ABIS Energy 2022

Suriname Playbook





Contents

1.	Foreword	4				
2.	About Suriname	5				
3.	Politics and Economics	6				
3.1	1. Politics	6				
3.2	2. Structure & Economics	7				
4.	Institutional Regulatory Framework	11				
5.	Exploration and production	12				
6.	Suriname Power System	29				
6.	1 Renewable Energy	30				
6.2	2 Energy Transition	31				
7.	Business and Legal	33				
8.	Service Opportunities 3					
9.	Risk Overview	46				
10.	Case History "Doing Business in Suriname"	48				
11.	Acknowledgements	51				

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1. Foreword

With the discovery of substantial quantity of oil offshore Suriname in recent years interests in the business opportunities deserves attention. The production of the Suriname Playbook by ABIS Energy is thus very opportune. The reader will find much relevant and judiciously selected information in the Playbook which would otherwise require much time to acquire.

The contents contain relevant details of the current state of the economy including the public finances. This is followed by a summary of the legislative and regulatory framework relating to the oil and gas sector, including the role of the state oil company Staatsolie. Details of the activities of the key operators in the sector are provided including well-designed maps of the relevant offshore blocks. A further map shows onshore energy-related facilities such as power stations with their current capacities.

This is very useful for an understanding of the sector in relation to Energy Transition. Another section provides a detailed presentation of the history of oil exploration and the fruits of the activity, both successful and unsuccessful. The experiences of all the main players are highlighted. Potential investors (both oil companies and service sector) will find the section on the legal framework for conducting business in Suriname of particular interest. Information on utilising a branch or subsidiary operation is provided.

A helpful list of opportunities in the service sector is shown. Finally, details of the settlement of maritime boundary disputes with Guyana and French Guiana are provided. In sum, I have no hesitation in recommending the Playbook to the wider investor community.

Professor Alex Kemp, University of Aberdeen

Alexkemp.

2. About Suriname

<u>Capital</u>: Paramaribo <u>Population</u>: 586,634 (2020) World Bank <u>President</u>: Chandrikapersad Santokhi <u>Currency</u>: Suriname Dollar (SRD)



Area 163,265 sq km (63,037 sq miles) Major languages Dutch (official), English, Sranang Tongo, Hindi, Javanese Major religions Hinduism, Islam, Christianity Life expectancy 68 years (men), 74 years (women) By 2017 about 47% of the population was online. GDP Nominal USD 4.2bn 2019 Independence from Nov 1975 Time zone GMT – 4 hours Intl Call code +597 The Republic of Suriname is a representative democratic republic, based on the Constitution of 1987. Internet TLD .SR World Bank Doing Business (DB) Rank 162

Suriname is the smallest independent country in South America. The country can be divided into two main geographic regions. The northern, lowland coastal area which has been cultivated, most of the population lives here. The southern part consists of tropical rainforest and sparsely inhabited savanna along the border with Brazil, covering about 80% of Suriname's land surface.

Suriname contains six terrestrial ecoregions. Its forest cover is 90.2%, the highest of any nation in the world. The country had a 2019 Forest Landscape Integrity Index mean score of 9.39/10, ranking it 5th globally out of 172 countries.^[55]

Suriname is situated between French Guiana to the east and Guyana to the west. The southern border is shared with Brazil and the northern border is the Atlantic coast. The southernmost borders with French Guiana and Guyana.

3. Politics and Economics

3.1 Politics

Elections 2020

In the case of Suriname, the election result has been declared and verified by CARICOM.



Party		Votes	%	Seats	; +/_
Progressive Reform Party	VHP	108,256	39.52	20	+11
National Democratic Party	NDP	65,654	23.97	16	-10
National Party of Suriname	NPS	32,390	11.82	3	+1
General Liberation and Development Party	ABOP	24,928	9.01	8	+3
Pertjajah Luhur	PL	16,673	6.09	2	-3
Reform and Renewal Movement	HVB	7,417	2.71	0	New
Brotherhood and Unity in Politics	BEP	6,823	2.49	2	0

Mr. Santokhi's Centre-left Progressive Reform Party won the parliamentary elections in May 2020.

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3. Politics and Economics

3.2 Structure and Economics.

Suriname's economy is dominated by services (56% of GDP), industry (35% of GDP) and agriculture (9% of GDP). In 2020, the economy shrunk by -15.9% due to the ongoing effects of the COVID-19 pandemic. Following the sharp contraction of 2020, growth is expected to modestly rebound by 0.7% in 2021, according to IMF estimates.

The country is keen to attract foreign direct investments including large-scale *public-private partnershi*p within the infrastructure and extractives sectors. The major driver of growth for Suriname over the medium term will be hydrocarbons and mineral extraction (such as gold) and as such commodity price volatility will continue to weigh heavily on the government's fiscal receipts and debt sustainability.



3.2 Structure and Economics (cont)





Data Source: IMF World Economic Outlook (October 2021)

Suriname remains a relatively small exporter of oil mostly from onshore production with oil exports accounting for about 10% of total goods exports. Gold exports on the other hand amounted to 60% of goods exports, as IMF data shows. Commodity prices are flatulating strongly, this is in part due to a strong dollar and uptick in global demand amidst rising concerns of a lingering COVID-19 Delta variant. Suriname is currently in the fourth wave of COVID infections (Delta). The percentage of fully vaccinated, 12-year-olds and older of the population is 37%.

Suriname is a net importer of oil, currently costing in the region of USD250-300 million per month. The current account balance has been positive since 2020, as has the capital and financial account.

3.2 Structure and Economics (cont)

The country's relatively stable political environment will be key to attracting further inbound FDI in the medium term, especially as Suriname seeks to commence offshore oil and gas production and exports and become a leading producer nation. This follows the recent discoveries of large commercially producible oil and gas resources offshore by several IOCs including France's TotalEnergies and the US' Apache Corporation. In the petroleum sector existing production has been stable at about 16,000 barrels per day. The large offshore discoveries of 2020 to 2021 are not expected to be operational until 2025.

Nevertheless, inflation concerns are likely to remain elevated over the medium term given that food and energy constitute a large percentage of the consumer price index (CPI) basket. Consumer prices are projected to end the year at 54.4%, according to the IMF. For example, monthly inflation peaked in June 2021 at 10.8%. This is driven by the price increase in food products and exacerbated by extensive flooding mid-year 2021 plus of course COVID-19.

In April 2021, the IMF reported that it had reached a Staff-level agreement with Suriname for a UD690 million Three-Year Extended Fund Facility (EFF) Programme. Under the IMF deal, Suriname will implement a series of home-grown policies at increasing domestic revenue mobilisation, restoring fiscal and debt sustainability as well as increased spending on social protection programs for the most vulnerable. Other measures include unifying the official and parallel (black market) exchange rate and the central bank putting in place a new monetary policy framework to bring down spiraling inflation. The Surinamese government has already undertaken various exchange rate adjustments or devaluation of the Surinamese Dollar (SRD) in 2021.

Public finances are slowly but steadily improving. Monthly revenues show realized surplus March to June 2021. This is part due to a "standstill" on debt payments from international capital markets, foreign exchange debts and debt restructuring. On the other hand, government revenues are estimated to increase over the medium term from increasing oil production and intended introduction of VAT, possibly in 2022.

3.2 Structure and Economics (cont)

Monetary

- Prudent monetary policy, keep SRD stable
- Reform financial sector to promote financial stability, stimulate financial inclusion

COVID-19

• Controlling the effects of the COVID-19 pandemic

Administrative

- Government restructuring
- Strengthening institutions, promoting good governance
- Create corruption-free
 environmental climate

Goal: To create sustainable real growth and development of the Suriname economy with a package of management measures which will be supported by the IMF

Social

- Fighting poverty and reducing loss of purchasing power
- Efficient and effective subsidy policy
- Promoting solidarity and social involvement

Budget Policy

- Limit government spending
- Generating additional revenue for the government
- Necessary restructuring and management of the economy

Real Sector

- Promotion production and export
- Preserving and promoting employment and activity
- Improving 'ease of doing business'
- Diversification of the economy

Output

- Price stabilization
- GDP growth will start 2022
- Increased international reserves
- Balanced budget within 3 to 5 years
- Restored community purchasing power

4. Institutional Regulatory Framework

Staatsolie Maatschappij Suriname N.V., a vertically integrated state-owned company founded in 1980. Staatsolie explores, drills, produces, refines, markets, sells and transports petroleum and products refined from it. Staatsolie also generates electricity. With the production and supply of energy, Staatsolie intends to meet the growing energy needs of Suriname.

Staatsolie Hydrocarbon Institute N.V. (SHI) embodies the institutional role of Staatsolie Maatschappij Suriname N.V. (Staatsolie), creating the right conditions for investments and supervises the hydrocarbon activities by independent oil companies in Suriname, in order to optimize the value from petroleum activities for Suriname.

1. Production Sharing Contract Management

Contract management includes negotiating the terms and conditions in Production Sharing Contracts (PSCs) and ensuring compliance with the terms and conditions, as well as documenting and agreeing on any changes or amendments that may arise during the implementation or execution. The contract management process is all for the purpose of monitoring and maximizing financial and operational performance and minimizing risk.

2. Policies, procedures and guidelines

Develop, implement and uphold policies, procedures and guidelines of world class standards to ensure transparent, prudent, efficient, cost-effective, safe and environmentally sound execution of hydrocarbon activities.

3. Acreage Management

SHI performs hydrocarbon resource assessment to determine the acreage strategy to drive the direction of hydrocarbon resource development, and to promote the hydrocarbon potential and to negotiate with capable and competent investors to explore and potentially develop hydrocarbon accumulations.

4. Data Management

SHI is the custodian of all data and develop a robust and secure centralized Data Management System to:

• unitize, centralize and optimize data storage, management and distribution.

• improve information quality, coherence, consistency, transparency.

• help unlock significant potential across the oil and gas lifecycle.

Production Sharing Contract

All petroleum ventures in Suriname are covered by a Production Sharing Contract (PSC) <u>https://www.staatsolie.com/media/tuvjyme3/mode</u> <u>l-psc.pdf</u>

Investor Relations

https://www.staatsolie.com/en/investor-relations/

Supply Chain/ Local Content/Supplier Portal

Doing business with Staatsolie See the attached link for terms of engagement T's & C's contract terms

https://www.staatsolie.com/en/supply-chain/

Potential Suppliers who want to be informed on the developments within the offshore petroleum sector can register for the latest news and announcements. click on the following link.

https://www.staatsolie.com/en/floodlight-on-localcontent/

Local Business Development/ Supplier Portal

The Suriname Supplier Portal works in a similar way to the CLBD Portal in Guyana. Click on the link to register.

https://smesupplierportal.sr/#/home

Staatsolie welcome partners in the quest to explore Suriname offshore hydrocarbon potential.

BASIN OVERVIEW

Guyana - Suriname basins type map



Conceptual main source rock Albian-Cenomanian-Turonian aged oil window indicated in green dashed line for reference.

The Suriname-Guyana basin extends towards the west up to the Columbus basin (Barbados accretionary prism) and is limited to the north by the North Atlantic Oceanic crust, and to the east by the Demerara Plateau. Its sedimentary system wedges out to the south against the Suriname Craton basement.

BASIN OVERVIEW

Three main geological events where responsible for the present configuration of the basin: The North Atlantic rift (occurred during the Late Triassic-Early Jurassic), the South Atlantic rift (occurred within the Early Cretaceous), and the Equatorial Atlantic drift (initiated in Late Cretaceous).

Although oil companies have been searching for hydrocarbons in the Guyana-Suriname Basin for many decades, exploration efforts have only really intensified in the last decade. ExxonMobil's world-class Liza discovery in Guyana's Stabroek Block in 2015 paved the way for a string of subsequent discoveries, initially in Guyana, but also now in Suriname. A run of five consecutive discoveries in Suriname during 2020 and early 2021 suggest that Guyana's prolific plays – where around 9 bn barrels of oil equivalent have been discovered to date – extend across the border.

The basin had been known to be petroliferous for years, and Suriname has been producing small volumes of oil from onshore fields since 1982. Geological and geochemical studies suggest the hydrocarbons in the onshore Tambaredjo and Calcutta fields, which currently produce around 15,000 bpd, were originally generated from source rocks offshore. It is only very recently, though, that the offshore geology and broader petroleum system have started to be properly understood.

The first field to come onstream in the basin, in 1982, was the Tambaredjo oil field, discovered in 1968, following to the Calcutta field discovery in 1965, discovered by accident while drilling for water on a school yard, where oil was struck at 160m depth. Calcutta field came onstream in 2006. The Tambaredjo NW field, an extension of Tambaredjo field discovered in 2002, started producing in 2010. All three fields are located onshore and are still producing from Paleocene, Eocene and Miocene reservoirs, with a combined oil in place estimated around 1.1 billion barrels (bbls). The oil produced in these fields by means of artificial lift (tertiary methods) range from 16 to 19 API degrees (heavy oil type), with a recovery factor of around 20%. These accumulations are situated in a gentle structural nose, occurring as laterally extensive unconsolidated delta plain and fluvial sands, mostly stratigraphic trapping working mechanism, sealed by intraformational shales.

The accepted main source rock feeding the petroleum system of Suriname basin is the Albo-Cenomano-Turonian Canje formation, which is mature in the deep offshore area. *This formation is thought to be coeval with a worldwide anoxic event that generated other Cretaceous source rocks widespread throughout the Equatorial and South Atlantic margins*. The hydrocarbon migration towards the onshore is expected to have occurred through sand carrier beds overlaid by shales, with distances ranging up to 200 km from the oil window zone to the onshore reservoir accumulations.

In recent years, the exploration scope was driven towards the deep-water areas, in search for cretaceous turbiditic deposits analogue to the latter discoveries made at the Atlantic Conjugate margins.

As with other Atlantic Margin basins in the region, analysts and geologists have drawn comparisons with working petroleum systems off West Africa. According to IHS Markit, the Guyana-Suriname Basin is analogous with the MSGBC Basin. The main reservoir targets are Upper Cretaceous and Lower Tertiary basin floor fans, shelf-margin deposits and turbidites directly overlying the world-class mature source.

The USGS's latest undiscovered resource assessment, carried out in 2012, estimated the basin contained 13.6 bn barrels of risked, technically recoverable conventional oil, 32 billion cubic feet (bcf) of gas (around two-thirds associated), and 863 million boe of natural gas liquids (NGLs).

KEY PLAYERS



Suriname Operators Map. Main operators of current block areas under contract agreement in Suriname

Whereas ExxonMobil dominates the offshore exploration picture in Guyana and has had almost all of the success there, the picture is somewhat more fragmented in Suriname, where there are more blocks and more companies involved. Nonetheless, some keys players have started to emerge.

TotalEnergies in particular looks set to become a major player in Suriname. It is a relative newcomer, having only entered in December 2019, although it has participating interests in three active blocks in Guyana so has experience of the basin.

It has assumed operatorship from Apache of Block 58, where four of Suriname's five discoveries have been made, in what Rudolf Elias, former CEO of Staatsolie, called the 'Golden Lane of Oil'. It is very likely to be the first company to develop an offshore asset.

KEY PLAYERS

Outside of TotalEnergies and Apache, Petronas and Shell seem to be geographically and operationally best placed to achieve near-term success. Petronas is active on Block 48 and in particular on Block 52, where it has drilled two wells and made one discovery. It has partnered there with ExxonMobil. As well as partnering TotalEnergies on Block 58, Apache is operator on block 53, partnered by Petronas and Cepsa.

Shell only entered Suriname in December 2020, acquiring Kosmos' shares of Blocks 42 and 45 and assuming operatorship, partnered by Chevron and Hess. But it is likely to breathe new life into the two blocks, where Kosmos had previously drilled two unsuccessful wells in 2018. Shell has experience in French Guiana, but no current interests in Guyana. It had previously partnered with ExxonMobil in its prolific Stabroek block, only to pull out in 2014, just months before the transformational, play-opening Liza discovery there.

Tullow is also active, and is operator on three blocks – 47, 54 and 62 – where is it partnered variously with Equinor, Pluspetrol, Ratio and Noble. It has drilled two wells in Suriname (in addition to two in Guyana as operator and another one as a partner), but has had very limited success in the basin to date. At the other end of the spectrum, ExxonMobil acquired the ultra-deepwater Block 59 in 2017, which sits on the border, along with Hess and Equinor. But the company's main focus is on Guyana for now.

Tullow has relinquished all license commitments in Suriname effective from 31 December 2021.

Equinor and Cairn operate one block each in what is currently peripheral acreage, and both are in relatively early stages of exploration.

The national oil company, Staatsolie, has three material onshore Oil fields, but does not have a direct interest in any of the major offshore blocks. Nonetheless, most of the PSCs signed with IOCs – including those for Blocks 58 and 52 – give Staatsolie the option to back into the contract with an interest of up to 20% upon approval of any development plans.

OFFSHORE DISCOVERIES

In late 2019 the exploration well Maka Central-1 was spudded by the Noble Sam croft drillship in block 58, under Apache operatorship, targeting upper Cretaceous-aged Campanian and Santonian stratigraphic intervals. In early 2020 a discovery for this well was announced by Apache, almost simultaneously with the farm-in agreement with TotalEnergies, taking over as the new operator.

The Maka Central discovery was a breakthrough that proved a working petroleum system akin to that of previous discoveries in the Guyana basin was functioning as well in the deepwater section of Suriname, casting away the setbacks of previous exploration in the basin. Apache itself had drilled in the adjacent block 53 the Popokai-1 well, in 2015, which results have not been disclosed but is believed to bear hydrocarbons in a tight formation, and the Kolibrie-1 well in 2017, that failed to hit commercial hydrocarbons.

The Maka Central discovery was then succeeded by Sapakara West, Kwaskwasi, Keskesi East and Sloanea discoveries, shared in between block 58 (operated by TotalEnergies) and block 52 (operated by Petronas).



Suriname Activity Map showing current block areas under contract agreement, accumulations and prospects in the Suriname basin.

OFFSHORE DISCOVERIES

Staatsolie Hydrocarbon Institute is mandated to attract qualified international oil companies to sustainably explore and develop Suriname's hydrocarbon resources. As of December 2020, there are 12 production sharing contracts for offshore and the onshore blocks active.

Year	Area	Block	Operator	Partner(s)	PSC Effective Date	PSC Status	Well Aliase	Well(s) Drilled	Spud Date	Total Depth (m)
1957	Onshore	N/A	Colmar Surinam Oil Company		30 Jan 1957	Relinquished				
1993	Offshore	Contract Area	Pecten Suriname Ltd		15 Nov 1993	Relinquished				
1999	Offshore	Inboard and Outboard area	Burlington Resources Suriname Ltd	Shell EP Suriname B.V. Totalfina Exploration Suriname Korea National Oil Corporation	23 Aug 1999	Relinguished				
2000	Onshore	Wayambo	Koch Exploration International B.V.		15 Mar 2000	Relinquished				
2004	Offshore	30	Repsol Exploracion, S.A		24 Apr 2004	Relinquished	WT-1	West Tapir- 1	16 Apr 2008	4080m MD
2004	Offshore	31	Maersk oil Suriname B.V.		25 Nov 2004	Relinquished	AKT-1ST2 Spari- 1ST1	Aitkantie- 1(ST2) Spari- 1(ST1)	14 Apr 2011 (26 May 2011) 14 May 2015	5483m MD 3830m MD
2005	Offshore	32	Occidental of Suriname LLC		25 Oct 2005	Relinguished				
2007	Onshore	Uitkijk	Paradise Oil Company N.V.	Hardman Oil and Gas PTY Ltd	23 Jul 2007	Staatsolie Operated				
2007	Onshore	Coronie	Paradise Oil Company N.V.	Hardman Oil and Gas PTY Ltd	23 Jul 2007	Relinquished				

OFFSHORE DISCOVERIES (cont)

2007	Offshore	37	Murphy Suriname Oil Company Ltd		6 July2007	Relinquished	CRC-1 ARC-1	Caracara-1 Aracari-1	2 Nov 2010 13 Mar 2011	2705m MD 2450m MD
2010	Offshore	47	Tullow Suriname B.V.	Petroandina Resources Corporation N.V. Chevron Suriname Exploration Limited	30 Sep 2010	Active	GVN-1*	Goliath- Voltzberg North-1	30 Jan 2021	5060m MD
2011	Offshore	42	B.V. Dordtsche Petroleum Maatschappij ("Shell")	Hess Suriname Exploration Limited	13 Dec 2011	Active	PON-1*	Pontoenoe- 1	12 Aug 2018	6194m MD
2011	Offshore	45	Kosmos Energy Suriname	Chevron Suriname Exploration Limited	13 Dec 2011	Relinquished	ANA-1(A)	Anapai- 1(A)	5 Apr 2018	3577m MD
2012	Offshore	48	Petronas Suriname E&P B.V.		18 Jan 2012	Active				
2013	Offshore	52	Petronas Suriname E&P B.V.	ExxonMobil Exploration and Production Suriname B.V.	26 Арг 2013	Active	RS-1X* SLO-1*	Roselle-1 Sloanea-1	9 May 2016 8 Oct 2020	4908m MD 4780m MD
2013	Offshore	53	Apache Suriname Corporation LDC	Cepsa Suriname S.L.	1 Apr 2013	Active	POP-1* KOL-1*	Popokai-1 Kolibrie-1	4 Feb 2015 3 Mar 2017	7200m MD 5212m MD
2014	Offshore	54	Tullow Oil Suriname B.V.		14 Feb 2014	Active	ARA-1*	Araku-1	1 Oct 2017	2685m MD

OFFSHORE DISCOVERIES (cont)

2015	Offshore	58	Total E&P Suriname B.V.	Apache Suriname 58 Corporation	1 Jul 2015	Active	MKC-1* SPW-1*	Maka Central-1 Sapakara	24 Sep 2019 7 Jan	6285m MD 6326m
				LDC			KWA-1*	West-1 Kwaskwasi-	2020 19 Apr	MD 6644m
							KEE-1*	1 Keskesi East-1	2020 14 Sep 2020	MD 6675m MD
							SPW-2*	Sapakara West-2	8 Feb 2021	N/A
							SPS-1*	Sapakara South-1	23 Mar 2021	N/A
	14						KES-1*	Keskesi South-1	2 Jun 2021	N/A
2018	Offshore	59	ExxonMobil Exploration and Production Suriname B.V.	Hess (Suriname II) Exploration Limited Equinor Suriname B59 B.V.	9 Jul 2018	Active				
2018	Offshore	61	Capricorn Suriname B.V.		26 Jun 2018	Active				3 <u>-</u>
2018	Offshore	60	Equinor Suriname B60 B.V.		11 Jul 2018	Relinquished				
2018	Offshore	62	Tullow Suriname B.V.	Petroandina Resources Corporation N.V.	2 Oct 2018	Relinquished				
2019	Onshore	Nickerie	Decker Petroleum and Marketing Co. Ltd.		1 Oct 2019	Active				
2019	Onshore	WnZ	Challenger Energy Group PLC		3 Oct 2019	Active				
2021	Offshore	Block 5	Chevron Suriname Exploration Limited	Paradise Oil Company N.V.	13 Oct 2021	Active				

BLOCK 58 (TotalEnergies)

Announced	Discovery	Drillship	Water Depth (m)	Total Depth (m)	Net Pay (m)	Play Targeted
Jan 2021	Keskesi East	Noble Sam Croft	725	-	63	Upper Cretaceous
July 2020	Kwaskwasi	Noble Sam Croft	1,000	6,644	278	Upper Cretaceous
April 2020	Sapakara West	Noble Sam Croft	1,000	6,326	79	Upper Cretaceous
Jan 2020	Maka Central	Noble Sam Croft	1,000	6,285	123	Upper Cretaceous
Nov 2021	Bonboni (sub-commercial)	Maersk Valiant	2000	-	16	Upper Cretaceous

BLOCK 58 (TotalEnergies)

Announced	Discovery	Drillship	Water Depth (m)	Total Depth (m)	Net Pay (m)	Play Targeted
Dec 2020	Sloanea	Maersk Developer	-	4,780	-	Upper Cretaceous

UNSUCCESSFUL WELLS

Note: historical and onshore wells excluded

Date	Block	Well	Operator	Drillship	Water Depth (m)	Total Depth (m)
March 2021	Block 47	Goliathberg-V oltzberg North-1	Tullow	Stena Forth	1,856	5,060
Oct 2018	Block 42	Pontoenoe-1	Kosmos (now Shell)	Ensco/Valaris DS-12	2,497	6,194
June 2018	Block 45	Anapai-1	Kosmos (now Shell)	Ensco/Valaris DS-12	1,500	4,556
Oct 2017	Block 54	Araku-1	Tullow	Noble Bob Douglas	~1,000	-

UNSUCCESSFUL WELLS

April 2017	Block 53	Kolibrie-1	Apache	Noble Bob Douglas	-	5,212
May 2016	Block 52	Roselle-1	Petronas	Rowan/Valaris JU-117 (Ralph Coffman)	-	4,908
May 2015	Block 31 (relinquish ed)	Spari-1	Maersk	-	52	3,830
Feb 2015	Block 53	Popokai-1	Apache	Stena DrillMAX	1,492	7,200
May 2011	Block 31 (relinquish ed)	Aitkantie-1	Maersk	-	-	5,483
March 2011	Block 37 (relinquish ed)	Aracari-1	Murphy Oil	-	-	2,450
Nov 2010	Block 37 (relinquish ed)	Caracara-1	Murphy Oil	-	-	2,705
April 2008	Block 30 (relinquish ed)	West Tapir-1	Repsol	-	-	4,080

2019 Nearshore Drilling Project

Staatsolie drilled an additional six wells as part of a Nearshore Drilling project between April and December 2019. The Marai, Electric Ray, Kankantrie, Powisi, Gonini and Tukunari wells reached total depths of between 1,000m and 3,000m in shallow water 8m to 25m deep. The presence of oil was demonstrated in four of the wells, but there were no commercial finds. The wells were drilled by Seadrill's West Castor jackup.

BLOCK DEVELOPMENTS

TotalEnergies	Block 58 Total 50% Apache 50% Water Depth: 55-2,250m 5,844 km2	 Apache signed PSC with Staatsolie in June 2015 and farmed out 50% to Total in December 2019. TotalEnergies assumed operatorship on 1st Jan 2021 in a pre-planned switch. Partners have made four consecutive discoveries on the block since January 2020: Maka Central, Kwaskwasi, Sapakara West and Keskesi East. All four wells encountered stacked reservoirs, uncovering oil and condensate in the shallower play and oil in the deeper play. Keskesi East encountered pressure issues when continuing to deeper targets. Block is located on the Guyana-Suriname border, directly adjacent to ExxonMobil's prolific Stabroek Block in Guyana where the partners have found around 9 bn boe across 19 discoveries. Appraisal drilling campaign is being carried out in 2021, alongside further exploration work (Maersk Developer and Maersk Valiant). Partners have identified Bonboni prospect in north of the block as their next target. Rystad has estimated the first three discoveries (excluding Keskesi East) contain around 1.4bn boe (Maka Central ~400m, Kwaskwasi 728m, Sapakara West ~250m) A 2020 Morgan Stanley report estimated that Block 58 contained recoverable resource of around 6.5 bn boe (5.9 bn of oil). Partners are targeting FID on existing discoveries by end of 2021 and first oil by 2025. Apache says the projects would offer return to investors at sub-\$40 WTI prices. Partners have no relinquishment requirements on the block until June 2026.
Apache	Block 53 Apache 45% Petronas 30% Cepsa 25% <i>Water Depth:</i> 500-1,800m 3,509 km2	 Apache signed PSC in 2012 following competitive bid round. It has drilled two unsuccessful wells on the block: Popokai-1 (2015) and Kolibrie-1 (2017). It did not report the results of Popokai and Kolibrie found no commercial hydrocarbons.

BLOCK DEVELOPMENTS

Petronas via Petronas Suriname E&P BV (PSEPBV)	Block 52 Petronas 50% ExxonMobil 50% <i>Water Depth:</i> 50-1,100m 4,749 km2	 Petronas signed the PSC in April 2013 and ExxonMobil farmed in in May 2020. Partners made the Sloanea-1 discovery in December 2020. It is currently being evaluated to determine its resource potential. Petronas had previously drilled the Roselle-1 well in 2016 which, although unsuccessful, provided useful information and data on the subsurface and indicated multiple geological play types in the block. Petronas contracted Shearwater GeoServices in September 2020 conduct a new 6,200 km2 3D seismic survey on the block, using the Geo Caribbean vessel. It was due to begin in
	Block 48 Petronas 100% <i>Ultra-Deepwater</i> ~3,200 km2	 Q4 2020 and take 4 months. Petronas signed a PSC in January 2012, but is yet to drill any wells on the block. 3D seismic conducted in 2017. Fugro conducted a seep survey and geochemical campaign on the block during Q1 2021, from the survey vessel MV Fugro Brasilis. It involved geophysical data collection, heat flow measurements, core sampling and onboard geochemical analyses. Subsequent geochemical analyses and final reports were due to be delivered in May 2021.
Shell	Block 42 Shell 33.33% Chevron 33.33% Hess 33.33% Water Depth: ~2,000-2,700m 6,175 km2	 Kosmos originally acquired the block in December 2011 and farmed out stakes to Chevron (2012) and Hess (2016). Shell acquired Kosmos' share in December 2020, assuming operatorship. There has been one well drilled on the block to date – the unsuccessful Pontoenoe-1 well, drilled by Kosmos in October 2018. It encountered high quality reservoirs, but no commercial hydrocarbons, and the primary exploration objective proved to be water bearing. 3,900 km2 of 3D seismic was acquired over parts of blocks 42 and 45 in 2012, and another 6,500 km2 3D seismic survey was completed on the blocks in January 2017. The partners have met all commitments under second exploration phase of the PSC, which expires in September 2021.
	Block 45 Shell 50% Chevron 50% Water Depth: 200-2,000m 5,125 km2	 Kosmos originally acquired the block in 2011, and farmed out 50% to Chevron in November 2012, at the same time as the deal for Block 42. Shell acquired Kosmos' share in December 2020, at the same time as Block 42. There has been one well drilled on the block to date – the unsuccessful Anapai-1 well, drilled by Kosmos in June 2018. It encountered high quality reservoirs but was dry. It was plugged and abandoned. The partners have met all commitments under second exploration phase of the PSC, which expires in September 2021.

BLOCK DEVELOPMENTS (cont)

Tullow	Block 47 Tullow 50% Pluspetrol 30% Ratio 20% Water Depth: 1,300-3,000m 2,369 km2 Block 54 Tullow 30%	 Tullow signed PSC in September 2010. Ratio farmed in in 2017 and Pluspetrol farmed in in 2018. The partners were recently granted a two-year extension for the block. The partners completed the first well on the block, the Goliathberg-Voltzberg North-1 well, in March 2021. It targeted two prospective intervals and encountered good quality reservoirs, but only minor oil shows. It has been plugged and abandoned. PSC signed in February 2014. Noble acquired 20% from Tullow in 2015.
	Equinor 50% Noble 20% <i>Water Depth:</i> 200-1,300m 8,480 km2	 Partners drilled the unsuccessful Araku-1 well in October 2017. It encountered gas condensate but did not find significant reservoir rocks and was abandoned. Tullow said that it did prove the presence of a new petroleum system in the Demerara plateau, though.
	Block 62 Tullow 80% Pluspetrol 20% Water Depth: 1,600-2,400m	 Tullow signed PSC in October 2018, following the 2017-2018 open bid round. Pluspetrol farmed in in April 2019. Tullow is carrying out initial geological work on the area ahead of 2D seismic.
ExxonMobil	4,061 km2 Block 59	Partners signed PSC in July 2017.
via	ExxonMobil 33.33% Hess 33.33% Equinor 33.33%	 2D seismic carried out in 2019. Partners planned to shoot more focused 3D survey ahead of drilling, likely in 2022.
ExxonMobil Exploration and Production Suriname B.V.	Water Depth: 2,900-3,500m ~11,000km2	
Equinor	Block 60 Equinor 100% Water Depth: 700-1,300m	 PSC signed in 2017. 3D seismic survey conducted in 2018.
Cairn	~6,200 km2 Block 61 Cairn 100% (via Capricorn Suriname BV) <i>Water Depth:</i> 60-1,100m 13,080 km2	 PSC signed in June 2018 as part of an open bid round in September 2017-September 2018 Around 12,000 km2 of 2D seismic has been carried out and processed on the block Cairn say they have identified multiple targets across the block in 100-800m water depths, targeting the Upper Cretaceous play. Company is high-grading most prospective prospects and is planning focused 3D seismic for H2 2021 (as of investor presentation in March 2021) Cairn investor presentation in September 2020 suggested contingent drilling would take place in 2023 onwards

2021 / NEAR TERM DEVELOPMENTS

Picking up where they left off in 2020, TotalEnergies and Apache will continue to lead offshore activity in Suriname this year. The partners have contracted two Maersk drilling rigs to drill appraisal wells on their recent Block 58 discoveries and begin a second exploration programme. The semi-submersible Maersk Developer arrived in January from Block 52 and the drillship Maersk Valiant arrived in March. The Noble Sam Croft, which had drilled all of the partners' previous exploration wells, has moved to ExxonMobil's Stabroek Block in neighbouring Guyana.

Apache President and CEO John Christmann told investors last November that they planned to maintain the pace of exploration in 2021. The partners are expected to drill the Bonboni prospect, in deeper waters within the central northern part of Block 58, later this year. Apache has previously said it had identified over 50 prospects in seven distinct play types on Block 58.

In the meantime, Tullow has drilled the unsuccessful Goliath Berg-Voltzberg North-1 well in Block 47. The company announced in March that it had encountered good quality reservoirs, but only minor oil shows. Coming on the back of three other disappointing wells in Guyana in 2019, and the broader challenges the company is facing, Tullow's focus is likely to be elsewhere for the foreseeable future. In a press release, the company said it would "assess the data gathered from the well and carefully consider next steps."

Elsewhere, Wood Mackenzie reported in January 2021 that Petronas and Shell would also drill in Suriname this year. Shell is likely to focus on Block 42 and Petronas on Block 52, following up the success of Sloanea at the end of last year. Last September, Petronas had contracted Shearwater GeoServices to conduct a new 3D seismic survey covering the whole of Block 52 in Q1 2021. Cairn is also planning a focused 3D seismic survey, on Block 61, in the second half of this year, with a view to drilling in 2023. ExxonMobil is unlikely to drill in Block 59 in 2021, but may start to focus more in Suriname from next year.

Staatsolie recently announced that it had received ten bids on three shallow water blocks. Eight blocks in an underexplored area covering 13,524 km2 had been offered via the Suriname Shallow Offshore (SHO) Bid Round 2020/2021, which ran from 16th November 2020 to 30th April 2021. The company said it would evaluate the bids and communicate with the successful bidders by 30th May 2021, before awarding PSCs

Suriname SHO Bid Round 2020/2021 Blocks 6 & 8

Paris, June 25, 2021 – TotalEnergies and its partner Qatar Petroleum have been awarded Block 6 and Block 8 in the Suriname SHO Bid Round 2020/2021. TotalEnergies shall operate these blocks, situated in shallow water with depths between 30 meters and 50 meters, and adjacent to the TotalEnergies operated Block 58, where 4 significant discoveries have been made since January 2020 and where operations are continuing in 2021.

With these two new operated exploration blocks, TotalEnergies expands its position in Suriname, an emerging world class basin. A 3D seismic acquisition campaign will be carried out on these 2 licenses to confirm their potential.

"This award demonstrates our ability to capture exploration acreage in a core area for TotalEnergies, pursuing our strategy of exploring for low development cost oil resources in highly prospective basins, particularly here, reinforcing our operatorship position in Suriname Block 58 ", **said Kevin McLachlan**, **Senior Vice President Exploration**. "We are delighted to continue to expand our strategic international partnership with Qatar Petroleum on these blocks."

TotalEnergies will operate the blocks with a 40% working interest, alongside Qatar Petroleum (20%) and the national company Staatsolie (40%).

RESOURCE AND PRODUCTION POTENTIAL

Given the recent drilling successes on both sides of the border, it now seems very likely that the Guyana-Suriname basin contains materially more than the 13.6 bn barrels of oil estimated by the USGS in 2012. ExxonMobil has already found more than 9 bn boe of recoverable resource in Guyana, and in March said that the basin could contain more than double that, or 18 bn boe. Morgan Stanley estimated in August 2020 that Block 58 alone in Suriname would ultimately yield 6.5 bn boe, of which 5.9 bn was oil.

There had previously been some concerns – based on results from ExxonMobil's Haimara discovery just across the border – that Block 58, and the Suriname half of the basin in general, might contain primarily gas condensate fields. The Maka Central discovery, which is seven miles from the border, and the other subsequent finds, dispelled most of these fears.

Although TotalEnergies and Petronas' discoveries are still being fully evaluated, initial signs are very positive. Rystad Energy estimated last year that TotalEnergies's first three discoveries alone could contain 1.4bn barrels of oil equivalent.

TotalEnergies has said that it plans to take FID on a development plan for Block 58 later this year, with a view to achieving first oil in 2025 – which would represent an impressive five years from discovery to first oil. Given the low breakeven costs for projects in the basin – broadly understood to be around \$45 in Suriname and even lower in Guyana – even low oil prices are unlikely to derail the development of Suriname's offshore industry.

Rystad has said it expects combined production from Blocks 58 and 52 to reach about 650,000 bpd by early 2030. As in Guyana, Suriname's fields are likely to be developed via high-capacity floating production complexes, with crude oil exported directly without ever making landfall in Suriname itself. Even though Suriname has an existing refinery, it is only very small and volumes would far exceed its capacity, which is set up to process Saramacca crude from Suriname's small onshore fields. It is not yet clear whether the gas and condensate intervals will be economically viable to produce.

DATA COVERAGE

The offshore area of the Suriname basin is fully covered with 2D seismic surveys, with the most recent 3D surveys concentrated in the deepwater section. The quality of such surveys increases further away from the shallow water section.



Seismic Data Coverage Map for Suriname basin

The National Power System of Suriname relies on isolated power networks served by the N.V. Energie Bedrijven Suriname (EBS), Staatsolie, and the Department of Rural Energy (DEV). The power system of the country is mainly served by hydro and thermal generation power stations.

The Afobaka plant is the main Hydropower station, located in Bkorondo village and providing a total power supply of 189 MW which is transmitted through a large electric grid towards the northern region. Thermal power plants and diesel Fuel oil generators are providing the remaining power supply required by other communities and rural villages across Suriname.

Producer	Plant	Capacity (MW)
Staatsolie	Thermal power plant	96
	Afobaka Hydropower Plant	189
NV EBS	EPAR thermal power plant	168
	ENIC thermal power plant	25
DEV	Diesel generators in approximately 130 villages	4.5

Source: SOC Report team elaboration

The potential hydropower estimated for Suriname is of 2.419 MW, nonetheless only +- 190 MW has been harnessed until the moment. The hydropower sites of Puketi (40Kw) and Gran Olo (300Kw) hydropower sites, are included in that estimation.

Country Installed capacity: 503.4 MW

Peak Demand (2018): 215.4

Total Generation (2017): 328.5

Electricity access: 97% (of total population: 100% access to urban population; 91% access to rural population).

6.1 Renewable Energy

A total of 62% of Suriname's energy supply is from fossil fuel sources, with the remainder 38% generated from renewable energy sources. Nearly 5.5% of the country's GDP is allocated to subsidise electricity costs, which is the largest when relatively compared to other countries.

Generation by type: Hydropower 180 MW; Biomass 2MW; Solar 2MW.

Main renewable energy generated from Afobaka hydropower plant.

Non-conventional Renewable Energy (RE) is being slowly introduced in Suriname. The off-grid Pokigron solar power plant, inaugurated by EBS in February 2018, was the first and largest solar project installed in Suriname, providing 500Kw power 24 hours a day to the village of Atjoni and Pokigron .

6.1 Renewable Energy (cont)

The biggest solar plant in Suriname was commissioned in 2014 to supply power to the IAMGold Rosebel gold mine, providing 5MW capacity to the mining operation. Other examples of renewable energy projects being developed in Suriname are the solar power plants of Brownsweg (500Kw), located nearby Brownsweg village and aimed to be commissioned by 2023, the Alliance project (200Kw), located in the Commewijne district and planned to be completed by 2024, and the Coronie solar power plant (300Kw), located in the Coronie district. A floating solar PV installation in the Afobaka hydropower dam is now undergoing feasibility studies, in order to support the establishment of a proper regulatory framework, based on strategies and technologies used in Japan.



6.2 Energy Transition

Target: Maintain the share of electricity from renewable sources above 35% by 2030.¹⁰

6.2 Energy Transition

Notes

ⁱ(2021) *Ewsdata.rightsindevelopment.org*. Available at: <u>https://ewsdata.rightsindevelopment.org/files/documents/55/IADB-SU-L1055_zbxMxXC.pdf</u> (Accessed: 10 November 2021).

ⁱⁱ Ibidem. Diesel power generators are normally operated with certain limitations, supplying electricity during a few hours a day.

The Afobaka hydropower plant is operating since 1965 "which makes it one of the oldest large hydropower plants that is still operational in the Amazon region. The water reservoir has an area of 1560 km2. Currently there are 3 Kaplan turbines and 3 fixed blade turbines installed. During normal operation 4 out of the 6 turbines are working." (2021) Fga.unb.br. Available at: https://fga.unb.br/articles/0002/3737/Alimoestar Thesis 8 maart 2020.pdf

(Accessed: 9 November 2021).

ⁱⁱⁱ State of the Climate Report: Suriname | Publications (2021). Available at: <u>https://publications.iadb.org/publications/english/document/State-of-the-Climate-Report-Suriname.pdf</u> (Accessed: 9 November 2021).

^{iv} Puketi facility operated from 1981 to 1988, supplying the villages of Puketi and Futupasi of electricity, and is non-operative at the present time. Gran Olo construction took place from 2005 to 2017, located in the Tapanahony River, nearby Puketi site, nevertheless malfunctioning problems were discovered during the commissioning phase and rendered the facility non-operative.

V Suriname has the third lowest electrification rate in Latin America. (2021) Ruralelec.org. Available at: <u>https://www.ruralelec.org/sites/default/files/Status%20of%20the%20off-grid%20renewable%20energy%</u> <u>20market%20in%20Latin%20America%20%26%20the%20Caribbean_0.pdf</u> (Accessed: 10 November 2021).

(2021) Energy.gov. Available at:

https://www.energy.gov/sites/default/files/2020/09/f79/ETI-Energy-Snapshot-Suriname_FY20.pdf (Accessed: 10 November 2021).

(2021) Ewsdata.rightsindevelopment.org. Available at: https://ewsdata.rightsindevelopment.org/files/documents/55/IADB-SU-L1055_zbxMxXC.pdf

(Accessed: 10 November 2021).

vi Punwasi, S. (2019) A roadmap for energy transition in Suriname: Backcasting scenarios for a sustainable electricity generation by 2040, Repository.tudelft.nl. Available at: <u>https://repository.tudelft.nl/islandora/object/uuid:65b2fee9-d729-4e4c-8b1a-715041f144d4?collection=e</u> <u>ducation</u>

(Accessed: 10 November 2021). Financing for Pokigron solar project was provided by the Inter-American Development Bank (IDB).

The system "consists of 1680 solar PV panels (each 300 Wp) and a group of 8 battery banks with a total capacity of 8000 Ah. However, this power plant uses diesel generators as backup in case the batteries deliver insufficient power during the night."

6.2 Energy Transition

Notes (cont)

Part of the energy generated during the day by the solar panels is stored in batteries for use in the evening. EBS's Solar Energy project provides 1x24 hours of power to approximately 494 households and other end-users in Atjoni and Pokigron, including 9 local shops, the civic center and 7 local businesses. (2021) Unstats.un.org. Available at:

https://unstats.un.org/unsd/envstats/Compendia/Suriname9thEnvironment2020.pdf (Accessed: 10 November 2021).

^{vii} Such projects had its permit application submitted or are under construction phase
 ^{viii} Project being developed by the Government of Suriname and Staatsolie Power Company Suriname NV (SPCS) with funds from the Inter-American Development Bank. TC Document.pdf | IADB (2021).
 Available at: <u>https://www.iadb.org/projects/document/EZSHARE-975627404-21?project=SU-T1138</u> (Accessed: 10 November 2021).

Funded projects like these are aiming to pave the way for future projects, removing main obstacles as the lack of a clear policy and regulatory framework for the electricity sector, and therefore attract more investment to the country.

^{ix} (2021) Energy.gov. Available at: <u>https://www.energy.gov/sites/default/files/2020/09/f79/ETI-Energy-Snapshot-Suriname_FY20.pdf</u> (Accessed: 10 November 2021).

General

Suriname has been a colony of the Kingdom of the Netherlands. Suriname became independent on November 25, 1975 and became a Republic – the Republic of Suriname.

Before the independence of Suriname, court decisions, laws and treaties to which the Kingdom of the Netherlands was a party applied mutatis mutandis in Suriname, with some exceptions. The aforementioned is also known as the application of "the principle of concordance".

After independence, the principle of concordance formally came to an end, but judgments of the Supreme Court of the Netherlands in particular are still authoritative and guiding for the Surinamese judges.

The Judiciary

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The Constitution is the highest law and provides only for two courts: the Suriname District Court (Het Surinaams Kantongerecht) and the Court of Justice (Het Hof van Justitie).

The Surinamese district courts (both civil and criminal cases) serve in the first instance and the Court of Justice serves as the appeal court.

Suriname has three district courts, namely: district court judge in the first district (civil cases in the districts of Paramaribo, Wanica, Para, Brokopondo, Commewijne and Saramacca), district court judge in the second district (criminal cases in the districts of Paramaribo and Commewijne) and the district court judge in the third district (civil and criminal cases in the districts of Nickerie, Coronie, Marowijne and Sipaliwini, as well as on criminal cases in the districts of Wanica, Para, Brokopondo and Saramacca).

Besides the role of the only appeal court, the Court of Justice of Suriname serves exclusively as the civil service court.

The members of the judiciary in charge of the administration of justice and the Attorney General at the Court of Justice are appointed by the Government, after advice from the Court of Justice.

The Public Prosecution Service, headed by the Attorney General at the Court of Justice, is charged with investigating and prosecuting criminal offences.

Suriname also has a Constitutional Court (which is not a part of the judiciary) that is charged with reviewing laws against the Constitution and treaties and government decisions against fundamental rights in the Constitution.

The Court of Justice officially introduced the "court hearing" (comparitie na antwoord) in civil cases in 2021, which means that court cases will be much faster and more efficient than before.

Suriname entered the original jurisdiction of the Caribbean Court of Justice when it was established in 2005.

Suriname recognizes contractual clauses related to choice of law, forum and arbitration.

Suriname has four major codes of law, namely:

The Civil Code (Burgerlijk Wetboek)

This code contains rules relating to family law (book 1), law of property and inheritance (book 2), law of obligations and torts (book 3) and proof and statute of limitations (book 4).

The Code of Civil Procedure (Wetboek van Burgerlijke Rechtsvordering)

In particular, this code contains the formal rules that apply in civil proceedings.

The Commercial Code (Wetboek van Koophandel)

This code contains the rules relating to company law, commercial law, insurance law and transport law.

The Criminal Code (Wetboek van Strafrecht)

This code contains the substantive rules of criminal law (criminal offenses and violations, etc.).

The Code of Criminal Procedure (Wetboek van strafvordering)

This code contains the formal rules that apply in criminal cases.

The Body of Laws

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Part of the Civil Law Family

Because Suriname has been a colony of the Kingdom of the Netherlands, which is part of the Civil Law Family, its legal system is also based on the Civil Law System/Family.

The Civil Law System is characterized by the use of legislation as the primary source of law and case law and doctrine as secondary sources of law. In contrast to the Common Law System which is based more on case law.

Surinamese legislation often derives from Dutch legislation.

Influences from the region (Carcom, etc.) are hardly noticeable in the current Surinamese legislation.

Anti-Corruption and Money Laundering

Suriname has legislation to ensure compliance with international money laundering and counter-terrorism financing (AML/CFT) requirements, and complies with its obligations under several UN and Inter-American treaties to which it is a party.

The Anti-Corruption Act (Anti-corruptiewet, S.B. 2017 no. 85): The Anti-Corruption Act applies to both public and private governmental entities. Public officials – including directors and supervisory directors – associated with government legal entities must refrain from obtaining any unlawful advantage for themselves or another and/or whereby the State or a state institution is intentionally inflicted with any financial disadvantage or financially disadvantageous conditions are stipulated. The aforementioned

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The Anti-Corruption Act also provides for an Anti-Corruption Commission to ensure, among other things, the early identification and prevention of corruption. However, the aforementioned committee has not yet been established at the time of writing.

This law also obliges public officials to issue a written statement (by notarial deed) about their income and assets.

Money Laundering Act (Wet Strafbaarstelling Money Laundering, S.B. 2002 nr. 64):

Money laundering is punishable under this law.

Notification of Unusual Transactions Act (Wet Melding Ongebruikelijke Transacties, S.B. 2016 nr. 33):

Suriname has been a member of the Caribbean Financial Action Task Force (CFATF) since 1998, a sister organization of the Financial Action Task Force (FATF). These organizations initially focused only on fighting money laundering; In this context, Suriname adopted eight laws in 2002, including the Notification of Unusual Transactions Act. Developments in the world have forced the organizations to focus on the financing of terrorism in addition to fighting money laundering.

A Hotline has been set up under this Act, which contributes significantly to preventing and combating money laundering by analyzing reports of unusual transactions and translating them into suspicious transactions.

AML/CFT Directive of the Central Bank of Suriname dated October 13, 2016:

With this directive, the Bank fulfills its obligations as a supervisor of financial institutions on the one hand and, on the other hand, attempts to contribute to the promotion of compliance with laws and regulations regarding money laundering and the financing of terrorism by the financial sector of Suriname.

International Sanctions Act (Wet Internationale Sancties, S.B. 2016 nr. 31):

This law provides an administrative basis for the implementation of international sanctions imposed by the United Nations on terrorist organizations or persons associated with them.

Money Transaction Offices Supervision Act (Wet Toezicht Geldtransactiekantoren, S.B. 2021 nr. 53):

Among other things, this Act aims to combat illegal activities related to the financial sector, such as money laundering and terrorism financing.

Annual Accounts Act (Wet op de Jaarrekening, S.B. 2017 nr. 84):

This law obliges both public and private legal entities to prepare and publish annual accounts. If the annual accounts are not drawn up or published on time, fines will be imposed pursuant to article 18 paragraph 1 Annual Accounts Act. Article 16 Annual

Accounts Act holds the directors and supervisory directors who are guilty of misleading annual figures personally liable for the damage suffered. The same consequence is also attached to failure to prepare or publish in a timely manner, if this results in damage.

Energy-Specific Laws

Suriname has experienced various oil discoveries in the past period. However, Suriname does not yet have legislation that explicitly deals with the management of the oil industry.

Mining Decree (Decreet Mijnbouw, S.B. 1997, nr. 44):

This law contains the rules with regard to the exploration and exploitation of minerals, including oil.

Petroleum Act (Petroleumwet, S.B. 2001 nr. 58):

This law contains rules regarding petroleum agreements between state enterprises and contractors.

The Environmental Framework Act (De Milieuraamwet, S.B. 2020 nr. 97):

This law contains rules with regard to the prevention and punishment of environmental pollution that apply to everyone (both natural and legal persons). An arsenal of implementing decrees must be issued for the adequate implementation of this law. However, the implementing decrees are at the moment of writing still only in the draft phase.

Suriname does not yet have a Local Content policy in the form of legislation.
7. Business and Legal

Registering or Incorporating a Company

Participation in the Surinamese market by a foreign company is possible by establishing a branch (1) or by establishing a new (limited liability) company under Surinamese law (2). The choice for one of the two aforementioned options will be determined by considerations that can be decisive. This may include tax considerations or the fact that certain licenses are only given to national entities.

The establishment of a branch is affected by its registration in the Trade Register. Registering a branch is a relatively simple procedure. Among other things, the formal appointment of a local representative by the competent body of the foreign company is required. Furthermore, the deed of incorporation and valid articles of association must be submitted.

For the establishment of a new company under Surinamese law, the relevant provisions of the Commercial Code apply. (Suriname does not have a separate Companies Act, as in the common Law jurisdictions. Following the forthcoming amendment of the Civil Code, all legal entities will be governed – in addition to their statutes – by the relevant provisions of the new Civil Code.)

The establishment of a limited liability company can be done in two ways:

- By means of a notarial deed or;
- By using the model articles of association approved by the government.

The advantage of the first method is that the statutes can be tailored to the needs of the founders. The second method gives the advantage of speed.

Service Type	Overview
Marine Services	VSH Transport Terminal Services & Logistics Terminal Operator & Stevedore • Licensed custom broker Offshore Project Support Services Agency Services Logistics Management, Warehousing Road Transport Surveys VSH Labour Services
	DP World Terminal located at Nieuwe Haven / Dr Jules Sedney Paramaribo. Providing vessel and yard ops and services/ Container & Freight Services / LCL storage facilities / Roll on Roll off Services.
	Kuldipsingh Group; Port Facilities Services for ships in the oil, gas, mining and wood industries. Shore base facility quayside support for exploration and drilling.
Tier 1 Service Providers	The principal oilfield players, OPCO's, have all established presence in Paramaribo, this includes the principal Tier 1's and their global partners. This establishment is either in the form of a locally incorporated company or a reciprocal agency agreement. Typically this includes Schlumberger, Halliburton and Baker Hughes and their global partners.
Logistics	Paramaribo Port Authority Nieuwe Haven - Dr Jules Sedney Port VHL Logistics DP World Kuldipsign Port Facility

Shore Base	Kuldipsign Port Facility This is an existing logistics hub for offshore operations The facility is located only 15 km from the mouth of the Suriname River and expands out over 330 hectares. It boasts of 1000 meters of direct access river frontage, with a natural water depth of 7 meters along the quay. It provides secure storage, berthing operational personnel and loading support. It has sufficient capacity to cope with current demand but it is unlikely to be able to service all of the planned Deepwater development support required
Port Facilities	Jules Sedney-Haven On the west bank of the Suriname River, approx. 12 n.m. from the river mouth. 7 metres of water A river port, handles dry and liquid bulk, containers, reefer, metals, Ro-Ro and breakbulk cargo. The port serves the capital and largest city in Suriname. Facilities comprise the multipurpose Jules Sedney-Haven Terminal and several privately operate logistics and warehousing operations
Local Workforce Training	Given the strong political drive to make use of local content, and the limited capacity, an industry needs to grow around training and up-skilling the local workforce to international oil industry standards.
Agency for Local Business Development	Agency for local business development should be established to help source local labour and encourage participation by local companies. All businesses, local or international, should register with the LBD Agency to gain access to Industry RFI Training programmes and learn about opportunities in the Energy sector. It can also used by international companies looking for potential local partnerships.
Other Local Services	The Paramaribo Chamber of Commerce to provide a list of companies that are available to be involved in the nascent Suriname Offshore Energy sector.
	https://www.chamber-commerce.net/dir/3968/Suriname-Chamber-of-Commerce-and-Industry-in-Paramaribo

Paramaribo ESRI Satellite Map.



General Reafer area **VSH Main** Office VSH terminal VSH **DP World** /SH terminal terminal terminal Common Users Berth

Jules Sedney Harbour Paramaribo

N.V. Verenigde Surinaamse Holdingmij,-/United Suriname Holding Company VSH Group of Companies

N.V. Verenigde Surinaamse Holdingmij,-/United Suriname Holding Company

VSH Group of Companies

A public company incorporated in the Republic of Suriname, listed on the Suriname Stock Exchange, with subsidiaries in Miami / U.S.A. (2001), Georgetown/Guyana (2015) and Moerdijk, the Netherlands (2018). The Group's major activities include logistics, trading, manufacturing, real estate, steel engineering project management and specialized information technology services.

VSH TRANSPORT is a group company, is active in Terminal and Port Operations, Stevedoring, Customs Brokerage, Warehousing, Local Transport, Logistics Services and Offshore Support Services, offering services at all ports in Suriname. Certified: ISO 9001:2015, 14001:2015, ISO 45001:2018, ICMI, TRACE

N.V. Havenbeheer Suriname is a Port Management Company, owns and manages infrastructure transportation, logistics, trade and development Certified ISO 9001: 2015; ISO 14001: 2015 and ISO 45001:2018

SHORE BASE CONSORTIUM SURINAME - SBCSR

Together with **N.V. Havenbeheer Suriname (HBS)** and **G-Port Incorporated (G-Port)**, **VSH Transport (VSH)** is a partner in the SHORE BASE CONSORTIUM SURINAME – SBCSR

G-Port Incorporated is a partnership formed in 2018 between Georgetown, Guyana based John Fernandes Ltd (JFL) and Louisiana, USA based Edison Chouest Offshore (ECO).



Figure 1: Phase 1 Shore-base terminal

SBCSR Key Features

- · Adjacent to the existing Paramaribo port facility.
- Sustainable shore-base development: existing zoned industrial site
- One-stop offshore logistics provider
- Experience/trained personnel.
- · Automated shore base certified ops procedures.
- · Project support for heavy-lift requirements
- Bonded facilities Warehousing, Custom brokerage, Agency, Crew changes & logistics

SHORE BASE CONSORTIUM SURINAME - SBCSR

Phase 2: Shore-base terminal – for future offshore production activities, shore-base support additional land is available to the south of Phase 1. A more extensive shore base is still to be designed basis agreements with landowners (Phase 2 and 3).

	PHASE 1 – EXPANSION
Phase 2	Phase 3 PHASE 1 PERPANSION PHASE 1 Multi purpose terminals Phase 3 Quay side 600 x 40 meters
Quary side 6/5 meters	Phase 2 – land owned by third party/option to long lease available - 50 ha/500,000m2 – quay side 675 m Phase 3 – HBS owned land in legal process 65.000 m ² (6.5 ha)

Figure 1: Phase 2 and 3 Shore-base terminal

DP World

https://www.dpworld.com/

DP World is a global player a leading provider of smart logistics solutions, enabling the flow of trade across the globe, deploying industry-leading technology to create the smartest, most efficient and innovative trade solutions, while ensuring a positive and sustainable impact on economies, societies and our planet.

https://www.dpworld.com/en/paramaribo#

In August 2011, DP World acquired majority shares in Integra Port Services NV (founded in June 2008) by our local shareholder, as a subsidiary company of the Holding Integra Marine & Freight Services. With this acquisition, Integra Port Services NV changed its entity name to Integra Port Services /DP World Paramaribo at the chamber of commerce, with DP World Paramaribo as its brand name.

Terminal located at Niew Haven/Dr Jules Sedwey Paramaribo. Providing vessel and yard ops and services/ Container & Freight Services/ LCL storage facilities/ Roll on Roll off Services.

Terminal located at La Vigilantia. Seventy-three metres Quayside; 21K Sq. meters storage servicing Mining Oil Forestry sectors plus Cement cargoes.

Kuldipsingh Group

Kuldipsingh Port Facility

Facilities for ships in the oil, gas, mining and wood industries.

Port services

Berth space

- Loading and unloading of all types of cargo
- Storage areas for large amounts of general cargo, steel, heavy material, vehicles/ containers
- Stevedore services
- Ships Agents
- Dedicated space for offshore Supply Vessels
- Logistics services

Storage Facilities

Open storage area 9.1 HA: logs, steel pipes

- Covered storage 9000 Sqm: cement, quicklime and rice
- Warehouse: 1100 + 750 Sqm general cargo
- Secured Pipe Yard: 11.900 Sqm
- Jetty Open Storage: 15.800 Sqm for containers, vehicles and heavy materials
- Temporary deck storage: 11.995 Sqm

Kuldipsingh Oilfield Services

Kuldipsingh Oilfield Services N.V. is mainly concerned with providing services and deliveries in the energy industry (oil and gas). The services this company provides and delivers are very diverse. From drilling and finishing oil wells, and maintenance and cleaning of producing oil wells to the sales of (drilling) materials and parts. Oilfield Services also introduces new, innovative techniques.



9. Risk Overview

Risk	Severity	Comments
		The index of Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. The index is an average of several other indexes from the Economist Intelligence Unit, the World Economic Forum, and the Political Risk Services, among others.
Political Instability		Suriname Political Rights Rating is 135 from a list of 190 countries
Territorial Disputes		 WASHINGTON, DC/ THE HAGUE, Netherlands A long-simmering maritime boundary dispute between Suriname and Guyana has recently been settled. The two South American countries' offshore waters are believed to contain significant oil and natural gas deposits. Under terms of a tribunal's ruling announced Sept. 20, Guyana has been granted sovereignty over approximately 12,800 sq mi (33,152 sq km) of coastal waters that had been in dispute. Suriname was awarded 6,900 sq mi (17,871 sq km). This binding ruling, according to terms of the UN Convention of the Law of the Sea, is expected to lead to further offshore oil and gas exploration by both countries. French Guiana–Suriname After centuries of dispute, France, on behalf of its overseas territory of French Guiana, and Suriname, a former Dutch colony, agreed to a boundary delimitation in 2021. The two States established a digital borderline for approximately two-thirds of its length (364 km or 226 miles) along the Maroni and Lawa Rivers. Sovereignty for hundreds of islands was determined. One remaining dispute, leftover from colonial disagreements, is currently being negotiated by the bilateral boundary commission. There has been a history of conflict over which tributary of the Lawa River the boundary follows to the tripoint with Brazil. The Netherlands, and now Suriname, contends that the boundary follows the Marouini River to the east, while France asserts that the border follows the Litani River and Coulé-Coulé Creek to the west. Suriname disputes Guyana's possession of an area of South-Eastern Guyana called the New River triangle. In the 1960's and 1970's there were skirmishes between opposing forces. Currently, however, both Governments in Suriname and Guyana have committed to discussing the matter in a peaceful and cooperative manner.
Corruption		Suriname: Corruption Perceptions Index, 100 = no corruption For that indicator, data for Suriname from 2005 to 2020. The average value for Suriname during that period was 37 points with a minimum of 30 points in 2006 and a maximum of 45 points in 2016. The latest value from 2020 is 38 points. For comparison, the world average in 2020 based on 177 countries is 44 points. Suriname Corruption Ranking is 99 from a list of 177 countries.

9. Risk Overview

Crime and Safety	The FCO describes crime levels as "relatively high" and warns that police capacity is low. It says that Suriname experiences many of the same crimes as other countries with significant wealth gaps and a perception that foreigners are wealthy and warns of potential robberies against businesses and individuals. It advises against walking anywhere at night or travelling to and from the main airport late at night because of poor roads and incidents of armed robberies.
Government Intervention and Regulatory/ Tax Discrimination Natural Disasters	The governing contractual arrangements for access to Suriname's Offshore Assets is the Production Sharing Contract (PSC) a copy of which is appended to the Suriname Playbook. Energy Specific Laws Suriname does not yet have any legislation that explicitly deals with the management of the oil industry. Current Laws Mining Decree (Decreet Mijnb, S>B 1997, nr 44) exploration/exploitation of minerals Incl Oil. Petroleum Act (Petroleumwet, S <b 2001="" 58)="" agreements="" between="" nr="" petroleum="" state<br="">enterprises and contractors. The Environmental Framework Act (De Milieuraamwet,s.b. 2020 nr. 97) at this time in draft Suriname is rarely affected by tropical storms and or hurricanes. It does however suffer from periods of heavy rainfall and flooding which was witnessed earlier this year. SURINAME Saramacca Canal System Rehabilitation Project
	The Government of Suriname (GoS) is preparing the World Bank-funded project, the US\$30 million Saramacca Canal System Rehabilitation Project to reduce flood risk for the Greater Paramaribo. The Project will improve the capacity of the Saramacca Canal to discharge water efficiently into the Suriname and Saramacca Rivers, improve operation of the canal for flood management, navigation, and irrigation. In addition, the Project will establish a monitoring, forecasting, and management system for the overall Saramacca drainage system.

10. Case History "Doing Business in Suriname"

MedservRegis in Suriname



MedservRegis provides integrated shore base logistics to the offshore oil and gas industry and supply chain management for Oil Country Tubular Goods (OCTG) to support the offshore and onshore oil and gas industry. As a company we have always strived to explore and develop business in non-saturated markets and expansion into Suriname was no different. MedservRegis prides itself in its ability to deploy world class services, specifically in the Energy market, to the highest industry standards. We have coined this concept as our **base in a box** model, where we are able to establish an integrated offshore supply base anywhere in the world and have it operational within weeks.

Following the successful hydrocarbon findings which Guyana encountered in 2017 and 2018, we kept a very close eye on the surrounding market and potential opportunities.

In mid-2018 one such opportunity emerged from Guyana's southern neighbour Suriname, or more specifically its National Oil Company Staatsolie Maatschappij Suriname N.V (Staatsolie). A call for tender was released to support a 6 well, shallow water, offshore exploration drilling program.

When visiting a country for the first time one doesn't quite know what to expect. The fact that Suriname is the only sovereign nation outside of the Netherlands that speak Dutch, is situated on the South American continent with 96% of its land mass covered in rain forest, speaks 21 recognised languages or dialects and has one of the most ethnically diverse populations on earth, only adds to the intrigue.

In December 2018 Medserv was awarded a \$30M, fully integrated logistics and support contract, providing a vast range of shore base logistics services. These included but were not limited to the provision of medivac/crew change helicopters, PSVs, AHTS, FSIV and the operation of onshore supply base / complementary services. The Near Shore Drilling Project (NSDP) by Staatsolie was the first offshore drilling campaign to be supported predominantly from Suriname.



10. Case History "Doing Business in Suriname"

Medserv was able to work with "The Kuldipsingh Group" port facility, historically and primarily used to import concrete, chemicals & export lumber for use in the construction and mining industries. On the 8th of January 2019 the first shipment of (OCTG) casing arrived, all be it 2 months ahead of schedule and we were ready to receive it.

The team at Kuldipsingh were very receptive to our requests and recommendations, working exceptionally well with the Medserv management team to deliver the contract to our client.

The integrated nature of the contract required MedservRegis to provide additional ad-hoc shore base and logistics support services from Trinidad and Guyana. Through management of the contract, Medserv garnered an unrivalled operational knowledge of working both onshore and offshore in Suriname, and in setting up and organizing remote shore bases in Trinidad and Guyana.

I strongly believe in promoting, developing, and delivering in-country values (ICVs), through capital investment and local recruitment, with 75% of our total personnel count, being employed from the local area. We took every opportunity during the 2019 near-shore exploration project, to recruit, train and develop local Surinamese personnel. We take pride in the development of our team and I am convinced that the training and development programs we deploy deliver significant opportunity to our staff increasing socioeconomic standing in a meaningful way to the community.

Our ICV endeavours were highly appreciated, and we were commended by Staatsolie for our efforts – particularly in the training of sea cadets - for the emerging offshore Oil and Gas industry.

Due to the completion of the drilling campaign, and because of the serious impact of Covid 19 on the energy sector, a decision was made to temporarily suspend operations, allowing for an internal review to be carried out to assess a longer-term strategy.

Earlier this year a decision was taken to return to Suriname and to sign a strategic alliance agreement with DP World Paramaribo (DPW) who are our partners in Cyprus with a view to recommencing operations in country. This region (with Guyana and Trinidad and Tobago) has been identified for future growth by the company.



10. Case History "Doing Business in Suriname"

DPW in line with its strategic objectives in the oil and gas sector has made the commitment to develop a comprehensive Offshore Support Base in Suriname to provide the required highly specialized, integrated end to end solutions for the oil & gas operations in the promising Guyana-Suriname basin. Integra Port Services operating under the brand name DP World Paramaribo entered a joint venture with Suriname partners HJ de Vries Project Development N.V. and FIRM Engineering N.V., to build a world-class facility on the east bank of the Suriname River. The purpose-built facility will house an all-encompassing one-stop

-shop solution for the local energy market; one that is currently unavailable in the Caricom region.

The facility is located only 15 km from the mouth of the Suriname River and expands out over 330 hectares. It boasts of 1000 meters of direct access river frontage, with a natural water depth of 7 meters along the quay. Features like these make it the ideal site to develop an industry leading marine park. The consortium is taking a phased approach to the development with phase 1 expected to be complete in Q4 of 2022, initially providing 200m of quay and 10 hectares of laydown / operational area. Medserv will bring shore base management expertise, as well as a range of strategic partnerships to the facility, from OCTG inspection, OCTG repair and manufacturing, fabrication services, waste management, industrial gas manufacturing and mixing, mud, and bulk plants and CCU rentals. This facility will also benefit from an in-house, scheduled freight service linking Trinidad, Guyana and Suriname, supporting operators and tier-1 contractors to facilitate their transition to operate in Suriname seamlessly.

With the market and region primed for success we see Suriname as an integral part of MedservRegis' growth. Suriname has several, potential offshore developments, under the management / operation of a handful of world class operators, therefore MedservRegis is aligning itself with several strategic partnerships to facilitate and support the upcoming offshore evolution.

Suriname is perfectly positioned to encourage the upcoming growth; its business community is proactive and willing to invest in the country's future, adding a level of sustainable development to the supply chain that is especially welcomed.

11. Acknowledgement

Staatsolie and the Staatsolie Hydrocarbon Institute. Patrick Brunnings and his team. <u>https://www.staatsolie.com/en/staatsolie-hydrocarbon-institute</u>

Naarendorp Advocaten; Edward Naarendorp and his team. http://naarendorp.com/en/home/

Fina Bank; Eblein Frangie and his team. https://www.finabanknv.com/

VSH Transport; Sjoerd Poort and his team. https://vshunited.com/

Kuldipsingh; Vinood Ramkhelawan and his team. https://www.kuldipsingh.net/#betonmaterialen

Suriname Chamber of Commerce and Industry in Paramaribo. https://www.chamber-commerce.net/dir/3968/Suriname-Chamber-of-Commerce-and-Industry-in-Param aribo

Medserv Paramaribo: Jean Marc Pace. http://www.medservenergy.com/

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AZ5 - London WordPress & amp; Drupal Agency: Damian Ellis at AZ5.co.uk



We specialise in Energy Economics, Research/Analysis, Marketing, Investment, Policy, Strategy and Delivery.

We cover the UK, Scandinavia, East and West Africa, Guyana and Surinam in Caribbean South America.

Our global reach includes Sovereign Governments, IOC/NOC's, FTSE 100 Companies, Energy Investors, International Management, Energy Consultations and the Global Supply Chain.

Simplify Complexity, Enable Performance Get in touch on +44 (0) 1224 961 380 or <u>info@abisenergy.com</u>