

**Risk Assessment Analysis**

---

# Political Risk Assessment Mitigating Political Risk to the Venezuelan Oil Industry

Prepared by the Leadership & Democracy Lab, University of Western Ontario

---

Published April 2021



## **Generated By**

Sheetal Vemannagari - *Team Leader*  
Harleen Cheema - *Research Analyst*  
Madison Regan - *Research Analyst*  
James Rosenthal - *Research Analyst*  
Yash Jethoo - *Research Analyst*  
Ben Danzinger - *Research Analyst*  
Madison Binder - *Research Analyst*  
Alireza Mirshafiei - *Research Analyst*

## **Democracy Lab Student Directors**

Nikhil Pandeya  
Bitu Pejam

## **Democracy Lab Faculty Directors**

Dr. Peter Ferguson  
Martin Edinberg  
Christine DeClercy

## **Graphic Design & Report Layout**

Huda Mukhtar

Leadership and Democracy Lab  
University of Western Ontario  
1151 Richmond Street  
London, Ontario, Canada, N6A 3K7

<http://www.democracylab.uwo.ca/>

**Published April 2021. All rights reserved**

# Table of Contents

- Venezuela & PDVSA.....6
  - 1. Historical Economic Dependence on Oil.....6
  - 2. Venezuelan International Relations.....6
  - 3. Governance and Guaidó.....7
  
- Resources.....8
  - 4. Poor Cash Position.....8
  - 5. Lack of Human Capital.....8
  - 6. Lack of Foreign Direct Investment.....9
  
- International Cooperation.....9
  
- Preface.....9
  
- Risks
  - 7. Biden Presidency.....9
  - 8. Sanctions.....10
  - 9. Ostracism from Latin America.....11
  - 10. Reliance on Russia.....12
  - 11. Alliance with Iran.....13
  - 12. China-Venezuela Relationship.....14
  
- Global Trends.....16
  - 13. Technological Trends.....16
  - 14. Energy Transitions.....16
  
- Appendix.....18
  
- Bibliography.....20
  
- Endnotes.....23

# Executive Summary

Venezuela, a founder of the Organization of the Petroleum Exporting Countries (OPEC) is one of the world's largest exporters of oil, holding 20% of global reserves. Although these reserves once transformed the global energy market and the country's economy, under the leadership of Hugo Chavez, the oil sector has been in steep decline. Production has been hindered by years of international sanctions and mismanagement, bringing Venezuela's era as an energy powerhouse to an end.

This report compiles research from a wide range of primary and secondary sources to diagnose several risks facing the Venezuelan oil industry. Provided is a compiled collection of mitigation strategies to help minimize risks and identify opportunities for improvement.

This document features four sections:

## **1. Venezuela & The PVDSA:**

A broad overview of how the country's structure and governance impact the oil industry.

## **2. Resources:**

An examination of the country's poor cash position, human capital, foreign direct investment and suggestions to change Venezuela's current standing.

## **3. International Cooperation:**

An investigation into Venezuela's relationships with other countries and solutions which propel the country towards strategic change.

## **4. Global Trends:**

An analysis on how technological and energy trends will change the demand for Venezuelan oil, and what the country can do to cope.

<b>Mitigations</b>	<b>Risks</b>	<b>Economic Risks</b>	<b>International Relations Risks</b>	<b>Leadership Risks</b>	<b>Energy Trends Risks</b>
Modernize refineries		■			■
Reduce emissions					■
Social Welfare Fund		■			
Diversification (Economy)		■	■		
Pay Loans		■	■		
Leveraging Oil		■	■		
Support from LIMA for opposition (Guaido)				■	
Renegotiating Debt					
Cash management & Taxation changes		■	■		
Invest in clean energy		■			■
Industry management				■	
Education and STEM spending		■			
Pro-democracy programs			■	■	
Leveraging existing allies		■	■		
Allow more US workers in Venezuela		■	■		
Take efforts against Hezbollah		■	■		
Make concessions		■	■		
Work with opposition (Guaido)			■		
Better relations with China and Turkey		■	■		

# Venezuela & PDVSA

## Historical Economic Dependence on Oil

### RISK

Upon its discovery in 1922, oil has become a strong source of income for the Venezuelan economy, accounting for around 80% of their exports in 2017. and this has only shifted to dependence as time passed. Similar to the Netherlands' discovery of oil in the North Sea (1959), Venezuela found itself falling into an economic theory named "Dutch disease". This concept describes the macroeconomic effect of a new commodity or resource, such as oil, being discovered. Other areas of the economy are then forgone to build up infrastructure relating to the newly discovered resource. Labour and capital are taken away from the manufacturing or agricultural sectors which are considered crucial to any country's development. When the resource runs out or its prices fall, there is a large rise in unemployment and depreciation of currency. The country is then reliant on a failing sector without the required development in other areas of the economy. In the case of Venezuela, this has been transpiring for almost a century, restricting economic growth.

### MITIGATION

Despite exhibiting Dutch disease for a considerable amount of time, there are ways for the country to readjust its economic trajectory. One possible mitigation is the creation of a social wealth fund or SWF. An SWF is an investment fund that is owned by a country comprised of various stocks, bonds, and other sources. This type of fund would give Venezuela an external source of income to invest in the infrastructure development required to enlarge its oil sector. Another way Venezuela can increase their oil revenue is to decrease the Petr6leos de Venezuela, S.A.(PDV-

SA) budget allocation to social programs. As of 2002, 10% of its budget must be allocated to development not in the oil sector, but should this be decreased, oil profits can be used to build up the sector's infrastructure and drive revenues for the long-term.

## Venezuelan International Relations

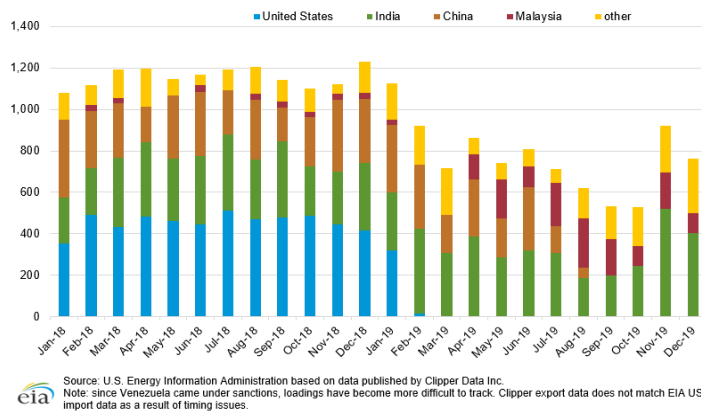
### RISK

Due to a number of political and international factors, Venezuela has a negative reputation in the international community, evidenced by sanctions put in place to prevent Venezuelan business abroad. For example, Venezuela ranks 162 out of 179 countries on Transparency International's Corruption Index. Despite this, the country has had some success in creating relationships with others through its connections with the Organization of Petroleum Exporting Countries (OPEC) and other countries in its immediate vicinity. Venezuela, a founding member of OPEC, is in good standing with the organization and indirectly has an impact on oil prices worldwide. Typically, quotas are needed from all members and when a state is underperforming, other states, usually those in the Middle East, will sell extra capacity to make up for it. However, due to an increasing emergence of US oil in recent years, these countries are less willing to invest in spare capacity because of a decreasing market share, which negatively impacts Venezuela's OPEC standing. Venezuela also joined Mercosur, which is a trade agreement between South American countries, in 2006 but has since been suspended due to political turmoil. During their time in the agreement, deals were made with countries including Brazil, Argentina, Columbia and more but having their membership suspended will hinder future agreements. Despite the

sanctions and lack of trust in the international community, there is still a large interdependence between the US and Venezuela. 11% of US oil imports come from Venezuela and 60% of Venezuelan exports go to the US. With increasing sanctions and American oil becoming more prominent, this partnership will deteriorate and further depreciate the Venezuelan economy.

Source: [US Energy Information Administration](#)

Figure 3. Venezuela's exports of crude oil, January 2018-December 2019  
thousand barrels per day



## MITIGATION

Even though Venezuela's international relations are largely negative, there are ways to mitigate this risk and rectify its economy. Currently, Venezuela has made attempts to diversify its oil clients to lessen American dependence and they should continue to do this. Especially with incoming US sanctions, it is imperative that the country shifts clients to diversify its exports and reduce risk. Another mitigation spanning from the aforementioned client diversification is that oil is a commodity that is always demanded. Regardless of international sanctions placed on Venezuela, there will always be countries that will ignore these and purchase Venezuelan oil. While their international standing is unlikely to be remedied unless their political situation becomes less chaotic, there will consistently be clients looking to import oil from Venezuela. As well, Venezuela should look into further diversification in the Asian markets, specifically that of China due to having a prior relationship; although this relationship has wavered a bit, the two countries are on neutral terms and this could ensure there are consistently exports to a country that is not the US. This will be discussed in depth in the foreign risk section of the report.

## Governance and Guaidó

### RISK

Maduro's continued corruption and mismanagement have proven that he is not suited to recover the Venezuelan oil industry. For example, he failed to reinvest in the industry and has appointed military officials with no expertise on oil, solely because of their loyalty to him. However, despite wide domestic unfavourability and opposition leader Guaidó proclaiming himself the legitimate president, the Maduro regime has managed to maintain its power. His regime has the ability to remove all dissidents and deny Guaidó's claims, allowing him to push the oil industry into ruin.

Guaidó made a strong start, and was recognized by many in the international community as the rightful president. However, his approval dropped from 60% in February 2019, to 25.5% in May that year. Further, the Maduro regime has managed to replace the leaders of three opposition parties with individuals loyal to them. Ángel Alvarado, a lawmaker for the opposition Justice First party, stated that these individuals had all been paid off by the regime. Other members of the opposition have been imprisoned or fled to resist arrest. This strategy of repressing the opposition, without removing them fully has allowed Maduro to claim the country is still being run as a democracy. Maduro's refusal to hold a fair election has been condemned by many in the international community, namely the United States - resulting in heavy sanctions. These sanctions have further crippled the country's oil-dependent economy and have further damaged the industry.

### MITIGATION

Although a complete power transition remains unlikely, one route through which this could be achieved is using Guaidó's support in combination with better organization. Guaidó would be the ideal candidate due to his existing support in the international community. This change in leadership would bring stability to the country and repair and design the future of the oil industry. To maximize his chances of coming to power, Guaidó and other opposition forces should cooperate to create more

powerful demonstrations and gain public support. In exchange for the lifting of individual sanctions, the Lima Group could be persuaded to support the interim government. The opposition under Guaidó and Lima Group Armed Forces could march on centers of power and pressure Maduro out of office. If the opposition forces successfully achieve a large-scale series of demonstrations with support from groups like the Lima Group, they would have the potential to create an uprising that even Maduro could not reverse. Although removing Maduro is not an absolute fix for Venezuelan oil, or the overall economy it would be the first step in rebuilding the industry.

# Resources

## Poor Cash Position

### RISK

The Venezuelan government relies on the PDVSA to finance social programs on its behalf such as health care, housing and education. As a result, the PDVSA's finances are strained. In 2014, the PDVSA spent \$26 billion on social programs when it only brought in a profit of \$12 billion. The pattern of the PDVSA spending more than its profit has been present since 2006. This has come at the expense of the PDVSA not investing in "basic maintenance of its equipment and facilities such as pipelines and refineries." To stay afloat the PDVSA has been issuing bonds but its poor cash management makes it difficult for it to make the necessary coupon payments. For example, the PDVSA defaulted on \$404 million in coupon payments in 2016. Defaulting will reduce the PDVSA's ability to borrow and could result in its global assets being seized which includes fuel shipment tankers and international refineries. Thus, using the PDVSA as a tool to finance social programs is unsustainable going forward and could cost Venezuela the health of its oil industry.

## MITIGATION

In the short term, the mitigation strategy the PDVSA should focus on renegotiating the terms of their debt with creditors. It should look to stretch out payment terms because given the financial circumstances of being in a pandemic the PDVSA cannot afford to cut social spending in the country. Possible concessions the PDVSA could make to have creditors agree to terms could include converting part of their debt into equity to incentivize renegotiating debt. With the only other option being defaulting on payments and having creditors have to write off large amounts of debt this strategy would likely be met with success.

In the long term many look to a regime change to bring better cash management policies however, a democratically elected leader would not stay in power if they completely cut the PDVSA's social spending and relied on taxation. Instead, a phased approach with the policy implementation continuing past the tenure of the current office should be pursued. Social spending by the PDVSA would decrease in small increments annually with taxation increasing in small increments over an extended period of time.

## Lack of Human Capital

### RISK

Venezuela has the highest poverty rates in Latin America having overtaken Haiti in 2020.<sup>xvii</sup> As a result, Venezuelans have been fleeing the country. Since 2015 "more than 2 million Venezuelans have fled the country" which is "roughly 7 percent of the population."<sup>xviii</sup> However, this has not been the only exodus within the past two decades. After the 2003 workers' strike, Chavez fired 20 000 PDVSA employees who left the country and took their talents places such as Colombia or the Caribbean.<sup>xix</sup> In the meantime Chavez filled the PDVSA's board and leadership positions with his supporters. With the country essentially facing brain-drain and a decrease in the size of the working class the risk that arises is that there is no one qualified enough to lead the oil industry. The current mismanagement of the industry reflects that Maduro's loyalists do not have the expertise and are not capable of the task. However, with the current regime, it is difficult to incite



change as Maduro wants his supporters in positions of power, sacrificing the oil industry in the process.

## MITIGATION

In the short term, the PDVSA should learn best practices by studying other state-owned and private oil companies. Adopting similar business tactics would keep the PDVSA competitive until more qualified personnel in the long term can rise through the ranks. A recruitment system based on meritocracy should be implemented to fill any new vacancies within the company. To satisfy Maduro's need to have his loyalists in power the board of directors could be filled with his supporters.

## Lack of Foreign Direct Investment

### RISK

The shift towards sustainable sources of energy, American shale revolution and rise of other oil-producing countries have made the Venezuelan oil industry unattractive to foreign direct investors. All of this has resulted in a fall in oil production by over/almost 200 000 barrels per day. Decreased oil sales can be dangerous to the country, as oil and gas exports make up 95% of Venezuelan export revenues.<sup>xx</sup> Due to PDVSA's poor cash position and lack of resources, the industry has not upgraded facilities or maintained equipment, necessitating foreign investment.

Because 40% of Venezuelan crude exports used to go to the U.S, new American sanctions require the PDVSA to find buyers for 500 000 barrels of crude per day.<sup>xxi</sup> It is also expected that production costs will increase because the oil produced is heavy and needs to be diluted in order to export it. However, the U.S has banned shipments of diluents to South American countries and Venezuela needs 100 000 barrels of diluent per day.<sup>xxii</sup> Oil production is also expected to fall by/to 200 000 barrels per day.<sup>xxiii</sup> Thus, the industry's profitability will be hit, warding off the foreign direct investment needed to revitalize the industry and risking its ability to stay afloat.

## MITIGATION

The Venezuelan government should change policies to attract and award investment in the nation. For example, Venezuela has one of the highest tax rates in the world for foreign oil companies and as a result, the state takes near 90% of revenues from oil and gas companies. Lowering this tax rate to take between 50-80% of revenues would be closer to competitors and the lower it is made the more attractive the industry is to invest in.<sup>xxiv</sup> Although there would be a loss of tax revenues there would be a larger influx investment to offset the losses. The Venezuelan government should also look to bettering its relations with other nations to attract investment. This topic will be further explored in the foreign risks section of the report.

# International Cooperation

## Preface

International perception and image are critical to a country's political and economic strength both in the international and domestic spheres. This reality is clearly demonstrated in the case of Venezuela. For Venezuela's oil industry to recover, the Maduro regime needs to receive aid from other countries to both access global markets and help fix the PDVSA's numerous shortcomings. The viability and success of Venezuela's oil industry are heavily reliant on what markets and trade options are available to Venezuelan oil, which has resulted in Venezuela's international isolationism (regionally and globally) contributing to their declining oil industry. Mitigating Venezuela's status as an international pariah and securing economically and politically profitable international relationships has to be a priority for the Maduro regime.

## Biden's Presidency

### RISK

The current Biden administration clouds the future of the Global oil market. Potential cuts to domestic oil production could result in increased production levels from other OPEC members, as well as rises in American unemployment. Currently, Venezuela has the strongest alliances with Iran and China, and a friendlier American foreign policy towards Venezuela may weaken these ties. The possible impacts of a Biden administration on global markets are difficult to predict but are largely estimated to negatively affect the oil industry. Potential actions such as instituting harsher tariffs on oil imports would impede any efforts from Venezuela to increase its exports to the US. While in the 90s Venezuela accounted for 20 percent of US oil imports, in 2018 the number dropped to 6%.<sup>xxv</sup> As such, the potential for a return to the 1990s remains unlikely.

### MITIGATION

The December stimulus package provided \$33 million to Venezuela for "pro-democracy" programs.<sup>xxvi</sup> Potential for further aid exists, both as a necessary

measure in the aftermath of the COVID-19 crises, as well as promoting American goals abroad. Ensuring financial aid is used properly is difficult, however, US actors could monitor any potential outcomes, to verify the aid is being used and affecting change. Aid to Venezuelan oil production will likely come in the form of monetary aid, instead of increasing trade with the US. The current migration crisis in Venezuela is a target for further monetary aid, and negotiations about democratic elections would greatly increase the likelihood of Venezuela receiving aid. US foreign policy has the incentive to aid Venezuelan industry and break away at their ties with Russia and China. Pushes for further cooperation between the two nations can be of great aid. The current ties with Russia and China present an uncertain outlook into the future wherein Venezuela will be the subject of a larger global conflict. To ensure their own success, Venezuelans must take caution when developing ties with America. Potential democratic aid must be agreed upon by Maduro and the currently ruling government, without impacting agreements with other allied nations as well as the Venezuelan people. The poor state of Venezuelan infrastructure and skilled labourers creates a large hamper on attempts to restore manufacturing. American losses in energy employment could be tied to US-based initiatives to aid repairs and possibly provide training. Initiatives like these would do well to strengthen ties and promote growth in the industry.



Source: [Miami Herald](#)

# Sanctions

## RISK

The Venezuelan economy has been crippled by sanctions, seeing its production fall to 420,000 b/d from 1.9 million b/d in 2017.<sup>xxxvii</sup> With oil revenue falling from \$4.8 billion in 2018 to \$447 million in 2020, Venezuela is severely hampered in its growth.<sup>xxxviii</sup> The strong ties between Iran and Venezuela present difficulties for easing of sanctions, as Hezbollah increases its presence in Venezuela and its trafficking. As Maduro further entrenches himself in power, the likelihood of a change in governance becomes increasingly unlikely. The hardline stance of the Trump administration and their backing of Juan Guaidó presented considerable difficulty to Maduro and Venezuelan hopes of reconciliation. The exit of Trump from power could bring a less aggressive approach to Venezuela and sanctions. Currently, the discord in American affairs has seen a relaxation in the enforcement of sanctions, since October 2020.<sup>xxxix</sup>

## MITIGATION

Sanctions such as E.O. 13224 from 2008 regarding anti-terrorism efforts are unlikely to be relaxed, however, the various financial and sectoral sanctions present a more hopeful outlook.<sup>xxxxi</sup> Executive orders from President Biden could greatly aid this endeavour and would likely be approved by the Democratic majority in the senate. Recent crude-for-diesel swaps between India's Reliance Industries and Venezuela saw 4 million barrels of crude a month being exported from Venezuela.<sup>xxxii</sup> The American sway ending these agreements could see a reversal under the Biden administration. Increases in US industry based in Venezuela are possible as well, with various companies such as Chevron and Citgo being granted extensions on waivers to operate in Venezuela, albeit largely confined to strictly maintaining upgrading operations.<sup>xxxiii</sup> Potential amendments made to these waivers can significantly aid the recovery of Venezuelan oil production. Harsher sanctions like the blocking of Repsol, based in Spain, also have the potential for amendments that allow Venezuela a larger market share.<sup>xxxiv</sup>

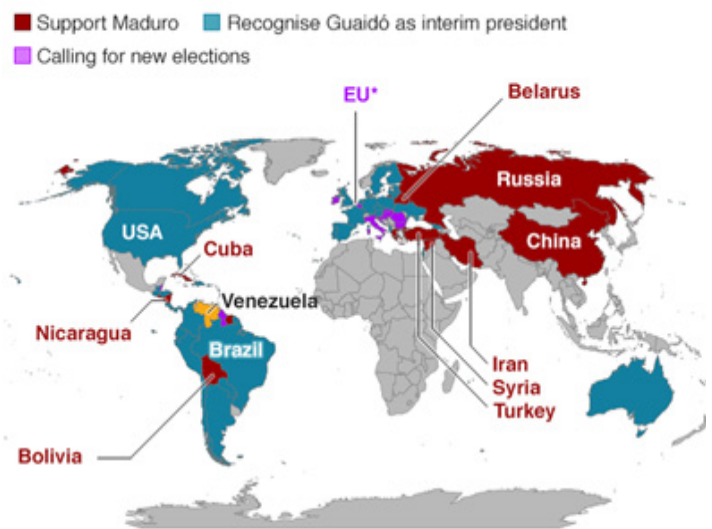
# Ostracism from Latin America

## RISK

The Maduro regime had, by and large, ostracized themselves from their Latin American counterparts. As such, Latin America has generally been divided into two camps of allyship, with Venezuela and its few Latin American allies, Bolivia, Nicaragua, and Cuba, in one camp, and the Lima Group (a group dedicated specifically to resolve the Venezuela crisis) in the other. Further, the Maduro regime has deeply fractured the OAS, leaving it paralyzed by partisan divisions over the issue of Venezuela.<sup>xxxv</sup>

This division in Latin America originated with Chavez's election in 1999, and Maduro's regime has only served to make this division wider and more apparent.<sup>xxxvi</sup> Due to Venezuela's political corruption, international image, and decreasing economic viability, Venezuela has become increasingly diplomatically and politically isolated from most of the Latin American countries in the OAS and Mercosur (both the OAS and Mercosur have openly opposed Maduro's re-election) and are working closely with the Lima Group and EU Contact Group to find a resolution to the Venezuela crisis (see figure below).

Where do countries stand on Venezuela?



\*The EU has called for new elections but some individual member countries have expressed their preferences.

Data as of 16:30 GMT 4 Feb 2019

Source: [BBC](#)



## MITIGATION

To mitigate the increasing intensity and widespread nature of Latin American opposition to Maduro, the government should consider conceding on certain political demands from the Lima Group and EU Contact Group. Venezuela's isolation is not viable in the long-term, as demonstrated by its refugee and humanitarian crisis. The Maduro regime will likely need to work with Guaidó, as Maduro's 're-election' is cited by both Mercosur and the OAS as the reasoning for their opposition to Venezuela.<sup>xxxvii</sup> Giving some political concessions demanded by the Lima Group would help save the country's economy, trade interests, and aid the humanitarian crisis.

Appearing more cooperative can also help shift the position of some Latin American countries back to more neutral stances. The increasing violence associated with the Maduro regime after his re-election has pressured some otherwise neutral Latin American countries, such as Mexico, Uruguay, and several Caribbean countries, to be pro or anti-Maduro (almost all have chosen the latter).<sup>xxxviii</sup> As seen by Cuba's recent offer of assistance to the Lima Group, if Venezuela continues on its current trajectory, the economic and diplomatic pressure against Venezuela will increasingly push its few remaining regional allies away. The Maduro regime cannot rely solely on Cuba, Nicaragua, and Bolivia to sustain Venezuelan interests, and must have more cooperative relations with other regional players to ensure Venezuela's survival.

## Reliance on Russia

### RISK

The Maduro regime has needed to rely heavily on larger powers like Russia and China for political, financial, and military aid amongst growing international opposition to Venezuela and its declining internal situation. Russia and China are both deeply entrenched in Venezuela's oil industry but differ in their approach and overall goals in their involvement. Through their oil company Rosneft, Russia has a substantial stake in Venezuela's oil, having loaned over \$17 billion to Venezuela between 2006 and 2017.<sup>xxxix</sup>

### The Lima group

They will meet in Bogota next week to support Venezuelan opposition leader Juan Guaidó



Source: [Digital Journal](#)

Russia is one of the only foreign investors that has been somewhat paid back for such loans, essentially leaving it the only investor in Venezuela that is receiving any economic benefits, as Venezuela has had a poor record of paying investors back. Russia, unlike other countries, has seen a return on their investment because of how they accept payment. Rather than receive money back for all of their loans, Rosneft has accepted the PDVSA's 50% share in American-owned oil company Citgo (which has since cut all ties with the PDVSA and Rosneft amid US sanctions).<sup>xl</sup> Russian investment in the PDVSA is more motivated by political gain than economic gain; it has little issue with the economic risks associated with an investment in the PDVSA. The main goal of investing is to gain a political foothold in the country.

Russia doesn't appear to have a comprehensive long-term plan for Venezuela; they seem to have neglected the possibility that any political gains in Venezuela can be overshadowed by the economic costs. This can be seen by Rosneft's recent sale of its PDVSA assets to the Russian government-owned company Roszarubezhneft in early 2020. The sale was the result of Rosneft's non-Russian shareholders determining that PDVSA investment was not economically viable. While the sale means that Russia is now more involved

in the PDVSA, it also sends the message that Russian investments have largely neglected the establish proper economic foundations for their investments

Russian officials have been clear that much of their involvement in Venezuela is motivated by broader Russian geostrategic aims. Heavy involvement in Venezuela allows for Russia not only to assert influence in the South American region but also to challenge the US and its allies in the region.<sup>xliii</sup> Russia's presence in Venezuela has further antagonized the US, reducing the likelihood that sanctions or pressure will be eased. If Russia's economic and political involvement in Venezuela continues as it currently stands, the long-term negative political effects of the relationship on Venezuela's international position will make it difficult to capitalize on most of the economic benefits the Russian relationship has to offer. In short, the Venezuela-Russia relationship may well harm the Maduro regime's long-term economic and political recovery more than it will aid it.

## MITIGATION

Venezuela needs substantial support from bigger powers to hope to kickstart its oil industry again and have it succeed in the long-term. Therefore, the country's best shot at mitigating the international pressure that is associated with Russian involvement would be to increase involvement with China. As it stands currently, the Chinese government has been pulling out of Venezuela due to continuous political corruption and inefficiency that is hindering the PDVSA.<sup>xliiii</sup> This situation has not only caused China to lose money in its Venezuelan investments, but it has also given the perception that Venezuela isn't capable of genuine political and economic partnership. While Venezuela has managed to make some inroads in the issue however, as it has paid back over half of the \$62 billion given by the Chinese government through oil, US sanctions have continued to put the PDVSA in an increasingly worse economic position as time goes on.<sup>xliv</sup>

Working with China rather than Russia would also benefit Venezuela as China has been attempting to establish not just economic foundations, but strong political and social foundations in Venezuela. China has invested in several other sectors of Venezuela, with the aim of building up the country's in-

frastructure. Examples include Chinese investment in building 20,000 homes, building a high-speed railway, and creating a massive rice manufacturing plant. Almost all of these ventures have massively failed due to Venezuela's political corruption, as the railway has not been built, and the rice manufacturing plant is producing at less than 1% of capacity.<sup>xliv</sup>

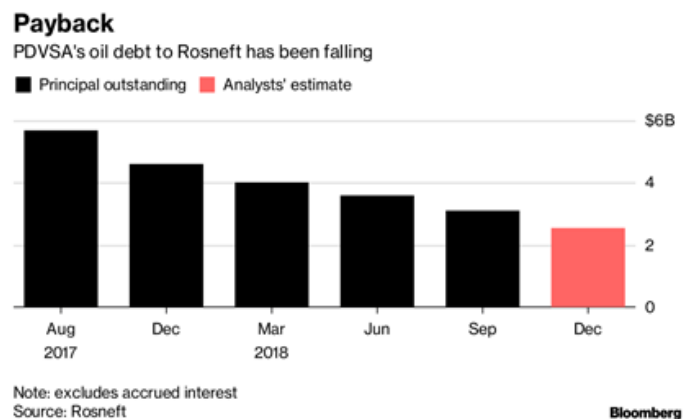


Source: The Inter-American Dialogue, China-Latin America Finance Database



Source: [Center for Strategic and International Studies](#)

In 2019, China provided the Maduro regime with roughly 40% of its food imports and has been a critical lifeline during COVID-19 by sending PPE, medical supplies, and medical personnel.<sup>xlvi</sup> Contrary to Russia, China appears to have a much more cohesive long-term plan in Venezuela as a whole as seen by their infrastructure initiatives. As a generally non-antagonistic player in the international realm, China offers Venezuela much better long-term prospects both for internal stability and economic prosperity, and potential for reintegration into the international community.



Note: excludes accrued interest  
Source: Rosneft



Source: [Bloomberg](#)

## Alliance with Iran

### RISK

The current international perception of Venezuela and its anticipated future has been heavily based on who it views as true allies. Venezuela's alliances with Iran and Turkey are highly influential in Venezuela's international image as these alliances are viewed as ones of friendship and interest alignment. Iran and Venezuela's relationship has been recently rekindled as the two have found common ground as international pariahs, but it was initially based on their common interest in oil in the 2000s.<sup>xvii</sup> After a brief separation following Chavez's death, Iran and Venezuela have become increasingly closer as international pressure against the two has mounted. This relationship has only seemed to worsen Venezuela and Iran's positions as it particularly alarms the US. The public link between Venezuela and Iran, and more specifically the link between Maduro and Hezbollah is a huge risk to Venezuela's ability to keep its economy afloat. The close connection between the Maduro regime and Hezbollah has been favoured by both Iran and Venezuela. Iran sees Hezbollah's foothold in Venezuela as critical for expanding its transnational network (as Venezuela is a hub for Hezbollah), while Maduro can utilize Hezbollah to retain political control and profit from illicit markets and revenue streams.<sup>xviii</sup> The Venezuela-Hezbollah link has resulted in the US escalating pressure on the Maduro regime and facilitated further measures on arms prohibition and counter-terrorism initiatives.<sup>xix</sup> If US counter-terrorism initiatives in the region are successful, and Hezbollah becomes ineffective in Venezuela, the Maduro regime will lose a critical lifeline.

### MITIGATION

Venezuela could greatly remove the risks associated with being Iran's ally by instead strengthening its recent alliance with Turkey. Despite a working strategic relationship with the US, Turkey has recently become more involved in Venezuela by helping the Maduro regime evade US oil sanctions. Turkey's interest in Venezuela stems from broader geostrategic goals and potential economic benefit from Venezue-

lan industries (oil, gold, and mining).<sup>i</sup> The Turkey relationship offers many of the benefits that the Iranian relationship does, but without its risks. Turkey's international position allows it to operate in Venezuela in several non-legal ways while avoiding the global backlash that Iran does. One case is Venezuela's gold. Both Iran and Turkey have funded Venezuela's gold trade through mostly illegal methods, but Turkey's methods have flown under the radar as most of the illegal activity occurs in Turkey (Maduro moved a gold refinery from Switzerland to Turkey in 2018 after gold sanctions).<sup>ii</sup> Turkey has also been a reliable buyer of Venezuelan oil despite the sanctions and has received relatively little backlash.<sup>iii</sup> Another benefit of the Turkey-Venezuela relationship is that it has been cultivated on the relationship between Maduro and Turkish President Erdogan, which makes Turkey a new, but reliable ally for Venezuela.<sup>iiii</sup> A closer public alliance with Turkey gives the Maduro regime a more stable bilateral alliance and mitigates the negative attention and consequences associated with the Iranian relationship, while maintaining many of the benefits. A good bilateral alliance with Turkey could also give Venezuela a foot in the door of Europe in the long-term.

## China-Venezuela Relationship

### RISK

In recent years Venezuela has looked favourably towards China as a means to diversify its oil exports which have been overwhelmingly dependent on the United States of America. This desire to dilute US influence became all the more important as the relationship between the United States and Venezuela has soured since the death of former president Hugo Chávez in 2013.<sup>iv</sup> However, the risk that affects Venezuela is whether or not they are trading a subordinate role under one power with another to create new vulnerabilities.

The growing relationship between China and Venezuela appears to be natural; on one hand, China is the world's largest importer of oil and Venezuela has the largest proven oil reserves in the world, upwards of 300 billion barrels. For the most part, the Chinese government has answered the call for greater cooperation, providing upwards of \$62 bil-

lion in loans to Venezuela which have constituted the largest loans China has provided not only in the Latin American region but the entire world.<sup>lv</sup> In order to pay back said loans, the Venezuelan government has provided China access to their oil and the companies in charge of it. Subsequently, Venezuela only has approximately \$20 billion left to repay.<sup>lvi</sup>

As it stands, the People’s Republic of China appears to be unwilling to directly challenge the United States for control of Venezuela’s petroleum sector. By failing to meet these expectations, it has been called into question the extent to which Chinese commitments will develop it as a key partner in the future. China supposedly ceased its daily extraction of approximately 350,000 barrels after the sanctions imposed by the United States in August 2019—however, it is largely believed that the Chinese secretly imported Venezuelan oil disguised as coming through Malaysia.<sup>lvii</sup>

in 2019 with approximately 321,000 barrels a day.<sup>lviii</sup>

Another mitigation for the China-Venezuela relationship is simply to continue to wait and continue engaging in joint ventures between the two states. The fact that Chinese Officials have held informal conversations with Juan Guaidó shows that China considers the preservation of Chinese contracts to be crucial in the event of any transition of power.<sup>lix</sup> This means that any presumed hesitancy in Chinese commitments can be attributed to uncertainty during the present presidential crisis, and that China believes that continued relations and support of Venezuelan oil industries are critical to being repaid for their loans.

### Chinese Lending to Latin America and the Caribbean, 2007–19

The China Development Bank and China Export-Import Bank have provided \$138 billion in loans to governments and state-owned enterprises throughout Latin America and the Caribbean since 2007. About 45 percent has gone to Venezuela.



Source: Kevin P. Gallagher and Margaret Myers, "China-Latin America Finance Database," Inter-American Dialogue, [www.thedialogue.org/map\\_list](http://www.thedialogue.org/map_list).

Source: [The Dialogue](http://TheDialogue.org)

## MITIGATION

The first mitigation for the Venezuela-China relationship will be for the Venezuelan government to look to the rationale behind its relationship with China, to avoid the adverse effects of being economically dependent on a single state like they were of the United States. Therefore, the Venezuelan government should continue to further diversify in countries like Russia and India—India itself was among the primary importers of Venezuelan oil

# Global Trends

## Technological Trends

### RISKS

Among the greatest risks facing Venezuela's oil industry is the impact that ageing infrastructure will have in the coming years. Within the oil industry, it is reported that approximately half of significant maintenance-related projects in mature oil fields are a result of ageing infrastructure.<sup>lx</sup> The subsequent increase in operational risk for refineries has already begun to show itself in Venezuela as the PDVSA continually attempts to restart severely damaged and dysfunctional refineries. There has been a marked increase in the incidence of industrial accidents, specifically spills, in the summer of 2020.<sup>lxi</sup>

#### A summer of oil accidents in Venezuela

1. A pipeline near the Cardon refinery has leaked an unknown volume of oil.
2. The El Palito refinery has leaked an estimated 26,000 barrels of oil since July.
3. The FSO Nabarima, laden with 1.3 million barrels, is taking on water.



Source: [The Washington Post](#)

In addition to the environmental damage brought on by ageing infrastructure, there is

also a significant impact on the health and well-being of those who live near oil refineries. Oil refineries are prone to releasing toxic pollution into the air that can result in serious health issues such as cancer, birth defects, and asthma.<sup>lxii</sup>

### MITIGATIONS

The first steps that should be taken by the PDVSA would be to invest in new technologies like carbon capture, uphold industry safety standards, and set enforceable air pollution limits. By being proactive through the adoption of the aforementioned suggestions, the PDVSA and Venezuelan government would ensure that future costs associated due to ageing infrastructure and technology could be extensively mitigated. In addition to improving the quality of life for those living near oil refineries, any action taken could drastically improve the efficiency and effective lifespan of the current infrastructure. Finally, it is important to note that the current shutdown of Venezuelan oil refineries constitutes the greatest opportunity for the PDVSA to refit them with new and more efficient technologies instead of ageing ones. These shutdowns and decreased outputs are largely the results of US sanctions and the decreased demand for gasoline during the Coronavirus pandemic, after which demand should normalize.

## Energy Transitions

### RISKS

The projected global clean energy transition to renewable sources of energy, such as wind and solar technologies, is one of the greatest challenges that Venezuela will have to face in the coming decades. In addition to possessing the world's largest reserves of oil, Venezuela's oil revenues constitute 99 percent of the country's export earnings, meaning that it has by far the most to lose in the event fossil fuels are phased out of use.<sup>lxiii</sup> In 2019, Bloomberg New Energy Finance has projected that by 2040, 57 percent of all automobiles sold worldwide will be electric.<sup>lxiv</sup>

Setting aside the possibility that fossil fuels are phased out, the energy transition is critical

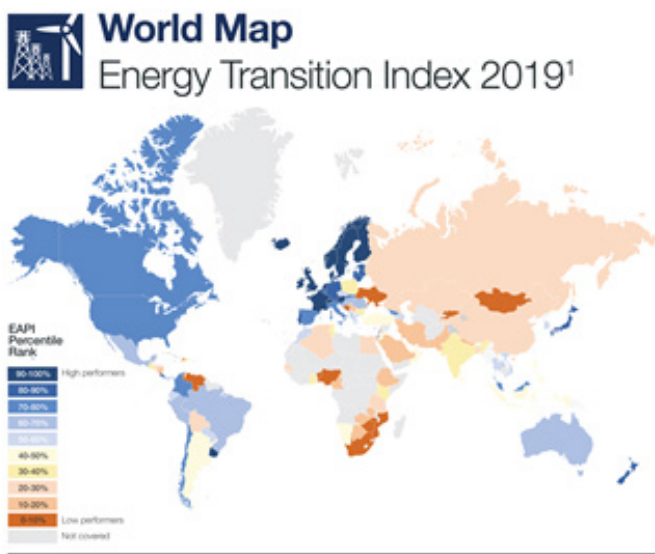


to many South American countries. Venezuela is one of these states, as it presently receives a large portion of its energy from renewable sources like the Guri Dam, which has suffered significant shortages due to El Nino and extreme weather patterns.<sup>lxv</sup> It is also estimated that over the next 20 years, renewable energy will constitute the fastest-growing energy source in the world, encompassing two-thirds of all investments in power plants by 2040.<sup>lxvi</sup>

## MITIGATIONS

To respond to this inevitable change, the PDVSA can begin transitioning from solely an oil company to an energy company, which can be achieved by investing back into renewable technologies. Given that Venezuela's oil reserves are difficult to presently take advantage of, as well as the national power outages that have occurred in part to the decreased oil outputs, it is critical that the Venezuelan government fully harness the renewable technologies at their disposal as opposed to letting them fall into disrepair.<sup>lxvii</sup> Past national studies have determined that Venezuela has significant potential for geothermal, wind, hydroelectric, and solar energy in many regions.<sup>lxviii</sup> Therefore, the government should adopt a holistic perspective and conduct a demand study evaluating present policies surrounding energy standards as well as GHG emissions to develop a modern national energy plan.

Another mitigation, though problematic, would be to do nothing and disregard the proposed energy transition altogether. Despite the explosive growth of electric car sales, from 17,000 electric cars on the world's roads in 2010 to approximately 7.2 million in 2019, gasoline-based cars number upwards of 1.4 billion.<sup>lxix</sup> This means that at least for the foreseeable future, the demand for gasoline will not disappear. Finally, similar to advancements in the feasibility of electric cars, significant advancements are also taking place to make gasoline cars more efficient and environmentally viable.



**Note 1:** The Energy Transition Index benchmarks countries on the performance of their energy system, as well as their readiness for transition to a secure, sustainable, affordable, and reliable energy future. ETI 2019 score on a scale from 0 to 100%.  
**Source:** Fostering Effective Energy Transition Report 2019, World Economic Forum

Source: [World Economic Forum](https://www.weforum.org/publications/fostering-effective-energy-transition-report-2019/)

# Appendix

## COUNTRY INFORMATION

### Location

Northern coast of South America, roughly 2100km/1300 miles from the United States.

### Languages

Official language: Spanish (Castilian). Chinese (400,000), Portuguese (254,000), Italian (200,000).

### Predominant Religions<sup>ii</sup>

The most common religion in Thailand is Buddhism followed by Theravada.

### International Allies<sup>iii</sup>

Russia, China, Iran, Cuba, Turkey

### Voting<sup>iv</sup>

Voting age is 18, and voting is not compulsory.

### Population<sup>v</sup>

- 28,520,000 (2019)
- Capital (Caracas): 2,082,000
- Population growth: -1.2% (2019)

### Governmental Structure<sup>vi</sup>

- Federal presidential republic
- Executive branch: president elected by plurality vote and a serve 6-year term
- Legislative branch: the judicial branch and the citizen branch

### Key Figures

- Nicolás Maduro (president)
- Juan Guaidó (interim-president/former member of the social-democratic Popular Will party)

### Legal System<sup>vii</sup>

- Supreme Justice Tribunal (TSJ) with 32 justices elected for 12-year terms
- Rulings based on Civil Law

### Corruption<sup>viii</sup>

- 173rd/180 countries in transparency
- In 2014, 75% of Venezuelans believe corruption is widespread within the government.
- Ranked 17th in corruption



### Health Concerns<sup>ix</sup>

- Life expectancy: 72.13 years
- 63% increase in infant death (2012-2016)
- Outbreak of various vaccine-preventable diseases measles and diphtheria.

### Economy<sup>x</sup>

- GDP 2014: 482,000,000,000 USD (2014)
- GDP 2020: 250,000,000,000 USD (2020)
- Per Capita GDP 2014: 16,000 USD
- Per Capita GDP 2020: 10,000 USD
- Main source of income: Petroleum

### Human Rights Violations<sup>xi</sup>

- Unlawful or arbitrary killings
- Forced disappearances
- Torture
- Life-threatening prison conditions

### Unemployment rate<sup>xii</sup>

- 2020: 9.38%
- 2019: 8.8%
- 2018: 7.22%
- 2017: 7.3%

# Endnotes

- i. Amelia Cheatham. "Venezuela: The Rise and Fall of a Petro-state." Council on Foreign Relations. Council on Foreign Relations, January 22, 2021. <https://www.cfr.org/background/venezuela-crisis>.
- ii. Ianchovichina, Elena, and Harun Onder. "Dutch Disease: An Economic Illness Easy to Catch, Difficult to Cure." Brookings. Brookings, October 31, 2017. <https://www.brookings.edu/blog/future-development/2017/10/31/dutch-disease-an-economic-illness-easy-to-catch-difficult-to-cure/>.
- iii. F Norrestad. "Leading SWFs Worldwide by Assets 2021." Statista, February 3, 2021. <https://www.statista.com/statistics/276617/sovereign-wealth-funds-worldwide-based-on-assets-under-management/>.
- iv. Cesar J. Alvarez. "Venezuela's Oil-Based Economy." Council on Foreign Relations. Council on Foreign Relations, February 9, 2009. <https://www.cfr.org/background/venezuelas-oil-based-economy>. Helima Croft. "Understanding OPEC's Agreement to Raise Production: A Conversation with Helima Croft." Atlantic Council, September 5, 2019. <https://www.atlanticcouncil.org/blogs/energysource/understanding-opec-s-agreement-to-raise-production-a-conversation-with-helima-croft/>.
- vi. Moises Rendon. "Are Sanctions Working in Venezuela?" Are Sanctions Working in Venezuela? | Center for Strategic and International Studies, June 20, 2021. <https://www.csis.org/analysis/are-sanctions-working-venezuela>.
- vii. Moises Rendon. "Can Sanctions on Venezuela Be Improved?" Can Sanctions on Venezuela Be Improved? | Center for Strategic and International Studies, February 17, 2021. <https://www.csis.org/analysis/can-sanctions-venezuela-be-improved>.
- viii. Amelia Cheatham, and Rocio Cara Labrador. "Venezuela: The Rise and Fall of a Petrostate." Council on Foreign Relations. Council on Foreign Relations, January 22, 2021. <https://www.cfr.org/background/venezuela-crisis>.
- ix. John Otis, "Venezuela's Maduro Holds Firmly To Power- And Squeezes The Opposition," NPR (NPR, July 28, 2020), <https://www.npr.org/2020/07/28/896261268/venezuelas-maduro-holds-firmly-to-power-and-squeezes-the-opposition>.
- x. John Otis, "Venezuela's Maduro Holds Firmly To Power- And Squeezes The Opposition," NPR (NPR, July 28, 2020), <https://www.npr.org/2020/07/28/896261268/venezuelas-maduro-holds-firmly-to-power-and-squeezes-the-opposition>.
- xi. Moises Rendon, and Mark L. Schneider. "Analyzing Obstacles to Venezuela's Future." Center for Strategic and International Studies, November 6, 2019. <https://www.csis.org/analysis/analyzing-obstacles-venezuelas-future>.
- xii. Lisa Viscidi, "Venezuela on the Brink: How the State Wrecked the Oil Sector—and How to Save It," Foreign Affairs 95, no. 5 (2016): 134. <http://www.jstor.org/stable/43946964>.
- xiii. Lisa Viscidi, "Venezuela on the Brink: How the State Wrecked the Oil Sector—and How to Save It," Foreign Affairs 95, no. 5 (2016): 135. <http://www.jstor.org/stable/43946964>.
- xiv. Lisa Viscidi, "Venezuela on the Brink: How the State Wrecked the Oil Sector—and How to Save It," Foreign Affairs 95, no. 5 (2016): 135. <http://www.jstor.org/stable/43946964>.
- xv. Carolyn Cui, "Venezuela's PdVSA Misses \$404 Million Payments on Bonds," The Wall Street Journal, November 22, 2016, <https://www.wsj.com/articles/venezuelas-pdvsa-misses-404-million-payments-on-bonds-1479768989>.
- xvi. Lisa Viscidi, "Venezuela on the Brink: How the State Wrecked the Oil Sector—and How to Save It," Foreign Affairs 95, no. 5 (2016): 136. <http://www.jstor.org/stable/43946964>.
- xvii. Sheyla Urdaneta, Antoly Kurmanaev, Isayen Herrera, and Adriana Loueriro Fernandez, "Venezuela, Once an Oil Giant, Reaches the End of an Era," The New York Times, October 7, 2020, <https://www.nytimes.com/2020/10/07/world/americas/venezuela-oil-economy-maduro.html>.
- xviii. Juan S. Gonzalez, "The Venezulean Crisis and Salvador Allende's Glasses," Prism 8, no.1 (2019): 45, <https://www.jstor.org/stable/26597309>.
- xix. Juan S. Gonzalez, "The Venezulean Crisis and Salvador Allende's Glasses," Prism 8, no.1 (2019): 44, <https://www.jstor.org/stable/26597309>.
- xx. Lisa Viscidi, "Venezuela on the Brink: How the State Wrecked the Oil Sector—and How to Save It," Foreign Affairs 95, no. 5 (2016): 136. <http://www.jstor.org/stable/43946964>.
- xxi. "What's Next for Venezuela?," J.P. Morgan, February 7, 2019, <https://www.jpmorgan.com/insights/research/venezuela-outlook-2019>.
- xxii. "What's Next for Venezuela?," J.P. Morgan, February 7, 2019, <https://www.jpmorgan.com/insights/research/venezuela-outlook-2019>.
- xxiii. "What's Next for Venezuela?," J.P. Morgan, February 7, 2019, <https://www.jpmorgan.com/insights/research/venezuela-outlook-2019>.
- xxiv. Lisa Viscidi, "Venezuela on the Brink: How the State Wrecked the Oil Sector—and How to Save It," Foreign Affairs 95, no. 5 (2016): 139. <http://www.jstor.org/stable/43946964>.
- xxv. Jude Cemente. "Venezuela's U.S. Oil Loss is Canada's Gain" Forbes. August 14, 2019. <https://www.forbes.com/sites/judecemente/2019/08/14/venezuelas-u-s-oil-loss-is-canadas-gain/?sh=69ccd9e960ed>
- xxvi. \$900 billion COVID-19 Relief Package (Page 1498)
- xxvii. Mery Mogollon. "Commodities 2021: Venezuela's Oil industry expected to deteriorate further" S&P Global Platts. January

- 4th, 2021. <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/010421-commodities-2021-venezuelas-oil-industry-expected-to-deteriorate-further>
- xxviii. Mery Mogollon. "Commodities 2021: Venezuela's Oil industry expected to deteriorate further" S&P Global Platts. January 4th, 2021. <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/010421-commodities-2021-venezuelas-oil-industry-expected-to-deteriorate-further>
- xxix. U.S. Government Printing Office, "Hezbollah in Latin America – Implications for U.S. Homeland Security" U.S. Government Publishing Office. July 7, 2011. <https://www.govinfo.gov/content/pkg/CHRG-112hrg72255/html/CHRG-112hrg72255.htm>
- xxx. Mery Mogollon. "Commodities 2021: Venezuela's Oil industry expected to deteriorate further" S&P Global Platts. January 4th, 2021. <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/010421-commodities-2021-venezuelas-oil-industry-expected-to-deteriorate-further>
- xxxi. Clare Ribando Seelke. "Venezuela: Overview of U.S. Sanctions" Congressional Research Service. January 22, 2021. <https://fas.org/sgp/crs/row/IF10715.pdf>
- xxxii. Charles Kennedy. "Largest Indian Refiner Switches From Venezuelan to Canadian Crude" OilPrice. September 30, 2020. <https://oilprice.com/Latest-Energy-News/World-News/Largest-Indian-Refiner-Switches-From-Venezuelan-To-Canadian-Crude.html>
- xxxiii. Haik Gugarats. "US gives Chevron six more months in Venezuela" Argus Media. November 17, 2020. <https://www.argusmedia.com/en/news/2160677-us-gives-chevron-six-more-months-in-venezuela?backToResults=true#:~:text=The%20Treasury%20Department%20today%20granted,elect%20Joe%20Biden%27s%20incoming%20administration>
- xxxiv. Charlie Smith. "White House Threatens Spanish Oil Giant Repsol with 'devastating sanctions' If It Doesn't Stop Drilling In Venezuela. The Olive Press. May 19, 2020. <https://www.theolivepress.es/spain-news/2020/05/19/white-house-threatens-spanish-oil-giant-repsol-with-devastating-sanctions-if-it-doesnt-stop-drilling-in-venezuela/>
- xxxv. "Statement of the OAS General Secretariat on the Situation in Venezuela," OAS, January 5, 2020, [https://www.oas.org/en/media\\_center/press\\_release.asp?sCodigo=E-116/20](https://www.oas.org/en/media_center/press_release.asp?sCodigo=E-116/20)
- xxxvi. International Crisis Group, *A Way Out of Latin America's Impasse Over Venezuela* (Brussels: International Crisis Group, 2019), 2.
- xxxvii. Silvio Cascione, "Mercosur suspends Venezuela, urges immediate transition," Reuters, August 5, 2017, <https://www.reuters.com/article/us-venezuela-politics-mercotur-idUSKBN1AL0IB>
- "Statement of the OAS General Secretariat on the Situation in Venezuela", 2020.
- xxxviii. International Crisis Group, *A Way Out of Latin America's Impasse Over Venezuela*, 9-10.
- xxxix. Alejandro Cardozo Uzcategui and Victor Mijares, "The Versatile Amalgam," *European Review of Latin American and Caribbean Studies*, no. 109 (2020): 188.
- xl. Uzcategui and Mijares, "The Versatile Amalgam", 189.
- xli. Antonio De La Cruz, "Rosneft's Withdrawal amid US Sanctions Contributes to Venezuela's Isolation," CSIS, April 10, 2020, <https://www.csis.org/analysis/rosnefts-withdrawal-amid-us-sanctions-contributes-venezuelas-isolation>
- xlii. Evan Ellis, "Venezuela: Pandemic and Foreign Aid in a Collapsing Narcostate," CSIS (2020): 4.
- xliii. Moises Rendon and Claudia Fernandez, "The Fabulous Five: How Foreign Actors Prop up the Maduro Regime in Venezuela," CSIS (2020): 5.
- xliv. Mayela Armas and Corina Pons, "Exclusive: Venezuela wins grace period on China oil-for-loan deals, sources say," Reuters, August 12, 2020, <https://www.reuters.com/article/us-venezuela-china-exclusive-idUSKCN2581UN>
- xlv. Rendon and Fernandez, "The Fabulous Five: How Foreign Actors Prop up the Maduro Regime in Venezuela," 5-6.
- xlvi. Evan Ellis, "Venezuela: Pandemic and Foreign Aid in a Collapsing Narcostate," 3.
- xlvii. Rendon and Fernandez, "The Fabulous Five: How Foreign Actors Prop up the Maduro Regime in Venezuela," 8.
- xlviii. Joseph M. Humire, *The Maduro-Hezbollah Nexus: How Iran-Backed Networks Prop up the Maduro Regime* (Washington: The Atlantic Council, 2020): 10-11.
- xlix. Congressional Research Service, *Venezuela: Overview of U.S. Sanctions* (Washington: Congressional Research Service, 2021): 1.
- l. Rendon and Fernandez, "The Fabulous Five: How Foreign Actors Prop up the Maduro Regime in Venezuela," 10.
- li. Reuters Staff, "Venezuela says its refining gold in Turkey following sanctions," Reuters, July 18, 2018, <https://www.reuters.com/article/venezuela-gold-idUSL1N1UE1DV>
- lii. Rendon and Fernandez, "The Fabulous Five: How Foreign Actors Prop up the Maduro Regime in Venezuela," 10.
- liii. Reuters Staff, "Turkey's Erdogan voices support for Venezuela's Maduro," Reuters, January 24, 2019, <https://www.reuters.com/article/us-venezuela-politics-turkey-idUSKCN1PI0FJ>
- liv. Matt Ferchen. "Crude Complications: Venezuela, China, and the United States." Carnegie-Tsinghua Center for Global Policy. October 23, 2014. [www.carnegietsinghua.org/2014/10/23/crude-complications-venezuela-china-and-united-states-pub-56996](http://www.carnegietsinghua.org/2014/10/23/crude-complications-venezuela-china-and-united-states-pub-56996).
- lv. Matt Ferchen. Report. US Institute of Peace, 2020. Accessed 10 Jan. 2021. doi:10.2307/resrep26639.
- lvi. R. Evan Ellis. Report. Center for Strategic and International Studies (CSIS), 2020. Accessed 10 Jan. 2021. doi:10.2307/resrep25659.
- lvii. Luc Cohen, and Marianna Parraga. "Special Report: How China Got Shipments of Venezuelan Oil despite U.S. Sanctions." Reuters. Thomson Reuters, June 12, 2020. <https://www.reuters.com/article/us-venezuela-oil-deals-specialreport-idUSKBN23J1N1>
- lviii. "Venezuela." U.S. Energy Information Administration. United States Department of Energy, n.d. <http://www.eia.gov/international/analysis/country/VEN>.
- lix. Moises Rendon and Claudia Fernandez. Report. Center for Strategic and International Studies (CSIS), 2020. Accessed January 10, 2021. doi:10.2307/resrep26421.
- lx. Economist Intelligence Unit. *The Impact of Ageing Infrastructure in Process Manufacturing Industries*. The Economist, 2013. Accessed January 10, 2021. [https://www.chemengonline.com/Assets/whitepapers/Oracle\\_PPM\\_US\\_EN\\_WP\\_TheImpactofAgeing.pdf](https://www.chemengonline.com/Assets/whitepapers/Oracle_PPM_US_EN_WP_TheImpactofAgeing.pdf)
- lxi. Anthony Faiola and Mariana Zúñiga. "Venezuela's Broken Oil Industry Is Spewing Crude into the Caribbean Sea." *The Washington Post*. WP Company, September 25, 2020. [http://www.washingtonpost.com/world/the\\_americas/venezuela-oil-spills/2020/09/23/5613c996-f793-11ea-a275-1a2c2d36e1f1\\_story.html](http://www.washingtonpost.com/world/the_americas/venezuela-oil-spills/2020/09/23/5613c996-f793-11ea-a275-1a2c2d36e1f1_story.html).
- lxii. Earthjustice. "OIL REFINERIES AND TOXIC AIR POLLUTION." Fact sheet. Earthjustice. San Francisco. n.d. Web. <https://earthjus->

tice.org/sites/default/files/files/Refineries-Fact-Sheet\_04-08.pdf

lxiii. “Venezuela.” OPEC, Organization of Petroleum Exporting Countries, [www.opec.org/opec\\_web/en/about\\_us/171.htm](http://www.opec.org/opec_web/en/about_us/171.htm).

lxiv. Peter Valdes-Dapena. “By 2040, More than Half of New Cars Will Be Electric.” CNN. Cable News Network, September 6, 2019. <http://www.cnn.com/2019/05/15/business/electric-car-outlook-bloomberg/index.html#:~:text=That%20means%20that%20electric%20cars,million%20by%202040%2C%20BNEF%20predicts.>

lxv. Oliver Leighton Barrett. CLIMATE AND SECURITY IN LATIN AMERICA AND THE CARIBBEAN. Report. Edited by Abdenur Adriana Erthal, Kuele Giovanna, and Amorim Alice. Igarape Institute, 2019. 13-25. Accessed January 10, 2021. doi:10.2307/resrep20639.4.

lxvi. Matthias J. Pickl. “The Renewable Energy Strategies of Oil Majors – From Oil to Energy?” *Energy Strategy Reviews*, vol. 26, Nov. 2019, doi:<https://doi.org/10.1016/j.esr.2019.100370>.

lxvii. “Venezuela.” U.S. Energy Information Administration, United States Department of Energy, [www.eia.gov/international/analysis/country/VEN](http://www.eia.gov/international/analysis/country/VEN).

lxviii. Germán Massabié. “Why Would Oil Countries Be in Renewables? – The Case of Venezuela.” *Renewable Energy Law and Policy Review* 2, no. 1 (2011): 39-50. Accessed January 16, 2021. <http://www.jstor.org/stable/24324638>.

lxix. IEA (2020), *Global EV Outlook 2020*, IEA, Paris <https://www.iea.org/reports/global-ev-outlook-2020>

# Appendix Endnotes

- <sup>i</sup> “Venezuela,” Ethnologue.
- <sup>ii</sup> Pier, “Venezuelan Culture – Religion,” Cultural Atlas.
- <sup>iii</sup> Moises Rendon, “The Fabulous Five: How Foreign Actors Prop up the Maduro Regime in Venezuela,” Center for Strategic and International Studies, December 22, 2020.
- <sup>iv</sup> “Compulsory Voting around the World,” The Guardian, July 04, 2005.
- <sup>v</sup> “Venezuela, RB,” Data.
- <sup>vi</sup> “The Economist Intelligence Unit,” Political Structure, November 05, 2018.
- <sup>vii</sup> “The Economist Intelligence Unit.”
- <sup>viii</sup> “Corruptions Perceptions Index 2015 for Venezuela,” Transparency.org; Dugan, Gerver Torres and Andrew, “Venezuelans Saw Political Instability Before Protests,” Gallup, January 14, 2021
- <sup>ix</sup> “Venezuela: Numbers Highlight Health Crisis,” Human Rights Watch, October 28, 2020.
- <sup>x</sup> “Venezuela, RB.”
- <sup>xi</sup> “World Report 2020: Rights Trends in Venezuela,” Human Rights Watch, January 14, 2020.
- <sup>xii</sup> H. Plecher, “Venezuela- Unemployment Rate 2020,” Statista, November 04, 2020.

# Bibliography

- Alvarez, Cesar J. "Venezuela's Oil-Based Economy." Council on Foreign Relations. Council on Foreign Relations, February 9, 2009. <https://www.cfr.org/backgrounder/venezuelas-oil-based-economy>.
- Armas, Mayela and Corina Pons. "Exclusive: Venezuela wins grace period on China oil-for-loan deals, sources say." Reuters, August 12, 2020. <https://www.reuters.com/article/us-venezuela-china-exclusive-idUSKCN2581UN>
- Barrett, Oliver Leighton. CLIMATE AND SECURITY IN LATIN AMERICA AND THE CARIBBEAN. Report. Edited by Abdenur Adriana Erthal, Kuele Giovanna, and Amorim Alice. Igarape Institute, 2019. 13-25. Accessed January 10, 2021. doi:10.2307/resrep20639.4.
- Cascione, Silvio. "Mercosur suspends Venezuela, urges immediate transition." Reuters, August 5, 2017. <https://www.reuters.com/article/us-venezuela-politics-mercosur-idUSKBN1AL0IB>
- Cheatham, Amelia, and Rocio Cara Labrador. "Venezuela: The Rise and Fall of a Petrostate." Council on Foreign Relations. Council on Foreign Relations, January 22, 2021. <https://www.cfr.org/backgrounder/venezuela-crisis>.
- Cheatham, Amelia. "Venezuela: The Rise and Fall of a Petrostate." Council on Foreign Relations. Council on Foreign Relations, January 22, 2021. <https://www.cfr.org/backgrounder/venezuela-crisis>.
- CISIS. "Are Sanctions Working in Venezuela?" Are Sanctions Working in Venezuela? | Center for Strategic and International Studies, June 20, 2020. <https://www.csis.org/analysis/are-sanctions-working-venezuela>.
- Clemente, Jude. "Venezuela's U.S. Oil Loss is Canada's Gain" Forbes. August 14, 2019. <https://www.forbes.com/sites/judeclemente/2019/08/14/venezuelas-u-s-oil-loss-is-canadas-gain/?sh=69ccd9e960ed>
- Cohen, Luc, and Marianna Parraga. "Special Report: How China Got Shipments of Venezuelan Oil despite U.S. Sanctions." Reuters. Thomson Reuters, June 12, 2020. <https://www.reuters.com/article/us-venezuela-oil-deals-specialreport-idUSKBN23J1N1>.
- Congressional Research Service. Venezuela: Overview of U.S. Sanctions. Washington: Congressional Research Service, 2021.
- "Compulsory Voting around the World." The Guardian. July 04, 2005. <https://www.theguardian.com/politics/2005/jul/04/votera-pathy.uk>.
- "Corruptions Perceptions Index 2015 for Venezuela." Transparency.org. <https://www.transparency.org/en/cpi/2015/index/ven>.
- Croft, Helima. "Understanding OPEC's Agreement to Raise Production: A Conversation with Helima Croft." Atlantic Council, September 5, 2019. <https://www.atlanticcouncil.org/blogs/energysource/understanding-opec-s-agreement-to-raise-production-a-conversation-with-helima-croft/>.
- Cui, Carolyn. "Venezuela's PdVSA Misses \$404 Million Payments on Bonds." The Wall Street Journal. November 22, 2016. <https://www.wsj.com/articles/venezuelas-pdvsa-misses-404-million-payments-on-bonds-1479768989>.
- De La Cruz, Antonio. "Rosneft's Withdrawal amid US Sanctions Contributes to Venezuela's Isolation." CSIS, April 10, 2020. <https://www.csis.org/analysis/rosnefts-withdrawal-amid-us-sanctions-contributes-venezuelas-isolation>
- Dugan, Gerver Torres and Andrew. "Venezuelans Saw Political Instability Before Protests." Gallup. January 14, 2021. <https://news.gallup.com/poll/167663/venezuelans-saw-political-instability-protests.aspx>.
- Earthjustice. "OIL REFINERIES AND TOXIC AIR POLLUTION." Fact sheet.
- Earthjustice. San Francisco. n.d. Web. [https://earthjustice.org/sites/default/files/files/Refineries-Fact-Sheet\\_04-08.pdf](https://earthjustice.org/sites/default/files/files/Refineries-Fact-Sheet_04-08.pdf)
- Economist Intelligence Unit. The Impact of Ageing Infrastructure in Process Manufacturing Industries. The Economist, 2013. Accessed January 10, 2021.
- Ellis, Evan. "Venezuela: Pandemic and Foreign Aid in a Collapsing Narcostate." CSIS (2020). <https://www.jstor.org/stable/resrep25659>
- Ellis, R. Evan. Report. Center for Strategic and International Studies (CSIS), 2020. Accessed 10 Jan. 2021. doi:10.2307/resrep25659.
- Faiola, Anthony, and Mariana Zúñiga. "Venezuela's Broken Oil Industry Is Spewing Crude into the Caribbean Sea." The Washington Post. WP Company, September 25, 2020. [http://www.washingtonpost.com/world/the\\_americas/venezuela-oil-](http://www.washingtonpost.com/world/the_americas/venezuela-oil-)

spills/2020/09/23/5613c996-f793-11ea-a275-1a2c2d36e1f1\_story.html.

Ferchen, Matt. "Crude Complications: Venezuela, China, and the United States." Carnegie-Tsinghua Center for Global Policy. October 23, 2014. [www.carnegietsinghua.org/2014/10/23/crude-complications-venezuela-china-and-united-states-pub-56996](http://www.carnegietsinghua.org/2014/10/23/crude-complications-venezuela-china-and-united-states-pub-56996).

Ferchen, Matt. Report. US Institute of Peace, 2020. Accessed 10 Jan. 2021. doi:10.2307/resrep26639.

Gonzalez, Juan S. "The Venezuelan Crisis and Salvador Allende's Glasses." PRISM 8, no. 1 (2019): 40-55. Accessed January 7, 2021. <https://www.jstor.org/stable/26597309>.

Gugarats, Haik. "US gives Chevron six more months in Venezuela" Argus Media. November 17, 2020. <https://www.argusmedia.com/en/news/2160677-us-gives-chevron-six-more-months-in-venezuela?backToResults=true#:~:text=The%20Treasury%20Department%20today%20granted,elect%20Joe%20Biden%27s%20incoming%20administration>

"Has Time Run Out for Guaidó in Venezuela?" World Politics Review, December 14, 2020. <https://www.worldpoliticsreview.com/insights/28029/for-maduro-venezuela-politics-has-become-crisis-management>.

Hernandez, I. "Weathering Collapse: An Assessment of the Financial and Operational Situation of the Venezuelan Oil Industry." The Growth Lab, February 12, 2020. <https://growthlab.cid.harvard.edu/publications/venezuelan-oil-assessment>.

Humire, Joseph M. *The Maduro-Hezbollah Nexus: How Iran-Backed Networks Prop up the Maduro Regime*. Washington: The Atlantic Council, 2020.

Ianchovichina, Elena, and Harun Onder. "Dutch Disease: An Economic Illness Easy to Catch, Difficult to Cure." Brookings. Brookings, October 31, 2017. <https://www.brookings.edu/blog/future-development/2017/10/31/dutch-disease-an-economic-illness-easy-to-catch-difficult-to-cure/>.  
IEA (2020), *Global EV Outlook 2020*, IEA, Paris <https://www.iea.org/reports/global-ev-outlook-2020>

International Crisis Group. *A Way Out of Latin America's Impasse Over Venezuela*. Brussels: International Crisis Group, 2019. *It.* Foreign Affairs 95, no. 5 (2016): 133-40. Accessed December 23, 2020. <http://www.jstor.org/stable/43946964>.

Kennedy, Charles. "Largest Indian Refiner Switches From Venezuelan to Canadian Crude" OilPrice. September 30, 2020. <https://oilprice.com/Latest-Energy-News/World-News/Largest-Indian-Refiner-Switches-From-Venezuelan-To-Canadian-Crude.html>

Massabié, Germán. "Why Would Oil Countries Be in Renewables? – The Case of Venezuela." *Renewable Energy Law and Policy Review* 2, no. 1 (2011): 39-50. Accessed January 16, 2021. <http://www.jstor.org/stable/24324638>.

Mogollon, Mery. "Commodities 2021: Venezuela's Oil industry expected to deteriorate further" S&P Global Platts. January 4th,

2021. <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/010421-commodities-2021-venezuelas-oil-industry-expected-to-deteriorate-further>

Norrestad, F. "Leading SWFs Worldwide by Assets 2021." Statista, February 3, 2021. <https://www.statista.com/statistics/276617/sovereign-wealth-funds-worldwide-based-on-assets-under-management/>.

Otis, John. "Venezuela's Maduro Holds Firmly To Power- And Squeezes The Opposition." NPR. NPR, July 28, 2020. <https://www.npr.org/2020/07/28/896261268/venezuelas-maduro-holds-firmly-to-power-and-squeezes-the-opposition>.

Pickl, Matthias J. "The Renewable Energy Strategies of Oil Majors – From Oil to Energy?" *Energy Strategy Reviews*, vol. 26, Nov. 2019, doi:<https://doi.org/10.1016/j.esr.2019.100370>.

Pier. "Venezuelan Culture- Religion." Cultural Atlas. <https://culturalatlas.sbs.com.au/venezuelan-culture/venezuelan-culture-religion>.

Plecher, H. "Venezuela- Unemployment Rate 2020." Statista. November 04, 2020. <https://www.statista.com/statistics/370935/unemployment-rate-in-venezuela/>.

Rendon, Moises, and Claudia Fernandez. Report. Center for Strategic and International Studies (CSIS), 2020. Accessed January 10, 2021. doi:10.2307/resrep26421.

Rendon, Moises, and Mark L. Schneider. "Analyzing Obstacles to Venezuela's Future." Center for Strategic and International Studies, November 6, 2019. <https://www.csis.org/analysis/analyzing-obstacles-venezuelas-future>.

Rendon, Moises. "The Fabulous Five: How Foreign Actors Prop up the Maduro Regime in Venezuela." Center for Strategic and International Studies. December 22, 2020. <https://www.csis.org/analysis/fabulous-five-how-foreign-actors-prop-maduro-regime-venezuela>.

Rendon, Moises. "Can Sanctions on Venezuela Be Improved?" *Can Sanctions on Venezuela Be Improved? | Center for Strategic and International Studies*, February 17, 2021. <https://www.csis.org/analysis/can-sanctions-venezuela-be-improved>.

Reuters Staff. "Turkey's Erdogan voices support for Venezuela's Maduro." Reuters, January 24, 2019. <https://www.reuters.com/article/us-venezuela-politics-turkey-idUSKCN1PIOFJ>

Reuters Staff. "Venezuela says its refining gold in Turkey following sanctions." Reuters, July 18, 2018. <https://www.reuters.com/article/venezuela-gold-idUSL1N1UE1DV>

Seelke, Clare Ribando. "Venezuela: Overview of U.S. Sanctions" Congressional Research Service. January 22, 2021. <https://fas.org/sgp/crs/row/IF10715.pdf>

Smith, Charlie. "White House Threatens Spanish Oil Giant Repsol



with 'devastating sanctions' If It Doesn't Stop Drilling In Venezuela. The Olive Press. May 19, 2020. <https://www.theolivepress.es/spain-news/2020/05/19/white-house-threatens-spanish-oil-giant-repsol-with-devastating-sanctions-if-it-doesnt-stop-drilling-in-venezuela>

"World Report 2020: Rights Trends in Venezuela." Human Rights Watch. January 14, 2020. <https://www.hrw.org/world-report/2020/country-chapters/venezuela#>.

"Statement of the OAS General Secretariat on the Situation in Venezuela." OAS, January 5, 2020, [https://www.oas.org/en/media\\_center/press\\_release.asp?sCodigo=E-116/20](https://www.oas.org/en/media_center/press_release.asp?sCodigo=E-116/20)

"The Economist Intelligence Unit." Political Structure. November 05, 2018. [http://country.eiu.com/article.aspx?articleid=677343651&Country=Venezuela&topic=Summary&subtopic=Political structure](http://country.eiu.com/article.aspx?articleid=677343651&Country=Venezuela&topic=Summary&subtopic=Political%20structure).

U.S. Congress. "Consolidated Appropriations Act, 2012" US Government. December 21, 2020. Page 1498.

U.S. Government Printing Office, "Hezbollah in Latin America – Implications for U.S. Homeland Security" U.S. Government Publishing Office. July 7, 2011. <https://www.govinfo.gov/content/pkg/CHRG-112hrg72255/html/CHRG-112hrg72255.htm>

Urdaneta, Sheyla, Anatoly Kurmanaev, Isayen Herrera, and Adriana Loureiro Fernandez. "Venezuela, Once an Oil Giant, Reaches the End of an Era." The New York Times. October 07, 2020. <https://www.nytimes.com/2020/10/07/world/americas/venezuela-oil-economy-maduro.html>.

Uzcategui, Alejandro Cardozo and Victor Mijares. "The Versatile Amalgam." European Review of Latin American and Caribbean Studies, no. 109 (2020): 181-202. <https://www.jstor.org/stable/26936908>

Valdes-Dapena, Peter. "By 2040, More than Half of New Cars Will Be Electric." CNN. Cable News Network, September 6, 2019.

"Venezuela, RB ." Data. <https://data.worldbank.org/country/venezuela-rb>.

"Venezuela: Numbers Highlight Health Crisis." Human Rights Watch. October 28, 2020. <https://www.hrw.org/news/2018/11/15/venezuela-numbers-highlight-health-crisis>.

"Venezuela." Ethnologue. <https://www.ethnologue.com/country/VE/languages>.

"Venezuela." OPEC, Organization of Petroleum Exporting Countries, [www.opec.org/opec\\_web/en/about\\_us/171.htm](http://www.opec.org/opec_web/en/about_us/171.htm).

"Venezuela." U.S. Energy Information Administration. United States Department of Energy, n.d. <http://www.eia.gov/international/analysis/country/VEN>.

Viscidi, Lisa. "Venezuela on the Brink: How the State Wrecked the Oil Sector—and How to Save

"What's Next for Venezuela?" J.P. Morgan. February 7, 2019. <https://www.jpmorgan.com/insights/research/venezuela-outlook-2019>.

The Leadership and Democracy Lab publishes democratic analysis and leadership profiles throughout the year. The Lab is focusing on industry, regional, and leadership democratic transitions and will be reporting short but substantial publications relating to key areas of issue with a specified approach. These reports are intended to give corporations and individuals a short-term risk assessment by exploring the probability of a variety of outcomes to a variety of political conflicts.

