



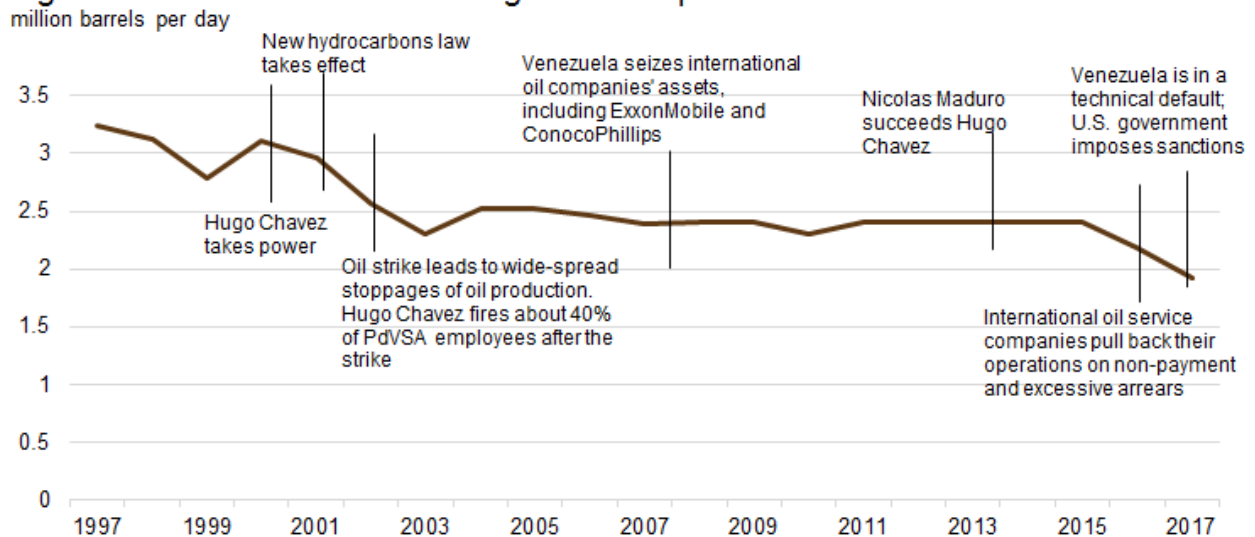
Country Analysis Executive Summary: Venezuela

Last Updated: January 7, 2019

Overview

- Reduced capital expenditures by state-owned oil and natural gas company Petróleos de Venezuela, S.A. (PdVSA) are resulting in foreign partners continuing to cut activities in the oil sector, making crude oil production losses increasingly widespread. With Venezuela's heavy dependency on the oil industry, the country's economy will likely continue to shrink, and that the runaway inflation will remain the mainstay at least in the short term.
- Venezuela's revenue from oil exports is severely constricted because only about half of the exports generate cash revenues. U.S. refiners are among the few customers that still remit cash payments. The remaining crude oil exports are sold domestically at a loss or sent as loan repayments to China and Russia (the repayments to Russia are sent to Nayara Energy's (formerly Essar) Vadinar refinery in India to service debt that Venezuela owes to Russian oil company Rosneft, the co-owner of the Vadinar refinery).

Figure 1. Venezuela's annual average crude oil production



Source: U.S. Energy Information Administration, *Short-Term Energy Outlook June 2018*

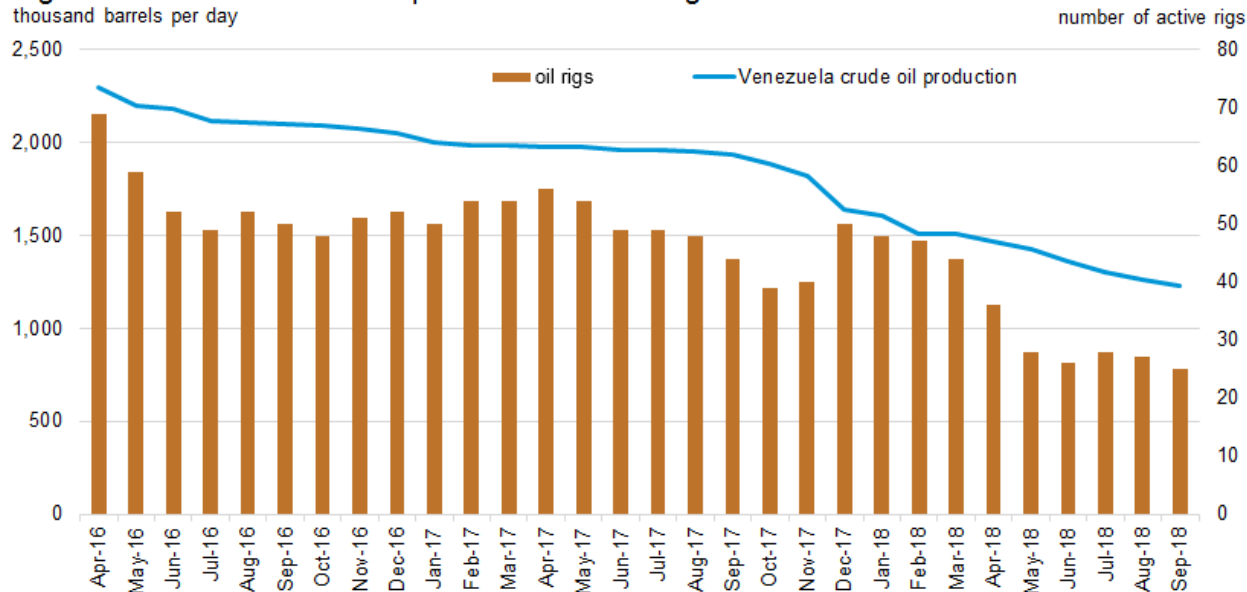
Petroleum and other liquids

- In January 2018, Venezuela had 302 billion barrels of proved oil reserves, the largest in the world.¹

Exploration and production

- Venezuela's crude oil production has declined rapidly and has fallen to a 30-year low (excluding the decline in production during the 2002–03 strike, Figure 1). As of May 2018, Venezuela's crude oil production was 1.4 million barrels per day (b/d). Despite its production declines, Venezuela was still the 12th largest producer of petroleum in the world in 2017.
- The number of active rigs fell from nearly 70 in the first quarter of 2016 to 25 rigs in September 2018 (Figure 2). Reports indicate that missed payments to oil service companies, a lack of working upgraders, a lack of knowledgeable and able managers and workers, and declines in oil industry capital expenditures will continue to affect crude oil production negatively.²

Figure 2. Venezuela's crude oil production and total rig count

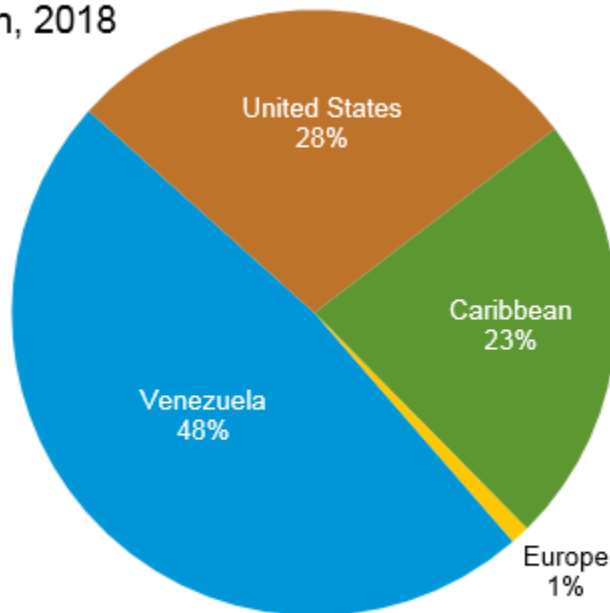


Source: Venezuela's crude oil production: U.S. Energy Information Administration, *Short-Term Energy Outlook October 2018*; Rig count: Baker Hughes

Refining

- Venezuela had 1.3 million b/d of domestic nameplate crude oil refining capacity in 2017, which were all operated by PdVSA.³ However, actual refining capacity in early 2018 was less than half of its nameplate capacity, estimated at 626,000 b/d.
- PdVSA also operates significant refining capacity outside the country. The largest share of Venezuela's foreign downstream operations is in the United States, followed by significant operations in the Caribbean and stakes in Europe (Figure 3).

Figure 3. PdVSA's crude oil refining nameplate capacity by region, 2018

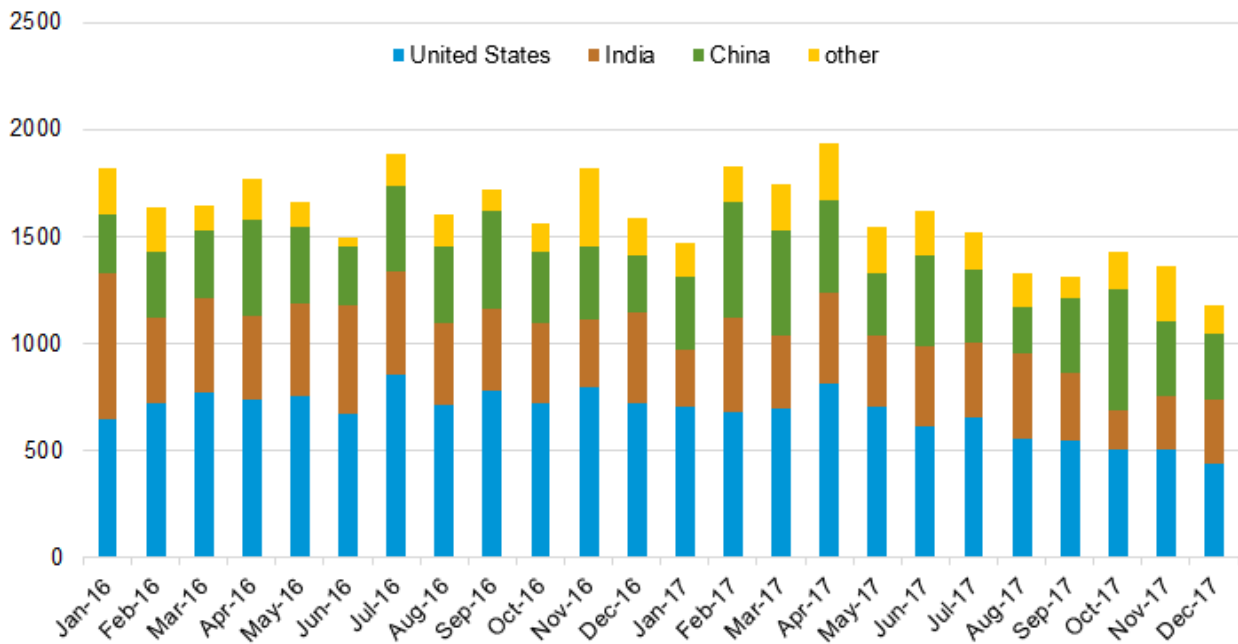


Source: Oil and Gas Journal, PdVSA, IPD Latin America, trade press

Trade

- According to tanker tracking data, Venezuela exported an average of 1.5 million b/d of crude oil in 2017, 10% lower than the 2016 level. In the first quarter of 2018, exports of Venezuela's crude oil fell to 1.1 million b/d, based on tanker loadings data.
- Venezuela's crude oil exports to the United States fell from 840,000 b/d in December 2015 to about 480,000 b/d in March 2018—at its peak, U.S. imports of Venezuelan crude oil averaged 1.1 million b/d in 2007. Venezuela was the third-largest supplier of crude oil imports into the United States after Canada and Saudi Arabia.
- The United States is the primary destination for Venezuelan crude oil shipments and receives about 41% of Venezuela's total exports. The second- and third-largest destinations and the fastest-growing destinations of Venezuelan crude oil exports have been India and China. EIA estimates that Venezuela sent more than 386,000 b/d of crude oil to China and 332,000 b/d of crude oil to India in 2017 (Figure 4).

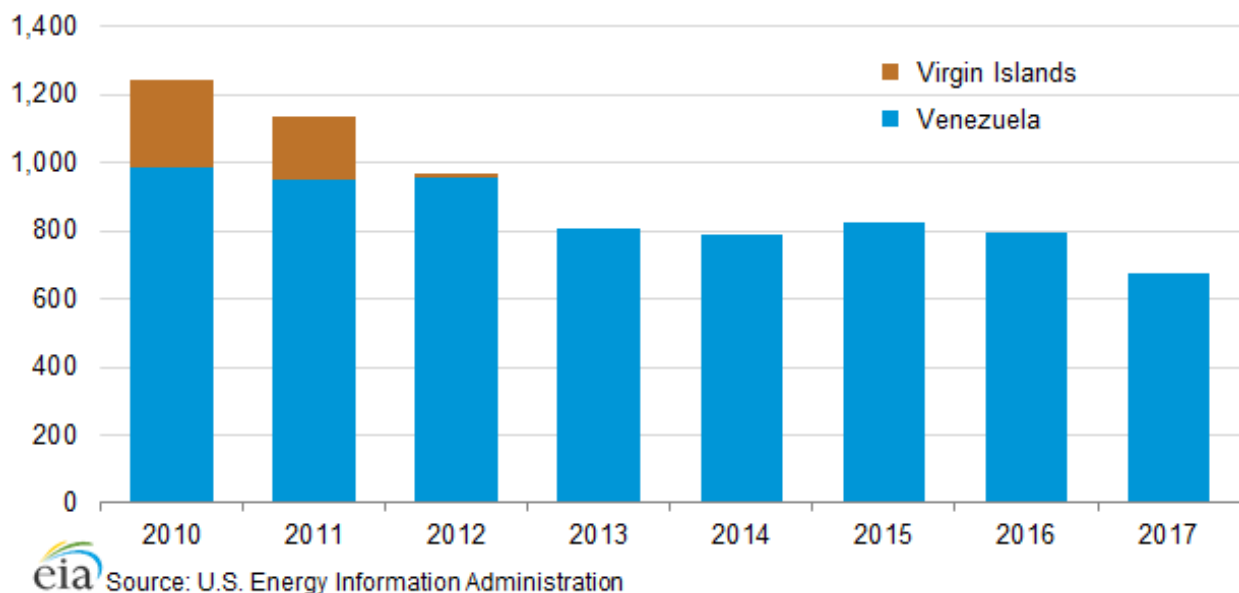
Figure 4. Venezuela's exports of crude oil, January 2016-December 2017
thousands barrels per day



Source: U.S. data: U.S. Energy Information Administration, other data: U.S. Energy Information Administration based on data published by Clipper Data Inc.

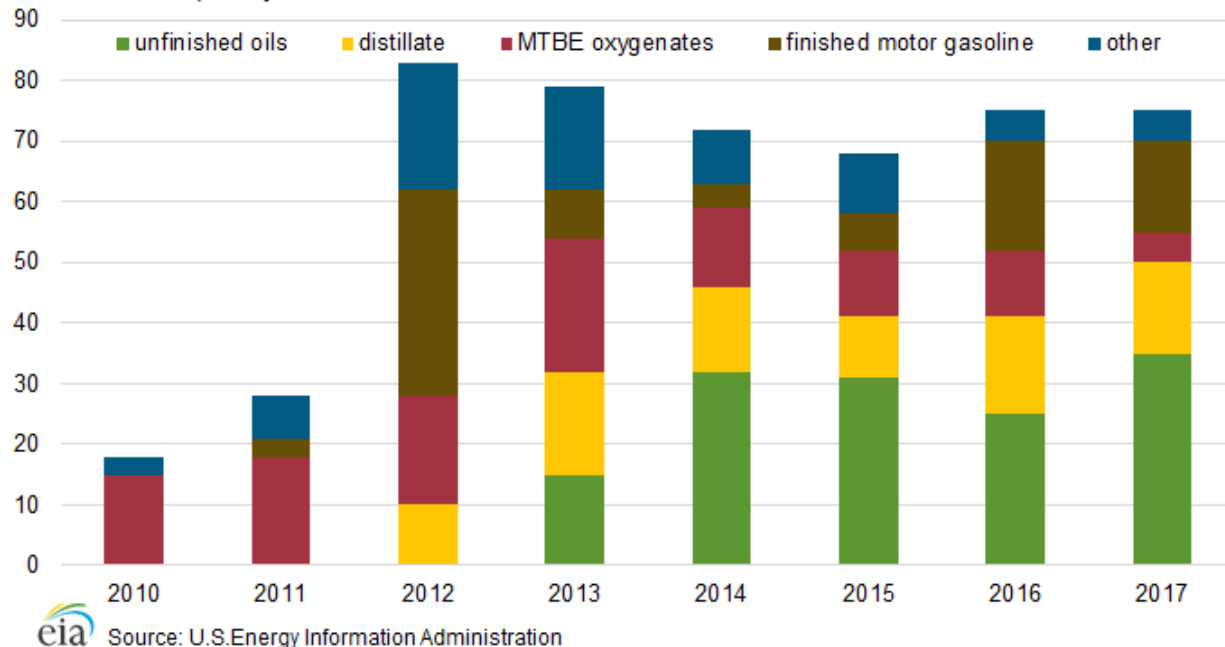
- In mid-June 2018, ConocoPhillips' seizure of PdVSA's Caribbean export and storage facilities hampered Venezuela's ability to maintain its export levels until it came to a repayment agreement with ConocoPhillips in August 2018. The country relies on these terminals to send crude oil to Asia.
- In addition to crude oil, the United States imported about 55,000 b/d of refined products from Venezuela in 2017, and this volume of imports has remained relatively steady since 2013 (Figure 5). U.S. imports of petroleum products in 2017 from Venezuela primarily consisted of motor gasoline blending components (18,000 b/d), kerosene-type jet fuel (15,000 b/d), and residual fuel oil (14,000 b/d).

Figure 5. U.S. total oil imports from Venezuela and U.S. Virgin Islands
thousand barrels per day



- U.S. exports of petroleum products to Venezuela have increased largely because of a lack of the funds needed to maintain domestic refineries (Figure 6). In 2017, the United States exported 77,000 b/d of petroleum products to Venezuela, 45% of which was unfinished oils, which are blended with heavy crude oils for processing.

Figure 6. U.S. exports of petroleum products to Venezuela, by type
thousand barrels per day



- In 2017, Venezuela exported crude oil from nine loading points. Venezuela’s largest terminal by barrels loaded is the Jose Terminal, located offshore of the Jose industrial complex in the northeast of Venezuela. It consists of two berths that can handle 300,000 deadweight tons at an average of 55,000 barrels per hour.⁴
- In addition to crude oil, PdVSA exports refined products from Curacao. The loading terminal in St. Eustatius is operated by NuStar Energy, and PdVSA rents storage tanks for exporting crude oil. In 2017, about 4% of Venezuela’s crude oil was exported from this terminal. Bonaire accounted for another 3% of Venezuelan crude oil exports. PdVSA owns this 10 million barrel BOPEC terminal. PdVSA and Citgo lease a refinery and a storage terminal in Aruba, but crude oil is not exported from that island.

Table 1. PdVSA’s crude oil loading terminals and percentage shares of total exports, 2017

Loading point	Percentage of total loadings during 2017
Jose Terminal, Venezuela	73%
Curacao Terminal, Curacao	10%
Puerto De La Cruz, Venezuela	5%
St. Eustatius Terminal, St. Eustatius	4%
Bonaire Terminal, Bonaire	3%
Puerto Miranda Terminal, Venezuela	3%
Bajo Grande Terminal, Venezuela	1%
Nabarima FPSO, Venezuela	1%
Amuay Bay Terminal, Venezuela	1%

Source: U.S. Energy Information Administration, based on information published by ClipperData, Inc. tanker tracking database

Natural gas

- Venezuela had 203 trillion cubic feet (Tcf) of proved natural gas reserves in 2017.⁵

Exploration and production

- In 2016, Venezuela produced 3.3 billion cubic feet per day (Bcf/d) of natural gas and consumed 3.4 Bcf/d of natural gas.
- In 2017, more than 38% of Venezuela’s total natural gas production was reinjected, according to data published by Rystad Energy.⁶
- To attract foreign investment, Venezuela awarded 18 natural gas exploration and production licenses to private companies, but currently only five of those licensees are operating (including three in which PdVSA Gas serves as a minority partner). As of early 2018, these licenses accounted for 860 thousand cubic feet per day (Mcf/d) of natural gas production, according to IPD Latin America.⁷
- In July 2015, operations began at the offshore Perla field project, where output reached nearly 550 Mcf/d in the first quarter of 2018, according to IPD Latin America.⁸

Electricity

- In 2017, Venezuela generated more than 117 billion kilowatthours of electricity, an increase of more than 5% compared with the previous year, according to data published by BP.⁹ The low electric generation in 2016 was primarily the result of extreme drought conditions during the year and lack of sufficient rainfall because hydroelectricity provides most of Venezuela's electricity supply.
- More recent declines in generation are the result of technical failures affecting both the hydropower and thermal electric power generation plants. These issues include the government's inability to repair or maintain facilities that are vital to electric power generation.
- In February 2018, six states in Venezuela reported power blackouts that lasted as long as 15 hours, affecting large population centers (including the capital city Caracas). Since then, the National Electricity Corporation (CORPOELEC) announced that it is implementing power rationing that affects seven states.¹⁰

Notes

- In response to stakeholder feedback, the U.S. Energy Information Administration has revised the format of the *Country Analysis Briefs*. As of December 2018, updated briefs are available in two complementary formats: the Country Analysis Executive Summary provides an overview of recent developments in a country's energy sector and the Background Reference provides historical context. Archived versions will remain available in the original format.
- Data presented in the text are the most recent available as of December 12, 2018.
- Data are EIA estimates unless otherwise noted.

Endnotes

¹ Oil and Gas Journal, "Worldwide Reserves Report," January 2018.

² Reuters, "Venezuela's deteriorating oil quality riles major refiners," October 18, 2017.

³ Oil and Gas Journal, "Worldwide Refining Survey," January 2018.

⁴ Clipper Data, Inc tanker loadings (accessed April 2018) and Energy Intelligence World Crude Oil Data, Venezuela" (accessed April 2018).

⁵ Oil and Gas Journal, "Worldwide Reserves Report," January 2018.

⁶ Rystad Energy, May 2018 data update (accessed May 2018).

⁷ IPD Latin America, "Venezuela's Natural Gas Sector: Getting to Yes," (March 30, 2018).

⁸ Ibid.

⁹ BP [Statistical Review of World Energy, 2018](#)

¹⁰ IPD Latin America, "Venezuela's Lurch into Darkness," (March 23, 2018).