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Venezuela's Natural Gas: Questions Endure

Venezuela, with its large and relatively untapped natural gas resources, has taken initial steps in developing and possibly exporting natural gas. The war in Ukraine has highlighted the important role of natural gas in the world's energy mix and the need for diverse sources to enhance global markets and improve supply security. In the medium term, Venezuelan natural gas could provide another non-Russian source of gas for Europe and elsewhere.

Venezuela's ability to develop its natural gas resources is limited by a lack of expertise, equipment, and financial capital within *Petróleos de Venezuela (PdVSA)*, the corrupt and debt-ridden state oil and gas company. U.S. sanctions on the authoritarian Nicolás Maduro government and PdVSA also likely limits the country's ability to develop its natural gas sector. The Biden Administration eased some energy sanctions on Venezuela in late 2022. Some analysts and Members of Congress oppose further relief given President Maduro's failure to negotiate with the opposition and to take steps to allow free and fair elections in 2024.

Venezuela's Natural Gas Potential

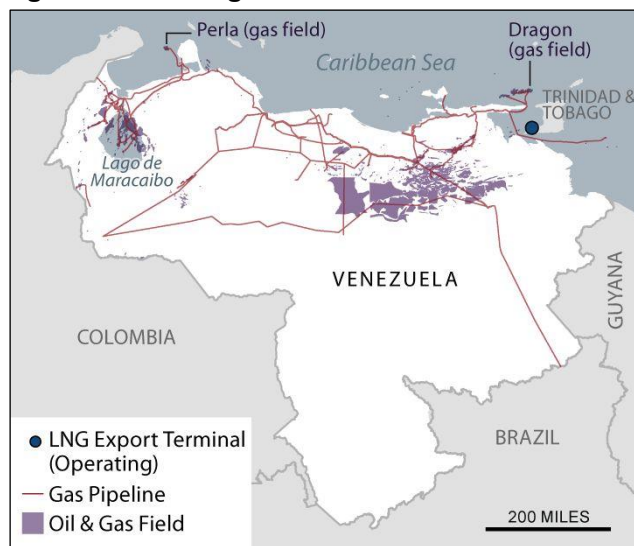
Venezuela has vast natural gas reserves, estimated at 6,300 billion cubic meters (BCM), the seventh largest in the world. As part of Venezuela's first steps to developing its large natural gas resources, the country announced that two internal licenses for the export of natural gas would be issued in June 2023, which had not happened as of the date of publication. Two major European oil and natural gas companies—ENI of Italy and Repsol of Spain—have been working in Venezuela since the 1990s and eventually began producing natural gas primarily for domestic use. The joint venture between ENI, Repsol, and PdVSA, known as *Perla*, is located in the western part of Venezuela and is producing approximately 3.1 BCM a year of natural gas, which is not a lot compared to the major U.S. fields, but it is enough to export. (See **Figure 1**.) This could be increased if the necessary conditions, such as Venezuelan reforms and U.S. licenses, are put in place by the Maduro government and the international community, including the United States.

Getting a license to export is a necessary step toward exporting natural gas from Venezuela. However, developing the natural gas resources and increasing production may take legislative and regulatory reform in Venezuela, as well as significant time, money, and other infrastructure, including pipelines.

There may be an opportunity to send Venezuelan natural gas to Trinidad and Tobago for export. Trinidad and Tobago has been a liquefied natural gas (LNG) exporting country for many years and has a partially idled LNG export terminal, which could become operational if additional natural gas were supplied. By sending this gas to

Trinidad, it would allow Venezuelan natural gas to reach markets in a much shorter amount of time. (See CRS In Focus IF10914, *Trinidad and Tobago*, by Karla I. Rios).

Figure 1. Select Regional Natural Gas Assets



Source: Compiled by CRS using IHS 2019 data and 2017 Department of State data.

The Dragon natural gas field in Venezuela (see **Figure 2**) currently is not producing and would require additional development to start production. It is located relatively close to Trinidad. Industry estimates that the Dragon Field, which would include companies from Venezuela, Trinidad and Tobago, and Europe, could be producing approximately 1.5 BCM a year within two years. Additionally, there are other fields in the area of Dragon, both in Venezuela and Trinidad and Tobago, that may provide additional production in the future.

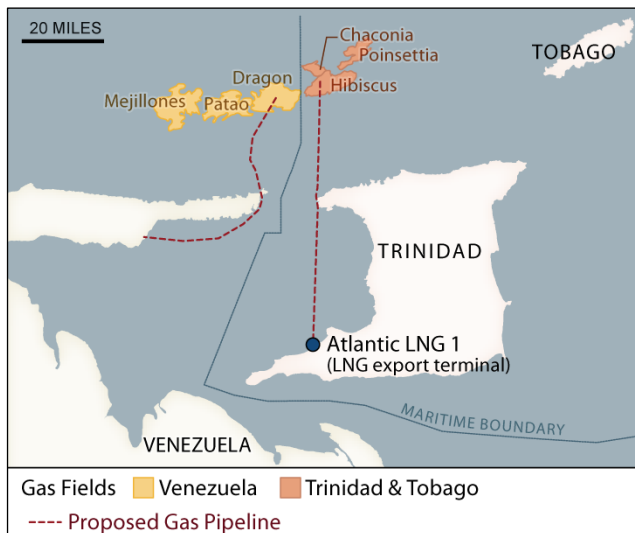
Venezuela also flares (burns natural gas that cannot be captured) a large amount of natural gas. About 80% of Venezuela's natural gas production is associated with its oil production, meaning it is produced whether or not there is demand for it. If this natural gas could be captured, it could be exported as well. Utilizing Venezuela's natural gas more fully may help reduce its emissions, which ranked in the top five last year according to the World Bank, by decreasing flaring.

Another factor in developing Venezuela's natural gas resources is that the Maduro government, including PdVSA, is subject to extensive U.S. economic sanctions. While the United States has imposed targeted sanctions on Venezuelan officials and individuals for more than 15 years, the Trump Administration expanded economic

sanctions in response to the increasing authoritarianism of President Nicolás Maduro, who came to power in 2013. U.S. sanctions, for example, restrict Venezuela's access to U.S. financial markets; impose full blocking sanctions on PdVSA and Venezuela's central bank, among other entities; and enable the imposition of secondary sanctions on foreign entities that assist or support the Maduro government.

In January 2023, Trinidad and Tobago received a two-year license from the U.S. Treasury Department to engage with Venezuela on developing the Dragon Field. However, some uncertainty surrounds the project. The Maduro government is not permitted to receive any cash payments from the project, which hampers Trinidad's relationship with Venezuela. Instead, Trinidad and Tobago provide humanitarian supplies to Venezuela as payment.

Figure 2. Dragon Field Export Project Rendition



Source: Compiled by CRS from the 2019 IHS database and the 2023 Sovereign Limits database.

Trinidad and Tobago's government is reportedly petitioning the U.S. Treasury Department to be allowed to pay PdVSA in cash. In March, the governments of Venezuela and Trinidad and Tobago signed confidentiality agreements, which are needed to establish a negotiating framework. They were scheduled to meet again in June, which has not happened as of the publication date. If negotiations go well, Trinidad's energy minister stated that natural gas could begin flowing to international markets in two years.

More Gas Resources than Production

Although Venezuela is an important player in global oil markets, it has not been for natural gas. Venezuela has generally been self-sufficient in natural gas for decades, producing all the natural gas it consumes, but never exporting. Between 2007 and 2015, Venezuela imported small volumes of natural gas from Colombia to meet its needs. Regardless, Venezuela is a member of the Gas Exporting Countries Forum, a nascent cartel referred to as "Gas OPEC," a reference to the oil cartel.

Venezuela has enough natural gas, at its current production rate, to last over 300 years. For comparison, the United States has just under 14 years-worth of proven reserves. If Venezuela were to produce at the same rate as the U.S. ratio, its annual production would be about 450 BCM compared to its almost 19 BCM per annum, currently. At the higher rate, it would also leave a large amount of natural gas for export, if domestic consumption did not rise to the same level. It could also be a new source of significant revenue for Venezuela. However, ongoing corruption and mismanagement by the Maduro government makes this scenario unlikely in the near future.

U.S. Policy and Natural Gas

In 2022, the Biden Administration sought to support negotiations between the Maduro government and the democratic opposition. In November 2022, the Department of the Treasury issued a license to allow Chevron to conduct business with PdVSA as an incentive for Maduro to make progress in negotiations aimed, in part, at making the presidential elections due in 2024 freer and fairer. While some in Congress supported that move, others opposed the license and introduced legislation that would prohibit U.S. imports of Venezuelan oil.

Chevron has resumed shipments from Venezuela to the United States and recouped some of the billions in debt PdVSA owes it, but political negotiations in Venezuela appear to remain stalled. On June 30, 2023, the State Department expressed "deep concern" about Maduro officials' decision to bar a leading opposition candidate from competing in elections. On July 6, Secretary of State Antony Blinken said that disqualifying opposition candidates is "deeply unfortunate" and that international efforts to press for free and fair elections will continue.

Despite these developments, some energy analysts have urged the Administration to issue a license for ENI and Repsol to work with PdVSA to export gas. They argue that such a license could contribute to global markets and European energy security while supporting negotiations. Skeptics doubt such a move would incentivize Maduro to negotiate in good faith, particularly since some neighboring countries have restored relations with his government without criticizing its antidemocratic actions. Congress may consider requesting more information about any Biden Administration efforts to grant sanctions relief to Venezuela in the natural gas sphere and then either encourage or discourage such actions.

See: CRS In Focus IF10230, *Venezuela: Political Crisis and U.S. Policy*; CRS In Focus IF10715, *Venezuela: Overview of U.S. Sanctions*; and CRS Report R44841, *Venezuela: Background and U.S. Relations*.

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