like pipelines, reduce the number of good-paying jobs that these projects create, and stifle the revenues that they generate for schools, roads and first responders.

Transportation Funding

There are a number of bills moving through the Texas legislature designed to provide additional transportation funding to areas impacted by increased oil and gas production. Senate Bill 500 and House Bill 4 are spending bills that supplement state spending to the Texas state budget. Senate Bill 500 passed the Senate Committee on Finance and was substituted for House Bill 4 in the House Committee on Appropriations. The bill has been reported favorably from committee and allocates \$250 million dollars to transportation in areas impacted by increased oil and gas production. Additionally, House Bill 1, the Texas House version of the state budget has \$500 million allocated to county transportation infrastructure funds and \$500 million allocated to energy-producing county transportation infrastructure funds.

House Bill 2154 and House Joint Resolution 82, authored by Representative Brooks Landgraf and Representative Tom Craddick, would create the Generate Recurring Oil Wealth for Texas Fund or the "GROW Texas Fund." The GROW Texas Fund uses severance taxes for specific re-investment in Texas oil and gas areas that have experienced increased production. The money would then be used exclusively to: expand and improve highways and public roads, increase law-enforcement and first responder salaries, and revitalize education and skilled-workforce opportunities by dedicating money to teachers, schools, colleges and universities. TIPRO supports this bill designed to re-direct severance tax dollars back to the areas in which they are produced.

Inactive Wells

Texas is currently home to 129,000 inactive wells. Many of these wells remain inactive due to their lack of economic viability related to market conditions, including fluctuations in commodity prices. Many smaller producers in Texas who may own these wells have not fully recovered from the recent industry downturn. House Bill 1558 by Representative Chris Paddie and Senate Bill 533 by Senator Brian Birdwell would help operators bring inactive wells back into production by reinstating an expired program that provided a severance tax exemption for qualified inactive wells. HB 1558 and SB 533 would provide a severance tax exception for five years in order to get inactive wells back online. This program would provide economic benefit through increased oil and gas employment, sales tax, production and royalty income, and ultimately increased severance tax revenue for the state once the exemption expires. This program would also help to reduce the number of inactive wells that could eventually become orphaned and potentially the responsibility of the state for plugging. The state has approximately 6,800 orphaned wells and the Texas Railroad Commission is working diligently to get ahead on the number of wells plugged versus the number they incur or inherit on an annual basis. The support HB 1558 and SB 533 can provide to reduce or delay the number of wells that become orphaned in the state is a tremendous benefit. SB 533 has been voted out of the Senate Committee on Natural Resources and Economic Development, placed on the Senate Local and Uncontested Calendar, and should be heard by the full Senate by the end of next week. HB 1558 was heard in the House Committee on Way and Means on Wednesday. TIPRO was in attendance for both the House and Senate committee meetings and testified in support of the legislation.

LAWMAKERS LYLE LARSON, CHARLES PERRY APPOINTED TO SOUTHWESTERN STATES WATER COMMISSION

Texas Governor Greg Abbott has reappointed state Representative Lyle Larson (R-San Antonio) and state Senator Charles Perry (R-Lubbock) to serve on the Southwestern States Water Commission, an entity formed to enable Texas to work with neighboring states and Mexico to resolve regional water issues. Both Representative Larson and Senator Perry are leaders of key water committees in the Texas legislature, chairing the House Committee on Natural Resources and Senate Committee on Water and Rural Affairs, respectively. The panel on which Larson and Perry serve will continue to partner with neighboring states and Mexico to identify and develop sources and methods of increasing and securing water supplies, including desalination and weather modification.

TEXAS SENATE PASSES SUPPLEMENTAL BUDGET, PULLING \$4.4 BILLION FROM RAINY DAY FUND

Members of the Texas Senate unanimously approved a \$8.4 billion supplemental budget on Wednesday, March 13, allocating funds to balance state expenditures incurred the last two years with appropriations originally issued in 2017. Under the approved budget from the Senate chamber, passed under Senate Bill 500, \$6.1 billion would be granted in state funds: \$1.7 billion provided from general revenue and \$4.4 billion pulled from the state's Economic Stabilization Fund, also known as the Rainy Day Fund. The rest will come from federal sources.

The bill's author, Senator Jane Nelson (R-Flower Mound), said that the Senate's budget will help cover critical needs for the state. "The supplemental budget provides funding for some of the legislature's key priorities - Hurricane Harvey relief, school safety and healthcare needs. It provides significant resources to improve the state's flood control infrastructure and helps communities along the Gulf Coast rebuild," observed Senator Nelson, who also chairs the Senate Finance Committee. "Because the budget we passed was essentially flat, Senate Bill 500 keeps our current biennial budget well within the constitutional spending limit."

Relief efforts from Hurricane Harvey account for the largest share of funding that is to be drawn from the Rainy Day Fund under Senate Bill 500. The historic storm that made landfall in August 2017 was the most economically destructive hurricane in the state's history with damage estimated at \$125 billion (including damage in Louisiana). Now, the Texas legislature is deliberating the appropriate amount of funding to help cover Harvey-related expenses and recovery needs. In the Senate's budget package, \$3.1 billion has been set to assist Texas communities impacted from the hurricane. Of that, more than \$900 million would go to help school districts maintain services while they cope with recovery efforts. Another \$840 million has been approved to fund Senate Bill 7, which would create the funding framework for the development of the statewide flood plan, to lessen the impact of the next storm, and to create the Texas Infrastructure Resiliency Fund.

"Hurricane Harvey affected one out of five public school students in Texas...if we're not going to use the Rainy Day Fund to cover something like that, I don't know when you're ever going to use the Rainy Day Fund," remarked Senator Larry Taylor, whose district along the Gulf Coast was one of the hardest hit areas from Hurricane Harvey. "You take away Harvey, you take away school violence, and we'll be happy to lower this budget. But this is what we're having to respond to, these are the events that happened in Texas, and I'll be damned if we don't deal with it," said Senator Taylor.

Beyond Harvey relief, other areas receiving Rainy Day Funds under Senate Bill 500 include --

- \$2.1 billion to address the Medicaid shortfall;
- \$100 million to improve school safety, in wake of the 2018 Santa Fe High School shooting, with an amendment that gives districts greater flexibility on the type of safety equipment they can buy;
- \$100 million to refill the Governor's Disaster Fund to help rebuild from natural disasters;
- \$300 million to continue the legislature's commitment to improve state hospital facilities;
- \$542 million to address pension liabilities for the Teacher Retirement System;
- \$211 million to pay obligations of the Texas Tomorrow Fund; and
- \$160 million to address the Correctional Managed Health Care shortfall.

Even if the full \$4.4 billion in Rainy Day Funds ends up being appropriated by the state legislature, as proposed through Senate Bill 500, the balance in the Texas Rainy Day Fund would still surpass \$11 billion. The fund is nearly entirely supported from taxes collected on crude oil and natural gas production.

Meanwhile, the lower chamber has not yet voted on its version of the budget. Speaker of the Texas House Dennis Bonnen hinted this week that legislators in the House would consider their budget bill, House Bill 1, next Wednesday, March 27.

TCEQ CONDUCTS AERIAL SURVEYS IN EAGLE FORD COUNTIES



Credit: TCEQ

This month, the Texas Commission on Environmental Quality (TCEQ) is completing aerial surveys in the South Texas counties of Gonzales and Lavaca, both situated in the Eagle Ford, to detect emissions otherwise invisible to the eye. According to the TCEQ, the helicopter will perform surveys using a specialized infrared camera over and around oil, natural gas and other industrial type facilities to image emissions of volatile organic compounds (VOC) and other hydrocarbons. During these surveys, business owners should be advised that the helicopter may hover and fly a path over

and around a facility or area multiple times in a manner that allows for the collection of images and other information on potential emission sources. The helicopter may fly a non-grid style search pattern over some areas to avoid tall structures. The helicopter may also fly or hover at an altitude as low as 250 feet above ground at times, notes the TCEQ.

Surveys began on Monday, March 18, and will conclude by March 31, 2019. Note the helicopter that is being used for these surveys is silver and black with Tail Number N544BB.

TCEQ OFFERING REBATE GRANTS UNDER TERP PROGRAM

The Texas Commission on Environmental Quality (TCEQ) is currently accepting applications for the state's Rebate Grants program, which provides funding to upgrade or replace diesel, heavy-duty vehicles and/or equipment. The program is part of the Texas Emissions Reduction Plan, known as TERP, that offers financial incentives to eligible individuals, businesses, or local governments to reduce emissions from polluting vehicles and equipment.

TCEQ will award up to \$5 million in this grant cycle to qualified applicants. TCEQ representatives note that the agency has received a significant number of applications already. As a result, parties should be aware that grant applications received beyond the funding availability for this grant round will be held in the order in which they are received until the grant round is closed. However, these applications may not be considered for a grant award unless additional funds become available.

Additionally, TIPRO members are reminded that TCEQ is also still accepting applications for funding consideration for the Texas Natural Gas Vehicle Grant Program (TNGVGP). The TNGVGP provides grants to encourage an entity that owns and operates a heavy-duty or medium-duty motor vehicle to repower the vehicle with a natural gas engine or replace the vehicle with a natural gas vehicle. The agency has as much as \$15 million available to disperse for TNGVGP. So far, \$5.1 million in funding has been awarded. Applications for this grant program must be submitted by May 31, 2019.

To learn more about how to apply for TERP grant funding, please visit www.terpgrants.org.

"GREEN NEW DEAL" LEGISLATION TO GET PROCEDURAL VOTE IN U.S. SENATE

Upon returning from a one-week recess, next Monday, March 25, members of the U.S. Senate are scheduled to take a procedural vote on progressive legislation being called the "Green New Deal." The proposed policy package, introduced in February by U.S. Representative Alexandria Ocasio-Cortez (D-NY) and U.S. Senator Ed Markey (D-MA), looks to address climate change by imposing challenging new standards, moving the United States off fossil fuels and drastically cutting air emissions.

U.S. Senate Majority Leader Mitch McConnell, an outspoken critic of the so-called Green New Deal, has called for a vote regarding the environmental resolution for late March, after initially saying he would force a vote before the August recess. The legislation will need 60 votes to get over the procedural hurdle and to progress in the legislative process.

"Even if we grant the Democrats' unproven claim that cratering American industries and outlawing the energy sources that middle-class families can afford would produce the kind of emissions changes they are after, we need to remember that the United States is only responsible for about 15 percent of the world's greenhouse gas emissions. Only 15 percent of the global total. And according to the Department of Energy, the U.S. cut our own energy-related carbon emissions by 14 percent from 2005 to 2017. What did the rest of the world do? They kept soaring higher and higher."

McConnell continued, "In the same time period that the U.S. cut our energy-related carbon emissions by 14 percent, the International Energy Agency found that worldwide energy-related carbon emissions rose more than 20 percent. China, the world's largest carbon emitter, increased their emissions dramatically over that period. So, believe me, if Democrats succeeded at slowing the U.S. economy and cutting our prosperity because they think it will save the planet, China will not pull over by the side of the road to keep us company. They will go roaring right on by. So the proposal we are talking about is, frankly, delusional. It is so unserious that it ought to be beneath one of our two major political parties to line up behind it."

Since the Green New Deal was put forth last month, members of the Texas congressional delegation have expressed similar viewpoints as McConnell in condemning the policy. Likewise, while speaking at TIPRO's recent Annual Convention in Austin, Texas Governor Greg Abbott also slammed the federal resolution, describing the deal as "socialistic" that would cost many trillions of dollars. "It's completely unfeasible in any way whatsoever. It shows the way socialism has hijacked the forces of capitalism... Let me tell you, socialism fails, capitalism works," Abbott said.

WHITE HOUSE DROPS LIKELY FERC NOMINEE

The Trump Administration has reportedly pulled its nomination of David Hill to serve on the Federal Energy Regulatory Commission (FERC). According to sources, Hill, a veteran lawyer who had formerly served as the Energy Department's general counsel under President George W. Bush, was supposedly being considered as a top candidate to fill the open seat at FERC. Since January, the commission has had a vacancy in its panel of leaders, after FERC commissioner and former Chairman Kevin J. McIntyre, who had been battling cancer since 2017, died. Though the White House had looked to appoint Hill to the leadership post at FERC, *Politico* reports that no longer seems to be the case, likely as a result of opposition expressed by Secretary of Energy Rick Perry and industry leaders regarding his nomination.

FERC CONSIDERS HOUSTON HEADQUARTERS

Neil Chatterjee, chair of the Federal Energy Regulatory Commission (FERC), recently spoke on the possibility of opening a regional office in Houston. While at CERAWEEK, an energy conference hosted by IHS Markit, Chatterjee stated that he was in talks with Houston Mayor Sylvester Turner about the potential office, which would have a focus on liquid natural gas (LNG) permitting. He noted the backlog of applications, suggesting that the expertise for properly handling this issue lies in Houston, the energy capital of the world. While plans are yet to be finalized, such a facility would be great news for the Texas oil and gas industry. Texas is already leading the way in LNG export terminals.

U.S. OFFSHORE OIL & GAS LEASE SALE BRINGS IN \$244 MILLION IN HIGH BIDS

The U.S. Department of Interior hosted its fourth region-wide Gulf of Mexico lease sale Wednesday, March 20, generating \$244 million in high bids from 227 available tracts in the federal waters of the Gulf. In the latest offshore oil and gas lease auction, a total of 30 companies participated, submitting \$283,782,480 in all bids, reported federal officials. This indicates growing interest in offshore activity, as the prior lease sale saw \$178 million in high bids.

“Today’s lease sale shows strong bidding by established companies, which indicates that the Gulf of Mexico will continue to be a leading energy source for our nation long into the future,” said Interior’s Assistant Secretary for Land and Minerals Management Joe Balash. “The results from today will help secure well-paying offshore jobs, while generating much-needed revenue to fund everything from conservation to infrastructure.”

“The Gulf of Mexico remains a premier basin, covering about 160 million acres. It holds about 48.5 billion barrels of oil and 141 trillion cubic feet of undiscovered and technically recoverable gas,” added Acting BOEM Director Walter Cruickshank. “[Wednesday’s] lease sale represents another step forward in the Administration’s comprehensive effort to secure domestically produced energy for our nation’s energy future.”

U.S. SETS NEXT OFFSHORE OIL & GAS LEASE SALE FOR AUGUST



In mid-March, officials with the U.S. Department of Interior and Bureau of Ocean Energy Management (BOEM) announced the next proposed offshore oil and gas lease sale featuring 78 million acres, including all available unleased areas in federal waters of the Gulf of Mexico. Lease Sale 253, scheduled for August 2019, will represent the fifth offshore sale to be conducted by the U.S. government under the 2017-2022 National Outer Continental Shelf (OCS) Oil and Gas Leasing Program, which provides for two Gulf lease sales to be held each year.

“Offshore oil and gas resources are essential to our nation’s energy portfolio and America’s energy security,” commented Interior’s Assistant Secretary for Land and Minerals Management Joe Balash. “We all benefit from a strong offshore energy program, which provides thousands of well-paid jobs, and affordable, reliable energy that Americans need to heat homes, fuel our cars, and power our economy.”

Acting BOEM Director Dr. Walter Cruickshank also cited the resounding benefits from strong offshore production of oil and natural gas, observing how “domestic offshore oil and gas development is critical for America’s economy and energy portfolio. BOEM’s staff works hard to help ensure future development is done in a manner that addresses our nation’s energy security, while protecting marine life and the environment in which they live.”

All terms and conditions for the Interior’s planned Gulf of Mexico Region-wide Sale 253 are detailed in the Proposed Notice of Sale information package, available online at <https://www.boem.gov/Sale-253/>.

IEA REPORT OFFERS GREAT SHALE NEWS FOR THE UNITED STATES

Oil and gas production boomed in 2018, placing the U.S. amongst the top producers globally. Now, the International Energy Agency (IEA) forecasts that the nation will soon lead the world in crude exports. In their recently released annual report, the IEA predicted that U.S. oil exports will double by 2024. This incredible growth is largely attributable to the shale revolution. This major shift would place the U.S. above Russia and just on Saudi Arabia’s tail, greatly changing the current oil and gas landscape.

One of the key findings from the IEA’s latest report noted that impressive U.S. shale growth is changing global markets. This is largely due to U.S. shale’s ability to respond quickly to price signals.

The U.S. will account for 70 percent of global supply growth, followed by Brazil, Iraq, Norway, the UAE and Guyana as other large sources of growth. Iran and Venezuela are expected to experience big losses.

Global oil demand is continuing to rise, though the rate of growth has slowed. India’s demand continues to rise, and may rival China’s in the next five years.

The report also highlighted U.S. shale’s importance in regards to the new International Marine Organization (IMO) limits on sulfur content in bunker fuels. With their relatively low sulfur content, lighter shale crudes require less processing and less investment to meet those new requirements.

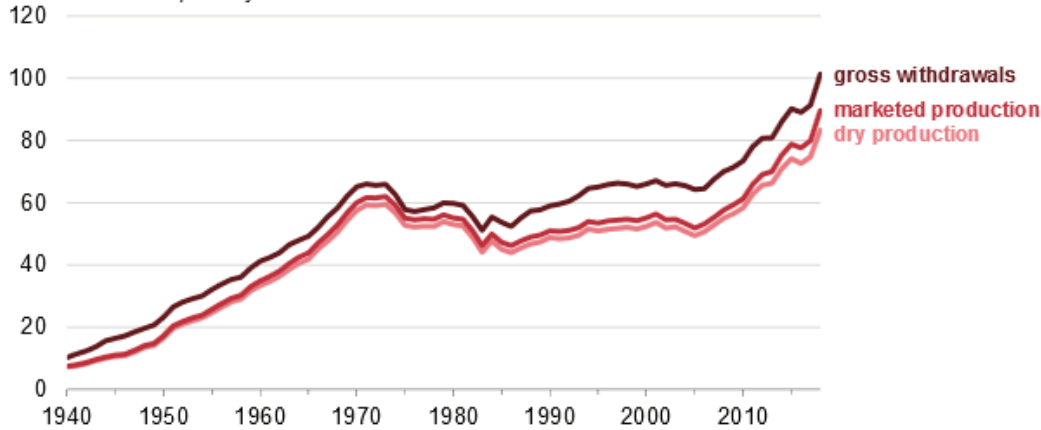
“The second wave of the U.S. shale revolution is coming,” said IEA Executive Director Fatih Birol. “It will see the United States account for 70 percent of the rise in global oil production and some 75 percent of the expansion in LNG trade over the next five years. This will shake up international oil and gas trade flows, with profound implications for the geopolitics of energy.”

Texas has played a major role in these changes, and as a state has led the nation in unconventional reservoir revolution. TIPRO is committed to continuing to fight for policies that foster growth and protect not only the economic welfare of Texans, but Americans as a whole.

U.S. NATURAL GAS PRODUCTION HITS NEW HIGHS

U.S. annual natural gas production (1940-2018)

billion cubic feet per day



Source: U.S. Energy Information Administration, Natural Gas Monthly



Last year, the United States broke record levels of production of natural gas, with 11 percent growth in output as compared to 2017, according to new data released by the U.S. Energy Information Administration (EIA). EIA analysts said in mid-March that U.S. natural gas production grew by 10.0 billion cubic feet per day (Bcf/d) in 2018, reaching a record high for the second consecutive year.

The Appalachian region in the Northeast remained the largest natural gas-producing region in the United States during 2018, observed the EIA. However, thanks to the state's prolific shale formations, Texas also supplemented

much of the increasing supply of natural gas resources in the country. Notably, extraction of natural gas was highest in the Permian Basin, wherein production grew in 2018 by 2.7 Bcf/d, or 32 percent. The Haynesville Shale formation in East Texas also accounted for an impressive segment of the country's natural gas output, with Haynesville natural gas production increasing last year by 2.2 Bcf/d, or 34 percent.

Not only has domestic natural gas production increased, correspondingly, so has the volume of exports of natural gas departing from the United States. Natural gas exports rose by 14 percent in 2018, with exports of liquefied natural gas (LNG) growing by 53 percent to 3.0 Bcf/d, according to the EIA. This trend allowed the United States to continue to export more natural gas than it imported in 2018, after becoming a net exporter in 2017 for the first time in nearly 60 years.

Experts with the EIA anticipate record-high dry U.S. natural gas production to continue increasing through 2020. Factors helping drive this production growth include improved drilling efficiency and cost reductions in drilling and well completions, as well as increased takeaway capacity from the highly productive Appalachia and Permian production regions.

GULF COAST WAS A NET EXPORTER OF CRUDE IN 2018

A recent report from the U.S. Energy Information Administration (EIA) states that the U.S. Gulf Coast became a net exporter of crude oil in 2018. Net trade fell from the 2006 high of 6.6 million barrels per day (bpd) of net imports to 0.4 million bpd of net exports in December 2018. During this time, gross exports of crude from the Gulf Coast hit a record high and crude imports to the Gulf Coast were at their lowest level in the last 33 years. The EIA cites several trends in explaining this remarkable growth. First, U.S. crude oil production has increased, particularly along the Gulf Coast, an area that mostly yields light, sweet crude. However, the refineries along the Gulf Coast are not equipped to process this type of crude meaning much more of it can be exported. Second, as production has increased, imports have decreased, not only in the Gulf region but across the nation. In addition to this, the Gulf Coast has decreased its share in total crude oil imports. The region went from accounting for nearly two-thirds of the nation's total crude oil imports to an average of 32 percent in 2018.

The Gulf Coast is also the first region to export more crude than it imports since the West Coast in the early 1990s. This remarkable accomplishment is a testament to the strength of the Texas oil and gas industry and indicative of a bright future ahead. The EIA's latest *Short-Term Energy Outlook* predicts that the U.S. will become a net exporter of petroleum products and hydrocarbon gas liquids by 2020, and these figures suggest that possibility will become reality.

CANADIAN DRONE COMPANY ANNOUNCES PLANS TO EXPAND TO HOUSTON

Canadian drone company SkyX has opened a new office in downtown Houston to further serve customers, including those in the Texas oil and gas industry. SkyX, a Canadian company, utilizes unmanned aerial vehicles (UAVs) to perform oil and natural gas pipelines inspections. Utilizing proprietary technology, SkyX can detect ground depressions and cracks, large corrosion patches on above-ground pipelines and locate above-ground pools of oil resulting from a leak. With its use of Artificial Intelligence and purpose-built drones, SkyX provides crucial data to organizations that allows for smarter decision-making and aids in mitigating risks associated with remote assets. "In the last few months, SkyX has experienced a growing demand from the oil and gas industry regarding our solution for long-range asset monitoring," SkyX CEO Didi Horn said in a statement. In addition to the new office, SkyX will also be opening a testing facility to demonstrate their services to potential clients.

This is an exciting new option for Texas pipelines and has the potential to help operators save significantly in time and costs. The new branch is also testament to the growth of the oil and gas industry in Texas.

CONFERENCE & EXHIBITION



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**Texas Independent
Producers &
Royalty Owners
Association**

With nearly 3,000 members, TIPRO is the nation's largest statewide association representing both independent producers and royalty owners. Our members include small family-owned companies, the largest publicly traded independents and large and small mineral estates and trusts.

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