

Inside NNPC Oil Sales: A Case for Reform in Nigeria

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Executive summary

Nigeria's national oil company, the Nigerian National Petroleum Corporation (NNPC), sells around one million barrels of oil a day, or almost half of the country's total production. NNPC oil was worth an estimated \$41 billion in 2013, and constitutes the government's largest revenue stream. Early in 2014, Nigeria's central bank governor Lamido Sanusi raised an alarm that \$20 billion in NNPC oil sale revenues had gone missing.

Our report picks up this story, and offers the first in-depth, independent analysis of how NNPC sells its oil. It identifies the most pressing problems—including several largely ignored by the prior government's response to Mr. Sanusi's allegations—and offers recommendations for their reform.

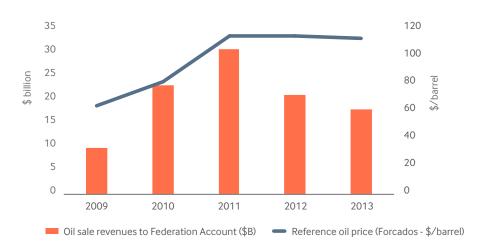
NNPC's approach to oil sales suffers from high corruption risks and fails to maximize returns for the nation. These shortcomings also characterize NNPC as a whole. Over 38 years, the corporation has neither developed its own commercial or operational capacities, nor facilitated the growth of the sector through external investment. Instead, it has spun a legacy of inefficiency and mismanagement. Its faults have been described by a number of scathing reports, many commissioned by government itself.¹ Despite NNPC's debilitating consumption of public revenues and performance failures, successive governments have done little to reform the company.

We find that management of NNPC's oil sales has worsened in recent years—and particularly since 2010. The largest problems stem from the rising number of *ad hoc*, makeshift practices the corporation has introduced to work around its deeper structural problems. For instance, NNPC entered into poorly designed oil-for-product swap deals when it could no longer meet the country's fuel needs. Similarly, it began unilaterally spending billions of dollars in crude oil revenues each year, rather than transferring them to the treasury, because NNPC's actual budget process fails to cover operating expenses. Some of these makeshift practices began with credible goals. But over time, their operation became overly discretionary and complex, as political and patronage agendas surpassed the importance of maximizing returns.

These poor practices come with high costs. Average prices for the country's light sweet crude topped \$110 per barrel during the boom of 2011 to 2014. Yet during that same period, as shown below, treasury receipts from oil sales fell significantly. While volumes lost to oil theft explain some of the decline, NNPC's massive revenue withholdings and an increase in suboptimal sales arrangements are also to blame. Mismanagement of NNPC oil sales also raises commercial, reputational and legal risk for actors worldwide: the sales involve some of the world's largest commodity trading houses, are financed by top banks, and result in the delivery of crude to countries across the globe.

NNPC's approach to oil sales suffers from high corruption risks and fails to maximize returns for the nation.

Government-commissioned reports include those by NEITI (covering 1999-2012), the Oil and Gas Implementation Committees (2003 and 2008), KPMG (2011), the Petroleum Revenue Special Task Force (2012), the Kalu Task Force (2012), the Lawan committee (2012), PwC (2015), and several parliamentary committees. Independent reports include those by Mark Thurber et al. (2012), Ugo Nwokeji (2007), Revenue Watch/NRGI (2012) and the Nigeria Natural Resource Charter (2012 and 2014). See main report for full references.



Oil prices versus Federation Account oil sale receipts, 2009-2013²

The most pressing problems with NNPC oil sales occur in five areas, described below. To arrive at this diagnosis, we reviewed published and unpublished official records, together with data from trade publications and secondary literature, and conducted dozens of interviews between 2010 and 2015. Our main report presents an overview of our findings. In annexes to the report, we further detail three topics: the domestic crude allocation, oil-for-product swap agreements, and government-to-government crude sales.

For each of the five issues, we also make recommendations for reform. In the current Nigerian context, reform is both urgent and feasible. The recent drop in oil prices has ushered in fiscal and monetary crises, particularly given the limited savings accumulated during the price boom. At the same time, demand for Nigerian crude has softened, due in part to the collapse of sales to the US. These revenue constraints come at a time when the oil sector itself sorely needs funds—as does Nigeria's broader economy, which struggles to provide equitably for the country's 170 million citizens.

In the current Nigerian context, reform is both urgent and feasible.

These economic imperatives coincide with political opportunities. President Muhammadu Buhari took office in May 2015, following his election victory over an incumbent government with a very poor record on oil sector governance. Expectations are high that the Buhari government will tackle the problem of NNPC performance. The president and other high-level figures in his APC party have made statements to that effect.

We recommend that the government make the most of this window of opportunity by pursuing two tracks of reform. The first involves urgent reforms to NNPC's management of oil sales (to "stop the bleeding"), targeting the five issues outlined below. At the same time, however, the government should also pursue a course of deeper structural reforms to NNPC (to "cure the patient"). If it does not, a new round of costly, ad hoc coping mechanisms will emerge.

A few cross-cutting points underlie our recommendations:

- NNPC oil sales are Nigeria's largest revenue stream and face severe problems. Fixing
 them should come first in the reform queue, before revisiting upstream contracts
 with international oil companies.
- Repairing oil sale governance does not require omnibus legislation like the Petroleum Industry Bill (PIB). Rather, a bold and targeted agenda with a one-totwo-year timeline better suits Nigeria's political timetables.

- When overhauling oil sales, the government should prioritize simplicity throughout. Current governance problems thrive on byzantine arrangements which only a handful of people understand.
- The bad practices that undermine NNPC oil sale performance all have political interference at their root. Only sustained leadership from the very top will shift incentives towards performance and away from patronage.

TARGETING URGENT PROBLEMS WITH NNPC OIL SALES

issue	
1	The Domestic Crude Allocation (DCA)
	 The DCA has become the main nexus of waste and revenue loss from NNPC oil sales. In 2013, the Federation Account (Nigeria's treasury) received only 58 percent of this oil's \$16.8 billion value.
Problems	The DCA was designed to feed Nigeria's refineries, but in practice NNPC exports three quarters of the so-called domestic crude.
Problems	 NNPC's discretionary spending from domestic crude sale revenues has skyrocketed, exceeding \$6 billion a year for the 2011 to 2013 period.
	 NNPC's explanations for how it spends the revenues it retains are incomplete and contradictory, and the spending (such as on the fuel subsidy and downstream operations) delivers poor value for money.
Recommendation	The government should eliminate the DCA, which creates more problems than it solves.

The domestic crude allocation (DCA) has become the main nexus of waste and revenue loss from NNPC oil sales. The government allocates around 445,000 barrels per day to NNPC in so-called "domestic crude." NNPC sells this oil to the Pipelines and Product Marketing Company (PPMC), one of its subsidiaries. PPMC is supposed to send the oil to Nigeria's four state-owned refineries, sell the resulting petroleum products, and pay NNPC for the crude it received, and then NNPC is supposed to pay the government. In practice, the refineries only process around 100,000 barrels per day. NNPC ultimately re-routes most DCA oil into export sales or oil-for-product swaps, and payments enter separate NNPC accounts, which NNPC officials then draw upon freely. Annex A contains a full discussion of the DCA.

The DCA facilitates some of NNPC's worst habits, and no longer serves its intended purpose. NNPC's discretionary spending from domestic crude returns has reached runaway, unsustainable levels, averaging \$6 billion a year between 2010 and 2013. Especially now that Nigeria faces major budgetary and savings shortfalls, unchecked off-budget spending on this scale threatens the nation's economic health. In 2004, NNPC retained around \$1.6 billion, or 27 percent of the DCA's full assessed value. By 2012, the amount had jumped to \$7.9 billion—or 42 percent of the value of the domestic oil for that year.



Reported domestic crude sales earnings versus treasury receipts, 2004-2013³

The DCA revenues spent by NNPC deliver poor value for money. A large portion of NNPC's withholdings is spent on fuel subsidy payments, which are vulnerable to misappropriation and excessive spending. KPMG for example found that in three years, NNPC paid itself roughly \$6.5 billion to fund the subsidy on 15.6 billion liters of products that "apparently were not available to the Nigerian market." NNPC has also spent hundreds of millions of dollars in DCA revenues on pipeline protection, but levels of theft from some crude oil pipelines have risen—in some cases by over 500 percent in a year. Since 2011, NNPC has spent as much as \$7.52 per barrel to transport oil to the refineries by ship under an opaque, multi-vessel arrangement (as compared with \$0.03 per barrel in pipeline fees), yet refinery outputs during the period did not improve.

Moreover, NNPC administers the DCA with few rules and weak oversight, causing chronic confusion. Debates abound on whether NNPC can legally retain DCA revenues, as seen in the controversy about whether it had permission to withhold several billion dollars annually for a kerosene subsidy that a prior government had slated for elimination. There is no contract between NNPC and PPMC for DCA sales, despite their huge value. In terms of reporting, NNPC's explanations about where the money goes are incomplete and contradictory: past audits showed the corporation claiming hundreds of millions of dollars in duplicated or undocumented expenses—\$2.07 billion in nineteen months, PwC found. We saw no evidence that NNPC includes the amounts actually paid by buyers of domestic crude in its reports to other government agencies. Controversies and competing claims, such those kicked off by Sanusi's accusations that the treasury was "missing \$20 billion," thrive in such a context.

NNPC's explanations about where the money goes are incomplete and contradictory.

^{3 2004-2012} data is from NEITI financial audit reports. 2013 data is from the 2013 NNPC Annual Statistical Bulletin; NNPC Report: Reconciled Receipts of Domestic Crude Cost, January 2013-date; and, NNPC Report: Computation of Revenue from Domestic Crude Oil Receipts, January 2013 to Date.

⁴ KPMG-S.S. Afemikhe, Final Report on the Process and Forensic Review of the Nigerian National Petroleum Corporation (Project Anchor), Volume One – Executive Summary & Main Report ("the KPMG project anchor report"), 2011,sec.6.3.4.

⁵ PwC, Investigative Forensic Audit into the Allegations of Unremitted Funds into the Federation Accounts by the NNPC ("the PwC report"), February 2015, p.17.

⁶ NEITI, 2012 Oil and Gas Audit Report. p.202.

⁷ PwC report p.13.

issue 2	Revenue retention by NNPC and its subsidiaries
	 NNPC has invented a makeshift system for financing its operations, and is discretionarily retaining ever-growing sums.
Problems	 NNPC's five oil trading subsidiaries have acquired no independent trading capacity, but act as passive middlemen on large sales volumes (144,010 barrels per day in 2012, worth \$5.9 billion). NNPC does not disclose what happens to the commissions earned by the subsidiaries on these sales.
	 Available records indicate NNPC retained revenues from the sale of 110 million barrels of oil over ten years from one block controlled by its subsidiary NPDC, worth an estimated \$12.3 billion.
Recommendation	The government should develop an explicit revenue collection framework for NNPC that facilitates more predictable financing and reigns in discretionary spending.

Most countries adopt an explicit set of financing rules for their national oil companies. Nigeria, by contrast, allows NNPC to cobble together funds from different sources, usually outside of formal budget processes. Along with retaining billions each year in DCA oil sale revenues, NNPC withdraws funding intended for joint venture cash calls to cover unrelated expenses—off-budget spending that totaled \$4.2 billion from 2009 to 2012. Some of NNPC's subsidiaries also retain their revenues, or transfer them to NNPC's central accounts. NNPC has also sourced third-party financing to cover further expenses at unknown costs to the nation. This makeshift system at once impoverishes NNPC and gives it far too much discretion to retain ever-growing sums.

In the area of oil sales, the retention of revenues by two sets of NNPC subsidiaries raises particular concern. The first are NNPC's five oil trading subsidiaries, headquartered mostly offshore. Originally set up to market crude and products for NNPC, after decades they function like passive middlemen, flipping the crude allocated by the corporation to experienced trading houses like Vitol or Glencore. NNPC routed 144,010 barrels per day through two offshore subsidiaries, Duke and Calson, in 2012 – oil worth \$5.9 billion. Neither NNPC nor the subsidiaries themselves disclose how much they earn or how they distribute their earnings.

Company (country of incorporation)	NNPC ownership stake	JV partner
Duke Oil Company Inc. (Panama)	100 percent	none
Duke Oil Services Ltd. (UK)	100 percent	none
Calson Ltd. (Bermuda)	51 percent	Vitol
Hyson Ltd. (Nigeria)	60 percent	Vitol
Napoil Company Ltd. (Bermuda)	51 percent	Trafigura

NNPC trading companies

The other subsidiary which warrants scrutiny is the Nigerian Petroleum Development Company (NPDC), NNPC's main upstream division. Available records suggest that when the corporation sells oil from blocks owned by NPDC—which produced a reported 80,243 barrels per day in 2013—it does not forward the resulting proceeds

to the treasury. The revenues it holds on to are substantial: in its review of the Sanusi accusations, PwC sorted through three sets of conflicting figures, and estimated total earnings from NPDC oil sales at \$6.82 billion over a 19-month period in 2012 and 2013.9 NPDC does not need such large withholdings: the majority of its blocks are developed under contracts—including one service contract and several Strategic Alliance Agreements—that require private partners to cover its share of operating costs. NNPC has not explained how the funds it retains are spent.

A case in point is offshore OML 119, a NPDC block governed by a service contract. NNPC sold around 33,000 barrels per day of OML 119's Okono grade crude in 2014. Our research found no evidence that NNPC forwarded to the treasury any revenues from sales of Okono crude between 2005 and 2014, volumes which totaled over 100 million barrels with an estimated value of \$12.3 billion. In other words, the corporation has provided no public accounting of how it used a decade's worth of revenues from an entire stream of the country's oil production.

The corporation has provided no public accounting of how it used revenues from an entire stream of oil production.

The government should develop a new, legally mandated mechanism for funding NNPC operations. A successful financing model would be established in law and resolve the conflict between the country's constitution and the NNPC Act concerning revenue withholdings; create a binding budgetary process for NNPC with adequate checks and balances; and place strict limits on extra-budgetary spending. Clear rules on revenue retention by subsidiaries are also needed.

issue 3	Oil-for-product swap agreements			
	NNPC channeled oil worth \$35 billion to swap deals between 2010 and 2014.			
Problems	 In 2015, nearly 20 percent of the oil sold by NNPC has been traded for petroleum products via poorly structured deals with two companies. 			
	 Recent offshore processing agreements (OPAs) contained unbalanced terms that did not efficiently serve Nigeria's needs. We estimate that losses from three provisions in a single contract could have reached \$381 million in one year (or \$16.09 per barrel of oil). 			
	Swap imports are vulnerable to downstream rackets around Nigerian fuel transportation, distribution and sales.			
Recommendation	The government should direct NNPC to wind down all OPAs and should not sign any more such deals. Future swaps should be competitively awarded refined product exchange agreements (RPEAs) with stronger terms.			

Currently, NNPC routes around 210,000 barrels per day, or one-tenth of the country's entire production, through deals with unacceptably high governance risks. Seven swap deals have been signed since 2010; we discuss these deals in detail in annex B.

RPEA and OPA holders, 2010-present

No.	Party	Duration							
Refine	Refined Product Exchange Agreements (RPEAs)								
1.	Trafigura Beheer BV	60,000	2010-2014						
2.	Duke Oil (Panama) Ltd., which entered into subcontracts with several companies who managed 30,000 barrels per day apiece:	90,000	2011-2014						
2.a	→ Taleveras Petroleum Trading BV	→ 30,000	2011-2014						
2.b	→ Aiteo Energy Resources Ltd.	→ 30,000	2011-2014						
2.c	→ Ontario Trading SA	→ 30,000	2011-2014						
3.	Duke Oil (Panama) Ltd., which subcontracted to:	30,000	2015-2016						
3.a	→ Aiteo Energy Resources Ltd.	→ 30,000	2015-?						
Offsho	re Processing Agreements (OPAs)								
1.	Nigermed Ltd., a fuel marketing joint venture between NNPC and British Petroleum (BP)	60,000	2010						
2.	Société Ivoirienne de Raffinage (SIR), which entered into a subcontract to manage the full amount with:	60,000	2010-2014						
2.a	→ Sahara Energy Resources Ltd.	→ 60,000	2010-2014						
3.	Sahara Energy Resources Ltd.	90,000	2015-2016						
4.	Aiteo Energy Resources Ltd.	90,000	2015-2016						

Currently, NNPC operates two 90,000-barrel-per-day OPAs. We find that this type of deal is less suitable for Nigeria than its alternative, the RPEA. An OPA's higher complexity makes it more opaque—and more open to abuse. Whether Nigeria receives good value depends on many technical factors that are difficult to negotiate and monitor. OPAs supply a wide slate of products when NNPC only requires two, gasoline and kerosene. Also, the structure of the OPAs, which envisions the oil being refined by a particular refinery, does not align with their actual operations. Moreover, our analysis of two OPA contracts, the 2010 deal with SIR/Sahara and the 2015 deal with Aiteo, reveals a number of underspecified, unbalanced provisions. We estimate Nigeria may have lost up to \$381 million in a single year of operations (or \$16.09 per barrel), if just three of the inappropriate provisions were fully exploited. RPEAs better suit Nigeria's needs: traders that hold RPEAs deliver specified products that equal the value of the crude they receive, minus agreed fees and expenses.

Nigeria will likely continue using oil-for-product swap agreements until its debts to fuel importers are brought under control or it solves its refining woes. During this period, NNPC should improve the structure and execution of the swaps. Specifically, NNPC should close out the OPAs with Sahara and Aiteo as soon as possible, and should not sign any more OPAs. RPEAs should be used for future swap deals. However, to obtain fair returns for Nigerian citizens, NNPC should award the RPEAs through competitive tenders to capable companies; and ensure that the RPEAs contain certain updated terms—particularly on fuel pricing—and that they contain stronger reporting and oversight requirements. Annex B details these recommendations.

We estimate Nigeria may have lost up to \$381 million in a single year of operations (or \$16.09 per barrel), if just three of the inappropriate provisions were fully exploited. Critically, traders holding NNPC-PPMC swap contracts deliver fuel into the existing supply chain for Nigerian fuel imports. As the 2012 fuel subsidy scandal revealed, the complexity of the supply chain serves a number of entrenched, lucrative rackets around shipping, distribution and sales of fuel. These include smuggling, selling locally refined products back to NNPC at import prices, over-charging for deliveries, and outright theft. The 2012 fuel subsidy investigations focused mainly on the mismanagement of standard import contracts, but we find that swap imports carry many similar risks. Unless the worst rackets around fuel imports are eradicated, the swaps will hemorrhage considerable amounts of fuel and money no matter how they are structured.

issue 4	The abundance of middlemen
Problems	 Nigeria is the only major, stable world oil producer that sells crude mostly to traders rather than end-users.
	 NNPC enters into term contracts with unqualified intermediaries that capture margins for themselves and create reputational risks for legitimate market players while adding little or no value to deals.
	 NNPC also sells to governments that do not refine the crude they buy. These deals have featured a glut of unnecessary middlemen, and prompted corruption scandals in five buyer countries.
Recommendation	NNPC should stop selling oil to unqualified companies, whether Nigerian or foreign, and improve its due diligence standards.

The marketplace for NNPC crude is uncommonly crowded with intermediaries. By our count, Nigeria is the world's only major oil producer (i.e., with average outputs of well over 1 million barrels per day) that sells almost all of its crude to middlemen, rather than end-users (with the exception of highly unstable countries like Libya). Over 90 percent of the barrels NNPC allocated in 2014 went to trading companies rather than end-users.

The names on NNPC's lists of approved buyers, numbering 43 in 2014, include a small group of large, experienced Nigerian and foreign commodity traders and many low-profile, inexperienced "briefcase companies." This latter group poses especially high governance risks. For instance, some reportedly help buyers of the oil to avoid taxes and channel payments to politically exposed persons (PEPs). Involving middlemen who serve no commercial function creates a marketplace with greater commercial, reputational and legal risks for its legitimate participants, which include some of the world's leading trading houses, banks and refiners. Past NNPC oil sales to the governments of Zambia and South Africa are good examples: in both, NNPC sold to intermediaries that lacked basic capacities, which led to corruption scandals in those countries. (See annex C for a full discussion of these government-to-government deals.)

Involving middlemen who serve no commercial function creates a marketplace with greater risks for its legitimate participants.

¹⁰ See e.g., Virginie Morillon, and Servais Afouda, "Le trafic illicite des produits pétroliers entre le Bénin et Nigeria," Economie Régionale (LARES), 2005; Nigerian House of Representatives, Report of the Ad-Hoc Committee To Verify and Determine the Actual Subsidy Requirements and Monitor the Implementation of the Subsidy Regime in Nigeria (Farouk Lawan, chair) ("the Lawan Report"), April 2012, p.112.

Going forward, NNPC should stop selling oil to companies, whether Nigerian or foreign, that never sell their allocations to refiners; that routinely sell to big trading companies that are already NNPC term customers; or that have ties to PEPs. To further protect against favoritism, patronage and inappropriate payments, NNPC should grant its next round of term contracts through openly competitive and rule-bound procedures that include a strict pre-qualification process, robust due diligence checks, and restrictions on the use of offshore vehicles by buyers. The corporation should also publish written rules for parceling out cargoes each month to buyers and stop allocating export contracts for more crude than it has to export. This will help end the monthly jockeying for allocations that occurs now, which is highly prone to corruption. Over the medium term, NNPC should rework its buyer selection process to secure more reliable global demand for Nigerian crude, and to sell more oil directly to refineries.

issue 5	Corporate governance, oversight and transparency					
	 NNPC reporting to other government agencies and the public on oil sales is patchy and regularly contains contradictions. 					
Problems	 The corporation's own internal recordkeeping systems and processes are disorganized and secretive. 					
	The corporation lacks basic checks and balances—for example, no published annual reports, weak audit functions and a board chaired by the petroleum minister.					
Recommendation	The presidency should lead a program of transparency and accountability reforms for NNPC, and empower oversight actors to scrutinize the corporation's decisions.					

NNPC's management has a history of resisting outside scrutiny. The corporation discloses very little about its finances and operations, even though more than half of public revenues flow through it. Officials from other government bodies say they cannot independently verify or challenge the oil sale figures provided by NNPC. Past reviews described NNPC's internal oil sale data management practices as disorganized, secretive and inaccurate. For example, one government task force found two separate sets of oil sale books that diverged at times by more than \$100 million per year. Corporation officials have faced few consequences for mismanagement—at most, they tend to be retired or transferred to other posts.

Reforms in several areas can help reverse this trend. To reduce perceptions of impunity, the government should commission independent performance audits of areas of concern, including: the DCA; oil-for-product swaps; NPDC oil sales and related operations; NNPC's oil trading subsidiaries; the refinery crude oil transport arrangement; and the JV cash call account.

¹¹ Author interviews, officials from CBN, Finance Ministry, Auditor-General's Office, FAAC and NEITI, 2010-14. NNRC Benchmarking Report Sec.2.2.10.

¹² Federal Ministry of Petroleum Resources, Report of the Petroleum Revenue Special Task Force (Nuhu Ribadu, chair), p.89.

Transparency and accountability must also advance. The government should require NNPC to regularly disclose detailed and prompt cargo-by-cargo data on all its crude oil liftings, and issue a 2015 annual report that includes its audited financial statements, operational data, the financial positions and earnings of its subsidiaries, and disclosures on quasi-fiscal spending. Independent audits should occur regularly, and NNPC should publish the resulting reports. Moreover, we recommend that NNPC establish clear work programs and performance benchmarks, so that oversight actors like the National Assembly, auditor-general, and others can then assess whether those benchmarks are regularly met. The NNPC board should meet regularly, include independent members, and have a chair other than the petroleum minister.

The government should require NNPC to issue a 2015 annual report that includes its audited financial statements.

SOLVING NNPC'S UNDERLYING PROBLEMS

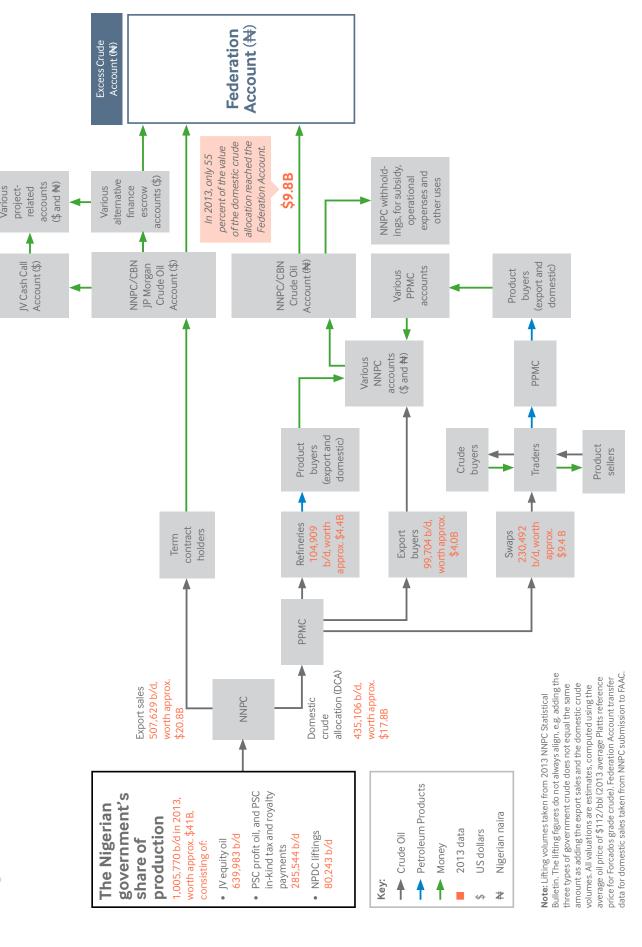
As we argued at the outset, maximizing full returns from NNPC oil sales will depend on pursuing two trajectories of reform – the measures described above, and a broader agenda of NNPC restructuring. Without the latter, the Buhari government will end up relying on a range of stop-gap measures, and NNPC's performance will plateau at best.

The high oil prices of the early 2000s allowed NNPC to "muddle through," as extra cash flows masked the inadequacies of its various short-term workarounds. Now that this luxury has ended, the Nigerian government should revise the NNPC joint venture cash call system; eliminate the fuel subsidy; remove NNPC as a commercial player from the downstream sector; tackle crude oil theft; and develop and implement a road map for restructuring and commercializing NNPC. The final section of the main report offers deeper analysis and recommendations on each of these points.

Nigeria can no longer afford to leave NNPC's dysfunctional and costly oil sales system as it is. The status quo, characterized by convoluted, under-policed deals with weak commercial justifications, has cost Nigeria revenues that it needs for its development priorities. The reforms recommended in this report would significantly increase the returns to the Nigerian government from the sale of its crude oil, even at today's lower prices. More broadly, improved oil sale functions would help create a solid foundation for remaking NNPC into a company that serves Nigeria's citizens, rather than the interests of a privileged few.

Nigeria can no longer afford to leave NNPC's dysfunctional and costly oil sales system as it is.

Figure 1. Overview of NNPC oil sales



Introduction

Most companies that lose billions of dollars a year have short lifespans. Not so for Nigeria's national oil company, the Nigerian National Petroleum Corporation (NNPC), now in its 38th year. Beginning decades ago, a steady stream of reports and reviews have documented the company's dismal legacy of lost revenues, inefficiency and corruption in eye-watering detail. Its problems are well known and widely agreed upon, yet meaningful solutions have not taken root. Despite the lost earnings and the glaring performance failures—and persistent poverty in many segments of Nigerian society—successive heads of state have avoided fundamental reform. Multiple versions of the Petroleum Industry Bill, aimed at reforming the company, have died in parliament. The persistent absence of political will illustrates just how deeply NNPC is embedded in the power structures of Nigeria, and how difficult a job true reformers face.

The biggest abuses of power—and public revenue losses—come from the many *ad hoc*, makeshift practices the corporation has introduced to work around its deeper structural problems. When crippling debts and corruption scandals left NNPC unable to supply enough fuel for the nation, it entered into overly complex, opaque and costly oil-for-product swap deals. When NNPC's main upstream subsidiary could not cover its share of operating costs, it signed ill-suited strategic alliance agreements (SAAs) with handpicked, opaque, private companies—but this did not fully solve the financing problems. When NNPC's formal budget allocation fell short of operating expenses, the company discretionarily withheld billions of dollars from oil sales, spending the money in a secretive, off-budget manner. Over and over, management has addressed the corporation's chronic ailments with quick fixes characterized by secrecy, undue complexity, and an absence of oversight.

This report focuses on one of NNPC's central functions: the sale of Nigeria's crude oil. The oil that NNPC handles has a value equal to more than half of the country's total government revenues. Management of these sales has worsened in recent years, mainly through an increase in makeshift transactions and discretionary revenue withholdings. Oil sale governance is integral to many broader aspects of NNPC governance, and as such offers a useful entry point for thinking about what bigger reforms and restructurings are needed. In a time of low oil prices and softening global demand for Nigerian crude, the country can no longer afford sale processes that deliver poor value.

In the sections that follow, we introduce our methodology and research process, and explain the basics of how NNPC's oil sales work. Next, we explain why the health of Nigeria's economy, the integrity of its government, and the legal, financial and reputational risks to all players in the Nigerian oil market depend on reforming NNPC oil sales in an urgent manner. We then outline a two-track reform agenda that includes five areas of urgent fixes and also bigger structural changes. In the annexes to this report, we provide greater detail on three important topics: the domestic crude allocation, the oil-for-product swap agreements, and government-to-government crude sales.

Governance of NNPC is not an intractable problem. The current environment of low oil prices, fiscal hardship and political transition offers Nigeria the best chance for reform in years. We urge the Nigerian leadership to go forward with its commitment to tackle NNPC once and for all, starting with oil sales.

The current environment of low oil prices, fiscal hardship and political transition offers Nigeria the best chance for reform in years.

Objectives and methodology

NRGI offers the following analysis in order to:

- Make forward-looking recommendations to the Nigerian government for increasing returns to the nation from NNPC oil sales.
- Increase transparency and public knowledge of NNPC oil sales.
- Provide contextual information and possible direction for future audits of past activities.
- Persuade commercial players (e.g., traders, refiners, banks, shipping companies) to take more seriously the governance risks of NNPC oil sales, and to strengthen their practices for understanding and mitigating risks.

Findings are based primarily on reviews of published and unpublished official records, data from trade publications and other market sources, secondary literature, and over forty interviews conducted between 2010 and 2015 with representatives of the relevant government agencies, multiple NNPC divisions, foreign and Nigerian oil and oil trading companies, civil society, journalists, independent experts, and international organizations.

Most of the figures in this report come from NNPC documents, or from the reports of government-commissioned probes of NNPC's operations which themselves rely heavily on data collected from the corporation. While we took steps to authenticate the documents, we were often unable to independently verify or reconcile the numbers they contained. Therefore, we cannot vouch for the full accuracy of the official figures reproduced in this report, particularly in view of the many problems with NNPC's record-keeping and reporting for oil sales described later (for example, see pages 60-61). Several of the key documents informing this report are available on the NRGI website at www.resourcegovernance.org/publications/inside-NNPC-oil-sales.

Given these limitations, no actor outside of NNPC could determine precisely how much the company's crude oil sales system has earned or lost Nigeria. The estimates of government losses put forward at various points are not substitutes for a rigorous audit conducted with NNPC's cooperation. We in some cases rely on hypotheticals and assumptions, and these are stated explicitly where they occur. Nonetheless, we feel that the data available is of sufficient quality to confidently identify the main trends and priorities for reform.

No actor outside of NNPC could determine precisely how much the company's crude oil sales system has earned or lost Nigeria. As part of our research process, we wrote formal letters to several of the participants in NNPC oil sales, informing them of the project, asking a number of detailed questions on the issues discussed in this report, and indicating our openness to dialogue and to learning their perspectives. The letters were sent by email, fax and courier. Specifically, we sent letters in April 2015 to NNPC and two of its subsidiaries, the Pipelines and Product Marketing Company (PPMC) and Duke Oil Ltd. We also sent letters to trading companies that held swap contracts, including Aiteo Energy Resources Ltd., Ontario Trading SA, Sahara Energy Resources Ltd., Société Ivoirienne de Raffinage (SIR), Taleveras Petroleum Trading BV, and Trafigura Beheer BV, as well as to a director and shareholder of PPP Fluid Mechanics, one of the companies involved in the refinery oil marine transport arrangements.

NNPC, PPMC, Duke Oil Ltd., Ontario Trading SA, SIR and PPP Fluid Mechanics did not respond to our communications. NNPC has answered similar questions in the past, to audiences including the media and NEITI. We drew on those explanations when possible so as to represent their views. Aiteo replied and asked that we enter into a non-disclosure agreement before they could share information, given confidentiality concerns. We declined, since the questions pertained to a report intended for public release, and asked that they nonetheless provide some information. They did not respond further. Sahara wrote to us and indicated that their response was contained in press releases they issued in May and June 2015 about the swap deals. We reviewed these materials and cite them in this report. Trafigura and Taleveras provided written responses to some of the questions; others they elected not to answer citing confidentiality constraints. Representatives of these two companies also made themselves available for several phone conversations about the questions that we asked. Their views informed the research, and are cited in the text.

¹³ The Sahara press releases are available here: http://www.sahara-group.com/cg/opa-updated.pdf; and http://www.sahara-group.com/cg/Saharas_Update_on_OPA.pdf.

The basics of NNPC oil sales

This section summarizes the nuts and bolts of NNPC oil sales. Details of specific transactions are explored in the annexes to this report, and in the next sections. Because NNPC uses a relatively complicated system for selling crude and handling sales proceeds, it is important to understand the basics before delving into the detail. Figure 1 contains an overview of the various transactions.

SOURCES OF NNPC'S OIL ENTITLEMENT

NNPC sells oil from three main sources:

- 1 *Joint venture equity crude.* This is the Nigerian government's share of oil produced under various joint ventures (JVs) with international oil companies (IOCs). Each of the JVs owns and operates one or more oil licenses allocated by the government, most of them located onshore or in shallow water around Nigeria's southern coastline. NNPC holds either a 55 or 60 percent equity interest in each JV, which usually entitles it to a production share equal to its ownership stake. However, this amount can decrease through the oil-backed financing arrangements that NNPC has entered into with some of its JV company partners. The JVs account for around two-thirds of the oil Nigeria pumps each day. In 2013, NNPC sold 639,983 barrels per day in JV equity oil, accounting for 64 percent of the corporation's total sales.¹⁴
- Oil from production sharing contracts. Under a typical Nigerian production sharing contract (PSC), the federal government awards a license to one or more private companies, which take responsibility for operating the block. The companies bear the risk and costs associated with exploration and production, and retain a share of the resulting oil to cover these costs. PSC operators commonly pay their tax¹⁵ and royalty¹⁶ obligations to Nigeria in oil rather than in cash. NNPC markets this oil on behalf of the government.¹⁷ After these barrels of "tax oil" and "royalty oil" are subtracted out of the total volume produced under the PSC, the remaining "profit oil" is divided between the operating companies and government in proportions set out in the PSC. NNPC receives Nigeria's share of profit oil from the roughly half-dozen PSCs currently operating in the country and markets it on the government's behalf. PSCs contribute most of the remaining third of average daily production in Nigeria. In 2013, NNPC sales of PSC oil both profit oil and tax and royalty in-kind volumes totaled 285,544 barrels per day.¹⁸

NNPC sold 639,983 barrels per day in JV equity oil, accounting for 64 percent of the corporation's total sales.

¹⁴ NNPC 2013 Annual Statistical Bulletin.

¹⁵ The main taxes that upstream companies pay on their operations in Nigeria are called "petroleum profit taxes" (PPT). Provisions of the 1990 Petroleum Profit Tax Act, together with provisions in some contracts and memoranda of understanding, form the basis of their obligations.

¹⁶ A royalty is a payment to a government by a company involved in oil extraction for the rights to extract and sell oil from its license area. Nigeria's 1969 Petroleum Act sets base rates, which later laws and contracts have altered in some cases.

¹⁷ For more details, see Nigeria Extractive Industries Transparency Initiative (NEITI), 2009-11 Oil and Physical and Process Audit Report, Appendix B.

¹⁸ NNPC 2013 Annual Statistical Bulletin.

3 Oil from blocks owned by NPDC. NNPC has assigned its equity in around a dozen onshore and offshore blocks to the Nigerian Petroleum Development Company (NPDC), its main upstream subsidiary. These assets are operated variously under JVs, PSCs and one service contract. Some important problems and questions around NPDC are discussed on pages 38 to 41 of this report. NNPC sold 80,243 barrels per day of crude from NPDC blocks in 2013.²⁰

Between 2004 and 2014, these three sources of crude gave NNPC around one million barrels per day—or between 41 and 53 percent of total Nigerian production—to sell.²¹

MAIN MECHANICS AND TYPES OF SALES

NNPC's Crude Oil Marketing Division (COMD) sells most of Nigeria's share of production for export. A smaller portion (in 2013, around 35 percent of NNPC sales) goes to feed the country's four refineries, or is allocated to oil-for-product swap deals. We discuss these more specialized transactions further on pages 42-46 below, and in annex B.

For the export sales, COMD structures the transactions almost exclusively through longer-term sales agreements, called "term contracts." A typical COMD term contract lasts one year, and grants its holder the ability to purchase and lift²² a set allocation of the government's equity share of Nigerian oil production—usually between 10,000 and 60,000 barrels per day.²³ COMD tends to award term contract awards in one batch per year, though sometimes more. COMD has often rolled over the prior year's contracts, extending them beyond their initial expiration dates. It has also executed one-off transactions for individual cargoes of crude (called "spot sales").²⁴ COMD puts out a request for applications several months before it announces awards, usually in local newspapers. Although the advertisements list some award criteria—for example, minimum annual turnover and "local content" requirements²⁵—COMD does not consistently follow these in its bid evaluations, and overall, the term contract award process is more a discretionary selection than an open, competitive tender. (See pages 46-59.)

Most recently, the corporation reportedly signed at least 43 term contracts in 2014 (for a list, see figure 11), and has rolled these contracts over to 2015. Most contract holders are trading companies, together with a few foreign governments. Direct sales to foreign refineries are rare, setting Nigeria apart from most major oil-producing countries. ²⁶

Between 2004 and 2014, three sources of crude gave NNPC around one million barrels per day—or between 41 and 53 percent of total Nigerian production—to sell.

¹⁹ For a list of NPDC-owned blocks, see http://npdc.nnpcgroup.com/Operations/Assets.aspx.

²⁰ NNPC 2013 Annual Statistical Bulletin.

²¹ NNPC Annual Statistical Bulletins.

^{22 &}quot;Lifting" refers to the process of loading oil onto a ship at an export terminal.

²³ NNPC introduced the term contract system in 1984-85. Prior to that, it had relied on long-term offtake agreements with IOCs and other companies operating in Nigeria.

²⁴ NNPC has said publicly that it does not sell any oil through spot sales. See e.g., http://www.nnpcgroup.com/nnpcbusiness/businessinformation/investmentopportunities/crudeoilmarketing.aspx. However, our review of internal NNPC oil sale records found individual cargoes sold to companies not on the corporation's annual term contract lists.

²⁵ For an example, see http://tenders.nigeriang.com/federal-government-tenders-in-nigeria/invitation-for-crude-oil-term-contract-application-at-nigerian-national-petroleum-corporation/12973/.

²⁶ The vast majority of large exporters sell to refineries, not traders. For explanations of how other NOCs sell their oil, see the series of briefs on *Selling the Citizens' Oil*, 2012, Natural Resource Governance Institute. http://www.resourcegovernance.org/publications/selling-citizens-oil.

NNPC sets sale prices for each of Nigeria's 26 grades of crude oil on a monthly basis.²⁷ Specifically, most of the oil NNPC sells for export is valued using a widely-used formula pricing system called "official selling prices" (OSPs). Each OSP has three components:

- NNPC sets sale prices for each of Nigeria's 26 grades of crude oil on a monthly basis.
- 1 *Benchmark.* This is an average of five consecutive price quotations for Brent crude, as published by the trade periodical *Platts*.
- 2 Differential. This is the premium or discount to Brent, expressed in dollars per barrel, that is supposed to reflect the market value of the particular crude grade vis-à-vis Brent. NNPC publishes a new differential once per month for each of the country's 26 crude grades.
- 3 *Pricing Option.* This feature allows a buyer to pay a small premium—usually \$0.05 to \$0.10 per barrel—which entitles the buyer to choose before lifting which five-day Brent quotations NNPC will use to price the cargo.²⁸

Each month, NNPC divides its share of the available oil into cargoes and allocates these to the companies that hold the term contracts, who then sell them on to other buyers. The typical cargo size is roughly 950,000 barrels.²⁹ Recently, COMD has had between 20 and 30 cargoes of oil to sell per month. All cargoes are sold "free on board" (FOB).³⁰

NNPC divides its oil sales into two main categories:

- Export sales. COMD sells well over half of the nation's oil to term customers for export. Most of the proceeds from these sales go into the treasury after first being collected in a dollar-denominated Crude Oil Account with JPMorgan in New York—or else they pool first in separate accounts managed by the Federal Inland Revenue Service (FIRS) and the Department of Petroleum Resources (DPR), in the case of tax oil and royalty oil sales. A portion of JV equity sale revenues enter different accounts for the purpose of paying NNPC's cash call liabilities, which are its share of the operating and capital expenses associated with the JV activities. The remaining proceeds are forwarded monthly to the Federation Account, the central account into which most public oil revenues are deposited and then shared monthly between the federal, state and local tiers of government according to a formula chosen by parliament.
- The domestic crude allocation ("DCA"): NNPC sells roughly 445,000 barrels per day on an intercompany basis to the PPMC, its main downstream subsidiary. The country's four NNPC-owned refineries are supposed to process 445,000 barrels per day if they run at full capacity. PPMC is meant to pay NNPC for this crude, and then NNPC is supposed to send the funds to the Federation Account.

²⁷ Nigeria has several hundred active oil wells. For purposes of export, these are combined into "grades" of crude oil. NNPC does not have equity interests in all of these, as some are developed on a "sole risk" basis. Each grade has different geological properties and produces different types, qualities and volumes of products when refined. Different users and markets have higher demand for some products than others. Grades are often named after the terminals from which they are exported.

²⁸ For more on how the pricing options work, see NEITI, 2009-11 Physical and Process Audit, p.2.

²⁹ The IOCs operating in Nigeria ship and sell roughly 30 more cargoes of their own, and for local companies, through separate processes.

³⁰ In maritime law, use of the term "FOB" in a buyer-seller transaction means that the seller pays for transportation of the goods involved to the port of shipment, plus loading costs. From that point, the buyer assumes ownership of the goods and pays the costs of marine freight transport, insurance, unloading, and transportation to the final destination.

This simple two-part system has broken down, however, especially during the 2010-2015 period. As NNPC's financial and operational problems deepened, it introduced more types of makeshift oil sale transactions, many grouped under the domestic crude system. Because the chronically underperforming refineries only process around 20 percent of the DCA, DCA crude goes in at least three separate directions:

- 1 *Supply to refineries.* These are the barrels that PPMC actually refines locally. This supply totaled 104,909 barrels per day in 2013.
- 2 Oil-for-refined product swap deals. Around 200,000 barrels per day are allocated to these complex transactions between PPMC and traders. They are discussed in annex B of this report.
- 3 Export sales of non-refined "domestic crude." NNPC sells whatever domestic crude is left—usually, between 100,000 and 150,000 barrels per day—to some of its term customers, on terms that are similar to regular export sales.

The result has been growing complexity, with more oil and revenue flowing in more directions through higher numbers of non-transparent accounts and byzantine deals that few outside of NNPC understand (see figure 1). These makeshift systems, the roots of which lie in NNPC's broader structural and financial difficulties, are particularly prone to abuse, and constitute the main objects of our analysis in this report.

As NNPC's financial and operational problems deepened, it introduced more types of makeshift oil sale transactions, many grouped under the domestic crude system.

Reform in the current context

The risks posed by NNPC's approach to selling its oil, both for players in the market and for Nigeria's fiscal and monetary health, are growing. Reform is urgently needed, for the following reasons:

Oil sales are the Nigerian government's largest source of revenues. NNPC oil sales are Nigeria's treasure trove. As in many other oil-exporting developing countries, 31 sales of oil by Nigeria's national oil company (NOC) are the single largest public revenue source. In 2013, NNPC was responsible for selling an average of 935,629 barrels per day, 43 percent of the country's entire oil production.³² The market value of this oil was equal to 61 percent of total government revenues in the same year.³³ Crude sales dwarf other oil revenue streams such as cash payments from operators for royalties and petroleum profit taxes.

Sales of oil by Nigeria's national oil company are the single largest public revenue source.

Nigeria urgently needs more revenue from oil sales. A confluence of the following macroeconomic and industry pressures has left Nigeria in dire need of higher returns from sales of its oil:

- Steep socio-economic development imperatives. Above all, Nigeria should maximize revenues from its oil in order to advance an urgent developmental agenda. Effective management of oil revenues is Nigeria's best shot at delivering the large-scale public health, education and infrastructure investments that its young, fast-growing population needs. As things stand, recurrent expenditures consume all of Nigeria's federal oil revenues; capital budget items must be funded through rising national debt; and poverty rates have climbed.34
- The oil price shock. Low oil prices will continue to reduce earnings from NNPC sales in the near- to mid-term, at least. Brent crude has traded between \$50 and \$60 per barrel for much of 2015—or around 40 percent below June 2014 prices, just before the global price decline began. Analysts do not expect a near-term rebound to the \$100+ per barrel prices that prevailed reliably from 2011 to mid-2014.

³¹ A recent joint NRGI-Berne Declaration-Swissaid study found that from 2011 to 2013, the governments of ten sub-Saharan African countries sold over 2.3 billion barrels of oil worth more than \$250 billion, equal to a staggering 56 percent of their combined government revenues. NRGI-Berne Declaration, Big Spenders: Swiss Trading Companies, African Oil and the Risks of Opacity 2014, available at: http://www. resourcegovernance.org/publications/big-spenders-swiss-trading-companies-african-oil-and-risks-opacity. 32 2013 NNPC Annual Statistical Bulletin.

³⁴ For an overview of key statistics, see Budglt, Falling Oil Prices: An Opportunity for Reform, December 2014, available at: http://www.yourbudgit.com/wp-content/uploads/2014/12/FALLING-OIL-PRICE BudgIT Nigeria.pdf.

- Weaker demand for Nigerian crude. Market demand for Nigerian barrels has fallen dramatically, thanks to a glut of light sweet oil in the Atlantic market, weaker refining margins, the return of more Libyan crude to the market, and the collapse of the US market for Nigerian oil.³⁵ Most Nigerian crude sells at a premium to Brent, a widely used pricing benchmark. Those premiums weakened from around a typical \$2.50 per barrel to just 50 cents or less in 2015, and could stay depressed for some time.³⁶ NNPC is now regularly left with significant quantities of unsold oil at the end of each month, some of which only can be sold after further price cuts. Europe and India, which are now the largest markets for Nigeria's oil, probably have limited growth potential.³⁷ Therefore, securing full value from each sale becomes all the more important.
- Need to rebuild depleted foreign reserves and oil savings. Unfortunately, Nigeria is not well placed fiscally or monetarily to weather the ongoing price shock and shifts in demand. During the oil price boom of 2011 to mid-2014, the country's external foreign reserves and oil savings actually fell to levels not seen in a decade or more. This was a break from the years immediately preceding, when prices and Nigeria's fiscal buffers moved more or less in tandem (figure 2). By the end of June 2015, gross foreign reserves were at \$29 billion, down from over \$60 billion at the height of the 2008 price spike. The Excess Crude Account (ECA) balance was just \$2.087 billion. 39

NNPC is now regularly left with significant quantities of unsold oil at the end of each month, some of which only can be sold after further price cuts.

³⁵ Throughout the early 2000s, the US reliably imported around 1 million barrels per day of Nigerian crude—are roughly half of the country's total exports at the time. In 2014, however, only 3 percent of Nigerian exports went to the US. US Energy Information Administration (US EIA) data.

Hoping to move a large overhang of unsold February cargoes ahead of releasing the March program in 2015, NNPC COMD cut the February OSPs for some grades to their lowest points in a decade or more. Reference grade Qua Iboe was priced at Dated Brent plus \$0.33 per barrel, down from \$0.65 per barrel in January, and a far cry from the \$3.00 plus premiums that Qua Iboe earned during the second quarter of 2013. Some important grades—notably Brass, Agbami and Amenam—have gone from earning premiums to selling at discounts to Brent. NNPC Monthly OSP sheets on file with NRGI.

³⁷ This is due, among other factors, to longer term contractions expected in Europe's refining sector, driven by pressure from US refiners processing cheaper oil, as well as slow macroeconomic growth in Europe and Indian refineries' increasing reliance on cheaper, lower quality crudes from Latin America and elsewhere. Platts, "A tale of two crudes: Nigeria and Angola," May 25, 2015.

³⁸ For data, see http://www.cenbank.org/intops/Reserve.asp

³⁹ Reuters, "Nigeria to share \$1.7 billion from Excess Crude Account," July 7, 2015. In addition to depleting the ECA, the Jonathan administration made only two major contributions to the Nigeria Sovereign Investment Authority (NSIA) worth around \$1.5 billion. Federation Accounts Allocation Committee (FAAC) data on file with NRGI. In 2013, the government had to use N802.984 billion from the ECA to augment revenue allocations to the three tiers. FAAC Technical Subcommittee, Federation Account Income Distribution for the Year 2013.

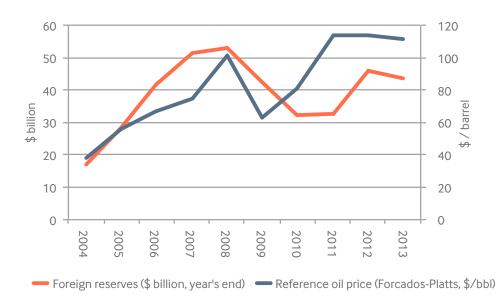
Average oil price versus savings, 2004-2013



Figure 2. Nigerian average oil prices versus savings and foreign reserves, 2004-2013

Sources: Platts data; IMF Article IV reports

Average oil price versus foreign reserves, 2004-2013



Crude oil theft⁴⁰ and the CBN's efforts to protect the value of the naira⁴¹ accounted for much of the fiscal erosion that started in 2010. Runaway spending, increased borrowing and indifference to saving also played significant roles. Yet NNPC's habit of retaining billions in foreign exchange earnings from its legal oil sales, along with its use of costly transactions like the swaps, have also contributed to the shortage of dollars in Nigeria and with it, the Jonathan government's failure to build adequate buffers. Sanusi told the Senate in February 2014 that "the failure of NNPC to remit foreign exchange to the Federation Account in a period of rising oil prices has made [the CBN's] management of exchange rates and price stability, while keeping reserve buffers adequate, extremely difficult."⁴²

NNPC oil sales also contribute to Nigeria's illicit financial flows problem, which is the biggest in Africa. According to African Union research, from 2000 to 2010 more than 92 percent of the country's illicit financial flows came from the oil sector. Oil exports with no recorded public revenue receipts were the largest single point of loss. Nigeria has rules requiring sellers of petroleum exports to repatriate their foreign currency earnings. But in practice, NNPC and the buyers of its crude keep much sales revenue in offshore accounts. Some of these are linked to shell companies that buyers use to share profits with "sponsors" in government and other politically exposed persons (PEPs—see p.49-50 for more details).

NNPC oil sales also contribute to Nigeria's illicit financial flows problem, which is the biggest in Africa.

• Worsening upstream funding shortfalls and rising costs. Nigeria also needs more revenue from oil sales to fund ongoing oil exploration and production work in the country. Even before the current fiscal crisis, NNPC was unable to finance its expensive upstream equity holdings. For years, NNPC has fallen short in paying its joint venture cash call obligations, and the gap is growing. In 2015, its JV budget was cut to \$8.1 billion, as compared with a \$13.5 billion allocation in 2014, including a 40 percent cut in capital expenditure. These shortfalls squeeze revenues in many ways. NNPC borrows from its JV partners to fund its shortfalls, and the associated interest payments further drain potential oil revenues. More fundamentally, the shortfalls starve the industry of the investments needed to increase production and reserves. In the words of one 2012 government task

For years, NNPC has fallen short in paying its joint venture cash call obligations, and the gap is growing.

- 40 Crude theft—discussed at p.69-70, below—and associated production deferments threaten fiscal stability mainly by pushing production levels below the agreed federal budget oil production benchmark. When this happens, the government is supposed to draw on savings to supplement monthly revenue allocations to the three tiers.
- 41 Despite progress on economic diversification in recent years, oil still gives Nigeria over 90 percent of its foreign exchange earnings. As such, large oil prices like the current one can significantly weaken the local currency.
- 42 Sanusi Lamido Sanusi, Memorandum Submitted to the Senate Committee on Finance on the Non-Remittance of the Oil Revenue to the Federation Account ("the Sanusi Senate Presentation)," February 3, 2014, p.3.
- 43 African Union (AU), Report of the High Level Panel on Illicit Financial Flows from Africa, 2014, available at: http://www.uneca.org/iff. The research estimated IFFs from Nigeria at \$217.7 billion between 1970 and 2008. Nigeria had the highest IFFs of any African nation, 30 percent of total IFFs on the continent, and 79 percent in West Africa. The report gave a multi-year average estimate of IFFs as equivalent to 12 percent of Nigeria's gross domestic product (GDP).
- 44 Id p.97; CLS Stockbrokers, Fixed Income Monthly "Nigeria's Missing Bilions," December 19, 2013. Renaissance Capital also identified an average monthly gap of \$1.5 billion between the value of world imports from Nigeria and claimed exports between January 2012 and May 2013. Africa Confidential, "Data Battles in Abuja," February 21, 2014, available at: http://www.africa-confidential.com/article-preview/id/5229/Data_battles_in_Abuja.
- 45 See e.g., section 19 of the 1996 Pre-Shipment Inspection of Exports Act, which stipulates that "an exporter of goods, including petroleum products, shall open, maintain and operate a foreign currency domiciliary account in Nigeria into which shall be paid all exports proceeds corresponding to the entire proceeds of the exports concerned." See also the 1995 Foreign Exchange (Monitoring and Miscellaneous Provisions) Act.
- 46 Author interviews, oil company and NNPC personnel, 2015.

force: "Output from aging onshore wells is falling 10 to 12 percent a year. NNPC estimates that by 2014, US\$3.7 billion in new drilling costs would be needed annually to simply retain current production levels. [...] Industry analysts forecast production could drop 20 percent by 2020 without additional investment." ⁴⁷

The governance problems associated with NNPC oil sales have intensified.

As detailed throughout this report, the governance of NNPC's oil sales system has worsened in recent years – just when Nigeria needs to maximize returns from these crucial transactions. As we discuss further in the next section:

• More oil is being sold through makeshift and opaque mechanisms. A growing share of NNPC oil sales occur through transactions which deviate from the basic oil sales processes. Senior officials execute these adaptations through processes that lack oversight, transparency, or due process or consultation outside of NNPC. They include the practice of companies paying taxes and royalties with oil instead of money; the crude-oil-for-product swaps; the strategic alliance agreements (SAA) for bankrolling the Nigerian Petroleum Development Company (NPDC), NNPC's main upstream subsidiary; and oil sold to fund "alternative financing" debts between NNPC and its joint venture IOC partners.

More oil is being sold through makeshift and opaque mechanisms.

The remaining sections of this report outline these practices in greater detail and offer suggestions for reform. But for now, to give a sense of the stakes, figure 3 shows our estimates of the volume of crude flowing through these channels—more than a third of NNPC's total sales in 2012.

Type of sale	2012			
	barrels per day	% total liftings	barrels per day	% total liftings
Total NNPC sales*	1,107,054	100	1,042,811	100
Sales of equity oil from blocks owned by NPDC, comprised of:				
- Okono crude (OML 119)*	0	0	39,537	3.8
- NNPC Forcados equity oil from ex-Shell JV blocks*	0	0	37,816	3.6
Sales of oil produced under JV alternative finance arrangements or for settling other debts, comprised of:				
- Repayment of Qua-Iboe Modified Carry Agreement+	0	0	31,498	3.0
- Repayment of Qua-Iboe Satellite Project+	0	0	18,220	1.7
- Other third-party debt settlement liftings*	17,944	1.6	0	0
- NPDC crude allocated to alliance partners under SAAs!	0	0	[no data]	[?]
Sales of oil allocated to PPMC's crude-oil-for-product swaps*	0	0	214,254	20.5
Sales of refinery oil delivered by marine transport+	0	0	38,012	3.6
TOTALS	17,944	1.6	379,337	36.2

Figure 3. NNPC oil sold through makeshift, non-transparent mechanisms, 2002 v. 2012

Sources: NNPC Annual Statistical Bulletins (*); 2012 NEITI Oil and Gas Audit Report (+) ! NRGI could not find a complete, reliable source of data for 2012 SAA liftings

⁴⁷ Federal Ministry of Petroleum Resources, Report of the Petroleum Revenue Special Task Force (Nuhu Ribadu, chair) ("the PRSTF Report"), p.33.

• Increasing NNPC revenue retention keeps billions of dollars per year from reaching the state treasury. After rebounding from the oil price slump of 2008-2009, market prices for Nigerian oil stayed stable and high for several years. Average prices for the country's light sweet crude topped \$110 per barrel during the boom of 2011-2014. Yet during that same period, treasury receipts from oil sales fell dramatically (figure 4).

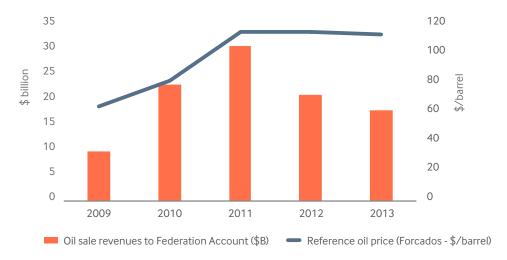


Figure 4. Oil prices versus Federation Account oil sale receipts, 2009-2013

Sources: Federal Budget Office Budget Implementation Reports; Platts data

While lower exports (reduced mainly by oil theft) explain some of the drop-off, two features of the NNPC oil sales regime are also to blame. He First, the corporation is allocating more oil to the complicated, non-transparent deals highlighted above, deals which fail to maximize returns for the crude it sells. At the same time, NNPC is holding back ever-growing sums from the treasury; withholdings totaled over \$25 billion from domestic crude sales alone between 2010 and 2013. He 2014, auditors for PriceWaterhouseCoopers (PwC), after reviewing the corporation's oil sales, wrote: "[NNPC has a] 'blank' cheque to spend money without limit or control. This is untenable and unsustainable and must be addressed immediately." This issue of NNPC withholdings is discussed in the next sections, and in annex A on the domestic crude allocation.

The transition in leadership may help disrupt the political capture of NNPC.

NNPC is a well-established venue for the broader patronage and corruption patterns that weaken accountability and good governance in Nigeria. During a period when some NOCs expanded their operations into other countries, NNPC failed to capitalize on high prices and growing demand for African crude. Instead, its governance systems have evolved in a manner that enables politically powerful actors to access and distribute short-term benefits from the company's operations. ⁵¹ Characteristics that

⁴⁸ No fully reliable public figures for losses from oil theft exist, but one report estimated theft levels at 100,000 barrels per day for the first quarter of 2013. Sayne and Katsouris Oil Theft Report p.21f.

⁴⁹ See figure 6. Calculation relies on data from NEITI audit reports and NNPC submissions to FAAC.

⁵⁰ PwC, Investigative Forensic Audit into the Allegations of Unremitted Funds into the Federation Accounts by the NNPC ("the PwC Report"), February 2015, p.16.

⁵¹ See e.g., Mark Thurber, Ifeyinwa Emelife and Patrick Heller, NNPC and Nigeria's Oil Patronage Ecosystem, Working Paper, September 2010, p.2f., available at: http://fsi.stanford.edu/sites/default/files/WP_95,_ Thurber_Emelife_Heller,_NNPC,_16_September_2010.pdf.; G. Ugo Nwokeji, The Nigerian National Oil Company and the Development of the Nigerian Oil and Gas Industry: History, Strategies and Current Direction," James A. Baker III Institute for Public Policy, Rice University, March 2007, p.12f., available at: http://bakerinstitute.org/media/files/page/9b067dc6/noc_nnpc_ugo.pdf.

define NNPC's approach to oil sales—including excessive discretion amongst officials, a surplus of middlemen, uneven information flows and weak oversight—ensure that these transactions benefit actors operating within the Nigerian patronage system; such a system fails to maximize current and future revenues for the benefit of the public.

Nigeria's recent leaders have not invested much political capital in reforming NNPC—even after receiving the well-publicized, dramatically negative findings of task forces and review committees which the leaders themselves commissioned. ⁵² Instead of prioritizing the long-term growth of the sector, NNPC officials have focused instead on business transactions that add little value over the long term, but that present narrow, near-term opportunities. "NNPC operations are disproportionately concentrated on oil marketing and downstream functions, which offer the best opportunities for private benefit," the authors of a 2010 study concluded. In such an environment, employees have "few incentives [...] to be entrepreneurial for the company's benefit." ⁵³ In this environment, the governance of oil sales has worsened, and vested interests have obstructed the reform of the sales.

The 2015 election and the installation of a new government in Abuja are opportunity to disrupt this pattern. While many of the interests that benefit from NNPC's systems remain powerful in the new political dispensation, the inauguration of President Buhari presents an opening nonetheless. Popular expectations are high, particularly given the president's reputation as an enemy of corruption, and beneficiaries of the status quo are braced for change. While far from guaranteed, the present moment may engender the kind of political will needed to tighten NNPC governance and boost the incentives for performance and against abuse.

Outside scrutiny of NOC oil sale governance is growing. This positive trend means that governance problems in this area can no longer persist quietly and unnoticed. The sale of crude oil by governments and their NOCs has historically been one of the least scrutinized parts of oil sector governance. Despite their great importance for countries like Nigeria, NOC oil sales are not well understood outside of industry circles. The media covers oil sales less—and less competently—than upstream activities. Several national laws that require extractives companies to disclose payments made to countries exempt NOC oil sales. ⁵⁴ The global physical spot market, where most of Nigeria's oil trades, is a vast, labyrinthine, and largely unregulated space.

The present moment may engender the kind of political will needed to tighten NNPC governance and boost the incentives for performance and against abuse.

As one 2008 government panel wrote, NNPC "operates as a huge amorphous cost centre with little or no sensitivity to the bottom line." Nigerian Presidency, Oil and Gas Sector Reforms Implementation Committee Final Report ("the OGIC 2 Report"), July 2008, p.7. In the words of a 2012 government panel: "NNPC's fiscal health has weakened dramatically in recent years. Between 2007 and 2009 the Corporation's closing net balance sheet liabilities grew from \$\frac{1}{2}\$952bn to \$\frac{1}{2}\$1.36tn. [...] NNPC's asset base appears stagnant from age and absence of strategic investment." PRSTF Report p.104; see also KPMG-S.S. Afemikhe, Final Report on the Process and Forensic Review of the Nigerian National Petroleum Corporation (Project Anchor), Volume One — Executive Summary & Main Report ("the KPMG Project Anchor Report"), 2011, sec.7.2.

⁵³ Thurber, Emefile and Heller (2010, op.cit.), p.6.

⁵⁴ Notable among these are Section 1504 of the 2010 U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act and similar rules propounded by the European Union (EU) and Canada.

But outside actors are becoming more attuned to NOC oil sales. Some private commodities trading companies have been called out and investigated for offenses, from sanctions-busting to manipulation of benchmark oil prices and environmental damage. Now foreign intelligence services, prosecutors and police are taking more notice—a trend that could continue. Civil society's work on physical commodity sales is also maturing. Recent investigative reports by NGOs garnered significant attention—including in Nigeria. In 2013, the Extractive Industries Transparency Initiative (EITI) called on participating countries to reveal more information about their oil sales, a practice which has already begun in several countries. Although many questions will likely remain unanswered, the era of near-total secrecy around oil trading in developing countries like Nigeria is over.

The era of near-total secrecy around oil trading in developing countries like Nigeria is over.

Nigeria is illustrative of this trend. The 2012 scandal around the fuel subsidy drew unprecedented attention to how NNPC manages its petroleum import and export procedures. The "missing \$20 billion" oil sales scandal followed in late 2013. (See annex A for a full account.) In 2015, NNPC's oil-for-product swap deals have drawn attention, with extensive media coverage and inquiries initiated by the anti-corruption police and the legislature.

More scrutiny means higher reputational risks for the players involved. Along with the Nigerian government, the buyers of Nigerian crude and the companies that finance their purchases also face legal sanctions and reputational damage if they are found to support rogue actors or bad deals. Attributes of the current system, such as transactions that leave space for politically exposed middlemen, could create issues for buyers and sellers—both traders and refiners—under anti-bribery statutes like the US Foreign Corrupt Practices Act or the UK Bribery Act. ⁵⁹ More generally, the steady stream of critical reports detailing the problems with NNPC oil sales has increased the scrutiny which companies involved in oil sales face, both in the market and from law enforcement. The fallout from this, in turn, could damage the reputations of government officials, the banks that finance and trade NOC oil shipments, the trading divisions of some IOCs, the private inspection agencies that sign off on shipments at ports, and the shipping companies that transport oil.

⁵⁵ For an overview of some past cases, see Berne Declaration, Commodities: Switzerland's Most Dangerous Business, 2012, available at: https://www.ladb.ch/fileadmin/files/documents/Rohstoffe/commodities_book_berne_declaration_lowres.pdf.

⁵⁶ To illustrate the wider trend: The US government in November 2012 launched its second Foreign Corrupt Practices Act (FPCA) investigation against a commodities trading house with a probe of alleged bribes paid by agricultural trading giant Archer Daniels Midland. Swiss officials in 2012 announced they were probing the activities of a former Gunvor executive for money laundering related to purchases of \$2 billion worth of crude from the NOC of the Republic of Congo at a discounted price of \$4 per barrel. *Le monde*, "L'affaire Gunvor ou l'anatomie d'un scandale pétrolier russo-congolais," June 3, 2013, available at: http://www.lemonde.fr/international/article/2013/06/03/l-affaire-gunvor-ou-l-anatomie-d-un-scandale-petrolier-russo-congolais_3422789_3210.html. For an example of a recent NGO reporting, see e.g., Global Witness, Azerbaijan Anonymous, December 2013, available at: https://www.globalwitness.org/archive/azerbaijan-anonymous/.

⁵⁷ See e.g., Berne Declaration, "Press release: BD oil report triggers parliamentary investigation in Nigeria," available at: https://www.bernedeclaration.ch/media/press-release/press/bd_oil_report_triggers_parliamentary investigation in nigeria/.

⁵⁸ See EITI, The EITI, NOCs and the sale of the government's oil, available at: https://eiti.org/document/eiti-brief-nocs-and-sale-government-oil.

⁵⁹ For a discussion of the risks of payments to politically exposed persons (PEPs) in NNPC oil sales, see pages 49-50.

Figure 5 illustrates the diversity of private sector actors involved in NNPC oil sale transactions, all of whom would face lower risks if governance practices improved. 60

Financial institutions that issued letters of credit	Refiners that bought crude originally sold by NNPC
ABN Amro, Netherlands	Bharat Petroleum Corp., India
Access Bank, Nigeria	British Petroleum, UK
BNP Paribas, France	Cepsa, Spain
Comerzbank AG, UK	ConocoPhillips66, US
Crédit Agricole, Switzerland	ExxonMobil, US
Credit Suisse, Switzerland	Indian Oil Corp., India
First Bank, Nigeria	Litasco, Switzerland
ING, Belgium	OMV, Austria
Natixis, France	Pertamina, Indonesia
Rabobank, Netherlands	Petrobras, Brazil
Société Générale, France	Petroineos, France
Standard Chartered, UK	Repsol, Spain
Sumitomo Mitsui Banking Corp., Japan/Belgium	Sasol, South Africa
UBA, Nigeria	Shell, Netherlands
Unicredit Bank, Italy	Societe Africaine d'Raffinage (SAR), Senegal
	Societe Ivorienne d'Raffinage (SIR), Côte d'Ivoire
	Sonara, Cameroon
	Sunoco, US
	Tema Oil Refinery, Ghana
	Total, France
	Tupras Refinery, Turkey

Figure 5. Significant financiers and refiners of marketed NNPC crude oil, 2011-2014⁶⁰

Sources: Ministry of Finance preshipment inspection reports; market data

Taken together, these contextual factors combine to make the reform of NNPC oil sales a national priority for Nigeria. In the sections that follow, we detail specific areas on which reformers might focus their attention.

Targeting urgent problems with NNPC crude sales

For Nigeria to secure full value from selling its crude oil, we propose a two-track reform agenda. For the first track, described in this section, the new government should urgently fix the worst sales practices, plugging leaks and stemming abuses of power. The first five recommendations pertain to this agenda ("stop the bleeding"). With concerted political will, many of these steps could take place within one to two years.

Second, NNPC should be required to fix certain underlying structural problems, otherwise a fresh system of equally inefficient, exploitable, makeshift measures and coping mechanisms will crop up. The next section details these broader efforts ("cure the patient").

For each of the five urgent issues, we detail why the existing practices do not adequately serve the public interest. Our analysis does not offer a comprehensive "framework" or "roadmap" for revamping NNPC's oil sales system. Nonetheless, we believe we have correctly identified the most important changes to make, in particular those that respond to the sector's governance challenges, like political interference and conflicts of interest, rather than just technical concerns. The case for the recommendations emerges from our review of all of the major reports about the oil sector issued since the 2000s; analysis of extensive oil sales and oil revenue data; and discussions with a wide range of stakeholders – including government, private sector, and civil society actors— within and outside of Nigeria.

A few cross-cutting comments about this agenda are as follows:

- NNPC's performance challenges and discretionary withholdings from oil sales
 almost certainly lose more money for Nigeria each year than any fiscal weaknesses
 in contracts with IOCs, and therefore should be first in the queue of oil sector
 reform measures.
- The agenda we propose does not require omnibus legislation like the Petroleum Industry Bill (PIB) to move forward. In fact, as has become evident over the past seven years, a far-reaching law of that kind acquires immense political baggage, and requires significant time for implementation.
- In reforming oil sales, the government would benefit from prioritizing simplicity
 throughout. Current governance problems throughout the sector from subsidy
 scams to tax collection to the swap agreements thrive on complex and murky
 arrangements that only a handful of people understand.
- The bad practices that undermine NNPC oil sale performance all feature political
 interference at their root. Entrenched, high-level meddling in financial, contracting,
 corporate governance and operational decisions has led to transactions and revenue
 collection habits that reward a privileged few over the Nigerian citizenry which
 owns the oil.

For Nigeria to secure full value from selling its crude oil, we propose a two-track reform agenda.

The bad practices that undermine NNPC oil sale performance all feature political interference at their root.

- Quick technical changes to the sales system, new contracts or leadership changes at NNPC will not address the real problems.
- NNPC requires deeper reforms: new institutional structures for sales, finance
 and broader corporate decision-making, together with fresh incentives, political
 independence and accountability for whomever will work within the structures
 going forward. This idea underpins all of the recommendations we offer.

Reform has not come easily to NNPC oil sales. Even acknowledging some very important and arguably beneficial technical changes, ⁶¹ in particular the introduction of OSPs in the 1980s, the decision-makers in and outside of the corporation have resisted insistent calls for reform during recent years. Nonetheless, the current conditions in the sector and the country overwhelmingly favor reform, which should involve the following six components. For each, we outline the shortcomings with the current system in order to justify why change is required.

issue 1	The Domestic Crude Allocation (DCA)
	 The DCA has become the main nexus of waste and revenue loss from NNPC oil sales. In 2013, the Federation Account (Nigeria's treasury) received only 58 percent of this oil's \$16.8 billion value.
Problems	 The DCA was designed to feed Nigeria's refineries, but in practice NNPC exports three quarters of the so-called domestic crude.
Problems	 NNPC's discretionary spending from domestic crude sale revenues has skyrocketed, exceeding \$6 billion a year for the 2011 to 2013 period.
	 NNPC's explanations for how it spends the revenues it retains are incomplete and contradictory, and the spending (such as on the fuel subsidy and downstream operations) delivers poor value for money.
Recommendation	The government should eliminate the DCA, which creates more problems than it solves.

The Nigerian government should end the DCA. Over time the mechanism—which consumes roughly a fifth of the crude that the country produces—has grown into arguably the single biggest point of waste and revenue leakage in public oil revenues. A shelf of prior reports called for reforms, but none have followed.

Our research on the DCA—which annex A lays out in detail—finds five reasons to eliminate it:

The DCA's design has little bearing on its current use. It makes little sense for NNPC to sell 445,000 barrels per day to PPMC, ostensibly to feed the country's refineries, when they usually process only 100,000 barrels per day, or less. NNPC ultimately re-routes most DCA oil into export sales or swaps, payments from which go into separate NNPC accounts, which NNPC officials then spend from freely.

⁶¹ These include the introduction of OSPs after the collapse of the OPEC pricing system, abandonment of long-term offtake agreements in favor of one-year term contracts, and the favoring of private oil traders as buyers over IOCs.

NNPC is retaining more DCA revenues in recent years; the treasury is receiving less. By analyzing data NNPC submitted to NEITI and the Federal Account Allocation Committee (FAAC), we found evidence of a dramatically widening gap over time between the sales value of domestic crude, as assessed by NNPC, and transfers of DCA revenues to the Federation Account. In 2004, for example, NNPC retained over \$1.6 billion, or 27 percent of the DCA's full assessed value. By 2012, the figure had jumped to a remarkable \$7.9 billion—or 42 percent of the value of the domestic oil for that year (figure 6). Although these figures come with some caveats, 62 we believe they are sufficiently solid to show that NNPC's habit of unilaterally withholding DCA revenues has reached runaway, unsustainable levels—especially now that Nigeria is facing an oil price slump, a depleted treasury, weakened demand for its crude and rising upstream oil sector costs.

Figure 6: Reported domestic crude sales earnings versus treasury receipts, 2004-2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
(a) Total DCA liftings										
('000 barrels)	151,893	159,899	155,068	157,312	164,724	161,914	166,523	164,454	162,343	156,192
(b) Annual sales value of all DCA liftings, calculated by NNPC										
(₦ million)	759,653	1,145,361	1,258,539	1,431,175	1,809,451	1,451,586	1,954,124	2,776,893	2,812,051	2,657,240
(\$ million)	5,935	8,743	10,599	11,531	15,562	9,903	13,229	18,363	18,260	16,818
			(c) Annı	ual transfers	to the Feder	ration Accou	nt			
(₦ million)	573,483	772,227	1,037,564	1,037,751	1,419,351	850,833	1,391,378	1,835,249	1,594,915	1,551,935
(\$ million)	4,312	5,578	8,235	8,359	12,213	5,788	9,401	12,154	10,357	9,822
(d) Estimated value of DCA oil that did not reach the Federation Account [(b) - (c)]										
(\$ million)	1,623	3,165	2,364	2,992	3,349	4,115	3,828	6,209	7,903	6,996#
percentage of total	27	36	22	26	22	42	30	34	43	42

Sources: For 2004-2012, the data for (a) Total DCA liftings and (c) Annual transfers are taken from NEITI financial audit reports, or are conversions based on average exchange rates. For 2013, the (a) Total DCA liftings and is drawn from the 2013 NNPC Annual Statistical Bulletin, and (b) Annual sales value and and (c) Annual transfers from NNPC Report: Reconciled Receipts of Domestic Crude Cost, January 2013-date, and NNPC Report: Computation of Revenue from Domestic Crude Oil Receipts, January 2013 to Date. Some columns may not total due to rounding.

• NNPC administers the DCA with few rules and weak oversight, causing chronic confusion. The corporation exercises excessive levels of discretion over how to sell domestic crude, whether to remit the resulting revenues to the treasury, and how to spend the funds that it keeps. It withholds billions of dollars each year with unclear legal authority and no defined repayment plan. NNPC retains several billion dollars a year for subsidized kerosene sales, for instance, despite a 2009 presidential directive calling for an end to the kerosene subsidy. NNPC and PPMC do not even have a contract governing DCA sales. In terms of reporting, NNPC's narratives about where the money goes are incomplete and uneven. Past audits showed it claiming hundreds of millions of dollars in duplicated or undocumented expenses—totaling \$2.07 billion in nineteen months, according to PwC. We could find no evidence that

⁶² We rely on average annual exchange rates, and rounded some figures. Also, as NNPC has three months to pay for domestic crude, we could not always discern whether the totals accounted for payments made by NNPC during the subsequent year due to this time lag. We also could not independently verify NNPC's figures for accuracy. See annex A for more detail.

⁶³ For an account of this controversy, see PwC Report p.17.

⁶⁴ NEITI, 2012 Oil and Gas Audit Report p.202.

⁶⁵ PwC Report p.13.

NNPC discloses to other government agencies what buyers of domestic crude actually pay; PwC recently found that the corporation under-reported DCA earnings to FAAC by an unknown amount. 66 According to our analysis of NEITI and FAAC data, NNPC gave no timely explanations at all for revenue withholdings that ranged from \$270 million to nearly \$7 billion per year. (See annex A, figure A7.) Controversies and competing claims, such as the one prompted by former CBN governor Lamido Sanusi's accusations of a "missing \$20 billion," thrive in this shadowy context. More than half—\$12 billion—of the alleged \$20 billion in "missing" revenues were from domestic crude sales.

NNPC gave no timely explanations at all for revenue withholdings that ranged from \$270 million to nearly \$7 billion per year.

- NNPC spending from of the DCA delivers poor value, shows signs of mismanagement. The corporation claims it holds back domestic crude earnings as a makeshift way of covering its downstream-related operational costs and subsidies. ⁶⁷ But our research finds serious cause to doubt whether its spending delivers value for money. Unilateral, unaccountable fuel subsidy withholdings are the largest "black box" in NNPC's DCA withholdings. Past practices suggest that the amounts withheld exceed actual subsidy costs. KPMG, for example, found that for the 2007-2009 period, NNPC paid itself \\$85.89 billion (roughly \$6.5 billion) for subsidies on 15.6 billion liters of gasoline, kerosene and diesel that "apparently were not available to the Nigerian market."68 According to NNPC's own data, theft from some of its crude oil pipelines actually rose—in some cases by over 500 percent in a year—after the company claimed to spend hundreds of millions in DCA earnings to protect them (See annex A, figure A10). Starting in 2011, the corporation entered into expensive arrangements—costing \$7.52 per barrel, by one estimate—to transport oil to the refineries by ship (see p. 33-34), yet refinery outputs during the period did not improve.
- The DCA creates a conflict-of-interest, with NNPC acting as buyer and seller. When NNPC allocates "domestic crude" on an intercompany basis to PPMC, whether for use in refining, swaps or export sales, it creates a situation where the corporation is essentially selling to itself. This leaves NNPC with no incentive to charge top prices. And indeed, many past audits and investigations reported that NNPC shortchanged the nation in domestic sales by using low exchange rates to convert dollar payments into naira, and by selling the crude at "discounts."

As a result of these problems we recommend that the Buhari government:

Eliminate the DCA.

There is no good reason to keep the DCA as a separate store of oil and money. Nigeria has other, better options for feeding the refineries, ensuring ample fuel supplies and covering downstream costs. (See issues two and three, below.) Especially right now, as the country faces tough fiscal challenges, leaving open such a large revenue drainpipe threatens the nation's economic health. There is no law establishing the DCA, thereby facilitating its removal.

⁶⁶ PwC Report p.58.

⁶⁷ For example, NNPC told PwC that it held withheld 46 percent of the value of DCA oil sold between January 2012 and 2013 for these two reasons. Id. p.12

⁶⁸ KPMG Project Anchor Report sec.6.3.4.

Devise a new model for supplying the refineries with crude oil; exclude PPMC from sales.

Even if the government eliminates the DCA, NNPC's refineries will still need crude oil. We recommend that PPMC be excluded from future refinery sales, given its poor record managing them. (See annex A). NNPC itself could still remain the refineries' largest, or even sole supplier under several possible models. 69 These include tolling, where NNPC would grant the refineries operational independence and lease refining capacity from them in exchange for providing crude; a repurchase agreement, under which the corporation would buy crude from its upstream partners on behalf of the refineries;⁷⁰ and further parent-subsidiary sales, with volumes capped at the refineries' actual needs. Forcing the refineries to buy their own oil from upstream operators is another option, though some firms would balk at doing business with the underperforming, cashstrapped plants, especially at first. 71 The government could pass legislation to force the IOCs or other operators to sell parts of their equity production to the refineries, but this would be controversial. 72 Finding the best transaction type depends in part on whether the government plans to change the refineries' ownership and management structures for example, by signing product sharing and technical service contracts with competent foreign refining companies, or by selling off equity to a private investor through a formal privatization exercise. 73 (For more on our recommendation to privatize NNPC's downstream businesses, see pages 67-69.)

We recommend that PPMC be excluded from future refinery sales, given its poor record managing them.

Review and reform the refinery oil marine transport arrangements.

In a purported effort to bypass theft from its refinery supply pipelines, NNPC in 2011 began transporting oil to the Warri refinery by ship. A similar arrangement for the Port Harcourt plant followed in 2014. In August of that year, former petroleum minister Alison-Madueke announced that NNPC was spending an average of \$7.52 per barrel to transport domestic crude to the refineries by ship. Previously, PPMC had charged the government only N0.30/liter (or roughly \$0.03 per barrel) to move oil through the refinery lines.

Information on the terms of these marine transport deals remains scarce. NNPC records show the corporation kept pumping crude through the Escravos-Warri refinery pipeline well after the ship transport arrangements started—even though the arrangements were supposedly set up because the line was hemorrhaging too much oil. ⁷⁶ Some of the vessels

Information on the terms of marine transport deals remains scarce.

⁶⁹ Note that under current law, the Petroleum Minister has broad power to determine crude supplies to the refineries. 1969 Petroleum Act sec.9(1)(d).

⁷⁰ For example, section 165(a) of the 2010-11 Interagency Team draft of the PIB envisioned NNPC, as a shareholder in incorporated joint ventures, having a first refusal-like option to purchase crude from its JV partners

⁷¹ Author interviews, NNPC officials and executives at Nigerian upstream oil companies, 2012-14.

⁷² Ibio

⁷³ Federal Ministry of Petroleum Resources, Report of the Refineries Special Task Force (Kalu Idika Kalu, chair) ("the Kalu Task Force Report"). 2012. p.42.

⁷⁴ Platts, "Nigeria's refining costs up on transporting crude oil by ship: minister," August 6, 2014, available at: http://www.platts.com/latest-news/oil/lagos/nigerias-refining-costs-up-on-transporting-crude-26851625. For more on this topic, see annex A p.A19.

⁷⁵ Kalu Task Force Report p.40.

⁷⁶ In October and November 2013, for example, NNPC sent 159,191 barrels of Escravos crude worth \$17.6 million through the line. NNPC, Crude Oil Lifting Profiles for Domestic Consumption, October and November 2013.

involved also sat anchored offshore the Niger Delta—presumably at a significant cost to the nation—for long periods when NNPC was not sending crude to the refineries at all. We wrote to a director and shareholder of PPP Fluid Mechanics, one of the companies involved in the arrangements, asking for information, but did not receive a reply.

issue 2	Revenue retention by NNPC and its subsidiaries
	 NNPC has invented a makeshift system for financing its operations, and is discretionarily retaining ever-growing sums.
Problems	 NNPC's five oil trading subsidiaries have acquired no independent trading capacity, but act as passive middlemen on large sales volumes (144,010 barrels per day in 2012, worth \$5.9 billion). NNPC does not disclose what happens to the commissions earned by the subsidiaries on these sales.
	 Available records indicate NNPC retained revenues from the sale of 110 million barrels of oil over ten years from one block controlled by its subsidiary NPDC, worth an estimated \$12.3 billion.
Recommendation	The government should develop an explicit revenue collection framework for NNPC that facilitates more predictable financing and reins in discretionary spending.

NNPC withholds DCA funds in part because there is no other established method for financing its operations. Most countries establish an explicit rule for national oil company financing. For instance, Malaysia's Petronas retains profits on earnings, but transfers royalties, dividends and export duties to the state, as well as paying a set tax rate on its own profits. Ghana's GNPC can retain "equity financing costs" and additional amounts approved by parliament, but these cannot exceed 55 percent of net cash flow from government assets.

Without such a mechanism, NNPC cobbles together funds from multiple sources. Spending from withheld DCA revenues is described above. The federal government also allocates to NNPC a portion of export sale revenues which are intended to fund the joint venture cash calls (see figure 1). NNPC spends a portion of these funds in a discretionary manner on non-cash call expenses – as detailed below. Some of NNPC's revenue generating subsidiaries also retain their revenues, or transfer them to NNPC's central accounts where they are spent – rather than entering the Federation Account. The amount of revenues retained by NNPC subsidiaries is unknown. In addition, NNPC sources financing from third parties to cover expenses. The amount of debt presently owed by NNPC is also unknown.

Paradoxically, this *ad hoc* way of operating at once impoverishes NNPC, leaving it chronically indebted and short of operating funds, and gives it far too much discretion to retain ever-growing sums from oil sale proceeds. The arrangements have grown more confusing, opaque and abuse-prone as types of sales have proliferated. Nigeria's executive branch has left top officials far too free to intervene and re-route money in questionable directions—and in some cases, directed them to do so.

⁷⁷ Finding based on a comparison of NNPC oil sale records with commercial tanker reports, other market intelligence data, and satellite vessel tracking data on file with NRGI.

Going forward, a more airtight system for collecting oil sale proceeds will not by itself guarantee Nigeria full and fair value. Money can still vanish earlier or later in the decision chain, through cost inflation, bad contracting and poor investment decisions. Moreover, NOCs with too much autonomy over their own revenues do not always deliver the best returns to the country. This report does not offer a complete set of recommendations for reforming NNPC's revenue collection system. The details of any new plan would depend on bigger, overdue decisions on how to restructure and fund operations going forward. But we posit that any successful model should, at the very least, do the following:

Establish the legal basis for NNPC withholdings, and resolve the conflict between the constitution and the NNPC Act

Section 162 of Nigeria's 1999 Federal Constitution requires that all government-collected revenues enter the Federation Account. Contrast this with Section 7 of the 1977 NNPC Act, which broadly allows the corporation to maintain a "fund" to bankroll its operations. NNPC has used the resulting confusion to retain money by fiat, outside of regular public financial management controls.

Along with resolving this apparent contradiction, it is necessary to create an explicit rule for how NNPC should fund its operations. This could be done through an amendment to the NNPC Act which spells out which funds NNPC can retain in greater detail than the current provision, as well as how they can be used, and the checks and balances on this expenditure. This report does not provide precise prescriptions for how to achieve this, such as how to structure tax or dividend payments by the corporation; the appropriate choices would depend on how NNPC is restructured going forward (see page 69). However, national oil companies around the world offer models that Nigeria could adapt, and some critical basic steps would include:

It is necessary to create an explicit rule for how NNPC should fund its operations.

- Carrying out an operational assessment, complete with a multi-scenario revenue modeling exercise, to identify proper and improper types of expenditures for NNPC, and their likely levels over the coming years.
- Defining a withholding or allocation system that would allow NNPC, its company
 partners and the country to plan with some predictability, and that creates financial
 incentives in favor of efficiency and performance.⁸⁰
- Strengthening NNPC's internal cost control mechanisms, both through better ex ante
 functions like budgeting and cost benchmarking and ex post verification and audit
 functions.
- In the near term, before a comprehensive NNPC restructuring takes places, the key
 would be to explicitly establish what funds can be withheld and strict guidelines on
 what is not allowed.

⁷⁸ In Angola, for example, Sonangol has huge de facto authority to spend its own oil revenues. In 2014, IMF analysis found an "unexplained residual" in state accounts of over \$31 billion between 2007 and 2010 that had been spent outside of ordinary public financial management rules. Further analysis attributed most of the losses to quasi-fiscal activities by Sonangol and the transfer of oil revenues "to external accounts to service external credit lines." IMF, Angola: Second Post-Program Monitoring: Press Release and Statement by the Executive Director for Angola, IMF Country Report No. 14/81, March 2014, available at: http://www.imf.org/external/pubs/ft/scr/2014/cr1481.pdf.

⁷⁹ For more on these challenges, see Section 6 of this report.

⁸⁰ Options include secondary profits taxes on NNPC (as Mexico does with Pemex) or a rule allowing the corporation to retain certain maximum percentages of revenues from different revenue streams (as is used in Kuwait and Ghana).

Place strict legal and operational limits on extra-budgetary spending.

NNPC rampantly spends oil sales receipts in an off-budget manner. The corporation and its subsidiaries do draw up annual budgets, some of which go to parliament and other agencies for review. Yet these documents do not always match reality. Top officials have virtually unchecked discretion over the size, sources and nature of expenditures. Each year, the corporation's leadership chooses not to fully fund some important line items in its budget, then re-routes billions of dollars to cover purported costs that are *not* mentioned in the budget. From the available information, we cannot calculate the magnitude of the problem. The ballooning withholdings of DCA proceeds give some sense of its scale, and how it is worsening.

Discretionary spending is not confined to the DCA: it is the norm in NNPC's upstream operations as well. The corporation makes its share of JV cash call payments mostly out of export oil sale proceeds. To determine the size of cash calls, each year the JV companies and several offices in NNPC—most notably the National Petroleum Investment Management Services (NAPIMS)—develop and agree on annual work programs and budgets. These documents are supposed to govern how much each party must pay into the JV cash call account for the year, and how those funds are used. 81

However, NNPC routinely uses money from the JV account for items not found in any work program or budget. NEITI identified roughly \$4.2 billion in such payments between 2009 and 2012. Be Earlier, a report from the Nigerian auditor-general's office found that in 2007 alone, roughly \$2.2 billion was "irregularly diverted [...] for execution of programmes and activities not included in the approved budgets of the JV operators." This came on top of other significant, largely unexplained irregularities in the management of the JV cash call account totaling approximately \$2.6 billion.

This pattern of behavior suggests that NNPC's long history of diverting funds into questionable "special" or "priority" projects has not ended. Off-budget spending from its JV accounts and DCA earnings represent red flags requiring urgent attention.⁸⁵

The corporation's leadership chooses not to fully fund some important line items in its budget, then re-routes billions of dollars to cover purported costs that are not mentioned in the budget.

⁸¹ For more detail on how the cash call process works, see NEITI, 2006-08 Oil and Gas Reconciliation Report, Appendix M.

⁸² More specifically, NEITI uncovered \$600 million in "security payments," \$646.95 million for the "Expansion of Escravos-Lagos Pipeline Project," and \$486.6 million in NAPIMS "management fees." NEITI, 2009-2011 Oil and Gas Financial Audit Report p.19. In its 2006-2008 audit, NEITI found similar payments for security and management fees that it could not support with "invoices, receipts or other documents." NEITI, 2006-08 Oil and Gas Reconciliation Report, Appendix M, sec.1.14.KPMG also questioned NAPIMS's practice of withholding large "management fees" from the JV account in its audit of NNPC accounts from 2007-2009, noting that NNPC "did not provide the auditors with authorization or supporting documentation" for \$384 million in such withholdings. KPMG Project Anchor Report sec.5.3.8.

⁸³ Auditor-General of the Federation, Report of the Auditor-General for the Federation to the National Assembly on the Accounts of the Government of the Federation for the Year Ended 31st December 2007, Sec. 3.32. The line items included "performance Balance/supply, Niger Delta Security Arrangement, NIPP projects and NAPIMS Overhead Cost." Id.

For instance, the Auditor-General reported that for 2007, total cash call payments exceeded approved overheads by N108.826 billion (\$877 million); federal budget appropriations worth \$336 million more than the combined JV budgets; a further unexplained extra-budgetary transfer of \$1.3 billion in February 2007; and \$50.436 million in interest earned on the JV cash call account balance that apparently was not remitted to the Federation Account. 2007 Id., sec.3.27, 3.29, 3.32-33. KPMG in its 2010-11 audit also queried the non-remittance of \$73 million in interest between 2007 and 2009. KPMG Project Anchor Report, sec.5.3.1.

⁸⁵ This legacy dates back to the late military period of the 1980s to 1998. Most notably, \$12.2 billion in oil sale proceeds were allegedly diverted into extra-budgetary accounts and projects during the 1984-85 price hike. One government committee also found that \$1.5 billion went into "special accounts" in the first six months of 1993. For details, see Nwankwo (op.cit., 2006), p.112.

Clarify when NNPC subsidiaries, including the trading businesses and NPDC, can retain revenues, and audit past subsidiary earnings and operations.

A string of parliamentary probes and audits have accused NNPC of failing to remit billions of dollars in subsidiary earnings to the Federation Account. 86 In 2012, a presidential task force questioned the "legal basis" and "business justification" for such withholdings "given the poor performance records and unprofitability of many [NNPC] subsidiaries."

NNPC has a total of 13 subsidiaries and a range of joint ventures, and most show symptoms of this problem. For instance, NNPC manages the federal government's 49 percent shares in Nigeria LNG Ltd, and receives dividends through this participation worth around \$1.5 billion a year. NEITI has consistently reported that NNPC has failed to transfer the dividends to the Federation Account. This practice stretches back to at least 2006, with over \$10 billion in NLNG dividends cumulatively retained by NNPC. In July 2015, perhaps signaling a shift in practice, the new Buhari administration secured a portion of these funds for a transfer to Nigeria's 36 state governments, many of which are facing severe fiscal crises. In July 2015, perhaps signaling a shift in practice, the new Buhari administration secured a portion of these funds for a transfer to Nigeria's 36 state governments, many of which are facing severe fiscal crises.

Less is known about the earnings of other subsidiaries. Opacity in NNPC operations means that we cannot estimate the value of revenues they retain. We acknowledge that the companies could have commercially legitimate reasons for holding on to at least some of their inflows. But there is inadequate oversight to ensure that this is the case. Given this report's focus on oil sales, we highlight the serious problems associated with the remittance of oil sale revenues from two types of NNPC entities:

NNPC's trading subsidiaries. Starting in the 1980s, NNPC set up five offshore subsidiaries to trade crude oil and refined products (figure 7). Three are JVs with major Switzerland-based traders Trafigura and Vitol. (Below, on page 57, we discuss the appropriateness of selling oil to these subsidiaries.) A 2012 presidential task force described the trading subsidiaries as "operational and financial black boxes." They do not declare their earnings, much of which appear to be kept in offshore accounts. NNPC likewise has not clearly explained how these subsidiaries account to their parent company or share profits, either with NNPC or Vitol and Trafigura.

Potential revenue losses to the nation could be large: NNPC records show that subsidiary Calson was allocated nearly 9 percent of total 2011 NNPC exports, oil worth \$2.2 billion; its profits for the year are unknown. Also in 2011, subsidiary Duke likely received over \$10 million in "commissions" from its swap deal with PPMC.

NNPC does not declare the earnings of its trading subsidiares, much of which appear to be kept in offshore accounts.

⁸⁶ See e.g., http://www.nigerianbestforum.com/index.php?topic=33074.0;wap; http://www.africa-confidential.com/article-preview/id/3149/Hide_and_seek; http://allafrica.com/stories/201303120272.html

⁸⁷ PRSTF Report p.105.

⁸⁸ NEITI 2012 Oil and Gas Audit Report p.223f.

⁸⁹ Business Day, "Presidential relief package drawn from NLNG dividends, Excess Crude Account intact," july 7, 2015, available at: http://businessdayonline.com/2015/07/presidential-relief-package-drawn-from-nlng-dividends-excess-crude-account-intact/#.VaW03PlViko.

⁹⁰ PRSTF Report p. 59. There have also been allegations—which we cannot confirm—that individual subsidiaries bought oil at below-market prices, took part in the scandal-ridden UN Oil-for-Food Program in Iraq, and overstated amounts of fuel supplied to NNPC on official documents. Berne Declaration Nigeria Report p.6. According to PwC and NEITI, one cargo that NNPC sold to Calson in 2012 was priced \$430,090 below OSP. PwC Report p.141, NEITI 2012 Oil and Gas Audit Report, Appendix 9.3.4.3A.

⁹¹ Ibid

⁹² See annex B sec.2.1.

Company (country of incorporation)	NNPC ownership stake	JV partner
Duke Oil Company Inc. (Panama)	100	none
Duke Oil Services Ltd. (UK)	100	none
Calson Ltd. (Bermuda)	51	Vitol
Hyson Ltd. (Nigeria)	60	Vitol
Napoil Company Ltd. (Bermuda)	51	Trafigura

Figure 7. NNPC trading companies

Nigerian Petroleum Development Company (NPDC) Ltd. When NNPC sells oil from blocks owned by NPDC—a reported 80,243 barrels per day in 2013—it does not forward any proceeds to the treasury. The revenues it holds onto are substantial: PwC estimated total earnings from NPDC oil sales at \$6.82 billion over nineteen months in 2012 to 2013. It is unclear why NPDC would need such large withholdings: the majority of its blocks are developed under contracts—including the Strategic Alliance Agreements—that require private partners to cover its share of operating costs.

Who collects and controls the revenues from NPDC sales is unclear from available information. NPDC's own financial statements do not list them, ⁹⁴ and the company has no settled practice of paying dividends to NNPC or the treasury. ⁹⁵ Instead, NNPC COMD sells the oil for NPDC and proceeds are lodged in an "NPDC/NNPC Special Account" which NNPC controls. ⁹⁶ According to NEITI, \$3.975 billion went into the "Special Account" for 2012 oil sales. ⁹⁷ The Nigerian Senate Finance Committee concluded that this arrangement "undermines [NPDC's] status as a separate legal entity and makes proper accounting difficult." ⁹⁸ NNPC has not explained how the funds are spent.

We cannot discern how much money NNPC has received in total from NPDC liftings. Illustrating some of the serious accounting issues, PwC, during its recent audit, received three conflicting sets of NPDC lifting and sales figures, from the Department of Petroleum Resources (DPR), NNPC COMD and the company itself. When reconciling these proved impossible, the auditors accepted total NPDC revenues of \$6.82 billion in nineteen months as "reasonable enough." ⁹⁹

When NNPC sells oil from blocks owned by NPDC, it does not forward any proceeds to the treasury.

⁹³ PwC Report p.85, 87.

⁹⁴ Office of the Auditor-General of the Federation, "Press Release: Highlights of the Investigative Forensic Audit by PwC," February 5, 2015, available at: https://www.oaugf.ng/78-highlights-of-investigative-forensic-audit-done-by-pwc.

⁹⁵ PwC Report p.83; NEITI, 2012 Oil and Gas Audit Report p.35.

⁹⁶ NEITI 2012 Oil and Gas Audit Report p.324, 331. NPDC, like other upstream petroleum companies, is required by statute to pay royalties and PPT on its operations. It pays these in cash.

⁹⁷ NEITI 2012 Oil and Gas Audit Report, Appendix p.11.1.2, p.938.

⁹⁸ Nigerian Senate Finance Committee, Report of the Senate Committee on Finance on the Investigation into the Alleged Unremitted \$49.8 Billion Oil Revenues by the Nigerian National Petroleum Corporation ("the Senate Finance Committee Report"), June 2014, p.47.

⁹⁹ PwC Report p.87. NB: This number could be gross of liftings by private companies under the SAAs, though PwC's figures are difficult to interpret. Id p.85.

NPDC oil sales come from two main sources, and NNPC appears to retain all the oil sale revenues from both:

• Okono liftings. All of Nigeria's Okono grade crude oil comes from the offshore block OML 119. NPDC has held 100 percent equity in this block since the early 2000s; the ENI subsidiary Agip Energy and Natural Resources Nigeria Ltd. (AENR) has operated the block for NPDC under the country's only service contract. OML 119 produced 34,948 barrels per day of Okono grade crude in 2014. NNPC sells the share of this oil that belongs to NPDC. A few private oil traders—recently, Sahara Energy and Taleveras above all—have bought NPDC's share of Okono from NNPC, lifted it and sold it to foreign buyers.

Our research found no evidence that NNPC forwarded to the treasury any earnings from the more than 110 million barrels of Okono crude it reported selling between 2005 and 2014. Using average annual sale prices, we provisionally estimate that this oil was worth up to \$12.38 billion (figure 8). It is not clear why NNPC, or NPDC, would need to withhold from the treasury such large earnings resulting from the sale of OML 119's output. The original service contract for the block required AENR to cover nearly all operating costs in exchange for receiving a share of production, meaning NPDC/NNPC did not need to contribute funds to keep the oil flowing. 102

There was likewise no evidence from NNPC reporting to other government agencies that the corporation reports on the proceeds from sales of Okono as revenue due to the Federation Account. For example, the monthly spreadsheets about oil sales that NNPC sends to FAAC do not show Okono liftings or the resulting earnings. ¹⁰³ Past NEITI audit reports also did not reconcile revenues or liftings of Okono, or show any remittances of proceeds to the Federation Account. ¹⁰⁴ Available records therefore indicate NNPC retained revenues from the sale of 110 million barrels of oil over ten years from one block.

Available records indicate NNPC retained revenues from the sale of 110 million barrels of oil over ten years from one block.

¹⁰⁰ Some press reporting said independent company Petrofac, together with Nigerian trader and swap holder Taleveras, won a new contract to replace AENR on OML 119 in 2013. We have not been able to confirm this. See e.g., *Africa Oil and Gas Report*, "Petrofac Clinches Strategic Alliance Partnership for OML 119," August 6, 2013, available at: http://africaoilgasreport.com/2013/08/farm-in-farm-out/petrofac-clinches-strategic-alliance-partnership-for-oml-119/.

¹⁰¹ Market intelligence data on file with NRGI.

¹⁰² Under the contract, AENR was supposed to provide all funds needed to develop two fields in OML 119, and operate the fields jointly with NPDC. In exchange for this, it could recoup the funds in cost oil and lift either 40 or 70 percent of whatever profit oil was left after payment of taxes and royalties. Service Contract Between NPDC and AENR for the Development of Okono and Okpoho Fields in OPL 91, October 2000, Art.4.1, 6, 10.2.

¹⁰³ Finding based on review of a sample of NNPC Crude Oil Lifting and Sales Profiles and NNPC monthly presentations to the FAAC Technical Subcommittee for the years 2005 to 2015.

¹⁰⁴ NEITI's 2012 Oil and Gas Audit Report did include lifting and sales data for Okono for the limited purpose of reconciling NPDC's tax obligations. NEITI 2012 Oil and Gas Audit Report Appendix 9.

Year	Okono barrels sold by NNPC*	Estimated average price per barrel (\$)!	Estimated total value of sales (\$)
2005	20,140,816	54	1,088
2006	21,170,299	65	1,376
2007	13,097,910	73	956
2008	10,763,075	100	1,076
2009	15,998,979	62	992
2010	15,254,403	79	1,205
2011	15,252,150	111	1,693
2012	15,280,468	112	1,711
2013	12,685,656	110	1,395
2014	12,053,749	74	892
Total	110,386,390	-	12,384

Figure 8. Estimated value of NNPC sales of Okono crude oil, 2005-2014

• Forcados equity liftings from ex-Shell blocks. Starting in 2010, NNPC assigned its 55 percent equity in eight onshore JV blocks to subsidiary NPDC for a reported \$1.85 billion. It did this around the time that the JV partners Shell, Agip and Total sold their minority stakes in the blocks to smaller companies. NPDC then signed strategic alliance agreements (SAAs) for the eight assets either with Septa Energy Nigeria Ltd., a subsidiary of Seven Energy International, or with Atlantic Energy Drilling Concepts Ltd. (figure 9). Under the SAAs, Septa and Atlantic are supposed to fund NPDC's 55 percent share of operating costs in exchange for rights to lift parts of the oil produced from the blocks. All of the oil is classified as Forcados grade for export purposes. As with OML 119, because the SAA partner companies cover NPDC's cash calls for the eight blocks, it is not clear why NNPC would need to withhold billions of dollars in oil sale revenues. NNPC justifies the revenue retention with two reasons: its ceding of equity to NPDC—which it describes like a sale to a private company, even though NPDC is a publicly owned entity—and government's failure to fund NPDC's operations. 105

Block(s)	Minority JV shareholders	SAA partner
OML 4, 38, 41	Seplat	Septa
OML 26	First Hydrocarbon Nigeria and Afren	Atlantic
OML 42	Neconde and Kulcyzk Oil	Atlantic
OML 30	Shoreline and Heritage Oil	Atlantic
OML 40	Elcrest and Eland Oil & Gas	Atlantic
OML 34	Niger Delta Western and Petrolin	Atlantic

Figure 9. NPDC blocks with SAAs

In addition to the revenues withheld from the eight blocks listed above, by some

105 More specifically, NNPC told NEITI that "NNPC divested its interest in the NNPC/SPDC JV in OMLs 26, 30, 34, 40, and 42 to the NPDC in year 2011. The Divestment was consented to by the HMPR pursuant to the rights of the HMPR prescribed in the Petroleum Act. The Deed of assignment of the divested assets assigned 55% equity interest in addition to right of operatorship to NPDC. The Good and valuable Consideration has been determined by the DPR and NPDC has made part payment. The proceeds from these lifting therefore belong wholly to NPDC and not to the Federation account. [...]The Federation no longer pays cash call for NPDC operations for the divested assets. Therefore, NPDC lifting proceeds are not subject to remittance to the Federation Account." NEITI 2012 audit report p.330. See also NNPC Response to Sanusi, p.8.

^{*} Source: NNPC Annual Statistical Bulletins

[!] Source: For 2005-2013, we used Platts reference prices for Forcados grade crude minus a discount of between \$1 and \$2 per barrel (with rounding to the nearest dollar), to reflect the generally lower monthly OSPs that NNPC COMD sets for Okono vis-à-vis Forcados. 2014 figure is based on analysis of Platts data and NNPC monthly OSP sheets on file with NRGI.

accounts, the SAAs themselves may be a major source of revenue loss for the Nigerian state. Trade press reporting, audit work and former CBN governor Sanusi variously have claimed that:

- The contracts were awarded outside constitutional and statutory procedures to politically connected companies.¹⁰⁶
- The SAAs with Atlantic cast NPDC as the fields' operator, despite the company lacking the technical wherewithal to play this role.¹⁰⁷
- NNPC valued its share in the assets at \$1.85 billion, and used this figure in its sale
 of the assets to NPDC. But PwC, in its 2014 audit, estimated the total value of
 the blocks at around \$3.4 billion. NPDC also paid only \$100 million of the \$1.85
 billion.¹⁰⁸
- The SAAs—the Atlantic SAAs in particular—have underperformed, delaying development of at least some of the eight blocks. In particular, media outlets have reported that the partner has not provided enough funds to cover NPDC's cash calls and has lifted more oil than the terms of the contracts allowed.¹⁰⁹
- Record-keeping and reporting for the SAA blocks was substandard. In its 2012 audit, for instance, NEITI could not reconcile conflicting sets of production, terminal receipts and lifting figures from NNPC, Shell (operator of the Forcados terminal, where most NPDC crude is exported), and DPR.¹¹⁰

We have been unable to independently verify these allegations. Septa and Atlantic have publicly denied these and other claims. 111 Nonetheless, the rumors of mismanagement are so pervasive and serious that the government should set the record straight and address any problems. We therefore recommend that the presidency commission a performance audit of the SAAs, to run in conjunction with a larger audit of NNPC subsidiaries' earnings and operations, that would require full submissions from NNPC, NPDC, Septa, Atlantic and Shell, which lifted and marketed some SAA crude from the eight blocks. 112

The rumors that the SAAs are mismanaged are so pervasive and serious that the government should set the record straight and address any problems.

¹⁰⁶ Sanusi Senate Submission presentation p.10; *Reuters*, "Nigerian lawmakers to probe state oil firm deals without tenders, "May 3, 2013, available at: http://www.reuters.com/article/2013/05/03/nigeria-oil-idUSL6N0DK3GU20130503

¹⁰⁷ Sanusi Senate presentation p.11; *Africa Oil and Gas Report*, "Looking Beyond the Diezani Tenure," January 29, 2015, available at: http://africaoilgasreport.com/2015/01/kickstarter/looking-beyond-the-diezanitenure/.

¹⁰⁸ PwC Report p.82.

¹⁰⁹ Petroleum Intelligence Weekly, "Is Indigenization Delivering for Nigerian Firms?" July 16, 2015; Daily Trust, "How NNPC May Lose \$2Bn in Controversial Agreement," May 21, 2015, available at: http://dailytrust.com. ng/daily/index.php/top-stories/55289-how-nnpc-may-lose-2bn-in-controversial-agreement; The Nation, "Revealed: How Nigeria Lost \$2bn in Oil Deals," July 21, 2015, available at: http://thenationonlineng.net/revealed-how-nigeria-lost-2b-in-oil-deals/; The Nation, "Inside the Oil Deals That Cost Nigeria Billions," July 21, 2015, available at: http://thenationonlineng.net/inside-the-oil-deals-that-cost-nigeria-billions.

¹¹⁰ NEITI, 2012 Oil and Gas Audit Report, p.332.

¹¹¹ See e.g., http://www.sevenenergy.com/media/news-and-announcements/2013/10-05-2013; http://www.sevenenergy.com/media/news-and-announcements/2011/15-06-2011; http://www.sevenenergy.com/media/news-and-announcements/2015/11-02-2014; http://www.atlanticenergy.com/frequently-asked-questions-regarding-atlantic-energys-business-model-2/; http://www.atlanticenergy.com/indigenous-partnership-of-oil-assets-increases-npdc-production-3/; http://www.atlanticenergy.com/legality-of-nnpcs-alliance-agreements/

¹¹² Market intelligence data on file with NRGI.

issue 3	Oil-for-product swap agreements
	NNPC channeled oil worth \$35 billion to swap deals between 2010 and 2014.
Problems	 In 2015, nearly 20 percent of the oil sold by NNPC has been traded for petroleum products via poorly structured deals with two companies.
	 Recent offshore processing agreements (OPAs) contained unbalanced terms that did not efficiently serve Nigeria's needs. We estimate that losses from three provisions in a single contract could have reached \$381 million in one year (or \$16.09 per barrel of oil).
	Swap imports are vulnerable to downstream rackets around Nigerian fuel transportation, distribution and sales.
Recommendation	The government should direct NNPC to wind down all OPAs and should not sign any more such deals. Future swaps should be competitively awarded refined product exchange agreements (RPEAs) with stronger terms.

Motivated by the threat of fuel shortages and staggering debts to fuel importers, the Jonathan government began using swaps in 2010 and 2011. 113 Since then, NNPC has used two types of swaps:

- Under a **refined products exchange agreement (RPEA)**, crude is allocated to a trader, and the trader is then responsible for importing specified products worth the same amount of money as the crude, minus certain agreed fees and expenses the value of which the trader keeps.
- Under an offshore processing agreement (OPA), the contract holder—either a
 refiner or trading company—is supposed to lift a certain amount of crude, refine it
 abroad, and deliver the resulting products back to NNPC. The contracts lay out the
 expected product yield (i.e. the respective amounts of diesel, kerosene, gasoline,
 etc.) that the refinery will produce. The company also can pay cash to NNPC for any
 products that Nigeria does not need.

Seven swaps have been signed since 2010; management of some has been subcontracted out to Nigerian trading companies (figure 10).¹¹⁴ We estimate the value of the oil allocated to the swaps over the period of 2010 to 2014 at approximately \$35.0 billion.

We estimate the value of the oil allocated to swaps from 2010 to 2014 at \$35 billion.

¹¹³ By 2010, the refineries were working at only around 20 percent of capacity and PPMC had racked up over \$3 billion in cash debts to fuel traders that it could not pay. Some of the bills were around three years overdue.

¹¹⁴ Several swap contracts, including the three discussed here, are available at www.resourcegovernance.org/publications/inside-NNPC-oil-sales.

Figure 10: RPEA and OPA holders, 2010-present

No.	Party	Oil allocation (barrels per day)	Duration				
Refine	Refined Product Exchange Agreements (RPEAs)						
1.	Trafigura Beheer BV	60,000	2010-2014				
2.	Duke Oil (Panama) Ltd., which entered into subcontracts with several companies who managed 30,000 barrels per day apiece:	90,000	2011-2014				
2.a	→ Taleveras Petroleum Trading BV	→ 30,000	2011-2014				
2.b	→ Aiteo Energy Resources Ltd.	→ 30,000	2011-2014				
2.c	→ Ontario Trading SA	→ 30,000	2011-2014				
3.	Duke Oil (Panama) Ltd., which subcontracted to:	30,000	2015-2016				
3.a	→ Aiteo Energy Resources Ltd.	→ 30,000	2015-?				
Offsho	Offshore Processing Agreements (OPAs)						
1.	Nigermed Ltd., a fuel marketing joint venture between NNPC and British Petroleum (BP)	60,000	2010				
2.	Société Ivoirienne de Raffinage (SIR), which entered into a subcontract to manage the full amount with:	60,000	2010-2014				
2.a	→ Sahara Energy Resources Ltd.	→ 60,000	2010-2014				
3.	Sahara Energy Resources Ltd.	90,000	2015-2016				
4.	Aiteo Energy Resources Ltd.	90,000	2015-2016				

These deals have helped NNPC keep gasoline and kerosene flowing into the country since it became unable to pay cash for fuel. But they have also absorbed huge amounts of the crude that Nigeria has to sell—around 210,000 barrels per day since 2011, roughly a tenth of total production and a fifth of all NNPC sales. NNPC and the contract holders have run these deals with limited transparency and oversight. The swaps also come with inherently high governance risks, have a history of controversy and are widely seen as costly to Nigeria. Some contract winners lacked fundamental trading capabilities—the abilities to market their own crude and source their own products directly from refiners, for instance. There are persistent, unanswered questions about whether all have supplied enough products. The contracts, particularly the OPAs, contain provisions that lower the returns for Nigeria, as well as underspecified terms and undue complexity. They were not operated in accordance with their design, and failed to target the supply of the products needed most by Nigeria. Periodic reconciliation meetings, held between the parties to the deal, were the only checks and balances in place to ensure the traders met their delivery obligations. We look at all of these points in depth in annex B.

Following a two-track reform plan is especially important in this area. Right now, the government must ensure steady supplies of fuel. To do that, NNPC will need to rely on swaps until it solves its refining woes or it has the cash or credit to buy imported fuel. 115 The recommendations in this section respond to this short-term reality. But eventually, Nigeria will need to fix the deeper problems in its downstream sector. The only sustainable way forward we see is for government to sell NNPC's downstream businesses, including the refineries, and totally remove the corporation as a player

¹¹⁵ Traders and bankers interviewed for this report thought that no bank would finance more PPMC cash imports, as the company still owes roughly \$1.5 billion in overdue debts to traders, and that the refineries and private marketers with PPPRA import permits cannot supply 100 percent of the country's needs in the current environment. Interviews, 2013-15.

in the local fuel market. Nigeria should also eliminate the fuel subsidy that has bred dysfunction and bled public funds, and prevent swaps from becoming a permanent feature of its energy landscape. Only by taking these steps, which are discussed further on pages 67-69, can the country avoid the kinds of costly, underperforming deals described here.

Abandon OPAs; Restructure the RPEAs to deliver better returns.

The government should seek to close out the two current OPAs with Sahara and Aiteo as soon as possible and refrain from signing more. An OPA's higher complexity makes it more opaque than an RPEA—and more prone to abuse. Whether Nigeria loses value is based on a high number of technical factors that few officials can effectively negotiate or monitor. Our analysis of the 2010 PPMC-SIR OPA and the 2015 Aiteo OPA found more points of possible government revenue loss than we found in the RPEAs (see box 1). We cannot confirm that the deals did in fact cost Nigeria more than the RPEAs—only a full audit could do that—but our analysis indicates that the *potential* for loss was inherently greater.

Along with their undue complexity, OPAs do not meet Nigeria's actual fuel needs efficiently. They supply a wide slate of products when NNPC only needs gasoline and kerosene. The main reasons for choosing an OPA—offloading hard-to-sell-crude, hedging against volatile commodity prices—may somewhat better reflect Nigeria's situation today than when the PPMC-SIR deal was signed. But overall, the risks of ending up with an unaccountable, unpoliceable, costly deal are simply too high.

If structured and carried out with balance and integrity, RPEAs could be more a sensible temporary option for Nigeria. A trader's obligations under an RPEA turn on a price-for-price valuation system that is much simpler to evaluate, manage and monitor. The parties can more easily limit the products supplied to those that Nigeria needs. The 2011 contract signed with Duke Oil could be an acceptable model for future deals, assuming that NNPC:

- Awards agreements competitively and transparently to companies, whether Nigerian or foreign, with top-notch financial and operational credentials.
- Revises the pricing provisions in the contract by 1) using regular NNPC OSPs to price all crude oil lifted, 2) reviewing the cost structures behind pricing premiums for gasoline and kerosene, and 3) exploring options for adjusting the pricing premiums more regularly for seasonal and other changes in the market.
- Clarifies some terms in the contract, currently left too open to interpretation, especially those governing which documents to use for pricing products and recording volumes delivered, calculating demurrage payments and fixing fuel delivery due dates.

Along with their undue complexity, OPAs do not meet Nigeria's actual fuel needs efficiently.

Box 1: Problems with the 2010 SIR OPA and the 2015 Aiteo OPA

The OPAs signed with Ivorian refiner SIR in 2010 and Nigerian trader Aiteo in late 2014 were not efficient choices for Nigeria, and are prime examples of why the country should not sign more OPAs. The contracts contained high numbers of unbalanced or inadequately defined terms that did not offer NNPC-PPMC fair value for their oil. Under the 60,000 barrels per day SIR contract, which Nigerian trader Sahara managed for SIR:

- PPMC allowed Sahara to lift lighter grades of crude oil which under the contract's weight-based
 calculation system gave PPMC fewer products in exchange for each barrel of crude lifted. The
 grades Sahara lifted also allowed it to satisfy more of its delivery obligations with cheaper types
 of refined fuel that Nigeria did not need—especially fuel oil and vacuum gasoil.¹¹⁶
- PPMC gave SIR an allowance for oil lost in the refining process that was significantly higher than SIR's own reported averages, again lowering the amount of products imported.
- Sahara was also permitted to meet its weight obligations by supplying heavier gasoline and kerosene. This gave PPMC fewer liters to sell on to consumers.
- Other critical processes were not clearly defined—for instance, the provisions for substituting diesel imports for gasoline and kerosene.¹¹⁷

We conservatively estimate that the first three of these factors, taken together, could have cost PPMC and Nigeria \$381 million (or \$16.09 per barrel) in 2011, the contract's first full year of operation. Using calculations based on the contract terms, third party price data and the 23.6 million barrels of crude that Sahara lifted under the OPA in 2011, we estimate that losses could have reached: \$8.17 per barrel, from the unfavorable yield patterns for the specific grades of crude that NNPC sold most often under the OPA; \$2.96 per barrel, from the high allowance for refining fuel and loss (RF&L); and, \$4.96 per barrel, because the contract allowed Sahara to import heavier products that gave PPMC lower volumes of fuel to sell.

Furthermore, the deal's main premise was that SIR would itself refine the crude. But according to interviews and documents related to the deal, PPMC and Sahara bypassed SIR's Abidjan refinery altogether and ran the deal like an RPEA, selling crude and buying products from the global market. But, Sahara's product obligations were still calculated as though SIR was actually refining the crude. This practice made the deal's inner workings even more opaque.

The 2015 Aiteo OPA, for 90,000 barrels per day, inherited most of these problems. While it did not name a specific refinery for processing the oil, the contract contained yield patterns that were even more unfavorable to NNPC than those in the SIR contract. While examining shipments of crude and fuel under the deal, we found no evidence that Aiteo delivered the oil to a refinery. Instead, other companies—mainly Shell—lifted and marketed the oil and Aiteo purchased fuel from overseas gasoline blenders for delivery to NNPC.

We wrote to SIR, Sahara, Aiteo, PPMC and NNPC with detailed questions on how the SIR and Aiteo OPAs were structured and managed. SIR, PPMC and NNPC did not reply. Sahara responded and directed us to press releases on its website about the OPA. 119 Aiteo asked us to sign a non-disclosure agreement before it could respond; we declined, and they did not respond further.

¹¹⁶ Sahara justifies this process by saying it was agreed "following detailed commercial negotiations which took into account a large number of factors including the value on the international market of the different grades of crude oil that could be made available by PPMC, the yields that could be achieved from refining those grades of crude oil at various refineries as well as the yield that is achievable by SIR, the cost of the refining process and the cost of transportation to and from the refinery." http://www.sahara-group.com/cg/opa-explanation.pdf. For our reaction to this explanation, see annex B p.B29.

¹¹⁷ Sahara in its press release on the OPA said that it substituted products under the deal "for the convenience and benefit of the Nigerian public" and that "the parties apply contractually defined OPA conversion formulae to determine the exact volume of 'Substitute Products' to be delivered for the particular grade of crude oil that has been supplied." Ibid. However, our analysis of the contract found no detailed formulas or other descriptions of how the process should work. See annex B p.B34.

 $^{118\,}Pages\,B27$ to B31 in annex $B\,$ detail how we reached this calculation.

¹¹⁹ lbid.

Explore options for breaking the various rackets around NNPC fuel imports.

Traders with NNPC-PPMC swap contracts deliver refined products into the existing supply chain for NNPC fuel imports—a complex, hard-to-track array of moving ships, tanker trucks, pipeline deliveries, third-party service providers and opaque, multi-step sales. As the 2012 fuel subsidy scandal showed—and as annex B explains more fully (see section 4)—the complexity of the supply chain exists partly to serve a number of entrenched, lucrative rackets around shipping, distribution and sales of fuel. These include smuggling, selling locally refined products back to NNPC at import prices, overcharging for deliveries, and outright theft. 120

The 2012 fuel subsidy investigations focused mainly on mismanaged imports by private companies, but we find that NNPC imports carry many similar risks. While the problems with the NNPC fuel supply chain are bigger than the swaps, the product imports associated with the swaps would be as susceptible as any to these broader shortcomings, and our research found some evidence of contract holders engaging in bad practices. (See annex B.) Looking ahead, unless the executive can clean up the worst rackets around fuel imports and improve oversight, swaps will hemorrhage considerable amounts of fuel and money no matter how they are structured. Further study will determine which steps would bring better results, though we list some steps the new government could take in annex B.

issue 4	The abundance of middlemen			
	 Nigeria is the only major, stable world oil producer that sells crude mostly to traders rather than end-users. 			
Problems	 NNPC enters into term contracts with unqualified intermediaries that capture margins for themselves and create reputational risks for legitimate market players while adding little or no value to deals. 			
	 NNPC also sells to governments that do not refine the crude they buy. These deals have featured a glut of unnecessary middlemen, and prompted corruption scandals in five buyer countries. 			
Recommendation	NNPC should stop selling oil to unqualified companies, whether Nigerian or foreign, and improve its due diligence standards.			

Nigerian crude sales are especially confounding and complex in the area of buyer-seller relationships. "Nigeria is a minefield," said one experienced analyst who tracks the market. "It's almost impossible to work out who's selling for whom." Much of the complexity is sanctioned by NNPC and seems designed to serve the narrow interests of well-connected politicians and powerbrokers who derive benefits from the system in exchange for doing very little.

¹²⁰ For more info, see e.g., Morillon, Virginie, and Servais Afouda, "Le trafic illicite des produits pétroliers entre le Bénin et Nigeria," Economie Régionale (LARES), 2005; Nigerian House of Representatives, Report of the Ad-Hoc Committee To Verify and Determine the Actual Subsidy Requirements and Monitor the Implementation of the Subsidy Regime in Nigeria (Farouk Lawan, chair) ("the Lawan Report"), April 2012, p.11
121 Correspondence with authors, 2013.

NNPC markets Nigeria's crude to a wider range and number of buyers than most large NOCs. Most years, COMD signs term contracts with:

- Large international oil traders. The largest buyers of NNPC crude in this class have been Vitol, Glencore, Trafigura, Arcadia, Mercuria, Addax and Gunvor – all Switzerland-based trading houses.
- Experienced Nigerian trading companies. These companies have the technical and financial capabilities needed to market, finance, lift and transport oil to buyers around the world. Their market share has grown considerably. Sahara and Taleveras have been the largest players in this group since President Jonathan took office in 2010.
- *Foreign refineries*. Each year's term contract winners include a few foreign refineries, though these do not always process the crude they receive. 122
- NNPC oil trading companies. COMD also sells oil on a term basis to NNPC's tradingfocused subsidiaries.
- Government-to-government (g-to-g), or "bilateral" customers. Since the 1970s, NNPC has regularly sold oil to other countries, above all three of the BRICs, a few West African refiners, and other, smaller countries, most of them African, which do not have refineries.
- Briefcase companies. In the language of the Nigerian crude oil market, a "briefcase company" is a small entity that routinely re-sells the cargoes it get to another intermediary—for example, a larger, more experienced commodities trading firm, which then re-sells the cargo to a third party buyer.

As this list shows, nearly all NNPC term contract holders have one thing in common: they are intermediaries. They buy oil from NNPC and then sell it to other companies instead of refining it themselves. Nigeria is the only major world oil producer (i.e., producing more than one million barrels per day) not experiencing full-scale conflict that sells almost all of its crude to middlemen, rather than end-users. Other non-conflict countries do also favor traders—including some in sub-Saharan Africa—but they are typically small or new producers, short of credit or facing severe instability.

The simplest transactions involve COMD selling a cargo to a trader with a term contract. The trader then re-sells to a buyer in the global market—for example, another trader, or a refining or oil storage company—keeping the margin between the price it agreed with NNPC and what it obtained from the buyer.

 $NNPC \rightarrow trader \rightarrow global market$

Nearly all NNPC term contract holders buy oil from NNPC and then sell it to other companies instead of refining it themselves.

¹²² For example, the Fujairah refinery, which Vitol subsidiary Vitol Tank Terminals International (VTTI) runs, has won several NNPC term contracts. But Fujairah is not well configured to process Nigerian crude, and so another Vitol subsidiary sells its cargoes in the spot market. Finding based on a comparison of NNPC oil sales records and market data on file with NRGI, confirmed by author interviews with traders and industry consultants, 2010 and 2014.

¹²³ PRSTF Report p.75-6.

In other cases, COMD sells to a less capable intermediary—a briefcase company, for instance—which then re-sells to a trading house that has the financial and operational wherewithal to actually lift and sell the crude. A foreign refinery then buys from the trader, meaning the oil changes hands at least three times:

$NNPC \rightarrow briefcase company \rightarrow trader \rightarrow global market$

Under this system, NNPC term contract holders can earn significant margins while adding little or no value to NNPC, which could have sold directly to the later buyers. Many have no industry track record when they sign their first contracts. A 2012 Nigerian government task force noted that many of NNPC's term customers "did not demonstrate renowned expertise in the business of crude oil trading" and had "little or no commercial and financial capacity." Two years earlier, KPMG warned that some of Nigeria's oil "might be sold to non-credible off-takers." As part of our research, we performed Nigerian corporate record checks on 16 of the 2014-2015 term contract winners. These findings are available on the NRGI website.

A-Z Petroleum	Dans Global Engineering	Hyde Energy	Sinopec Oil Corporation
Addax Energy SA	Delaney Petroleum Corp.	Ibeto Petrochemical	Somoil Sociedade Petrolifera Angolana SA
Aiteo Energy Resources	оогр.	maaamos	r ctromera / trigolaria o/ t
AMG Petro Energy	DK Global Energy Resources	Indian Oil Corporation	Sonar Tusk Ltd.
Avidor Oil and Gas		Mercuria Energy	Springfield Ashburton
Company	Duke Oil	Trading SA	Sullum Voe
Azenith Energy	Effective Energy	Mezcor SA	Taleveras
Resources	Elan Oil and Gas	Northwest Petroleum and Gas Company	Team Trade
Barbedos Oil & Gas	Elektron Petroleum	and das company	International
Services	Energy and Mining	Ontario Trading SA	Tempo Energy SA
Bono Energy	Emo Oil and Gas	Petrovietnam	Tavian Datus lavora
Calson	Petrochemical	PTT Public Company	Tevier Petroleum
Caison	Company	1 111 abile company	Tridax Energy SA
Century Energy Services	Eterna Plc.	Republic of Malawi	Voyage Oil & Gas Ltd.
Crudex International	Fujairah Refinery	Sahara Energy Resources	
Crudex International		Resources	

Figure 11. Reported 2014-2015 NNPC term contract holders

Source: Reuters¹²³

¹²⁴ ld. p.15.

¹²⁵ KPMG Project Anchor Report sec.3.4.8.

 $^{126\,\}text{CAC}\,\text{search}\,\text{reports}\,\text{available}\,\text{at}\,\text{www.resourcegovernance.org/publications/inside-NNPC-oil-sales}.$

¹²⁷ Reuters, "TABLE: Nigeria's expanded list of oil contract winners," June 5, 2014, available at: http://in.reuters.com/article/2014/06/05/nigeria-oil-sales-idlNL6N00K42020140605.

NNPC's habit of selling Nigeria's oil to intermediaries, especially those with few qualifications, looks more politically motivated than commercially driven. The main costs and risks to Nigeria are:

• Payments to PEPs. Some NNPC crude oil sales involve payments to Nigerian, and sometimes foreign, political elites, including government officials. By the late military period of the 1990s, NNPC's term lifting contracts became a form of patronage. They rewarded power brokers and served as vehicles for self-enrichment and building campaign war chests. 128 One 2013 study noted: "Selling to briefcase [companies] attracts many shadowy political handlers and 'politically exposed persons.' [...] A typical briefcase company is owned by one or more private individuals acting as a 'front' for top political office-holders and power-brokers. The briefcase then splits the margins it receives with the official." 129

Yet while few buyers would admit openly to paying officials at NNPC or elsewhere in government, 130 some say privately that payments remain a basic part of the business, 131 echoing the finding of a 1999 Human Rights Watch assessment that "getting a share of the trade is dependent on political patronage." 132 The payments can occur through different channels, according to past cases and experienced industry players. Companies often pay an official or a well-connected individual (often called their "sponsor") in exchange for receiving the allocation of crude. This kind of facilitation or "thank you" payment does not in itself suggest that the sponsor is a hidden owner of the paying company, interviewees said. 133 In such cases, the trader that ultimately lifts the crude may prefer to buy the oil from a middleman that can more easily make such payments, thereby giving more deniability and distance to the ultimate buyer. In other cases, the PEP holds an interest in the trading company itself, and will profit from its activities. Officials' names rarely show up on the records that NNPC term contract holders file with Nigeria's Corporate Affairs Commission (CAC). Instead, PEPs tend to hold their beneficial ownership interests indirectly—for instance, through nominee shareholders, family members or secret agreements with "fronts." 134

By the late military period of the 1990s, NNPC's term lifting contracts became a form of patronage. They rewarded power brokers and served as vehicles for self-enrichment and building campaign war chests.

Politically exposed persons tend to hold their beneficial ownership interests indirectly—for instance, through nominee shareholders, family members or secret agreements with "fronts."

¹²⁸ See annex C p.14 (discussing the case of Trafigura in Jamaica); see also *Petroleum Intelligence Weekly* (PIW), "Nigeria Feels Squeeze from Light Crude Glut," July 21, 2014; PIW, "Politics Helps Explain Nigeria's Cut-Price Crude," July 28, 2014.

¹²⁹ Christina Katsouris and Aaron Sayne, Nigeria's Criminal Crude: International Options for Combatting the Export of Stolen Oil ("the Katsouris and Sayne Oil Theft Report"), Chatham House Programme Report, September 2013, p.8, available at: http://www.chathamhouse.org/publications/papers/view/194254.

¹³⁰ In one older example, the now-deceased commodities trading mogul Marc Rich reportedly admitted paying \$1 million dollar to a former Nigerian minister to win a contract. For more detail, see A.C. Copetas, *Metal Men: Marc Rich and the 10 Billion Dollar Scam*, Harper Perennial, 1985.

¹³¹ Author interviews, trading company personnel, IOC staff, bankers, government officials and industry consultants, 2010-2015.

¹³² Human Rights Watch (HRW), The Price of Oil, January 1999, p.46, available at: http://www.hrw.org/reports/1999/nigeria/.

¹³³ Author interviews, trading company personnel and industry consultants, 2013-14. For more on the topic of beneficial ownership in the extractive industries, see NRGI, Owning Up: Options for Disclosing Beneficial Ownership of Extractives Companies, briefing, forthcoming 2015.

¹³⁴ Author interviews, trading company personnel and Nigerian banker, 2012-2014.

How buyers of NNPC crude with PEPs as hidden owners or sponsors pay these PEPs is not well documented. But industry players and law enforcement personnel consulted for this report laid out several options, based on their own experiences managing and investigating deals. Some companies, the sources said, transfer dividends or consulting fees to proxies for the PEP. The PEPs' expenses—airfare, hotel bills and shopping trips, for instance—with cash or credit cards. The Luxury items such as cars or private jets might be obtained for the PEP. The PEPs's fluxury bulk cash to the PEP's financial intermediaries and then book it as business overhead. A few preferentially hire politicians' family members or associates. In more elaborate cases, the interviewees claimed, a briefcase company will be one in a network of companies, both Nigerian and foreign, that invest—or simply hide—funds that an official captured while in office.

- Reputational risks and costs. The prevalence of politically connected briefcase companies contributes to the perception that Nigeria's petroleum sector is pervasively corrupt, frightening off some investors. 141 This can make it more difficult for legitimate oil companies operating in the country—whether in trading or elsewhere—to access finance, and increases the risks of prosecutions for financial crimes. 142
- Tax avoidance. According to interviewees, some NNPC term contract holders sell their cargoes at losses to intermediary companies (in which they have any ownership interest) that are located in offshore jurisdictions. These companies then use the intermediaries to re-sell the oil at profits. This, the interviewees said, allows the contract holders to show losses on their Nigerian books and thereby avoid payment of corporate income tax. We cannot estimate how much the country loses to this practice.¹⁴³
- Cover for oil theft. Counterintuitively, criminal actors can benefit from the opacity
 and complexity of legal NNPC oil sales. In particular, the corporation's practice of
 selling crude to middlemen creates a confusing, high-risk marketplace that offers
 cover for stolen barrels to reach oil markets.¹⁴⁴

The prevalence of politically connected briefcase companies contributes to the perception that Nigeria's petroleum sector is pervasively corrupt, frightening off some investors.

¹³⁵ For an example, see annex C pC15 (discussing the case of of Sarb Energy).

¹³⁶ Author interviews, trading company personnel and law enforcement personnel, 2014-2015.

¹³⁷ Id., 2011, 2014-2015.

¹³⁸ Author interviews, trading company personnel and industry consultants, 2012-2015.

¹³⁹ Author interviews, trading company personnel, IOC staff and industry consultants, 2012-2014.

¹⁴⁰ Author interviews, trading company personnel, IOC staff, industry consultants, government officials and bankers, 2012-15. Leading international, political risk and trade periodicals reported for instance, that term contracts under Abacha were negotiated directly out of the Presidential Villa in Abuja and required payments of 10-15 percent "commissions" to political insiders and Abacha family fronts via networks of shell companies and bank accounts in Singapore, Bermuda and Switzerland. See e.g., Washington Post, "Corruption Flourished in Abacha's Regime, June 9, 1998, available at: http://www.washingtonpost.com/wp-srv/inatl/longterm/nigeria/stories/corrupt060998.htmDATE; Africa Confidential, issues of May 1, 1998, June 26, 1998, April 16, 1999, May 14, 1999; Jedrzej Frynas, Oil in Nigeria, LIT Verlag Münster, 2000, p.40.

¹⁴¹ We spoke with a number of bank and oil company personnel who stated that they had decided not to do business in the Nigerian oil trading market, or related parts of the value chain, due either to general perceptions of the high corruption risks involved, or to due diligence investigations they had undertaken on potential partners. Author interviews, 2011-2015.

 $^{142\} Author interviews, traders, bankers, investment fund managers, IOC staff, industry consultants, 2011-2015.$

¹⁴³ Author interviews, traders and Nigerian bankers, 2013-2015.

¹⁴⁴ Reuters, "Buyer beware of \$10 million discounts on Nigerian oil," June 27, 2012, available at: http://www.reuters.com/article/2012/06/27/us-nigeria-oil-fraud-idUSBRE85Q0T020120627;" Katsouris and Sayne Oil Theft Report p.12.

Lower prices. Perhaps the most difficult question to answer is how sales to
middlemen affect the prices NNPC obtains for Nigeria's crude. One study put
average briefcase company earnings "at the higher end of \$0.25-\$0.40 per barrel."

These amounts are technically margins that could have been captured by the
Nigerian state. (See p.58 for more on this.)

It is difficult to see what value, if any, briefcase companies bring NNPC. They typically cannot lift and pay for oil themselves. One 2013 study noted: "Of the fifty term customers for 2012, perhaps only a dozen to twenty have the capacity or will to finance, ship and sell their own cargoes." 146 Yet as COMD's yearly lists of contract winners lengthened—from 16 in 1999 to a peak of 57 in 2011—briefcase companies have taken most of the added slots.

It is difficult to see what value, if any, briefcase companies bring NNPC.

Separating the briefcase companies from the capable buyers is not always easy, especially in the current context. Up until the mid-2000s, most Nigerian companies with NNPC term contracts did very little. They often lacked offices or full-time staff. Rather than lift or market any oil themselves, they would sign management contracts with a big trader, under which the trader financed, lifted and sold whatever oil the briefcase company got from NNPC, in exchange for fixed per-barrel commissions. This promised the briefcase company payment no matter how the trader fared.¹⁴⁷

Today, however, the more sophisticated, larger Nigerian term contract holders have busy offices and staff, sometimes based in multiple countries. They arrange their own letters of credit from banks and sell to more than one buyer. A few even have their own trading desks and occasionally sell cargoes FOB straight to overseas refiners. Their importance as NNPC customers has risen: as shown in figure 12, the volumes lifted by Nigerian traders of this type have increased from negligible in 2001 to around 500,000 barrels per day in recent years—around half of the oil NNPC had to sell. Two firms—Sahara Energy and Taleveras—have in particular come to rival the international traders in profile and market share, especially under President Jonathan. At the same time, though, most of the other Nigerian firms with industry name recognition today still depend on larger traders, or the trading desks of IOCs, to lift and market their oil abroad (figure 12).

¹⁴⁵ Katsouris and Sayne Oil Theft Report p.8. Demands of up to \$0.60/barrel were reported in 2012. Energy Intelligence Briefing, "West African Market Subdued Amid Plentiful Supply of Light, Sweet Crude," July 17, 2012. These numbers are significantly higher than earlier averages. For example, the Economist Intelligence Unit reported \$0.12-17/bbl in 1999. Economist Intelligence Unit, Nigeria: October 22, 1999, available at: http://country.eiu.com/article.aspx?articleid=34127603.

¹⁴⁶ Katsouris and Sayne Oil Theft Report p.8.

¹⁴⁷ Author interviews, trading company personnel and industry consultants, 2011-14. Some were merely the local arms of the big Nigerian or foreign traders. Others named themselves after larger foreign companies but are unconnected—a practice that continues today.

	June 2001	June 2011	June 2014			
Foreign traders		Thousand barrels per day				
Vitol	253	253 265				
Glencore	222	32	169			
Arcadia	190	32	0			
Trafigura	158	130	63			
Addax	93	0	0			
Itochu	63	0	0			
Attock	63	0	0			
TOTAL	1013	500	423			
Nigerian traders		Thousand barrels per day				
Duke	64*	0	63*			
Sahara	0	317	158			
Taleveras	0	160	95			
Oando	0	32*	0			
Ontario	0	32#	32#			
Aiteo	0	32#	95 [!]			
TOTAL	64	570	442			

Figure 12: Lifters of NNPC crude at three points in time, 2001-2014

Source: NNPC documents; market intelligence data on file with NRGI.

Even though there now exists a sliding scale between established, operational Nigerian traders and pure briefcase entities, many companies named on NNPC's term contract lists do not meet COMD's own award criteria. For 2013, these included a \$500 million minimum annual turnover, a prior track record in trading or "Nigerian oil and gas," submission of three years of audited accounts, and a commitment to investing in "priority" sectors of the Nigerian economy. 148 Some in the industry defend the award of contracts to such entities, arguing that NNPC must sell oil to less-seasoned Nigerian players in order to boost homegrown trading skills and grow "local content" in the Nigerian crude trading business. 149 While attractive in principle, these ideas should not be used as a smokescreen for sales to politically connected briefcase companies which do little to boost indigenization, market growth or local empowerment but instead redistribute wealth from everyday citizens to elites.

Local content should not be used as a smokescreen for sales to politically connected briefcase companies that lack sufficient qualifications.

^{* =} lifted by one or more foreign traders

^{# =} lifted by unknown trader

^{! =} lifted by Shell

¹⁴⁸ http://nnpcgroup.com/Portals/0/NNPC%20Crude%20Application%20Advert%202013%20Revised%20 May.pdf

¹⁴⁹ This Day, "Alison-Madueke Defends Award of 60 Pcent of Oil Contracts to Local Firms," April 28, 2014, reprinted at: http://www.ncdmb.gov.ng/index.php/news-update/100-alison-madueke-defends-award-of-60-of-oil-contracts-to-local-firms. Section 3(1) of the 2010 Nigerian Oil and Gas Industry Content Development Act requires that "Nigerian independent operators shall be given first consideration in the award of [...] oil lifting licences [...] subject to the fulfilment of such conditions as may be specified by the [Petroleum] Minister."

To address the costs and risks associated with sales to inappropriate middlemen, NNPC should:

Award term contracts through open, competitive tenders using performance-based criteria.

NNPC should grant the opportunity to buy state-owned oil through processes that are transparent, openly competitive and governed by clear rules so as to secure the best possible price and protect against problems like favoritism, conflicts of interest, patronage and bribery.

NNPC publicly tenders its annual term contracts, in principal. The invitations to tender that it puts out each year do have some language about qualifications, yet some is so broad that it creates almost no real barriers to entry. 150

Past probes have shed some light on how awards actually happen. A 2010 audit found no proof that COMD used performance-based criteria to select term contract holders. Instead, the audit concluded that final choices could be "based on individual discretion and inappropriate criteria" and "might not be transparent and objective." Similarly, NEITI reported that that "the choice of term buyers is taken at higher levels than COMD, implying NNPC's group managing director (GMD) and the presidency. Decision making is particularly opaque at these levels." Depending on the government in power, interviewees told us, this higher authority has shifted between the president, petroleum minister, NNPC and various presidential advisors. A former top NNPC official with responsibility for oil sales explained: "Only a few people inside one or two offices will know what is going on with the deals. Everything is done on a strictly need-to-know basis, even leadership may be kept in the dark." 154

We asked NNPC Group Managing Director Joseph Dawha about the corporation's current practices in this area, but we did not receive a response.

An improved system would feature a pre-qualification process that effectively weeds out companies lacking the financial and operational capability to lift and market a cargo of crude, and reflects a coherent, medium-term strategy for securing reliable global demand for Nigerian crude. Publishing the qualifications of the pre-qualified companies would be one way to check whether the criteria are actually applied. NNPC would award the term contract through a tender, with a clear and limited number of biddable terms.

COMD should also publish written rules for parceling out cargoes each month to buyers. A typical term contract indicates a volume figure (e.g., 30,000 barrels per day), but does not promise the holder any specific grades of crude. Instead, NNPC typically marries cargoes to contract holders at joint production and lifting programming meetings which are held one or two months before the oil is ready for lifting. This

NNPC should grant the opportunity to buy state-owned oil through processes that are transparent, openly competitive and governed by clear rules.

COMD should publish written rules for parceling out cargoes each month to buyers.

¹⁵⁰ For example, NNPC has specified that a successful applicant must be "a bona fide end user who owns a refinery and/or retail outlets," "an established and globally recognized large volume trader," or barring that, merely "a Nigerian registered company with operations in the Nigerian oil and gas industry." See e.g., NNPC, Invitation for Crude Oil Term Contract Application, 2013. Also here: http://www.nnpcgroup.com/nnpcbusiness/businessinformation/investmentopportunities/crudeoilmarketing.aspx

¹⁵¹ KPMG Project Anchor Report sec.3.4.10.

¹⁵² NEITI, Audit of the Period 1999-2004 (Popular Version), 2006, p.26, available at: http://www.neiti.org.ng/sites/default/files/documents/uploads/popularversionof1staudit.pdf

¹⁵³ Author interviews, trading company personnel, government officials, IOC staff, industry consultants, 2011-2015.

¹⁵⁴ Author interview, 2014.

process is overly opaque and discretionary. Also, NNPC commonly awards term contracts for more crude than it eventually will have to sell—50 percent more in 2011, for example. This creates a monthly bottleneck with traders jockeying to receive cargoes, and it is unclear what strategy or due process COMD follows to manage the competition that ensues. "You have to give something to get something," one trader claimed. Again, while our research found no clear evidence of specific buyers offering payments to government officials, two traders interviewed acknowledged making such payments to get their preferred grades of oil. Guidelines for allocations, and public disclosures of their utilization, would clear up this unnecessary area of risk.

Develop practices that avoid contract awards and payments to PEPs.

In addition to the basic process improvements described above, NNPC should implement additional safeguards to stem the tradition of awarding contracts to politically connected briefcase companies. NNPC should, at a minimum:

- Stop selling oil to companies, whether Nigerian or foreign, that:
 - Never or rarely sell their allocations to refiners.
 - Routinely sell to big trading companies that are already NNPC term customers.
 - Have financial or other ties to PEPs, as determined through due diligence.
- Use robust due diligence procedures for prospective buyers. It is unclear how NNPC vets term contract applicants for ties to PEPs or other serious red flags. We asked the corporation about this, but it did not reply.
- Write and enforce rules against awarding term contracts to companies linked to PEPs.
 Some provisions of Nigerian law arguably forbid term contract awards to companies that make payments to PEPs, and punish payment recipients. However, these are not sufficiently explicit, or well enforced.¹⁵⁸
- Require term contract holders to declare their beneficial owners, and publish the
 resulting registry of ownership data. NNPC should require a staff member at each
 winning company, as part of its tender package, to sign and hand in an affidavit or
 other statement naming the company's ultimate beneficial owners. Submission of
 a false statement should be automatic grounds for revoking a contract, and for legal
 action by federal prosecutors against the company and staff member. NNPC should
 publish all of the statements as part of a new oil sales transparency program. (See
 issue five for details.)¹⁵⁹

It is unclear how NNPC vets term contract applicants for ties to PEPs or other serious red flags.

¹⁵⁵ Finding based on comparison of volumes lifted versus awarded in NNPC Annual Statistical Bulletins and NNPC Approved Term Contract Lists.

¹⁵⁶ Author interview, 2012.

¹⁵⁷ Author interviews, 2010 and 2012.

¹⁵⁸ For example, Section 5 of Nigeria's Code of Conduct Bureau and Tribunal Act states that 'a public officer shall not put himself in a position where his personal interests conflict with his duties and responsibilities." Section 19 of the Corrupt Practices and Other Related Offences Act of 2000 provides that 'any public officer who uses his office or position to gratify or confer any corrupt or unfair advantage upon himself or any relation or associate of the public officer or any other public officer shall be guilty of an offence and shall on conviction be liable for five (5) years without option of fine."

¹⁵⁹ For more options on beneficial ownership disclosure, see NRGI, Owning Up (op.cit.).

• Place limits on buyers' use of offshore companies. Many NNPC term contract holders have corporate structures that stretch outside Nigeria. These can include sister companies set up in tax havens and jurisdictions where authorities do not require corporate vehicles to name their beneficial owners. For example, Tridax Oil and Gas Ltd. is a Nigerian entity that won its first term contract in April 2011, a few months after it was registered as a company. According to Nigerian and foreign corporate filings, Tridax's legal ownership is split between a Nigerian-born, U.S.-based lawyer, a Portuguese investment banker, and a string of shell companies and private investment vehicles running from Nigeria to Switzerland to Malta to Gibraltar (figure 13). How this structure benefits Tridax, NNPC or Nigeria is not immediately apparent, though it has attracted controversy and competing explanations. Tridax and its sister company Mezcor Ltd. have held NNPC term contracts for every year since 2011, and have sold their oil to several buyers.

Given the risks of PEP payments and tax avoidance discussed earlier, NNPC should develop rules and standards for term contractors' use of offshore companies, and processes for policing compliance. The corporation should consult with traders, bankers, anti-corruption police and watchdog groups to make the new rules and standards.

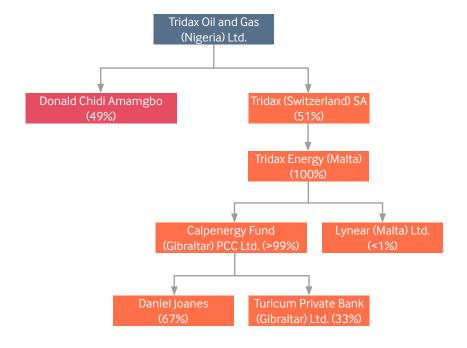


Figure 13: Corporate structure of Tridax Oil and Gas Ltd.

Sources: Nigerian and foreign corporate filings

¹⁶⁰ See e.g., Berne Declaration Nigeria Report p. 6; Africa Energy Intelligence, "The mysterious Tridax company," August 28, 2012, available at: http://www.africaintelligence.com/AEM/oil/2012/08/29/the-mysterious-tridax-company,106905811-ART; Handelszeitung, "Ex-Clariden Leu Banker mischt in Nigeria's Oel Business mit," August 28, 2012, available at: http://www.handelszeitung.ch/unternehmen/ex-clariden-leu-banker-mischt-nigerias-oel-business-mit; This Day, Tridax, Mezcor debunk claims in Swiss Report," November 15, 2013, available at: http://www.thisdaylive.com/articles/tridax-mezcor-debunk-claims-in-swiss-report/164428/.

¹⁶¹ Vitol lifted all of Tridax's crude in the 2011 and 2012 annual trading cycles, along with all of the cargoes NNPC earmarked for sister companies Mezcor and Lynear. BP, Glencore and ConocoPhillips 66 handled Tridax and Mezcor cargoes in 2013 and 2014, then Vitol returned as lifter in 2015, disposing of all of Mezcor's cargoes in the last days of the Jonathan government. Dutch bank ABN Amro provided letters of credit for the companies' liftings. NNPC Crude Oil Sales Profiles, 2011-2015; market intelligence data; Ministry of Finance Pre-Shipment Inspection Reports.

End government-to-government sales to smaller non-refining countries.

Each year, NNPC builds more middlemen into its sales system when it awards term contracts to foreign governments or other state-owned entities. The corporation's deals with smaller, mostly African countries that do not refine the oil they buy tend to be especially crowded. The most complex arrangements feature a briefcase company, an experienced trader which manages the deal on behalf of the buyer government and rosters of "agents" who collect small payments for little apparent reason. And since the other countries outsource management of their contracts to traders in exchange for per barrel "commissions" or a share of profits, they behave like middlemen themselves (figure 14).

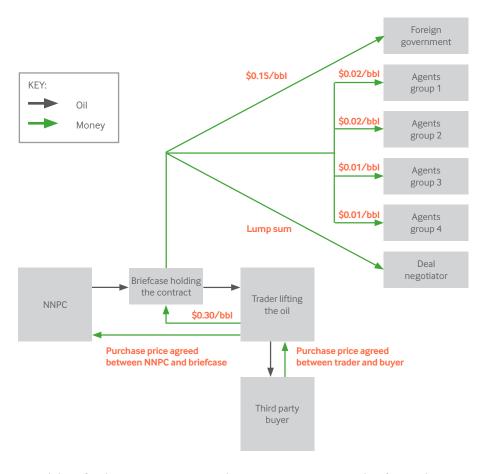


Figure 14: Payments to middlemen pursuant to one NNPC g-to-g oil contract

Source: Accounting document from a smaller country g-to-g deal, on file with NRGI.

Scandals in five buyer countries over the 2000s—Jamaica, South Africa, Liberia, Zambia and Malawi (for more detail on these, see the case studies in annex C)— showed that NNPC's sales to smaller, non-refining countries had no strong financial or policy justifications and came with substantial risks of mismanagement. These deals have sprouted accusations of payments parties made to government officials and the diversion of funds owed to buyer countries. The Zambia g-to-g deal, and its Nigerian-owned intermediary Sarb Energy, featured prominently in the corruption trial of former Zambian president Rupiah Banda. The case ended in an acquittal, but questions remain around payments made by Sarb to accounts connected to Banda's family members. ¹⁶² On the Nigerian side, corporate records checks we performed show that a retired Nigerian general and a former senator had interests in Sarb. ¹⁶³

¹⁶² Government of Zambia v. Hon. Rupiah Banda, Magistrate Court of Lusaka, transcript of trial testimony by Akpan Ekpene.

¹⁶³ For details, see documents available at www.resourcegovernance.org/publications/inside-NNPC-oil-sales (CAC reports for Sarb Energy, Pixy Energy and Deltoil Ltd.).

Overall, the added layers of complexity and opacity in the smaller non-refining country deals left them open to abuse, and the delivered to Nigeria no clear benefits above what it would have received from selling the oil under less convoluted arrangements. Unless NNPC can publicly explain their policy benefits and reduce the number of politically-connected actors involved, it should discontinue them.

The added layers of complexity and opacity in the smaller non-refining country deals left them open to abuse.

Review the operations of NNPC's trading subsidiaries; close down poor performers.

NNPC's trading subsidiaries were originally set up to become NNPC's main marketers of crude and refined products. But after three decades or more they have acquired limited independent trading capabilities. They receive crude through term contracts from COMD, and then flip the oil to a few big traders. Calson for example assigns most of its cargoes to JV partner Vitol, which takes them to market. Working for Calson is like being seconded to the London office of Vitol, said one NNPC official who spent time there. London office of Vitol, and a few other experienced trading houses nearly all of its crude to Vitol, Glencore and a few other experienced trading houses for typically undisclosed margins. When PPMC awarded Duke a swap contract in 2011, it outsourced nearly all aspects of managing the contract to three Nigerian trading companies. Acting like many of the extra middlemen in the NNPC oil sales marketplace, Duke retained the right to collect "commissions" from the companies—worth over \$16 million in the deal's first year (see annex B). As pages 37-38 of this report noted, all of the subsidiaries have opaque governance practices. Neither NNPC nor the subsidiaries disclose how they distribute their earnings, much of which go to offshore accounts.

We recommend that the Buhari government subject all of NNPC's oil trading subsidiaries to an independent operational review conducted by external consultants, carried out in tandem with multi-year financial audits. Those that are found to have weak trading skills and chronic governance problems should be barred from buying more NNPC crude and wound down. Other countries, such as Azerbaijan, Angola and Mexico, have set up affiliated, full-service trading arms that over time gained the capacity to sell directly to end-users and effectively secure top price for their country's oil. Building up one or more such entities could make sense for NNPC. Its current subsidiaries have not to date indicated an ability to fulfill such a mandate, however.

Other countries, such as Azerbaijan, Angola and Mexico, have set up affiliated, full-service trading arms that over time gained the capacity to sell directly to end-users and effectively secure top price for their country's oil.

¹⁶⁴ Market intelligence data for 2011-15 on file with NRGI; author interview with former Calson official, 2014.

¹⁶⁵ Author interview, 2011.

¹⁶⁶ Market intelligence data for 2011-15 on file with NRGI.

¹⁶⁷ Author interview, former Duke Oil official, 2014.

Commission a study on the performance of the official selling price (OSP) system.

Stakeholders within and outside of government need to better understand how NNPC sales to middlemen impact the prices the nation obtains for its crude. Our research found no clear, current proof that NNPC's OSP system is grossly manipulated or abused. Overall, pricing is one of the main areas where NNPC export oil sales have improved with time. The use of OSPs should ostensibly limit political interference in pricing: if NNPC strictly applies its formula, the Brent market should typically determine over 90 percent of a cargo's price. Traders claim Nigerian crude tends to be more aggressively priced than similar light sweet barrels—from Libya or Azerbaijan, for instance. Recent audits that reviewed pricing data did not find a consistent pattern of large gaps between OSPs and reported spot market prices for Nigerian crude. The OSP system does represent improvement over the system used in the 1970s, when NNPC staff reportedly set prices using OPEC formulas and top politicians revised them downward for political reasons. To

Selling oil through intermediaries does not automatically mean less money for an NOC. It is too simplistic to assert that NNPC would always capture a middleman's profits if the corporation sold oil directly to a refiner instead. In theory, intermediary sales should pay NNPC fairly well if the middleman finds a motivated buyer for the oil and shares enough profits with NNPC. Relationships are key in trading, and NNPC may not always have the right ones to make an optimal sale. Marketing through a limited number of traders could also widen the pool of possible buyers, since as a group they will have cultivated more buyer-seller relationships than NNPC. Finally, selling more oil to refiners does not guarantee higher profits: refineries buying crude longer-term sometimes charge heavy discounts for the stable demand they offer.

The main unanswered question with respect to how NNPC prices Nigeria's crude oil is whether the corporation sets OSPs at lower levels so as to allow for payments to intermediaries or their hidden owners. World Bank reviews during the Gen. Sani Abacha years (1993-1998) found that NNPC routinely lowered prices so middlemen could earn larger commissions. ¹⁷¹ If a term contract holder has to make payments to a briefcase company (or to the PEP behind a briefcase company) when it lifts NNPC oil, one would expect that it would not buy a cargo unless the cargo's OSP were set low enough to cover the cost of the payment. Buyers agree to buy the cargoes NNPC offers them before knowing the differential, suggesting they are fairly confident of obtaining wide enough margins. Although we have seen no clear proof that NNPC considers buyers' obligations to other middlemen and PEPs when it prices the country's oil, further study is warranted.

¹⁶⁸ Author interviews, 2014.

¹⁶⁹ See e.g., KPMG Project Anchor Report sec.4.3.1; NEITI 2009-11 Oil and Gas Financial Audit, Appendix B.; PwC Report p.47f.

¹⁷⁰ Federal Government of Nigeria, Report of the Panel on Crude Oil Production and Marketing Policies, 1976. 171 World Bank, Nigerian National Oil Company Management Audit, 2000; Analysis of the Flow of Funds in

¹⁷¹ World Bank, Nigerian National Oil Company Management Audit, 2000; Analysis of the Flow of Funds in Nigeria's Petroleum Sector, Oil and Gas Policy Unit, 2000.

Explore selling more oil directly to refiners.

It would be facile to recommend that NNPC should offer Nigeria's crude only to refineries. Signing long-term refining deals could be especially risky in the current market, when prices are volatile and US demand for Nigerian crude has softened. Nonetheless, NNPC does not select its term contract holders to broaden its options, nor does it scour the market for best prices. The corporation does little to seek out marketing deals with new end-users, which would be one strategy for developing demand. Buyers at two refineries said they had tried to deal directly with NNPC, but NNPC officials always insisted the refinery buyers go through middlemen. Indeed, since at least the late 1980s NNPC has depended on a small, ever-shifting circle of traders to get Nigeria's oil to market. These companies are not agents or fiduciaries of NNPC or the nation. They are not obliged to give a fair price to either. On the contrary, their goal is to maximize their own take. NNPC could look beyond its usual customers—especially given the need to find new markets for Nigerian crude.

issue				
5	Corporate governance, oversight and transparency			
	 NNPC reporting to other government agencies and the public on oil sales is patchy and regularly contains contradictions. 			
Problems	 The corporation's own internal recordkeeping systems and processes are disorganized and secretive. 			
	The corporation lacks basic checks and balances—for example, no published annual reports, weak audit functions and a board chaired by the petroleum minister.			
Recommendation	The presidency should lead a program of transparency and accountability reforms for NNPC, and empower oversight actors to scrutinize the corporation's decisions.			

The new administration should pursue several inter-related accountability goals when reforming NNPC:

- limit political interference
- reduce discretion
- broaden the stakeholders to whom NNPC answers
- end impunity.

When citizens, investors and other public institutions can neither ask nor answer basic questions about how an NOC makes decisions, the likelihood of management in the public interest drops off, as do incentives for efficiency and innovation. Research has found that *ex post* review of NOC actions by a broad range of stakeholders has better impacts on performance than strong *ex ante* controls imposed by a few influential actors. This is especially so when leaders face real consequences for making bad choices. 174

¹⁷² Author interviews, 2013-2014.

¹⁷³ NRGI, Nine Recommendations (op.cit.), p.16.

¹⁷⁴ D. Hults, "Hybrid Governance: State Management of National Oil Companies," in David G. Victor, David Hults and Mark C. Thurber (eds.), Oil and Governance: State-Owned Enterprises and the World Energy Supply, Cambridge University Press, 2014, p.62 – 120.

NNPC's management has a history of resisting outside scrutiny. Past NRGI research found that the corporation "discloses very little about its finances and operations. [...] Even though more than half of public revenues flow through the corporation, [...] no strong legal or policy framework forces NNPC to share information with other stakeholders, and its corporate culture may encourage secrecy." Within government, NNPC does share some information on oil sale earnings—most notably, in monthly and quarterly reconciliation meetings with around a dozen agencies. The It also feeds data on oil sales to FAAC each month. But as the "missing \$20 billion" controversy showed, facts about oil sales are firmly under NNPC's control. Officials from outside the corporation say they cannot independently verify or challenge the figures NNPC gives them. The Italian of the properties of the properties

Some information may not travel widely enough even within NNPC itself. Past reviews described NNPC's oil sale data management practices as disorganized and secretive. PwC called the corporation's accounting system for sales "inaccurate and weak," as evidenced by "significant discrepancies in data from different sources." 179 During KPMG's 2010-2011 review, auditors found that information on oil sales was not kept in any "centralized location," but instead was "stored on individual personal workstations."180 Some sales were "not promptly captured in the accounting system,"181 and key data collection processes remained manual and uncoordinated.182 This apparently led to ineffective debt control, lost or omitted invoices, and sizable data entry errors. 183 Overall, PwC auditors noted, "there is no single reliable data repository that can provide a holistic overview of the crude oil sales process from end to end. As such, variances in the records which would flag issues may be missed," and there is no "single point accountability." 184 As a dramatic example of this problem, the PRSTF, a government task force, found that between 2002 and 2009, separate sets of oil sale books kept by NNPC COMD and NAPIMS sometimes diverged by more than \$100 million per year. 185 NNPC has claimed for some time that it is addressing these challenges by implementing a SAP enterprise accounting system—a costly technological fix that remains unfinished. 186

Government officials from outside the corporation say they cannot independently verify or challenge the figures NNPC gives them.

¹⁷⁵ NRGI, The Petroleum Industry Bill and the Future of NNPC, 2012, p.14, available at: http://www.resourcegovernance.org/publications/petroleum-industry-bill-and-future-nnpc. Elsewhere, a 2010 joint report by NRGI and Transparency International (TI) rated NNPC the least transparent of 44 national and international energy companies surveyed. TI-NRGI, Promoting Revenue Transparency: 2011 Report on Oil and Gas Companies, 2011.

¹⁷⁶ Members of the Crude Sales Reconciliation Committee are drawn from NNPC COMD, CBN, Budget Office, Office of the Accountant-General, DPR, Finance Ministry, FIRS, National Bureau of Statistics, National Economic Intelligence Committee, National Planning Commission, Nigeria Customs Service, RMAFC. The Committee forwards its results to FAAC, and the FAAC Technical Subcommittee uses these to calculate monthly revenue allocations to the three tiers. For more on the Crude Sales Reconciliation Committee process, see NEITI, 2009-11 Physical and Process Audit Report, Appendix G.

¹⁷⁷ Author interviews, officials from CBN, Finance Ministry, Auditor-General's Office, FAAC and NEITI, 2010–14. NNRC Benchmarking Report Sec.2.2.10 (noting that RMAFC and CBN, though they have responsibility for monitoring revenues, "are simply informed of receipts, and little information is provided in terms of revenue projections, under- or over-payments and the breakdown and controls over receipts").

¹⁷⁸ Author interview, 2011.

¹⁷⁹ PwC Report p.18.

¹⁸⁰ KPMG Report sec. 3.4.9.

¹⁸¹ KPMG Report sec. 3.4.13.

¹⁸² PRSTF Report 20f.; NEITI 2005 Financial Audit, Appendix A, p.5f.

¹⁸³ Ibid.

¹⁸⁴ PwC Report p.51.

¹⁸⁵ PRSTF Report p.89. NAPIMS tended to report the larger figures.

¹⁸⁶ Author interviews, current and former NNPC officials and contractors, 2010-2013.

Along with improving transparency and information management, the government should also rebuild the collapsed accountability infrastructure around NNPC, empowering heretofore weak oversight institutions and reassuring the heads of such organizations that they have genuine mandates to ask tough questions. Currently, most oversight actors do not make good use of what little information they do receive. ¹⁸⁷ Explicit presidential leadership is required on this front. Perceptions run deep in both industry and government that NNPC is a law unto itself: the sacking of former CBN governor Sanusi after he raised questions about oil sale revenues remains fresh in the minds of many.

To enhance accountability, the presidency should ensure that the relevant executive branch agencies:

Along with improving transparency and information management, the government should also rebuild the collapsed accountability infrastructure around NNPC.

Target impunity by auditing and investigating problem areas.

Forward-looking reform of NNPC should be the government's first priority, particularly in this time of low oil prices and economic hardship. However, credible efforts to uncover past abuses can help deter bad practices in the future, and usher in a new era less defined by impunity. Such audits and investigations will face challenges including access to information (e.g., PwC failed to access all the NNPC data that it needed) and the temptation for some officials to use findings to shake down opponents. Political will from the top will be required.

This report identifies a number of areas that would benefit from rigorous forensic examination. Audit findings would inform the broader reform process and identify abuses of power where law enforcement action is needed. We recommend that at a minimum the government commission independent performance audits, with physical, financial, process and value-for-money components, for:

- The DCA
- The crude-oil-for-product swaps
- NPDC oil sales and related operations
- NNPC's oil trading subsidiaries
- Refinery crude oil transport arrangements
- The NNPC fuel import supply chain
- The JV cash call account

¹⁸⁷ For example, NNPC says that it makes its annual financial statements available to the Auditor-General, Accountant-General, House and Senate Public Accounts Committees, and the Fiscal Responsibility Commission, among others. Nigerian National Resource Charter, NNRC 2014 Benchmarking Report, sec.2.3.1, available at: http://nigerianrc.org/content/2014-nnrc-benchmarking-report.

Publish more data on NNPC oil sales and financial movements.

The presidency should require NNPC to regularly disclose detailed, cargo-by-cargo data on all of its crude oil sales, to include buyers, grades, vessels, lifting dates, destinations, financing banks, prices obtained and payment details. NEITI and PwC have already put out this information for a number of years, though only after long delays. ¹⁸⁸ Currently NNPC only publishes gross lifting volumes and destinations for each type of sale. ¹⁸⁹ It last published price data in 2008 and revenue information in 2005. A good first step would be for the government to require the corporation to issue an annual report for 2015 that would also include its audited financial statements, operational data, the financial positions and earnings of its subsidiaries, and disclosures on quasi-fiscal and other discretionary spending. Most sophisticated NOCs issue annual reports; the publications of companies like Petronas, Ecopetrol, Statoil and others could be used as models. The central bank and finance ministry should also make more detailed reporting on oil sale revenues in their publications, including disaggregation by sales types.

The presidency should require NNPC to regularly disclose detailed, cargo-by-cargo data on all of its crude oil sales.

Commission regular external audits of NNPC, and publish the reports.

According to past NRGI research, NOCs with strong audit and reporting requirements tend to realize better returns from their operations. ¹⁹⁰ Periodically—though perhaps not regularly—audits of NNPC, its subsidiaries and corporate divisions do take place. But the quality of audit functions and management responses are questionable. In 2010, KPMG found that the NNPC board's audit committee met just once in three years, the plan used for audits was not approved by directors, and the full board apparently did not discuss or approve internal audit plans or results at its meetings. The corporate audit division reported directly to the group managing director—a possible threat to its independence.

Most sophisticated NOCs issue annual reports; the publications of companies like Petronas, Ecopetrol, Statoil and others could be used as models.

Specific to oil sales, KPMG auditors examined reports from annual audits of COMD and found that management did not address red flags on transactions and financial movements worth \$2.59 billion. 191 Auditors also routinely complain that NNPC does not give them access to people or data they need to do their work. 192 In their 2014-2015 review, PwC auditors concluded that "the lack of independent audit and reconciliation [for NNPC oil sales] led to over reliance on data produced from NNPC. This matter is further compounded by the lack of independence within NNPC as the business has conflicting interests of being a stand-alone self-funding entity and also the main source of revenue to the Federation Account." 193

Other NOCs exhibit good practices that NNPC should follow. These include hiring external, independent firms to conduct audits, publishing the audit reports, hiring auditors through open tenders, and changing auditors periodically.

¹⁸⁸ See e.g., NEITI, 2009-11 Oil and Gas Physical and Process Audit Report, Appendix B, p.19.; PwC Report p.112.

¹⁸⁹ NNPC Annual Statistical Bulletins.

¹⁹⁰ NRGI, Nine Recommendations (op.cit.), p.18.

¹⁹¹ KPMG Project Anchor Report sec. 9.3.11.

¹⁹² See e.g., Senate Finance Committee Report p.36; PRSTF Report p.126; PwC Report p.13, 17, 19, 26, 81, 83, 196.

¹⁹³ PwC Report p.51.

Empower accountability actors.

To create more effective checks on NNPC's decision-making, the new administration could:

- Require NNPC to establish clear performance benchmarks, for the year and for
 the medium-term. These should include spending levels, tied to the corporation's
 actual budget proposals. NNPC should circulate these benchmarks to relevant
 government entities including the National Assembly (NASS), report against them
 on an annual basis, and use them as a basis against performance can be concretely
 assessed. This approach affords NNPC some autonomy (the NASS should not,
 for instance, get involved in various business decisions), while injecting some
 accountability into a system where it is sorely lacking.
- should require NNPC to meet clear performance benchmarks.

The new administration

- Clarify the extent of the Auditor-General of the Federation's powers to audit NNPC, and have its reports published online.
- Expand the Accountant-General of the Federation's role in reconciling and reporting on NNPC revenues, including oil sale revenues.
- Provide more resources and independence to the Economic and Financial Crimes Commission (EFCC), including its Oil and Gas Unit, to allow it to pursue high-level cases involving oil-related financial crimes.
- Ensure NEITI has the funds, independence and mandate it needs to rigorously
 report on the full scope of NNPC operations and finances, and encourage NEITI to
 publish reports in a more timely fashion.

Guard against known governance risks.

To further strengthen NNPC accountability and adopt a strong reform posture, the presidency should develop and oversee an agenda under which the relevant agencies:

- Propose amendments to the 1977 NNPC Act to remove the petroleum minister as chair of the NNPC board, appoint a board constituted by a majority of independent professionals, and ensure that the board meets regularly.
- Restore CBN's full authority as joint signatory to the Crude Oil Naira and Dollar Accounts.
- Sanction NNPC officials for refusing to cooperate with audits or parliamentary probes.
- Publicly support and protect the tenures of officials in other agencies who justifiably question NNPC management decisions.
- Require oil sector officials, including senior officials at the NNPC and its subsidiaries, to declare their assets, starting when they take office.
- Establish more open, productive relationships with civil society and the media on oil sector issues.
- Investigate and prosecute oil sector officials for misconduct while in office.

Solving NNPC's underlying problems

As we suggested at the beginning of this report, maximizing full returns from NNPC oil sales will depend on pursuing two trajectories of reform—the urgent fixes mentioned above, and a broader agenda of NNPC restructuring. Many of the worst performance problems found with NNPC's current sales system are byproducts of larger, longstanding, well known challenges that have eluded reform for many years, including through the chronic delays that prevented the passage of the PIB. By stalling sector reform, NNPC bosses have created a legal, operational and political limbo that influential officials in and outside of the corporation exploit in the service of narrow, short-term interests. Weak accountability means that bad management decisions, possibly criminal conduct included, have gone largely unpunished.

The dramatic rise of oil prices in the late 2000s made it easier for NNPC to "muddle through," with extra cash flow masking the inadequacy of various short-term fixes. This, in turn, further delayed action on addressing the larger, structural problems. Many of the stop-gap measures were introduced to fight fires, or re-route oil sale earnings. Over time, top officials have expanded, reworked and manipulated some of them in order to distribute patronage benefits. But now, faced with lower oil prices and sales premiums, rising industry costs, a growing list of suspect NNPC deals and withholdings, and drained government coffers, the government should undertake systemic reform, rather than creating another round of ill-suited coping mechanisms.

Below we recommend a number of fundamental fixes to Nigeria's oil sector governance. This list is certainly not exhaustive; we focus here on those issues that relate specifically to oil sales. For instance, we do not discuss the role of NAPIMS, the NNPC subsidiary in charge of negotiating and enforcing contracts, the operations of which are fraught with inefficiency and conflicts of interest. Also, this agenda does not require omnibus sector legislation, such as the Petroleum Industry Bill. In fact, the far-reaching nature of the bill attracted too much political baggage, and the timeline of its implementation would have far exceeded the political horizons of any leader. Taking up the agenda in workable segments is the way to achieve results.

The dramatic rise of oil prices in the late 2000s made it easier for NNPC to "muddle through," with extra cash flow masking the inadequacy of various short-term fixes.

Taking up the agenda in workable segments is the way to achieve results.

Develop a plan for funding NNPC JV cash calls.

The cash call system is fundamentally broken. For more than decade, NNPC has lacked the capital it needs to grow its asset base or meet upstream operating costs. This is partly because the federal government has not funded it adequately through the annual budget process, partly because funds have been diverted for other purposes. The corporation has amassed growing, multibillion dollar cash call debts, many of which it settles years late, if at all (figure 15). ¹⁹⁴ The resulting funding crisis set NNPC on the path of inventing makeshift methods for funding its obligations, both to the JVs and more generally.

Year	Total JV budget (\$ billion)	NNPC's share, estimated at 58 percent (\$ billion)	Actually paid by NNPC (\$ billion)	Debt to operators (\$ billion)
2006	8.1	4.7	4.1	0.6
2007	9.7	5.6	4.3	1.3
2008	12.4	7.2	4.9	2.3
2009	14.8	8.6	5.4	3.2
2010	17.7	10.3	6.2	4.1
2011	17.2	9.9	5.2	4.7
2012	18.0	10.4	6.9	3.5

Figure 15: JV cash calls, budgeted versus paid, 2006-2012

Sources: Author estimates based on data from PRSTF Report p.78; NEITI 2012 Audit Report p.103

Costs to Nigeria have already been high, from the actual interest payments associated with this lending to the lost revenues as field maintenance and investment are neglected. A functioning corporate finance model is a strong predictor of NOC performance. Companies that lack reliable access to enough revenue to cover their operational costs lose significant profits as a result. 195 Over the last decade, JV funding issues have meant delayed projects and lower production and revenue receipts for Nigeria.

To bridge some of the financing gaps, NNPC has entered into a series of makeshift arrangements in which opacity, complexity and governance risks are relatively high:

- Third party project financing deals
- Carry agreements and modified carry agreements (MCAs)
- IOC bridge loans¹⁹⁶
- The SAAs discussed on pages 40 to 41.

Roughly a third of JV production now happens under these alternative finance arrangements (figure 16). As a group, these deals come with unclear costs and shrink the total volumes of crude oil that NNPC has to sell.¹⁹⁷

Over the last decade, JV funding issues have meant delayed projects and lower production and revenue receipts for Nigeria.

¹⁹⁴ In 2012, for instance, NNPC paid JV operators \$1.253 billion in cash call arrears dating back to 2002-2009. NEITI, 2012 Oil and Gas Audit Audit Report p.104.

¹⁹⁵ NRGI, Nine Recommendations (op.cit.), p.9.

¹⁹⁶ For explanation of these deals, see NEITI, 2012 Oil and Gas Audit Report p.77f.

¹⁹⁷ NEITI found, for instance, that despite the increase in crude oil production during 2009-2011 by 4.8% 2006-2008, NNPC's share of total exports declined by 15.5% within the audit period in comparison to the last audit cycle. NEITI attributed this partly to NNPC's use of its equity crude oil entitlements to fund JV operations through alternative funding arrangements. NEITI, Remediation Plan Part B, item 2.1.

Item	2009	2010	2011	2012	2013	2014
Alt. finance production ('000b/d)	360	455	474	412	290	385
Total JV production ('000b/d)	1,268	1,454	1,429	1,274	1,093	1,087
Alt. finance as percentage of JV	28	31	33	32	27	35

Figure 16: Alternative finance production as a share of total JV production, 2009-2014

Source: NNPC Annual Statistical Bulletins, 2009-2014

The government should urgently explore other options for funding JV operations. Given the current state of play, the best arrangements would have to transfer much of the financial burden and risk to privately owned companies. NNPC's status as a statutory corporation with large debts and no credit rating means it cannot negotiate much external debt financing on its own. The most immediately accessible—though by no means the only—options are:

Given the current state of play, the best arrangements would have to transfer much of the financial burden and risk to privately owned companies.

- Selling off NNPC equity, either by divesting physical assets or listing corporate shares on a stock exchange, to raise capital for priority investments. This is perhaps the most appealing and practical step for now as it raises money, lowers future liabilities and helps right-size NNPC. If necessary, the state could maintain a minimum shareholding as a non-controlling financial interest (a common practice), which would enable it to maintain representation on management committees, etc. The sale process would require very high levels of protections and accountability to avoid the kinds of manipulation and underpricing observed in other countries.
- Converting the existing JVs to independent joint ventures (IJVs) so they can raise their own funds. This option was proposed in a previous version of the PIB, under the government of Umaru Yar'Adua. While interesting, this would take time: banks are unlikely to lend to IJVs until NNPC establishes a track record of better governance.
- Entering into new risk-sharing arrangements such as better-established carry agreements, PSCs or service contracts. NNPC could also enter into new operational agreements that would require the private companies involved to pay its share of project costs up-front and recoup their expenses in oil. Service contracts may result in a greater role for NNPC, exceeding its capacity. As such, the corporation should consider them with caution. It could negotiate the new agreements alongside the sale of JV equity.

Eliminate the fuel subsidy.

NNPC's habit of unilaterally holding back billions in DCA revenues each year, supposedly to cover its losses from selling gasoline and kerosene at subsidized prices, has become financially untenable for both the corporation and the nation. PwC found that NNPC withheld \$8.76 billion in domestic crude earnings for subsidy in just nineteen months. Investigations from the 2012 fuel subsidy scandal revealed the scale of governance failures and revenue losses that had developed within those transactions. The main winners seem to have been traders and the government officials who assist and receive benefits from them. ¹⁹⁸ The fuel subsidy system also does not reliably deliver affordable fuel to ordinary Nigerians—its intended goal.

There has never been a better time to end the subsidy, whether immediately or in a phased drawdown. The new government enjoys goodwill, fuel prices are low, an unprecedented number of key stakeholders are on board, and the ongoing fuel shortage highlights the dysfunction of the current system. If full removal cannot happen right away, NNPC in the interim should be forced to queue for its fuel subsidy claims from the Petroleum Support Fund (PSF) like other marketers, and be stripped of its ability to appropriate the claims directly from DCA proceeds.

There has never been a better time to end the subsidy, whether immediately or in a phased drawdown.

Remove NNPC as a commercial player from the downstream sector.

We recommend that the Nigerian government sell off all of NNPC's downstream businesses assets, including the refineries, to stop the growing, unsustainable losses from them. If the administration decides to retain an interest in the assets, it should at the most keep a small minority stake and cede operational and financial control to qualified private companies.

As already explained (see pages 30-34), NNPC withholds billions of dollars a year from the DCA purportedly to cover the costs of running its downstream businesses. Much of the expenditure is traceable to poor management decisions, waste and corruption. For years, NNPC's chronically underperforming refineries have kept Nigeria dependent on costly fuel imports. Once the fuel arrives, PPMC records huge losses from its transportation and storage infrastructure—at times PPMC loses more than 40 percent of all product to sabotage, theft and equipment failure. ¹⁹⁹ As refining costs have risen, outputs have actually fallen—especially after 2003, when the government eased out subsidies on the crude it piped to the refineries. ²⁰⁰ NNPC says downstream expenses are the biggest drag on its financial position, despite the billions of dollars it withholds from domestic crude sale proceeds each year. ²⁰¹

NNPC has had many chances to reform its downstream businesses. The results strongly suggest that the executive should not give NNPC more public funds for this purpose. Hundreds of millions of dollars spent on turnaround maintenance (TAM) did not sustainably improve refinery performance. Past government-commissioned studies concluded that it would take billions more to return PPMC's transportation and storage infrastructure to basic functionality—expenses which NNPC cannot afford. ²⁰² The corporation has never given the refineries a sound business model, cost

NNPC has had many chances to reform its downstream businesses. The results strongly suggest that the executive should not give NNPC more public funds for this purpose.

¹⁹⁸ For more on mismanagement of the fuel subsidy, see annex A and annex B section 4.1.

¹⁹⁹ See e.g., PRSTF Report p.102.

²⁰⁰ For more on this point, see NEITI, 1999-2004 Process Audit: Refineries and Product Importation, 2006, p.15.

²⁰¹ NNPC, Further Responses to the Observations of Forensic Examiners ("NNPC Responses to KPMG Project Anchor Report"), sec., 7.2.3.1.

²⁰² One 2010 study by AON Energy Risk Engineering reportedly estimated full rehabilitation costs at \$8.94

recovery mechanism, or governance framework, nor sufficient financial and operational autonomy. 203 At times NNPC does not even supply the refineries with crude. These are not anomalies that a few good policy choices can put right. They are decades-old dysfunctions that cannot be reversed.

As operating conditions have worsened and no easy fixes have emerged, NNPC has resorted to increasingly questionable stop-gap measures, especially in the last five years. Violent Niger Delta actors were paid to guard pipelines, yet theft actually increased—by over 500 percent in some areas. ²⁰⁴ Faced with stagnant refinery outputs, NNPC ran up over \$3 billion in debts to fuel suppliers. It settled part of these claims by mortgaging 15,000 barrels per day of future oil production in exchange for a syndicated bank loan; NNPC is still over \$1 billion in arrears for that. ²⁰⁵ Still left with hemorrhaging pipelines and no credit to buy imported gasoline or kerosene, the corporation fell back on more costly, opaque deals like the crude-for-product swaps and the refinery marine crude oil transport arrangements. Despite all of this activity, in 2014 the refineries ran at only 14 percent of capacity—their worst performance in years. ²⁰⁶ Nigerians have borne the costs of all this, whether through misspent revenues and underfunded social programming, periodic fuel scarcities, grassroots Delta violence over rights to stolen crude and products, or having to buy over-priced, adulterated fuel.

Some will argue that Nigeria cannot risk ceding control of such important national assets to a narrow band of self-interested private actors. But in effect, it already did, decades ago. Ordinary citizens are not the main beneficiaries of NNPC's unreliable refineries; leaky, decrepit pipelines, jetties, fuel depots and tank farms; poorly supplied filling stations; costly fuel import, infrastructure protection and maintenance contracts; or questionable, poorly documented fuel subsidies. For years, all of these have best served the traders, service contractors, government officials, powerbrokers, middlemen, police and soldiers, smugglers, militants, gang members and other criminals who benefit from the various rackets around transportation, distribution and sales of NNPC fuel.²⁰⁷ The corporation's fuel supply chain is already captured, by groups with no strong incentives to run it sustainably or for the public good. A few new policies or maintenance outlays will not loosen the dense knot of political interests around it.

Total privatization of the Nigerian fuel market likely will bring its own dysfunctions and abuses, especially at first. Although several government-commissioned reports have argued for it, ²⁰⁸ no one has come up with a clear downstream privatization and deregulation plan, so there is work to be done. ²⁰⁹ A tightly run competitive process would be essential to avoid problems observed in other countries, including the sale of assets at deflated prices and blatant favoritism of political insiders. ²¹⁰ Even with these

Some will argue that Nigeria cannot risk ceding control of such important national assets to a narrow band of self-interested private actors. But in effect, it already did, decades ago.

billion. Cited in the Kalu Task Force Report p.40-41.

²⁰³ ld. p.7f.

²⁰⁴ For more on this point, see annex A.

²⁰⁵ Reuters, "Nigeria state oil company borrows \$1.5 bln to pay fuel debt – source," January 7, 2013, available at: http://www.reuters.com/article/2013/01/07/nigeria-loan-idUSL5E9C798R20130107; author interviews, trading company personnel and government officials, 2011-15.

^{206 2014} NNPC Annual Statistical Bulletin p.iv, 39.

²⁰⁷ For more on this point, see annex B section 5.

²⁰⁸ See e.g., OGIC 2 Report p.42, Kalu Task Force Report p.9.

²⁰⁹ See e.g., Aaron Sayne, Presentation: The Petroleum Industry Bill and Its Implications for A Deregulated Downstream Sector, reprinted as Annex 4B of the House of Representatives Committee on Petroleum Resources (Downstream), Proceedings of the Downstream Stakeholders Forum, November 2012, available at: http://tandice-bsolutions.com/rokdownloads/downstream_stakeholders_forum/FINALREPORTONTHEDOWNSTREAM%20STAKEHOLDERS.pdf.

²¹⁰ Examples abound, including from post-Soviet countries in the 1990s and more recent asset sales by the national mining company in the Democratic Republic of Congo. See, for instance, Carol Leonard and David

safeguards, Nigeria may struggle to net a high return for some of these struggling assets. But in their current state, NNPC's downstream operations constitute an unpoliceable, unfixable, multi-billion dollar cost center that hides and enables endemic waste and corruption. The huge public resources poured in should be spent elsewhere.

Develop and start implementing a road map for restructuring and commercializing NNPC.

The prior two recommendations are linked to what is perhaps the biggest question of all in Nigerian oil and gas: what sort of entity does NNPC need to become in order to make money, serve the public interest, and facilitate growth in the oil sector? At a minimum, the corporation needs a new ownership structure, stronger operating mandate, clarified commercial and non-commercial roles, limits on quasi-fiscal and other questionable spending, and a corporate governance framework that allows for accountable, productive decision-making, starting at the board level.²¹¹

Since the early 2000s, plans for restructuring NNPC have been bound up with the debate around the PIB. Yet no draft of the bill has offered a clear, detailed transition framework for getting NNPC from where it is now to where it could be. ²¹² Moreover, given the PIB's dim legislative prospects and unwieldy breadth, the government will need a new vehicle for charting NNPC's future, born of a fresh legislative process.

Develop a credible, politically backed action plan for tackling crude oil theft.

A full examination of Nigeria's oil theft problem is beyond the scope of this report. Nonetheless, the phenomenon cannot go unremarked. Since the 1980s—and possibly before—organized criminal networks have been stealing Nigeria's oil from production infrastructure and even some oil export terminals. No one has been able to confidently quantify the volumes lost, but average estimates vary from 50,000 to over 250,000 barrels per day. Some of the lost oil is refined locally; tankers owned by middlemen and politicians, or chartered by rogue oil trading and shipping companies, abscond with the rest to foreign countries.

Given the PIB's dim legislative prospects and unwieldy breadth, the government should find a new vehicle for charting NNPC's future, born of a fresh legislative process.

Pitt-Watson (2015), Privatization and Transition in Russia in the Early 1990s, New York: Routledge; and Africa Progress Panel (2013), Equity in Extractives.

²¹¹ See Aaron Sayne et al., The Petroleum Industry Bill and the Future of NNPC, RWI Briefing, October 2012, available at: http://www.resourcegovernance.org/sites/default/files/rwi_bp_nnpc_synth_rev2.pdf.

²¹³ For more detailed analysis and recommendations, see Katsouris and Sayne Oil Theft Report.

It would be naive to classify Nigerian oil theft simply as a law enforcement or security problem. Officials at the very top of government have condoned—and in some cases, helped run—a parallel illegal export market. This hurts the performance and integrity of the legal market in several ways. Most obviously, theft means that NNPC has several billion dollars' worth of oil less to sell yearly, 214 and dents premiums paid for some grades. As noted above, lost revenues and production stoppages from theft have forced the government to dip into savings to fund itself, especially since 2012. Over time, some individuals and companies suspected of stealing oil even have won their own NNPC term contracts, which has offered them legitimacy—and possibly, more funds to grow their businesses in Nigeria and overseas. 216

In over three decades, no Nigerian administration has pushed hard against oil theft. Successive governments have acted only when losses reached unmanageable levels, mostly relying on *ad hoc* displays of military might and closed-door political settlements. Nigeria's main trade and diplomatic partners have taken no real action, and no group outside of government has a record of sustained, serious engagement. Given the strong influence and incentives of the groups that profit—top politicians and military officers, militants, oil company personnel, rogue oil traders, communities and a gaggle of local and international facilitators—it is difficult to identify solutions that might help without a marked shift in political incentives. The coming years will determine whether the 2015 transition in government will lead to such a shift.

It would be naive to classify Nigerian oil theft simply as a law enforcement or security problem.

Officials at the very top of government have condoned—and in some cases, helped run—a parallel illegal export market.

²¹⁴ We make no attempt here quantify the value of the oil stolen, given the failure of all relevant stakeholders in government and industry to keep and/or disclose reliable records on volumes lost. For more on this point, see id., p.25.

²¹⁵ Author interviews, trading company personnel, price reporting service journalists, industry personnel, 2012-2014.

²¹⁶ Author interviews, trading company personnel, IOC staff, government officials, industry consultants and law enforcement personnel, 2010-2015.

Conclusion

In December 2012—four months after receiving the findings of the Petroleum Revenue Special Task Force, the latest in a long line of reports detailing NNPC's performance woes—petroleum minister Diezani Alison-Madueke told a group of reporters in Vienna that Nigeria had no plans to reform its oil sales. "The issue of changing the way we sell our oil has been looked at by NNPC who do not feel there is a major problem with that," said the minister. At the time Brent crude was trading above \$100 a barrel. The country had over \$20 billion more in gross foreign reserves and savings than it does now. The Sanusi scandal was a year away.

Nigeria can no longer afford to leave NNPC's inefficient, secretive, overly convoluted oil sales system untouched. Particularly in this time of low oil prices, soft demand for Nigerian crude, rising oil sector operating costs, and weakened fiscal buffers, the current model is unsustainable for both the corporation and the nation. Keeping the status quo would cost Nigeria billions of dollars a year, obstruct broader efforts at oil sector reform, and make way for further political controversy. As things stand, Sanusi's "missing \$20 billion" claims remain unresolved (see annex A, box 1) and further billion dollar accusations are being made. ²¹⁸

The current climate, with its change of leadership and the immediate need to boost oil revenues, offers Nigeria its best chance in years for overhauling NNPC's oil sales, along with the corporation's larger structures, practices and culture. If implemented, the reforms recommended in this report would give the government a solid foundation for remaking NNPC into a company that serves the interests of the nation's 170 million citizens.

Keeping the status quo would cost Nigeria billions of dollars a year, obstruct broader efforts at oil sector reform, and make way for further political controversy.

²¹⁷ Reuters, "Nigeria has no plans to reform its oil sales," December 13,2012, available at: http://www.reuters.com/article/2012/12/13/nigeria-oil-idUSL5E8NC6MB20121213

²¹⁸ In June 2015, members of the National Economic Council (NEC) alleged that NNPC remitted barely half (N4.3 trillion, approx. \$27.7 billion) of a purported N8.1 trillion (\$52.2 trillion) it earned between 2012 and early 2015. A committee was set up to review the allegation. http://www.punchng.com/news/nec-sets-up-committee-to-probe-nnpc-missing-funds. Unpublished documents from a FAAC subcommittee put the corporation's 2011-2014 withholdings from domestic crude sales alone at N4.259 trillion (\$27.4 billion). FAAC Post-Mortem Subcommittee, FAAC Analysis for the Month of January, 2015, February 2015, p.9. We cannot independently confirm the accuracy of these figures.

Abbreviations

AENR	Agip Energy and Natural Resources Nigeria Ltd.	NNPC	Nigerian National Petroleum Corporation
AFRA	average freight rate assessment	NOC	national oil company
APC	All Progressives Congress	Nocma	National Oil Company of Malawi
b/d	barrels per day	NPDC	Nigerian Petroleum Development
bbls	barrels		Company
B/L	bill of lading	NSIA	Nigerian Sovereign Investment Authority
BRICs	Brazil, Russia, India, China	OML	oil mining license
CAC	Corporate Affairs Commission	OPA	offshore processing agreement
CBN	Central Bank of Nigeria	OSP	official selling price
COMD	Crude Oil Marketing Division	PEP	politically exposed person
DCA	Domestic Crude Allocation	PIB	Petroleum Industry Bill
DPK	dual purpose kerosene	PMS	premium motor spirit
DPR	Department of Petroleum Resources	PPMC	Pipelines and Product Marketing
DSS	Department of State Services		Company, Ltd.
ECA	Excess Crude Account	PPPRA	Petroleum Products Pricing and Regulatory Authority
ECOWAS	Economic Community of West African States	PRSTF	Petroleum Revenue Special Task Force
EFCC	Economic and Financial Crimes Commission	PSC	production sharing contract
FAAC	Federal Account Allocation	PSF	Petroleum Support Fund
FAAC	Committee	PwC	PriceWaterhouseCoopers
G-to-g	government-to-government	RF&L	refining fuel and loss
IOC	international oil company	RMAFC	Revenue Mobilisation, Allocation and
JV	joint venture		Fiscal Commission
L/Cs	letters of credit	RPEA	refined product exchange
LPG	liquefied petroleum gas	CAA	agreement
LPRC	Liberia Petroleum Refining	SAA	strategic alliance agreement
	Corporation	SAOC	South African Oil Company
MCA	modified carry agreement	SIR	Société Ivoirienne de Raffinage
MT	metric ton	STS	ship-to-ship transfer
NAPIMS	National Petroleum Investment Management Services	VGO	vacuum gasoil
NEITI	Nigeria Extractive Industries Transparency Initiative	VLCC	very large crude carrier



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Report Annex

August 2015



Inside NNPC Oil Sales: A Case for Reform in Nigeria

Annex A. The Case for Eliminating the Domestic Crude Allocation

INTRODUCTION

The Nigerian government should end the domestic crude allocation (DCA). NNPC exercises alarming levels of discretion in deciding how to sell the crude, whether to remit the resulting revenues to the treasury, and how to spend the funds that it keeps. Lately, the amounts it holds back for itself have ballooned to around \$7 billion per year—or close to half the value of each barrel sold. (See p.X for estimated losses.) This revenue retention has prompted controversy and confusion, including around whether such retention is even legal. Much of this money is spent in flawed ways, generating unacceptably low returns for the country's citizens. Especially now, as Nigeria faces tough fiscal challenges, leaving open such a large drainpipe is a threat to the nation's economic health.

The current DCA system dates back to the military period of the 1990s. Under the DCA, NNPC's Crude Oil Marketing Division (COMD) sells 445,000 barrels per day (b/d)— roughly one-fifth of what Nigeria produces—on an intercompany basis to the Pipelines and Product Marketing Company Ltd. (PPMC), NNPC's main downstream subsidiary. The domestic crude is a portion of the government's share of production from its joint venture and production sharing contracts which totals an average of 1 million barrels per day. PPMC sends some of the crude to domestic refineries, and COMD either sells the rest for export or trades it for petroleum products. PPMC then pays NNPC for the crude, either from the proceeds it gets from selling the crude for export or from selling the refined products derived from crude. NNPC then has 90 days from the day the crude was loaded on a tanker or pumped to a refinery to forward payments to a joint NNPC-Central Bank of Nigeria (CBN) naira-denominated Crude Oil Revenue Account domiciled with the CBN. Finally, once a month, CBN transfers an amount from this account to the Federation Account, which serves as the main treasury account for the country's three levels of government.

In this section, we explain why the government should eliminate this system and replace it with purpose-fit and soundly constructed mechanisms for financing NNPC, providing crude to the refineries, and financing NNPC's subsidy costs. The recommendations for what should replace the DCA appear in more detail in the main report. (See p.32.) Nigerian authorities could also use the information provided here to guide future audit efforts, as there exists no full and credible accounting of how NNPC has spent DCA revenues from recent years.

The reasons for the DCA's elimination are:

- 1 The DCA's design has little bearing on its current use.
- 2 NNPC is retaining more DCA revenues over time; the Federation is receiving less.
- 3 NNPC administers the DCA with few rules and weak oversight, causing confusion.
- 4 NNPC spending out of the DCA delivers poor value for money, shows signs of mismanagement.
- 5 The DCA sets up a conflict of interest in which NNPC sells oil to itself.

Our analysis relies on data about the volume and value of DCA oil, the transfers of domestic crude revenues to the Federation Account, and the spending of DCA revenues by NNPC. Some of the figures—particularly for 2012 and 2013—come from unpublished NNPC, CBN and FAAC documents obtained for this report. However, much of the earlier data is online—in NEITI audit reports, for example. Other figures come from the many probes and reports that this controversial topic has prompted. Across these sources, most data originated from NNPC's own internal oil sales and financial data. While we are confident that this data accurately identifies the important trends, we do offer a few caveats at the appropriate points in the analysis. This is a very opaque area, and the information available is full of inconsistencies, gaps and unanswered questions. Only a full performance audit conducted with NNPC's cooperation could provide a definitive account of the crude and money flows in recent years.

As part of our research for this report, we wrote to NNPC and PPMC seeking information about the DCA. Neither entity responded. NNPC has provided explanations for its management of the DCA in response to other inquiries, from bodies like the National Assembly and NEITI, and we cite these explanations at several points in the report. Generally, NNPC mostly identifies high oil prices and large downstream expenses—from the domestic fuel subsidy above all—as explanations for the billions of dollars it retains each year, and statements by corporation officials argue that NNPC has the legal authority to unilaterally do so. But as we suggest in this report, NNPC's public narratives about where the money goes have been incomplete, and fail to justify the vast sums of public money that could otherwise go towards other national priorities.

The government should remove the DCA, regardless whether it eliminates Nigeria's subsidy on fuel. As we will show, the cost of the subsidy and the dysfunctional manner of its administration contributes to the problems around the DCA. But they are far from its only cause, nor does the continuation of the subsidy require a continuation of the DCA. In fact, eliminating the DCA would plug gaps, streamline processes, and save money in either subsidy scenario.

1. THE DCA'S DESIGN HAS LITTLE BEARING ON ITS CURRENT USE.

NNPC started the DCA either in the late 1980s or early 1990s based on a directive from the Ministry of Petroleum Resources. It was not mandated by any Nigerian legislation. The original intention was to allocate a portion of Nigeria's crude oil production to the country's four state-owned refineries. The volume of domestic crude is set at 445,000 barrels per day (b/d) to reflect the volume of oil the refineries were built to process. PPMC is supposed to pay NNPC for the crude allocation from the proceeds of the sales of refined products.

DCA system was designed to function as illustrated below:

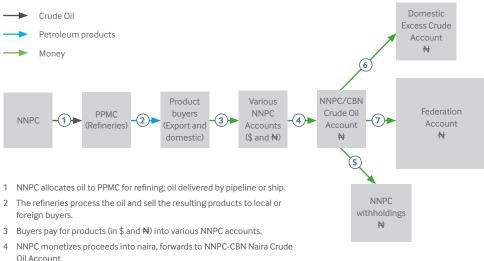


Figure A1. Original intended flows of oil, products and cash under the DCA

- 5 NNPC withholds funds, puportedly to cover its downstream operating expenses.
- 6 Remaining per barrel proceeds above federal budget benchmark swept to the Excess Crude Account.
- 7 NNPC mandates CBN to sweep remaining proceeds to Federation Account.

Today's practice looks quite different, for several reasons:

Most DCA oil is sold for export through complex transactions, rather than refined domestically. "Domestic crude" has become a misnomer. Chronic dysfunction has turned the refineries into basket cases—lately they have run at around 20 percent capacity. In this context, the $445,000\,\text{b/d}$ in DCA crude is a random number that NNPC uses regardless of refinery performance. In fact, the corporation ignores its own quarterly projections for performance when it keeps the figure the same from year to year.

¹ Author interview, retired NNPC official, 2014.

² For more on how NNPC forecasts how much oil its refineries will process, see NEITI, Process Audit 1999-2004: Refineries and Product Importation, 2006, p.42f.

In reality, oil from the DCA currently goes in three directions:

- *Refinery sales*. These are the barrels the refineries can realistically process. In 2014, for instance, the four refineries together received an average of 70,792 b/d for processing—or, 14 percent of their total installed capacity.³
- Oil-for-product swap deals. These complex barter transactions between PPMC or NNPC and a number of private traders have consumed around 210,000 b/d since 2011. We discuss them in annex B of this report.
- Export sales. NNPC COMD sells the remaining domestic crude—usually between 100,000 and 150,000 b/d—for export to some of its term customers, under terms that are similar to regular NNPC export sales.

The DCA is used as a makeshift and poorly suited mechanism for funding NNPC's expenses. NNPC deducts funds from the amounts due to the Federation Account, or delays in repaying the funds it owes. It uses these funds to cover various expenses. In its review of the DCA, discussed further below, PriceWaterhouseCoopers (PwC) found that NNPC discretionarily retained 46 percent of domestic crude revenues received during a 19-month period in 2012-2013 for spending on operations and subsidies. As discussed in section three below, the revenue retention is not governed by any rules, nor is it subject to oversight.

NNPC keeps these funds in part because there is no other established method for financing its operations. Most countries establish an explicit rule for national oil company financing. For instance, Malaysia's Petronas retains profits on earnings, but transfers royalties, dividends and export duties to the treasury, as well as paying a set tax rate on its own profits. Ghana's GNPC can retain "equity financing costs" and additional amounts approved by parliament, but this cannot exceed 55 percent of net cash flow from government assets.

NNPC's retention of domestic crude revenues is part of a larger *ad hoc* system for revenue collection within the corporation. This system consists of a mish-mash of methods including deductions from the joint venture cash call account, the retention of subsidiary earnings, and borrowing from third parties. Paradoxically, this *ad hoc* way of operating at once impoverishes NNPC, leaving it chronically indebted and short of operating funds, and gives it far too much discretion to retain ever-growing sums from oil sale proceeds.

NNPC uses revenues from the DCA to pay part of Nigeria's fuel subsidy bills.

NNPC receives subsidy payments for its refined product sales in a unique manner. Usually, the government pays companies the difference between the market price and the subsidized price for gasoline and kerosene. Most companies receive payments from the Petroleum Support Fund (PSF), the country's official fuel subsidy mechanism. NNPC, on the other hand, calculates its own claims and then pays itself out of domestic crude earnings. This effectively exempts NNPC from the PSF's inter-agency oversight process, in which around a dozen government bodies and agents play roles. NNPC does send its subsidy claims to the Petroleum Products Pricing and Regulatory Authority

³ NNPC 2014 Annual Statistical Bulletin p.iv.

⁴ PwC, Investigative Forensic Audit into the Allegations of Unremitted Funds into the Federation Accounts by the NNPC ("the PwC Report"), February 2015, p.12.

(PPPRA) for verification and approval, but the integrity of this process is questionable (see p.A17-A18). The corporation's legal basis for side-stepping the PSF is not clear, either. Multiple past investigations have found significant evidence that NNPC subsidy claims, and NNPC fuel imports more broadly, are systematically mismanaged.

As a result, the actual DCA system does a poor job of fulfilling its objectives. The following diagram illustrates how it works in practice, a significant departure from the intended model shown in figure A2:

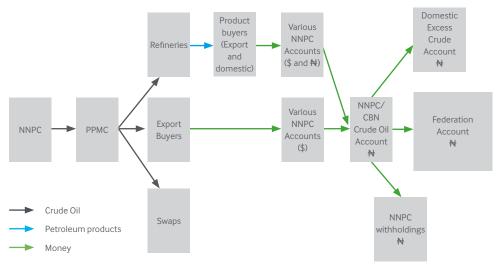


Figure A2. Actual flows of oil, products and cash under the DCA

Note: Flow diagrams for the swaps, which are more complex, appear in annex B.

2. NNPC IS RETAINING MORE DCA REVENUES OVER TIME; THE FEDERATION IS RECEIVING LESS.

For some years, there were anecdotes which indicated that NNPC's withholdings from domestic crude returns were growing, leaving the Federation Account with less value per barrel. This was clear cause for concern: every naira retained by NNPC is money that cannot be spent on other national priorities, like power, roads, education and health. Particularly during high-price periods (e.g., 2010-2014, when the oil price regularly topped \$100 per barrel), one would expect the opposite trend—that the flow of each oil sector revenue stream would increase. As discussed in section four, there are also good reasons to question whether NNPC's use of the retained revenues brings a good return for Nigerian citizens, or whether the funds would be better spent elsewhere.

To better understand the scale of funds not reaching the treasury, we collected and analyzed ten years of DCA-related data. For all but the year 2013, we used DCA sales figures that the Nigeria Extractive Industries Transparency Initiative (NEITI) collected from NNPC and published in its annual audit reports. Our 2013 figures come from documents that NNPC sent to the Federal Account Allocation Committee (FAAC),

⁵ A 2012 review of fuel subsidy payments by the Presidency could not find any justification, whether in law, the PSF Guidelines, or any presidential or agency directive, for NNPC unilaterally computing subsidy or withholding it from crude sales earnings. "There is no legitimate backing for the process," the panel concluded. Nigerian Presidency, Report of the Technical Committee on Payment of Fuel Subsidies (Aigboje Aig-Imoukhuede, chair) ("the Aig Technical Committee Report"), June 2012, p.25.

⁶ For more detail, see p.A17-A18 of this annex and Section 5 of annex B about the swaps.

⁷ Author interviews with NNPC staff, other government officials, trading company personnel, 2010-2015.

⁸ NEITI, Annual Physical, Financial and Process Audits, 1999-2012.

which we were able to authenticate. With this provenance, all of the raw data on DCA volumes and transfer amounts used here are based on information provided to third parties by NNPC itself.

These figures come with some caveats. Some of the conversions from Nigerian naira to US dollars use average annual exchange rates rather than the actual rates used in individual transactions. NNPC has three months to pay the Federation for domestic crude, so there is an average 90-day time lag between sales and transfers to the treasury. From the available documentation, we could not always discern whether the totals accounted for payments made by NNPC during the subsequent year due to this time lag. Some numbers in the individual columns may not neatly total due to rounding. More importantly, we stress that the figures are not the outcome of any independent audit work. We have not had access to supporting documentation for most of them, and cannot independently verify their accuracy. Given the apparent problems with how NNPC accounts for and reports on domestic crude sales (see p.A11-A16, below), this data and the resulting conclusions should not be read as definitive.

The data is robust enough to indicate trends, and illustrates a dramatically widening gap over time between the sales value of domestic crude, as calculated by NNPC, and transfers of DCA revenues to the Federation Account. In 2004, for example, \$1.6 billion of the total DCA's value failed to reach the Federation Account, or 27 percent of the full value. By 2012, the figure had jumped to a remarkable \$7.9 billion, or 43 percent of the full value. Total withholdings spiked in 2011, the first year of the Goodluck Jonathan administration, and have and remained at this high level since (figure A3).

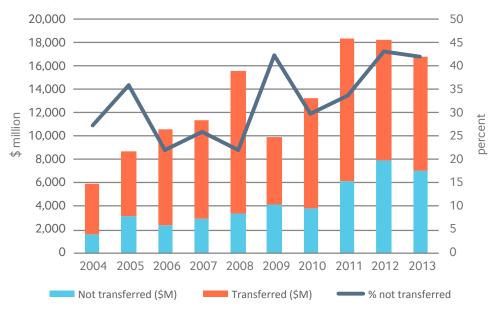
Figure A3. Domestic crude sales earnings versus treasury receipts, 2004-2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	(a) Total DCA liftings									
('000 barrels)	151,893	159,899	155,068	157,312	164,724	161,914	166,523	164,454	162,343	156,192
	(b) Annual sales value of all DCA liftings, calculated by NNPC									
(₦ million)	759,653	1,145,361	1,258,539	1,431,175	1,809,451	1,451,586	1,954,124	2,776,893	2,812,051	2,657,240
(\$ million)	5,935	8,743	10,599	11,531	15,562	9,903	13,229	18,363	18,260	16,818
			(c) Ann	ual transfer	s to the Fed	eration Acc	ount			
(₦ million)	573,483	772,227	1,037,564	1,037,751	1,419,351	850,833	1,391,378	1,835,249	1,594,915	1,551,935
(\$ million)	4,312	5,578	8,235	8,359	12,213	5,788	9,401	12,154	10,357	9,822
	(d) Estimated value of DCA oil that did not reach the Federation Account [(b) - (c)]									
(\$ million)	1,623	3,165	2,364	2,992	3,349	4,115	3,828	6,209	7,903	6,996#
percentage of total	27	36	22	26	22	42	30	34	43	42

Sources: For 2004-2012, the data for (a) Total DCA liftings and (c) Annual transfers are taken from NEITI financial audit reports, or are conversions based on average exchange rates. For 2013, the (a) Total DCA liftings and is drawn from the 2013 NNPC Annual Statistical Bulletin, and (b) Annual sales value and and (c) Annual transfers from NNPC Report: Reconciled Receipts of Domestic Crude Cost, January 2013-date, and NNPC Report: Computation of Revenue from Domestic Crude Oil Receipts, January 2013 to Date. Some columns may not total due to rounding.

⁹ Average annual exchange rates used were 126:1 (2004), 131:1 (2005), 126:1 (2006), 124:1 (2007), 117:1 (2008), 147:1 (2009), 148:1 (2010), 151:1 (2011), 154:1 (2012), 158:1 (2013).

Or seen graphically:



NNPC's habit of unilaterally withholding DCA revenues has reached runaway, unsustainable levels. This is especially true now that Nigeria faces an oil price slump, severe budgetary shortages, weakened demand for its crude and rising upstream sector costs. ¹⁰ In calling for the DCA to be eliminated, we endorse the concerns PwC auditors expressed in their final report: "If the NNPC overhead costs and subsidies are maintained (assuming crude oil production volumes are maintained), the corporation may have to exhaust all the proceeds of domestic crude oil sales, and may still require third party liabilities to meet costs of operations and subsidies, and may not be able to make any remittances to [the treasury]. . . . We therefore recommend that the NNPC model of operation must be urgently reviewed and restructured, as the current model which has been in operation since the creation of the corporation cannot be sustained." ¹¹

3. NNPC ADMINISTERS THE DCA WITH FEW RULES AND WEAK OVERSIGHT, CAUSING CHRONIC CONFUSION.

NNPC has near-exclusive authority over the use of DCA oil and revenues. Over time, as NNPC increasingly used the DCA for purposes other than those for which it was designed, no one developed adequate rules or oversight processes to govern the added complexity that ensued. NNPC manages the allocation with excessive discretion, especially when it decides how to sell the oil and use the revenues. For its 2010 audit of the corporation's finances, KPMG concluded that the practice amounted to an "unauthorized extension of credit;" the PwC report likened it to a "'blank' cheque" for NNPC. 13

¹⁰ See main report p.16-18 for more on these points.

¹¹ PwC Report p.12.

¹² KPMG-S.S. Afemikhe, Review of Claims of the Federal Government of Nigeria's Indebtedness to the Nigerian National Petroleum Corporation (Project Anchor II) ("the KPMG Review of NNPC Claims Report"), October 2011, sec.3.4.2.

¹³ PwC Report p.16.

The absence of explicit and agreed rules on the DCA's operations has led to chronic confusion, evident in decades of controversy and competing claims. The debate over unremitted DCA funds is at least three decades old. More than half—\$12 billion—of the alleged \$20 billion in "missing" revenues queried by then CBN governor Lamido Sanusi in 2012 were from domestic crude. (See box 1 for a fuller account of the Sanusi allegations.) With each round of controversy, the reported losses grow (figure A4). But despite the great toll on the nation's finances, the Nigerian government has never introduced viable solutions.

Year	Accusation	Action taken
1993	A government committee claimed NNPC had kept back \$\frac{1}{2}\$95 million (approx. \$5.5 million) worth of domestic crude earnings in the first six months of the year for unclear reasons. 14	None apparent
2006	NEITI's first audit found "remarkable differences" between the value of domestic crude and actual payments to the Federation Account for 1999 to 2004, worth †281.7 billion (approx. \$2.7 billion). 15	None apparent; nearly a decade later, the government set up an Inter-Ministerial Task Team (IMTT) to review NEITI reports and explore options for recouping lost revenues. Progress on this portion of the IMTT agenda has failed to advance.
2006	RMAFC accused NNPC of failing to remit \(\frac{\text{\text{\text{\text{\text{R}}}}}{290\text{ billion}}\) (approx. \(\frac{\text{\tilitet{\text{\ti}\t	The president set up an interagency review committee; no further action apparent.
2012- 2013	Ex-CBN governor Sanusi alleged a 19-month, \$12 billion DCA revenue gap. ¹⁷ See details in Box 1, p.15.	CBN governor sacked; audit by PwC ordered; no change in policy or practice.

Figure A4. Examples of past allegations that NNPC under-remitted DCA revenues, 1993-2013

Unclear rules and processes give NNPC too much discretion

The confusion and weak reporting around the DCA leave unanswered questions, including those listed below. Given the billions of dollars at stake each year, the preponderance of *ad hoc* or weakly established procedures is startling.

Is there a contract between NNPC and PPMC for domestic crude sales?

Setting out the terms of intercompany sales in a written agreement is basic good corporate governance, especially for transactions as large as those in the DCA. Yet NEITI's latest audit found that "there is no contract in place" between NNPC and PPMC for domestic crude sales. ¹⁸ If correct, this begs the question of what legal instrument, if any, dictates how the parties handle DCA sales. The common claim that NNPC underprices oil sold to the refineries (see p.X, below) shows one risk of allowing the corporation to manage the DCA without having basic terms codified in an enforceable agreement.

¹⁴ For accounts of the Clement Isong Budget Monitoring Committee, see A.A. Nwankwo, *Nigeria: The Stolen Billions*. Enugu: Fourth Dimension Publishers, 2002, p.112.

¹⁵ NEITI, 1999-04 Financial Audit Report, Appendix 5, p.7.

¹⁶ Nigeria Focus, April 2006 issue.

¹⁷ Sanusi Lamido Sanusi, Memorandum Submitted to the Senate Committee on Finance on the Non-Remittance of Oil Revenue to the Federation Account ("the Sanusi Senate Presentation"), February 2014, p.5.

¹⁸ NEITI, 2012 Oil and Gas Audit Report p.202.

Is it legal for NNPC to retain DCA revenues?

One cause of confusion is debate around whether NNPC has a legal basis for retaining domestic crude revenue. Some argue that its withholdings violate Section 162 of the 1999 federal constitution, which requires that all centrally collected oil revenues go to the Federation Account. NNPC has not explained the general legal basis for its withholding of DCA revenues, apart from pointing to Section 7 of the NNPC Act, which allows it to keep "a fund" of monies "received by the Corporation in the course of its operations or in relation to the exercise by the Corporation of any of its functions." Even if the NNPC Act does offer some legal cover – a point subject to perennial debate – it contains no adequate rules to govern the retention and use of such large revenues. Indeed, the act does not give a clear picture of NNPC's anticipated commercial activities, or how the revenues it generates are supposed to support them.

Are all types of withholdings allowed?

Particular questions have been raised about whether NNPC had been given authorization to withhold revenue in certain circumstances. NNPC did not produce for KPMG auditors any official paper ordering or allowing it to keep a strategic fuel reserve or pay for pipeline protection, for instance. More broadly, NNPC officials told NEITI that "the Attorney General of the Federation has advised that cost of operation and other related expense are chargeable to the cost of crude before remittance of the residual to the Federation account." In the most glaring example, top officials, including former petroleum minister Diezani Alison-Madueke, admitted to parliament in early 2014 that the corporation had no legal support for its decision to continue selling kerosene at below-market rates after a June 2009 directive from late President Yar'adua called for an end to the kerosene subsidy. Since NNPC has a monopoly on the import of kerosene in Nigeria, and withholds all of its purported subsidy costs from DCA revenues—it held back \$3.38 billion in nineteen months, PwC found this leaves the legality of its kerosene subsidy withholdings in doubt.

Why does NNPC have sole authority over disbursements to the Federation Account?

NNPC and CBN are joint signatories to the naira Crude Oil Account. This should give them joint authority over the funds in it, yet NNPC appears to have exclusive say over how money moves. Starting in 2002, CBN began waiting for NNPC to tell it what to transfer to the Federation Account each month. ²⁴ The reasons for this change are unclear. Statements made by former CBN governor Sanusi indicate that the CBN even lacks basic information about NNPC's withholding decisions and the use of the withheld revenues.

^{19 1999} NNPC Act Sec.7 (4).

²⁰ KPMG Review of NNPC Claims Report sec. 1.7, 4.4.

²¹ NEITI, 2012 Oil and Gas Audit Report, p.330.

²² Some doubts were raised, however, as to the legality of the Yar'adua era directive. For a summary of the competing arguments, see KPMG Review of NNPC Claims Report p.35; PwC Report p.17.

²³ PwC Report p.23.

²⁴ NEITI 1999-04 Financial Audit Report, Appendix 5, p.7.

When did NNPC start withholding DCA proceeds to cover its downstream losses?

The limited documents from parliament $(2004)^{25}$ and NEITI $(2006)^{26}$ available show different answers to this question. CBN has said it only started reporting NNPC's subsidy withholdings on its monthly Federation Account Component Statements in October $2009.^{27}$ It is unclear what policy decision drove this change, whether there were any limitations placed on the amounts, and if so, whether NNPC has observed them.

How much of the unremitted DCA proceeds are recorded as debt from NNPC to the treasury?

For legal and accounting purposes, it is not clear whether CBN, the finance ministry, the accountant-general's office or other agencies involved in oil revenue collection have written off, booked as bad debt, or forgiven some DCA withholdings, and if so, how much. Language in some financial reporting documents for the DCA reads as though no further funds are due.²⁸

Does NNPC have a repayment plan with government for unremitted DCA revenues?

NNPC has occasionally agreed to refund some of the money it withheld from the DCA. In late 2011, for instance, it began repaying to the treasury №450.776 billion (approximately \$3 billion) in domestic crude proceeds that it supposedly withheld to pay subsidy costs through 2009.²⁹ NNPC submitted to the payment plan under political pressure from Nigeria's powerful state governors, not based on any broadly applicable rule.³⁰ The *ad hoc* nature of its repayments suggests that no bigger plan exists.

The list of questions could continue, but those provided should serve two purposes: to illustrate the need for clear rules going forward, and to highlight issues that any backward-looking audit should address.

²⁵ Nigerian House of Representatives, Report of the Ad-Hoc Committee To Verify and Determine the Actual Subsidy Requirements and Monitor the Implementation of the Subsidy Regime in Nigeria (Farouk Lawan, chair) ("the Lawan Report"), April 2012, p.158.

²⁶ NEITI, 2006-08 Financial Audit Report p.57.

²⁷ Lawan Report p.158.

²⁸ For example, on the monthly sweeping (i.e. transfer) mandates NNPC sends CBN, NNPC labels the lesser amounts it tells CBN to pay as "Settlement of Domestic Crude Oil Cost." Monthly Federation Account component statements prepared by CBN have a line item marked "under-remittance of funds by NNPC," but the line is left blank. Samples reviewed from 2009, 2013, 2014 and 2015.

²⁹ Federal Ministry of Petroleum Resources, Report of the Petroleum Revenue Special Task Force (Nuhu Ribadu, chair) ("the PRSTF Report"), August 2012, p.66.

³⁰ Author interviews with NNPC and Finance Ministry officials, 2012.

Excessive discretion by NNPC officials leads to poor accounting and reporting practices

The way in which NNPC accounts for and reports on domestic crude sales creates still more confusion. With no effective checks on its powers to collect and spend DCA revenues, NNPC's top officials control the narrative about how much money comes in, and where the money goes. Information-sharing is patchy, both to the public and to other government agencies. This creates further unanswered questions, reflected in the following discussion of some poor practices:

Duplicated withholdings. NNPC appears to have duplicated some expenses when justifying its DCA withholdings, indicating that it claimed the same expense more than once. For example, PwC's auditors found that between January 2012 and June 2013, NNPC double-claimed \$63 million in losses for fuel that it sold at subsidized prices (figure A5).

Item	Total NNPC claim for the period	Total cost items claimed more than once	Percent duplicated
Product losses, 2009*	₦9.75 billion (\$66 million)	₦1.08 billion (\$7 million)	11
Crude oil losses, 2009*	₦9.24 billion (\$63 million)	₦1.72 billion (\$12 million)	19
Pipeline repairs, 2006-09*	₩22.41 billion (\$174 million)	₦75 million (\$23 million)	13

Figure A5. Examples of duplicated NNPC claims for DCA withholdings

Withholdings without supporting documentation. During past audits, NNPC regularly failed to produce proper documentation—be it invoices, payment vouchers, wire receipts—for large amounts of its DCA withholdings. For the KPMG and PwC reviews, for example, it did not hand over the paper trails needed to verify several hundred million dollars in claims (figure A6).

Item	Total NNPC claim	Not supported by documents	Percentage not supported
Product losses, 2006-2009*	₩85.34 billion (\$661 million)	₩8.06 billion (\$62 million)	9
Pipeline repairs, 2009*	₩15.92 billion (\$108 million)	₩4.52 billion (\$31 million)	28
Strategic fuel reserve costs, Jan. 2012-Jul.2013+	\$449 million	\$241.1 million	54

Figure A6: Examples of NNPC claims for DCA withholdings not supported by documentation

Questionable items included in withholdings. NNPC lumps seemingly unrelated expenses together when accounting for its DCA withholdings. Reviewing NNPC's 2006-2009 withholdings, KPMG discovered a range of items that seemed unrelated to the claims, or otherwise should not have been included. For instance, the auditors found that NNPC conflated crude and products lost through technical equipment failures with incidents of sabotage.³¹ It also added general corporate expenses (e.g., vehicle hire,

^{*}KPMG Review of NNPC Claims, Sec.4

^{*}KPMG Review of NNPC Claims, Sec.4 +Senate Finance Committee Report p.37

³¹ KPMG-S.S. Afemikhe, Final Report on the Process and Forensic Review of the Nigerian National Petroleum Corporation (Project Anchor) — Executive Summary and Main Report ("the KPMG Project Anchor Report"), March 2011, sec.4.1-4.2. The data on 2009 incidences of vandalism that NNPC provided to KMPG does not match the numbers in NNPC's own Annual Statistical Bulletin for 2009. A simple comparison of the two datasets shows NNPC included non-sabotage based incidents in its claims, incorrectly labelling them "vandalizations."

catering, and unexplained payments to a phone company and a bank) to its pipeline repair and maintenance claims. ³² Furthermore, if the general corporate expenses lumped in were covered by NNPC's federally appropriated annual budget, NNPC would have been able to double-claim them.

Non-disclosure of what buyers actually pay for domestic crude. As figures A1 and A2 (p.A2 and A5) show, there are at least three steps between DCA sales and revenue reaching the treasury:

- 1 Buyers of domestic crude pay NNPC for the oil—or for refined products derived from the oil—into various NNPC accounts.
- NNPC periodically transfers funds from these accounts to the NNPC/CBN Oil and Gas Naira Account. It apparently has sole authority to determine the amounts transferred.³³
- Once a month, NNPC mandates CBN to transfer money from the Oil and Gas Naira Account to the Federation Account.

None of the official records we reviewed reveal anything about step 1. In particular, we have not seen any NNPC document that discloses how much buyers of domestic crude actually paid the corporation for the oil they lifted. The main DCA reports that NNPC generates in-house and sends to other government agencies list prices, sales values and payment due dates but not actual receipts. A Contrast this with the export sales reports, which also show what lifters wired into NNPC's accounts and explain any underpayments. NNPC must know what domestic crude buyers pay. But we have seen no evidence that it tells others.

We asked the corporation if it regularly discloses to any other government body the actual amounts buyers of domestic crude, or refined products gotten from domestic crude, pay into NNPC accounts. We also asked for confirmation that all buyers of domestic crude remit to NNPC the full assessed value of all the oil they lift, as shown on the oil sale records that NNPC shares with other agencies. We received no response.

Former CBN governor Sanusi brought up the secrecy around actual payments for DCA crude in his September 2013 letter to then-President Jonathan about the "missing" oil sales revenues. He asked Jonathan to order "a thorough audit of activity on any domiciliary accounts held by NNPC outside of the CBN," explaining that this was needed because "the CBN has no record of either the dollar proceeds [held in them] or the naira equivalent being transferred to the Federation Account." Given his role as

- 32 KPMG Review of NNPC Claims Report sec.4.3.
- 33 PwC Report p.52.
- 34 We reviewed the monthly N.N.P.C. Crude Oil Lifting Profile for Domestic Consumption reports from 2005 to 2014 which listed "values payable" for each cargo but contained no information about payments. This is true of all other DCA-related documents from NNPC that we have seen, including its Domestic Crude Reports, Schedules of Payments for Domestic Crude, Statements of Account for the CBN/NNPC Naira Oil and Gas Account, Reconciled Receipts of Domestic Crude Cost, Gas Revenue and Other Miscellaneous Receipts or Computations of Revenue from Domestic Crude Oil Receipts.
- 35 N.N.P.C. Crude Oil Sales Profiles, 2005-2014. NNPC also sends FAAC a monthly report that lists underpayments by export buyers, but we have not seen any similar document for DCA sales. Samples of NNPC Report: Summary of Export Crude Oil and Gas Sales and Other Receipts, 2009-2014. The export reports also list total "sales receipts" by month, while the DCA documents speak in terms of "crude cost" payable.
- 36 We examined samples of the monthly reporting packets on oil sales that NNPC sent to CBN, FAAC and the interagency crude oil sales reconciliation committee. For domestic crude, all of them showed only what NNPC paid to the Federation Account, not what buyers paid NNPC.
- 37 Sanusi Lamido Sanusi, September 23, 2013 letter to H.E. President Goodluck Jonathan ("Sanusi Letter to President Jonathan"), p.2.

chief banker for the Nigerian Federation and one of the president's top advisers on fiscal and monetary matters, the CBN governor should have access to such information.

Sanusi pointed to a significant hole in existing audits of NNPC. NEITI, KPMG and the 2012 report of the Petroleum Revenue Special Task Force (PRSTF) all stopped at comparing NNPC's assessments of what the oil was worth with the much smaller amounts that wound up in the Federation Account each month.³⁸ Read closely, the methodology sections of their reports suggest they did not ask NNPC for records of receipts from buyers.³⁹ PwC says that it did trace financial movements into the various NNPC accounts "to confirm the total amount received from domestic crude sales," but its final report did not say what its auditors found.⁴⁰ Verifying payments is a basic part of auditing sales transactions. The omissions seem especially glaring given the multibillion dollar revenue shortfalls that happened each year. Notably, the auditors did verify receipts from export sales.⁴¹

Alleged under-reporting of DCA revenues to FAAC

During its 2014 audit, PwC found that the sales figures that NNPC gave FAAC for some DCA transactions were lower than what buyers actually paid. For these sales, the auditors wrote, "after the buyer elects a pricing option under which the purchase will be made, NNPC prepares a separate valuation of the lowest under the three pricing options. NNPC would then report the sale to FAAC using the lowest price valuation while invoicing the off-taker a higher price. We requested for a schedule and valuation documents invoiced to buyers under unutilized crude and Product Exchange contracts during the review period, in order to fully quantify the impact of this practice on the Federation Account. Our request was not granted."⁴² This alleged practice, if true, echoes then-presidential candidate Buhari's statement in December 2014 that NNPC maintains "two sets of books, one for public consumption and another for insiders."⁴³

Incomplete, contradictory explanations for withholdings

Most troubling of all, NNPC's explanation for how it spends unremitted DCA earnings has not been consistent or complete. Prior to the Sanusi scandal, the corporation usually told outsiders that it held back funds to recoup its subsidy-related losses, but did not explain other withholdings. ⁴⁴ For the ten years of NEITI and FAAC submissions we analyzed, the subsidy costs NNPC reported were almost always smaller than its total

- 38 NEITI, 2006-08 Reconciliation Report, Appendix B p.39; NEITI, 2005 Financial Audit Report, Appendix A p.19; NEITI, 1999-04 Financial Audit Report, App.5 p.2f; NEITI, 2009-11 Physical and Process Audit Report, Appendix B,p.29f.; Confidential Draft Report of the Petroleum Revenue Special Task Force, 30 June 2012, p.17f.
- 39 Ibid.
- 40 PwC Report p.53.
- 41 For export cargoes, NEITI for instance checked lifting volumes reported by NNPC against copies of shipping documents, checked assessed prices against invoiced prices, tracked payments for individual cargoes to NNPC's JP Morgan account, and performed random tests of invoices against bank statements to confirm full payment. NEITI, 2005 Financial Audit Report, Appendix A p.7.; NEITI, 2009-11 Financial Audit, Appendix B p.9f, 14.
- 42 PwC Report p.58.
- 43 See Pres. Muhammadu Buhari, "It's Time to Rebuild Nigeria," Speech given at the All Progressives Congress (APC) Convention on December 12, 2014, reprinted at: http://dailypost.ng/2014/12/12/time-rebuild-nigeria-full-text-buharis-acceptance-speech/. NNPC publicly disputed the claim. Leadership, "NNPC Faults Buhari's Allegation, Says We Don't Keep 2 Account Books," December 12, 2014, available at: http://leadership.ng/news/394893/nnpc-faults-buharis-allegation-says-dont-keep-2-account-books.
- 44 See e.g., PRSTF Report p.13, 59, 66; NEITI, 2009-11 Financial Audit Report, Appendices p.8, 38.

withholdings. The other, unexplained withholdings accounted for anywhere from \$270 million to nearly \$7 billion a year (figure A7).

Item	2004*	2005*	2006*	2007*	2008*	2009*	2010*	2011*	2012*	2013
Total withholdings	1,623	3,165	2,364	2,992	3,349	4,115	3,828	6,209	7,903	6,996#
Subsidy claims (\$ million)	0	0	1,744	1,908	3,079	1,348	2,814	5,204	1,688^	0#^
Other (\$ million)	1,623	3,165	620	1,084	270	2,767	1,014	1,005	6,215	6,996
Percentage unexplained	100	100	26	36	8	67	26	16	79	100

Figure A7. NNPC explanations for DCA withholdings, 2004-2013

In early 2014, officials started attributing the payment shortfalls to downstream-related costs aside from just subsidy payments (see figure A8, p.15). NNPC's monthly reports on DCA revenues to the FAAC now list withholdings for some of these additional expenses. The additional explanations only surfaced after ex-governor Sanusi's queries focused unprecedented attention on NNPC's DCA withholdings and the corporation was suddenly asked to explain \$10.8 billion in "missing" DCA revenues. (See box 1 for more background.) But even since then, NNPC has not factored in some items that necessarily would reduce domestic crude earnings—expenses that traders can charge back to the corporation under the provisions of the swaps, for instance. The CBN exgovernor showed no satisfaction with NNPC's updated explanation, and added that it did not answer some of the deeper issues he had raised. Speaking to the *Financial Times* in 2015, Sanusi said: "My claim was always that these amounts were being withheld illegally and unconstitutionally—not that some explanation cannot be provided or conjured for what they were spent on. [...] Anyone can produce invoices."

^{*} All figures in column taken from NEITI financial audit report for the relevant year, or are conversions based on average exchange rates (see FN 9)

[^] Uses info NNPC provided contemporaneously to FAAC and to NEITI, not later explanations given to PwC. For PwC's findings, see figure A8.
! 2013 NNPC Annual Statistical Bulletin

^{: 2013} NNPC Annual Statistical Bulletin # NNPC Report: Reconciled Receipts of Domestic Crude Cost, January 2013-date; NNPC Report: Computation of Revenue from Domestic Crude Oil

[#] NNPC Report: Reconciled Receipts of Domestic Crude Cost, January 2013-date; NNPC Report: Computation of Revenue from Domestic Crude Oil Receipts, January 2013 to Date

NB: Data comes with the same caveats explained on p.A6.

⁴⁵ See e.g., NNPC, Computation of Revenue from Domestic Crude Receipts from January 2014 to Date, August 2014.

⁴⁶ NNPC told the Senate Finance Committee that "the seeming delay" in it disclosing its subsidy claims for 2012 and 2013 "arises from the intricacies of PPMC operations," adding: "PPMC is a subsidiary of NNPC and a bulk supplier of petroleum products to other marketers. It takes fairly longer amount of time to assemble documentation from ship-to-ship (STS) operations involving coastal marketers and submitting to PPPRA compared to other marketers. This is due to the singular fact that NNPC supplies 100% HHK and about 60% of PMS to the market." The corporation did not explain why it was also late reporting costs for pipeline maintenance and protection, overheads and other costs it supposedly used DCA funds to cover. NNPC, Response to the Memorandum Submitted by the Governor of CBN to the Senate Committee on Finance on the Non-Remittance of Oil Revenue to the Federation Account ("NNPC Response to Sanusi"), February 2014, p.4.

⁴⁷ Traders with NNPC swap contracts are allowed to recoup certain costs associated with running the deals—freight and demurrage costs, for instance—either in cash or physically, in oil. This means that NNPC necessarily will receive less than full market value for oil lifted under the swaps. For more on this point, see annex B.

⁴⁸ Financial Times, "Nigeria says oil audit answers critics," February 12, 2015, available at: http://www.ft.com/intl/cms/s/0/063ee2cc-b2c8-11e4-b234-00144feab7de.html?siteedition=intl#axzz3eZ2im4dQ.

Box 1: The "missing" \$20 billion

On September 25, 2013, then Central Bank of Nigeria Governor Lamido Sanusi wrote a six-page letter to President Goodluck Jonathan, claiming that NNPC had not remitted \$49.8 billion in NNPC oil sales revenues to the Federation Account in the nineteen-month period from January 2012 to July 2013. The controversy that followed illustrates in dramatic fashion the murkiness surrounding NNPC's management of the DCA.

Sanusi told the president that between January 2012 to June 2013, "76 percent of the value" of oil sold by NNPC had been "diverted from the CBN and the Federation Account" without clear explanations and in "gross violation of the law." He attached some high-level data supporting his claims and recommended various audits and investigations. ⁴⁹

The letter leaked to the press in November. Shortly thereafter, the president set up a reconciliation committee to review Sanusi's claims, with members drawn from CBN, NNPC and the petroleum and finance ministries. By late December, the committee concluded that NNPC had failed to remit \$12 billion in DCA revenues to the Federation Account from January 2012 to July 2013, not \$49.8 billion as originally stated. Most of the \$49.8 billion, the committee found, went toward traceable operational expenses—joint venture cash calls, for example. It could explain only \$1.2 billion of the \$12 billion, which it said were fuel subsidy withholdings—a figure supported by internal NNPC and CBN documents. This left \$10.8 billion unaccounted for. NNPC, which attended the reconciliation meetings, did not dispute the committee's findings.

One month later, however, the corporation offered a new story. Convening a press conference at its Abuja headquarters, NNPC's top officials told reporters that subsidy expenses in fact totaled \$8.49 billion, and that the \$10.8 billion also covered various other downstream expenditures. (See figure X for a list). NNPC gave this same explanation to the Senate Finance Committee in February 2014—around the same time that President Jonathan suspended Sanusi for alleged "financial recklessness and misconduct." Once again, less than a month later, the corporation's figures were different—sometimes by as much as \$270 million. The senate committee endorsed NNPC's latest explanation in May 2014, with mostly small changes.

The president's office hired PwC to look into the matter in June 2014, and the firm submitted its report to the auditor-general's office on November 28th. PwC said that in January 2015 it was "recalled by the Auditor General for the Federation and asked to visit with NNPC (the nominal Auditee) to share our key findings and receive feedback from them." During this process, NNPC once again produced documents showing different numbers—some items departed from its last submissions by over a billion dollars.⁵⁴

The Jonathan government released the PwC report in April 2015—one day after then president-elect Buhari vowed to do so. The report is a useful document, as it provides further detail on the sheer scale of discretionary spending by NNPC. However, the PwC audit suffered from several problems, including limited terms of reference. The final report does not touch many of the claims Mr. Sanusi presented to parliament in 2014—for instance, regarding the terms and management of oil-for-product swaps. FwC relied mostly on documents (from NNPC and other agencies) that that it did not or could not authenticate. At times NNPC did not grant auditors access to the data or people they for which they had asked. At the front of their report, PwC authors included among the many caveats a statement that their work was "not an examination or a review in accordance

- 49 Sanusi letter to President Jonathan.
- 50 2012 NNPC oil revenue sweeping mandates to CBN and CBN Federation Account Component Statements.
- 51 Vanguard Nigeria, "How we spent \$10.8 bn oil revenue NNPC," January 17, 2014, available at: http://www.vanguardngr.com/2014/01/spent-10-8bn-oil-revenue-nnpc/.
- 52 Senate Finance Committee, Report on the Investigation of the Alleged Unremitted \$49.8 Billion Oil Revenue By Nigerian National Petroleum Corporation ("the Senate Finance Committee Report"), p.35f.
- 53 Ibid
- 54 PwC Report p.8.
- 55 See Sanusi Senate submission p.7f.

with generally accepted auditing standards or attestation standards," and that they could not vouch for "the information upon which [their] work was based." ⁵⁶ But the PwC audit cannot, and most likely will not, be the final word on this controversy. President Buhari already has said he'll probe the "missing" \$20 billion. ⁵⁷

To date, Sanusi's inquiries have led to five different accounts of what happened to the \$10.8 billion, none of which can be taken as definitive (figure A8). While debates around precise figures likely will continue, the picture of DCA revenues remains murky.

ltem	Sanusi and 2012 docs	NNPC, Jan. 2014	NNPC, Feb. 2014	Senate Finance Committee report	PwC
Total DCA value	28.0	Not stated	Not stated	Not stated	28.22
Remitted to Federation Account	16.0	Not stated	Not stated	Not stated	15.99
Subsidy	1.2	8.49	8.76	8.76	8.70
Crude oil and product losses	0	0.72	0.76	0.81	0.83
Pipeline maintenance and protection	0	1.22	0.91	0.88	0.49
Strategic fuel reserve	0	0.37	0.46	0.22	0.14
Other overheads	0	0	0	0	2.81
Unexplained	10.8	0	0	0	0
TOTAL unremitted	10.8	10.80	10.89	10.86	12.23

Figure A8. Five conflicting explanations for NNPC's DCA withholdings from January 2012 to July 2013 (\$ billion)

NB: Some numbers may not tally due to rounding by the authors.

4. NNPC SPENDING FROM THE DCA DELIVERS POOR VALUE, SHOW SIGNS OF MISMANAGEMENT.

Concerns have also arisen around how NNPC spends DCA revenues, and whether it uses the huge sums it withholds in ways that achieve value for money. This is a crucial question: every naira spent by NNPC is a naira that never reaches the national treasury.

NNPC has claimed that its withholdings from the DCA went to cover the following expenses:

- its losses from selling gasoline and kerosene at subsidized prices
- recouping the value of oil and petroleum products lost from PPMC's
 5,000-kilometer pipeline network due to sabotage
- expenses NNPC incurs to maintain and protect the pipelines
- the costs of keeping a 90-day strategic fuel reserve for the nation; and miscellaneous overheads and operational costs⁵⁸

(For numbers and a sense of the scale of each, see figure A8, this page.)

⁵⁶ For more on the audit, see http://www.resourcegovernance.org/news/blog/nnpcs-blank-check-pwc-nigeria-audit-and-upcoming-research-nrgi.

⁵⁷ Vanguard Nigeria, "I'll probe NNPC's missing \$20 billion – Buhari," April 27, 2015, available at: http://www.vanguardngr.com/2015/04/ill-probe-nnpcs-missing-20bn-buhari/.

⁵⁸ PwC Report p15f.

Each category of spending prompts questions around value-for-money:

Fuel subsidy claims

The fuel subsidy is by far the largest black box in DCA revenues, totaling a reported \$8.76 billion in DCA earnings in just nineteen months. The method for verifying the appropriateness of these subsidy claims is flawed, and past practice suggest that the amounts withheld for subsidy payments may exceed what they should be.

The main institutional check on this spending comes from PPPRA, which vets and approves NNPC's claims. NNPC argues that this step guarantees the claims are accurate, but in reality the process seems deeply flawed. PPPRA's review of NNPC subsidy claims is a classic example of the corporation carrying on without effective checks against mismanagement. Past examinations found grave errors and abuses of discretion in the process, most notably:

- NNPC as a matter of course made—and PPPRA approved—subsidy claims based on import volumes, rather than volumes of products physically evacuated from fuel storage depots, as PSF guidelines require.
- PPPRA's work is a "book keeping verification exercise rather than physical verification of products and claims."⁶⁰
- NNPC claimed—and PPPRA approved—subsidy on fuel from its refineries as if the
 fuel were imported. It regularly collected freight, finance and port charges on refinery
 products, even though it never paid these to any third party.⁶¹ NNPC also added in an
 unauthorized "pipeline tariff" that private marketers cannot claim under the PSF.⁶²
- As with other DCA withholdings, NNPC could not provide PPPRA with adequate supporting documentation for all of its claims. The agency disallowed ₩163.65 billion for this reason in 2007-09 alone. 63
- At other times PPPRA signed off on claims with incomplete paper trails for reasons it did not explain.⁶⁴
- NNPC sometimes withheld DCA funds for subsidy before it sent a corresponding claim to PPPRA for approval.⁶⁵
- NNPC regularly ignored PPPRA's approvals and kept back extra funds—as much as N285 billion in 2011, for example. 66
- PPPRA told parliament in 2012 that NNPC consistently claimed to import more product than PPPRA verified and approved, sometimes close to one billion liters in a year.⁶⁷

⁵⁹ KPMG Project Anchor Report sec.6.3; Senate Finance Committee Report p.20.

⁶⁰ Senate Finance Committee Report p.54.

⁶¹ KPMG Project Anchor Report sec. 6.3.2.

⁶² KPMG Review of NNPC Claims Report sec.3.1.

⁶³ KPMG Project Anchor Report sec.6.3.6. Payments for many shipments did not have vessel notices of readiness to discharge (NoRs) attached as supporting documentation. Id sec.6.3.9.1. PPMC paid suppliers for products without evidence of certificates of discharge. Id. sec. 6.3.9.2.

⁶⁴ KPMG Project Anchor Report p.6.3.

⁶⁵ ld p.47.

⁶⁶ KPMG Project Anchor Report sec.6.3; Lawan Report p.82.

⁶⁷ Lawan Report p.165.

The most thorough probes to date—one in 2010, two more in 2012⁶⁸—raised serious doubts about the integrity of NNPC's revenue withholdings. Relying on the corporation for most of their information, the examiners saw signs of "substantial product losses and other control weaknesses,"⁶⁹ together with huge calculation and payment anomalies. Reported annual figures can vary by several billion dollars (figure A9). KPMG found that in the 2007-2009 period, NNPC paid itself **885.89 billion (approx. \$6.7 billion) in subsidy on 15.6 billion liters of gasoline, kerosene and diesel that "apparently were not available to the Nigerian market." This added up to 36 percent of all fuels that NNPC claimed it imported during the period, and 35 percent of its total subsidy claims.⁷⁰

Source	Amount
NNPC presentation to parliament (cited in Lawan report p.156)	₩586 billion
PRSTF (p.76)	₩732.87 billion
Technical committee on fuel subsidies (Aig Technical Committee Report p.12)	₩764.94 billion
NEITI (2009-2011 Process Audit, Appendix D, p.8)	₩786 billion
Sanusi presentation to Senate Finance Committee (cited in Lawan p.158)	₩844.94 billion

Figure A9: Five conflicting published totals for NNPC's 2011 fuel subsidy withholdings

Pipeline protection costs

The case for letting NNPC deduct pipeline protection costs is even weaker, as spending for this purpose does not seem to buy security. PPMC initially hired community members as guards, but then brought in the military after the local guards started breaking into the lines themselves. Under the soldiers' watch, sabotage "continued unabated." NNPC then took a new tack in 2011, reportedly signing pipeline protection contracts with exNiger Delta militant leaders worth at least \$39.5 million a year. Government touted the deals as effective tools in the fight against oil theft, yet NNPC's own data shows pipeline losses actually went up after the new contracts started (figure A10). By mid-2012, the corporation was avoiding using its own pipelines, and supplying oil to the Warri refinery by ship through an opaque, costly arrangement described below. A similar arrangement for Port Harcourt followed quietly in 2014.

ltem	2010	2011	Percentage increase, 2011 over 2010
Value of Port Harcourt refinery pipeline losses (₦ billion)	6.43	21.86	340
Value of Warri refinery line losses (₦ billion)	10.42	60.65	582
PPMC crude oil pipeline losses (barrels per day)	4,854	17,718	365
PPMC crude oil pipeline losses (percentage of total deliveries)	5.2	14.2	273

Figure A10. Refinery crude oil pipeline losses, 2010 versus 2011

Sources: NNPC responses to PRSTF, 2012; NNPC 2010 and 2011 Annual Statistical Bulletins

- 68 KPMG Project Anchor Report; Aig Technical Committee Report; Lawan Report.
- 69 KPMG Project Anchor Report sec.6.3.
- 70 Id. sec.6.3.4.
- 71 KPMG Review of NNPC Claims Report sec.4.4. For more on the role of officers of the military Joint Task Force (JTF) for the Niger Delta in oil theft, see Stakeholder Democracy Network, Communities Not Criminals: Illegal Oil Refining in the Niger Delta, October 2013, available at: http://www.stakeholderdemocracy.org/sdn-report-communities-not-criminals-illegal-oil-refining-in-the-niger-delta/.
- 72 Wall Street Journal, "Nigeria's Former Oil Bandits Now Collect Government Cash," August 22, 2012, available at: http://www.wsj.com/articles/SB10001424052702304019404577420160886588518. NB: From available evidence, it is not clear that NNPC made payments for these contracts out of domestic crude proceeds. Two ex-militants who managed one of the companies with a contract claimed NNPC typically paid them late, and had not paid in full. Author interviews, 2012.
- 73 The Senate Finance Committee also found that PPMC's reported surveillance costs rose precipitously in 2013 over 2012 "without a corresponding decrease in pipeline oil losses." Senate Finance Committee Report p.37.

Transportation of crude oil to the refineries

In August 2014, Nigeria's petroleum minister told a U.S. audience that NNPC was spending an average of \$7.52 per barrel to transport domestic crude to the Port Harcourt and Warri refineries by ship. ⁷⁴ Figures in the PwC report suggest the Warri arrangement cost at least \$43.6 million over nineteen months, though the number is not sufficiently broken down to show whether it included all associated costs. ⁷⁵

NNPC began delivering crude oil to the Warri refinery by water in 2011, supposedly due to high theft from the refinery's supply pipeline. A similar arrangement for the Port Harcourt refinery commenced in 2014. Under the Warri arrangement, PPMC contracted PPP Fluid Mechanics Ltd., a private Nigerian company, to manage deliveries to the refinery. The company chartered a "very large crude carrier" (VLCC) that could hold roughly 2 million barrels of crude. Once it arrived offshore of the Niger Delta, the VLCC would begin lifting domestic crude barrels from the Escravos oil terminal—usually about a million barrels at a time. It would then travel to a point close to the mouth of the Forcados River, where it would anchor. Soon thereafter, smaller shuttle vessels would arrive and take crude from the VLCC by ship-to-ship transfer. They would then transport the oil up the Forcados River to the Warri refinery jetty for discharge to the refinery. The Port Harcourt arrangement works in similar ways, but with different vessels and locations.

Public information about the refinery transport deals is scarce, yet what information is available raises concerns about the deals' structure and management. A cost of \$7.52 per barrel, if accurate, is an expensive average fee, especially compared to PPMC's charge to the government of only \$40.30/liter (or roughly \$0.03 per barrel) to move oil through the refinery supply pipelines. PPMC does not seem to have held a competitive, open tender to award the original transport deals. At no time has the government disclosed the terms of the contracts it has with the companies involved. It is not known, for example, what costs make up the purported \$7.52 per barrel, nor if or how PPMC keeps watch over the flows of oil or cash involved in the deals. Government also has not disclosed how much oil the contractors lifted. PwC and NEITI's published figures for 2012 differed by more than two million barrels—11,637,246 barrels versus 13,874,531, respectively. Some of the vessels involved sat anchored offshore—presumably at a significant cost to the nation—for long periods when NNPC was not sending crude to the refineries. NNPC records also show that the corporation

- 74 Platts. "Nigeria's refining costs up on transporting crude oil by ship: minister," August 6, 2014, available at: http://www.platts.com/latest-news/oil/lagos/nigerias-refining-costs-up-on-transporting-crude-26851625
- 75 PwC Report p.90.
- 76 This was not the first time the Nigerian government transported crude oil to the refineries by ship. The Abacha regime used a similar arrangement between 1993 and 1998. Nigerian Presidency, Report of the Special Committee on the Review of Petroleum Products Supply and Distribution ("the Gbadamosi Report"), October 2000, p.27.
- 77 Description based on satellite vessel tracking data viewed by author, 2011-14 NNPC oil sale records and crude oil loading data obtained from export terminals. Copies on file with NRGI.
- 78 Id. For more description of the deal's mechanics, see *This Day*, "How Crude Oil Swaps, OPAs Stalled NNPC Refinery Operations," June 21, 2015, available at: http://www.thisdaylive.com/articles/how-crude-oil-swaps-opas-stalled-nnpc-refinery-operations/212663/.
- 79 Federal Ministry of Petroleum Resources, Report of the Refineries Special Task Force (Kalu Idika Kalu, chair) ("the Kalu Task Force Report"), 2012, p.42.
- 80 The arrangements were re-tendered in 2013, but the results, if any, were not announced. See: http://www.nnpcgroup.com/Portals/0/Invitation%20for%20Pre-qual%20using%20marine%20vessels%20from%20bonny%20to%20okrika%20jetty.pdf.
- 81 PwC figure based on lifting data shown in PwC Report Appendix 6.1.1; NEITI 2012 Oil and Gas Audit Report p.109.
- 82 Finding based on a comparison of NNPC oil sale records with commercial tanker reports viewed by author,

kept pumping crude through the Escravos-Warri refinery pipeline well after the ship transports started—even though they supposedly were set up because too much oil was being lost from the line. 83 We sent PPP Fluid Mechanics director and shareholder Captain Idahosa Wells Okunbo a letter asking for information about the refinery supply arrangement but did not receive a reply. 84

Miscellaneous overhead

NNPC claims that it draws on DCA revenues to pay some of its general operating expenses. For instance, officials told PwC's auditors that between January 2012 and June 2013, NNPC retained domestic crude earnings to cover \$1.5 billion in salaries, \$480 million in "monthly operations," and \$810 million in "other third party payments (including training course fees, estacode [a Nigerian government term for travel expenses], and consultancy fees)." They apparently booked these costs as related to pipeline maintenance, though the PwC report does not make clear the provenance of the claimed expenses. ⁸⁵

The report did not break down the charges in any detail. From available information, we cannot discern whether some of them were, or should have been, covered by NNPC's annual budgetary subvention from the Federal Government. Spending such large sums to bankroll the corporation's lossmaking, mismanaged subsidiaries—PPMC especially—is a poor use of public money. Moreover, NNPC only declared these costs to PwC after the auditor's submitted their initial findings to Nigeria's auditor-general in November 2014. According to PwC, in January 2015 NNPC produced documents showing the extra \$2.81 billion in expenses, saying it had "understated [...] amounts incurred by the Corporation's subsidiaries" in its initial submissions for the audit. PwC reviewed the documents and subsequently revised its figures for the final, released report. 86

5. NNPC ENGAGES IN CONFLICT OF INTEREST BEHAVIOR IN MANAGING THE DCA.

The DCA features a built-in conflict of interest. When NNPC COMD allocates "domestic crude" on an intercompany basis to PPMC, whether for use in refining, swaps or export sales, it creates a situation in which NNPC acts as buyer and seller, through its subsidiaries. This leaves COMD officials with no incentive to charge top prices to PPMC. Indeed, a shelf's worth of past audits and investigations—most of them ordered or supported by the Nigerian government—have raised the following two main concerns in this area:

NNPC may use low exchange rates to convert dollar payments into naira.

NNPC negotiates, invoices and takes payment for all domestic crude sales in dollars, but then converts earnings into naira before releasing them to the Naira Crude Oil Account for eventual credit to the Federation Account. Various inquiries and press reports have claimed that NNPC employs dollar-to-naira conversion rates that are lower than CBN's

other market intelligence data, and satellite vessel tracking data viewed by author. Copies on file with NRGI.

⁸³ In October and November 2013, for example, NNPC sent 159,191 bbls of Escravos crude worth \$17.6 million through the line. NNPC domestic crude profiles, October and November 2013.

⁸⁴ NRGI May 2015 letter.

⁸⁵ PwC Report p.30, 96.

⁸⁶ Ihid

official advertised rates when it computes the conversions. 87 By doing this, NNPC reduces how much it owes the federation for barrels of domestic crude. NEITI suggested losses from these conversions were as high as \$217 million per year for 2009 to 2011. 88 NNPC denies that it engages in this practice, 89 and some audit work suggests the gap between CBN rates and those NNPC uses shrunk in recent years. 90

NNPC may sell itself crude for the refineries at "discounts."

By comparing data from export and refinery sales, a number of government probes of the DCA found that the refineries consistently enjoyed lower per barrel prices than export buyers. Explanations for this have varied. According to some, NNPC picks the most favorable of the three available price options retroactively when paying for its refinery oil. By not gambling on the options, as other buyers do, it secures better prices over time. Others claimed more ambiguously that NNPC grants itself "discounts" on the refinery oil, but left the exact mechanics unexplained. Estimates of discount-related losses from 2002 to 2011 ranged from \$22 million to \$460 million per year. In their examinations of 2012 and 2013, authors of PwC and NEITI's most recent reports pointed out a number deliveries to the refineries that NNPC priced at levels below the monthly official selling prices (OSPs) set by NNPC COMD.

NNPC responded that it has paid "market price"—a somewhat malleable and non-specific term—for all crude piped to the refineries since October 2003. 96 The corporation argued (correctly) that at least some of the audits relied on questionable assumptions and comparisons, and further that any differences in price resulted from the complexities of OSP pricing. NNPC produced its own figures showing that there is no pattern of lower priced refinery sales. 97 Given these opposing accounts, the question remains open year after year.

These potential challenges —though they need attention—are not the crux of why the DCA delivers so few dollars per barrel for Nigeria. They relate to how NNPC values barrels of domestic crude up front, not whether it turns over the full value to the treasury at the back end.

- 87 See e.g., NEITI, 2006-08 Reconciliation Report, Appendix B, p.51; PRSTF Report p.63.
- 88 NEITI, 2009-11 Core Audit Report, Appendix B, p. 31.
- 89 NNPC, Further Responses to the Observations of Forensic Examiners ("NNPC Responses to KPMG Project Anchor Report"), p.46.
- 90 See e.g., PRSTF Report p.64.
- 91 See e.g., NEITI, 2006-2008 Reconciliation, Appendix B, p.52; KPMG Project Anchor Report sec.3.4.3.
- 92 NEITI 2006-2008 Financial Audit, p.18, KPMG Project Anchor Report sec.3.4.3.
- 93 See e.g., Lawan Report p.12, 101.
- 94 See e.g., KPMG Project Anchor Report sec. 3.4.3 (claiming that retroactive pricing cost government \$67 million in three years); Lawan Report p.101 (reporting N108.648 billion in "discounted sales" between 2009 and 2011); PRSTF Report p.68 (calculating \$4.6 billion in losses between 2002 and 2011).
- 95 NEITI, 2012 Oil and Gas Audit Report, Appendix 9.3.4.3; PwC Report p.141.
- 96 In that month, President Obasanjo canceled a long-time subsidy on NNPC refinery oil, issuing a directive that all future refinery sales would "attract the prevailing international market price." Office of the President, PRES/158, to Group Managing Director, NNPC, dated October 9, 2003. Before then, NNPC had paid fixed fees ranging from \$9.50 and \$22/bbl.
- 97 NEITI 2006-08 Reconciliation Report, Appendix B, p.53; NNPC Responses to KPMG Project Anchor Report, p.46.

CONCLUSION

This section of the report has demonstrated why the DCA should be eliminated and replaced with purpose-fit and clearly articulated mechanisms for financing NNPC operations and providing crude to Nigeria's refineries. Given the scale of the revenue waste, the DCA is a sensible place to start in a broader effort to turn NNPC into a profitable, commercially oriented, accountable national oil company.

Upon eliminating the DCA, the Nigerian government would need to identify new mechanisms for supplying oil to the refineries, funding NNPCs operational expenses, and delivering adequate petroleum products into the country. In the main report, we offer a number of proposals for how to pursue these tasks. Broadly speaking, the reform should proceed on two tracks: immediate measures to reign in bad practices, and longer-term steps to address the fundamental dysfunctions inherent to the current NNPC system. Some of the near term recommendations, to complement the elimination of the DCA, would include:

- Establishing a clear legal mechanism that governs NNPC revenue withholdings
- Placing strict legal and operational limits on extra-budgetary spending by NNPC
- Limiting sales of oil to the refineries to their actual needs; excluding PPMC from sales
- Reviewing and revising the refinery oil marine transport arrangements
- Targeting impunity by auditing and investigating problem areas, including the spending of DCA receipts by NNPC, the swaps and the NNPC fuel supply chain
- Publishing more information about NNPC oil sales, including sales to the refineries

The more fundamental reforms would involve:

- Eliminating the fuel subsidy
- Removing NNPC as a commercial player from the downstream sector
- Developing and implementing a road map for restructuring and commercializing NNPC



Report Annex

August 2015



Inside NNPC Oil Sales: A Case for Reform in Nigeria

Annex B: NNPC's Oil for Product Swaps

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1. Introduction: Nigeria's high-stakes swap deals

1.1. BACKGROUND AND METHODOLOGY

Nigeria has used four methods in recent years to meet its domestic fuel needs:

- National oil company NNPC refines crude oil at its three refineries and sells most of the output to privately owned fuel marketing companies. Small amounts are sold through NNPC Retail Ltd., its network of retail filling stations.
- 2 NNPC, through subsidiary PPMC, imported products using traders. The traders delivered the products to PPMC in exchange for cash (called "open account" imports). PPMC sold the products mostly to fuel retailers and various types of intermediary companies. The open account system ended in 2011.
- 3 Private marketers import products under permits issued by the Petroleum Product Pricing and Regulatory Authority (PPPRA) and sell them to a range of wholesale and retail buyers. NNPC is not involved with these imports.
- 4 NNPC imports and sells products through "swaps," deals in which crude oil is bartered for petroleum products, rather than sold for money.

NNPC turned to swaps in 2010, in part to avoid domestic fuel shortages. By that time, its refineries were working at only around 20 percent of capacity and PPMC had incurred over \$3 billion in debts to fuel importers under the open account system that it could not pay. Some of the bills were 1,000 days overdue. By 2011, banks were unwilling to finance more open account imports. This left the corporation in need of a new mechanism for importing gasoline (referred to locally as "premium motor spirit," or "PMS") and kerosene (known as "dual purpose kerosene," or "DPK").

In response, NNPC entered into two different types of swap agreements. The first is a crude-oil-for-refined-product exchange agreement (RPEA). Under an RPEA, crude is allocated to a trader, and the trader is then responsible for importing specified products worth the same amount of money as the crude, minus certain agreed fees and expenses, the value of which the trader keeps. By early 2011, the government had signed four RPEAs with commodities traders (figure B1). Subsidiaries Duke Oil and PPMC represented NNPC in the deals.

The second type of swap is an offshore processing agreement (OPA). Under this type of deal, the contract holder—either a refiner or trading company—is supposed to lift a certain amount of crude, refine it abroad, and deliver the resulting products back to NNPC. The contracts lay out the expected product yields (i.e., the respective amounts of diesel, kerosene, gasoline, etc.) that the refinery will produce. The refining company also can pay cash to NNPC for any products that Nigeria does not need. In 2008, as fuel shortages worsened, NNPC issued a tender for an OPA and signed one with BP affiliate Nigermed late in 2009. The following year, PPMC signed another OPA with the Ivorian state-owned refining company Société Ivoirienne de Raffinage (SIR).

The contract holders for both types of deals did not change between 2010 and 2014, with the exception of Nigermed, whose OPA ended in 2010. In late 2014, PPMC did not renew its RPEA with commodities trader Trafigura. Duke's contract was reduced to 30,000 barrels a day, and Duke farmed out this contract to Aiteo. Separately, NNPC awarded two new, two-year, 90,000 barrel a day OPAs to Sahara and Aiteo (figure B1).

Oil allocation No. **Party** (barrels per day) Duration Refined Product Exchange Agreements (RPEAs) 1. Trafigura Beheer BV 60.000 2010-2014 2. NNPC subsidiary Duke Oil Ltd., which entered into 90,000 2011-2014 subcontracts with three companies that managed 30,000 barrels per day apiece: → 30,000 2011-2014 → Taleveras Petroleum Trading BV, a Nigerianfocused trading company → 30,000 2011-2014 2.b → Aiteo Energy Resources Ltd., a Nigerian trading company → 30.000 2011-2014 2.c → Ontario Trading SA, another Nigerian company 3. Duke Oil (Panama) Ltd., which subcontracted to: 30,000 2015-2016 3.a → Aiteo Energy Resources Ltd. → 30.000 2015-? Offshore Processing Agreements (OPAs) 1. Nigermed Ltd., a fuel marketing joint venture 60,000 2010 between NNPC and British Petroleum (BP) 2. Société Ivoirienne de Raffinage (SIR), which entered 60.000 2010-2014 into a subcontract to manage the full amount with: 2.a → Sahara Energy Resources Ltd., a Nigerian oil → 60,000 2010-2014 and fuel trading company 3. Sahara Energy Resources Ltd. 90,000 2015-2016 2015-2016 Aiteo Energy Resources Ltd. 90,000

Figure B1. RPEA and OPA holders, 2010-present

The oil for the swaps comes out of NNPC's 445,000 barrel per day "domestic crude allocation" (DCA). Annex A discusses the DCA in more detail.

The Jonathan government was not the first to use swaps. Rather, the original swaps came in the country's military era. Between 1994 and 1997, Gen. Sani Abacha's internationally isolated regime put 96.2 million barrels—or around 66,000 barrels per day—into RPEAs with a handful of traders.² The Buhari and Babangida military governments earmarked an average of 103,000 barrels per day to European refiners for processing between 1983 and 1987.³

¹ International Oil Daily, "Nigeria Reshuffles Controversial Deals with Oil Traders," December 23, 2014; Reuters, "Nigeria Allocates 2015 Crude-for-Product Swaps, Trafigura Out," January 5, 2015.

² Historical data on file with NRGI.

³ Ibid.

In analyzing the swaps, we concentrated on three main agreements:

- 1 The 90,000 barrels per day RPEA signed in early 2011 between PPMC and Duke, NNPC's wholly owned trading company ("the 2011 PPMC-Duke RPEA")
- 2 The 60,000 barrels per day OPA signed between PPMC and SIR in October 2010 ("the 2010 SIR OPA")
- 3 The 90,000 barrels per day OPA NNPC and Aiteo signed in October 2014 ("the Aiteo OPA")

Full versions of these contracts are posted on NRGl's website. ⁴ Along with analyzing these contracts, we reviewed relevant documentation including other contracts and subcontracts, ⁵ NEITI reports, various NNPC documents, and market intelligence data. We also consulted industry experts and consultants, and conducted several dozen interviews between 2012 and 2015.

As part of our research process, we wrote formal letters to the main parties involved in the swap deals, informing them of the project, asking a number of detailed questions, and indicating our openness to dialogue and to learning their perspectives. The letters were sent by email, fax and courier. Specifically, we sent letters in April 2015 to the NNPC, PPMC and Duke. We also sent letters to trading and refining companies that held swap contracts, including Aiteo, Ontario, Sahara, SIR, Taleveras, and Trafigura.

NNPC, PPMC, Duke, Ontario and SIR did not respond to our communications. NNPC has answered similar questions in the past, from audiences including the media and the Nigeria Extractive Industries Transparency Initiative (NEITI). We drew on those explanations when possible so as to represent NNPC's perspective. Aiteo officials replied and asked that we enter into a non-disclosure agreement before it shared information, given confidentiality concerns. We declined, since the questions pertained to a report intended for public release, and asked that they nonetheless provide some information. They did not respond further. Sahara officials wrote to us and indicated that their response was contained in press releases they issued in May and June 2015 about the swap deals.⁶ We reviewed these materials and cite them in this report. Trafigura and Taleveras provided written responses to some of the questions; others they did not answer, citing confidentiality constraints. Representatives of these two companies also made themselves available for several phone conversations about the questions that we asked. Their views informed the research, and are cited in the text.

1.2. WHY THE SWAPS DESERVE CAREFUL SCRUTINY AND REFORM

For the following reasons, reforming Nigeria's swap agreements requires urgent attention from the Buhari government:

Nigeria's ongoing fuel supply crisis makes swaps practical in the short term. Swaps have helped keep gasoline and kerosene flowing into the country since the PPMC open account import system collapsed in 2010 and 2011. This has been NNPC's main

⁴ See http://www.resourcegovernance.org/publications/inside-NNPC-oil-sales

⁵ In particular, we reviewed management subcontracts signed between Sahara and SIR and between Taleveras and Duke, but not those between Aiteo or Ontario and Duke.

⁶ The Sahara press releases are available here: http://www.sahara-group.com/cg/opa-updated.pdf and http://www.sahara-group.com/cg/Saharas_Update_on_OPA.pdf.

argument in favor of the swaps.⁷ Since then, the supply challenges that led Nigeria to reintroduce swaps have not notably improved. Traders and bankers interviewed for this report suggested that no bank would finance more PPMC open tender imports.⁸ A small circle of private marketers with PPPRA import permits that usually supply around 50 percent of imports, and they are struggling to obtain credit due to Nigeria's foreign exchange shortage and continuing currency depreciation.⁹ Refinery production remains very low and likely could not meet local demand for gasoline even if the plants ran at full capacity.¹⁰

The swaps consume a significant portion of the crude oil NNPC has to sell.

NNPC data shows that the corporation allocated just over 79 million barrels (or roughly 218,000 barrels a day) to swaps in 2011 alone. This accounted for nearly half of the DCA and around a tenth of the country's average daily production (figure B2). For 2011, the oil involved in swaps was worth approximately \$9 billion, internal NNPC data suggests. Figures for 2012-2014 are similar. All told, we estimate that between 2010 and 2014, NNPC channeled over 352 million barrels of oil worth a total of \$35 billion into the swaps.

Year	(a) OPAs	(b) RPEAs	Total (a + b)
2010	90,630	0	90,630
2011	64,900	153,512	218,412
2012	62,344	151,910	214,254
2013	67,576	162,916	230,492
2014	57,837	154,616	212,453
2015 JanMay*	205,629	31,457	237,086

Figure B2. NNPC oil allocated to OPAs and RPEAs (barrels per day)

Sources: NNPC Statistical Bulletins; NEITI 2009-11 core audit report; other NNPC documents and market intelligence data on file with NRGI.

Capturing full value from swaps is a challenge. NNPC must overcome several obstacles in order to secure fair returns for the crude allocated. First, countries tend to enter into oil-backed barter deals like swaps in desperate times—either when demand for their crude is low¹⁴ or when they cannot pay cash for commodities they need.¹⁵ In such tough circumstances, officials may struggle to negotiate hard terms with the traders and refiners on the other side of the table. Second, since swap deals are highly

- NNPC also argues that moving away from open account imports to swaps has helped the country avoid costly litigation, sovereign debt default, liens on vessels at sea and damage to its credit rating. NNPC, Response to the Memorandum Submitted by the Governor of CBN to the Senate Committee on Finance on the Non-Remittance of Oil Revenue to the Federation Account ("NNPC Response to Sanusi"), February 2014, p. 7. Thus far, however, banks holding the remaining unpaid debt from open account imports—worth approximately \$1.5 billion, some of it now reaching half a decade past due—have not called a default. Author interviews, trading company personnel and industry consultant, 2015.
- 8 Perversely, some debtors have complained that the swaps took pressure off NNPC to pay its overdue fuel bills, causing more arrears to accumulate and worsening NNPC's credit standing. Author interviews, Nigerian fuel traders and industry consultants, 2012-2015.
- 9 Author interviews, 2014-2015.
- 10 Author interviews, traders, industry consultants and NNPC and PPPRA officials, 2012-2014.
- 11 NNPC, Domestic Crude Report for the Period January to December 2011.
- 12 For 2012 totals, see NEITI, 2012 Oil and Gas Audit Report p. 55 (reporting \$8.744 billion).
- 13 Figure obtained by multiplying total annual swap liftings by average annual domestic crude prices derived from NNPC documents on file with NRGI. Additional forensic work would be needed to determine the exact sales value of the oil involved.
- 14 For example, Iran, under pressure from international sanctions that have blocked dollar transfers to its central bank, has reverted to barter deals as payment for oil exports. Discounted barter deals were also common under the Soviet system.
- 15 In past years, Angola, Iran, Indonesia, Malaysia, China, Saudi Arabia and Kuwait have used swaps to meet domestic needs for refined products. For more detail, see Energy Intelligence, International Crude Oil Markets Handbook, 2006, p. A57.

^{*2015} figures are for volumes nominated by NNPC rather than actual liftings.

context-specific, there are few industry standard terms or "best practices" against which to measure them. Finding standard terms for OPAs is especially hard. Third, the traders party to PPMC swap contracts incur a range of costs when they buy products in the open market and ship them to Nigeria. (See sections 2 and 3 for more detail.) Because the contracts allow them to recoup these costs either in cash or oil, they necessarily will supply products worth less than 100 percent of the value of the crude they took away.

NNPC's swap deals have been opaque. More so than for any other transaction covered in our examination of NNPC oil sales, NNPC and its oil trader partners control the flow of information around swaps. NNPC publishes only high-level figures for the crude lifted and products supplied. Contracts are not published; instead, they circulate through industry and press leaks. Moreover, the Duke and SIR contracts only required NNPC to retain documents from the deals for one year after the agreements ended. In addition, the processes for awarding the RPEAs and OPAs were low on transparency, due process and oversight. We saw no signs that the Trafigura and Duke RPEAs were openly tendered. There was a tender in 2008 for the BP-Nigermed OPA, which took over a year and ended problematically. As sections 2.1 and 3.1 will show, the selection criteria that NNPC, Duke and PPMC used were unclear and, at the time of the awards, some of the parties had limited in-house capacity and no record of running such complex deals.

The swaps have attracted controversy and calls for greater scrutiny. Voices in government and civil society have questioned their probity. Most notably, in February 2014 Central Bank of Nigeria (CBN) governor Lamido Sanusi argued before the senate that the swaps are "not properly structured, monitored and audited." He attached a guidance note indicating possible points of public revenue loss, though without trying to estimate losses. Our interviews suggest that many in industry and government believe the swaps have been costly for Nigeria. Gradually the press picked up on this notion: the Financial Times for instance called the swaps "the real 'Bermuda Triangle" of oil revenue loss. In recent months, Nigeria's Economic and Financial Crimes Commission (EFCC) and Department of State Services (DSS) each launched investigations, but have not yet released findings.

¹⁶ NNPC 2011-2014 Annual Statistical Bulletins. NEITI has put out slightly more detailed numbers for 2010-2012 in its annual audit reports.

¹⁷ PPMC-Duke RPEA Art.12: SIR OPA Art.18.

¹⁸ Trafigura confirmed this in a written response to questions from us, adding that "the call for bids was restricted to a number of companies that had sufficient competence and track record." Trafigura, May 17, 2015 correspondence with NRGI.

¹⁹ Nigermed emerged the winner in early 2010 after competing with two other shortlisted refiners, Cepsa and Sunoco. Sunoco reportedly investigated and suspended four of its traders in connection with the tender. Energy Intelligence Briefing, "Nigeria and Angola Start Crude-For-Product Deals," January 29, 2010.

²⁰ We asked NNPC, PPMC and Duke about how the various deals were awarded, but they chose not to reply.

²¹ E.g., NEITI, 2009-11 Physical and Process Audit p.16; Berne Declaration, Swiss traders' opaque deals in Nigeria, November 2013 ("the Berne Declaration Nigeria Report"), p. 7.

²² S.L. Sanusi, Memorandum Submitted to the Senate Committee on Finance on the Non-Remittance of Oil Revenue to the Federation Account, February 3, 2014 ("the Sanusi Senate Presentation"), p. 2.

²³ Id., Appendix 6.

²⁴ Financial Times, "Goodluck Jonathan must publish the full report into lost oil earnings," March 12, 2015.

²⁵ Author interviews, trading company personnel and EFCC officials, 2015.

1.3. EXAMINING PAST PRACTICES AND IDENTIFYING WAYS FORWARD

The many unanswered questions around NNPC's swap deals boil down to one: have their holders delivered fair value for the oil they lifted, and if not, why? Only a robust performance audit with financial, process and value-for-money components, undertaken by competent downstream sector experts with NNPC's full cooperation, could answer this definitively. Any audit should answer two main questions:

- 1 Did the traders party to swap contacts deliver all of the fuel they owed and purported to supply under their contracts?
- 2 Was the fuel the traders delivered good value for the crude oil they lifted?

We see no evidence that the swaps have been robustly audited thus far. PwC and NEITI have done some limited work, mostly on reconciling financial flows. Instead, the previous government relied almost totally on periodic reconciliation meetings among the parties to the RPEAs and OPAs to ensure the traders met their delivery obligations and detect mismanagement.²⁶

This system of incomplete oversight left the parties largely free to police themselves. NNPC has argued that the reconciliation meetings ensured that "the value for value philosophy enshrined in the swap contracts is validated and tested on a regular basis." But Sanusi told the Senate—and the 2010 PPMC-SIR OPA and the 2011 PPMC-Duke RPEA substantiate his statement—that only PPMC and the contract holders attended the meetings. He wrote: "This choice of a two-party, closed door verification mechanism effectively shuts out other relevant MDAs in government, not least the Ministry of Finance, Department of Petroleum Resources, Accountant-General, CBN and others. It thus removes the swaps and offshore processing arrangements from the usual inter-agency accounting and auditing procedures to which NNPC crude oil sales are typically subject." PPMC certainly was not well suited to act as Nigeria's sole agent at these meetings, as it was a party to the contracts and has a history of conflict-of-interest behavior around domestic crude oil sales. (See annex A section p.A20 for more on this point.)

While we cannot say definitively how much NNPC's swap deals have cost Nigeria, we have found that:

- Some contract terms were unbalanced or underspecified and unduly favored the traders (explained in sections 2 and 3).
- Swaps are vulnerable to a number of rackets around transportation, distribution and sales of imported fuel in Nigeria (discussed in section 4).

The following sections explore these conclusions in detail. Section 2 offers analysis and recommendations for improving the performance of RPEAs, which we believe are the better option for Nigeria going forward. Section 3 explains why the country should abandon the OPA model, based on analysis of the SIR and Aiteo deals. Section 4 discusses the fuel supply chain rackets and offers some preliminary recommendations for dismantling them.

²⁶ Under the contracts, PPMC and Duke were supposed to hold reconciliation meetings every two months, while Duke and the three traders committed to meeting monthly. PPMC-Duke RPEA, Art. 9(C)(ii), Art. 17; Duke-Taleveras Art. 7.1. The PPMC-SIR OPA called for quarterly reconciliations. PPMC-SIR OPA Art.15; Aiteo OPA Art.16.

²⁷ NNPC Response to Sanusi, p. 7.

²⁸ Sanusi Senate Submission, Appendix 6, p. 6.

2. Tightening RPEAs for better returns: The case of the 2011 PPMC-Duke RPEA

If they were structured and run with balance and integrity, RPEAs could be a sensible choice for Nigeria, at least until the country solves its refining woes. We believe the contract signed between PPMC and Duke in early 2011 could be a decent starting point for how to structure future deals—if the government subjected it to a thorough review and improved award process. Specifically, this would entail addressing the three challenges detailed below:

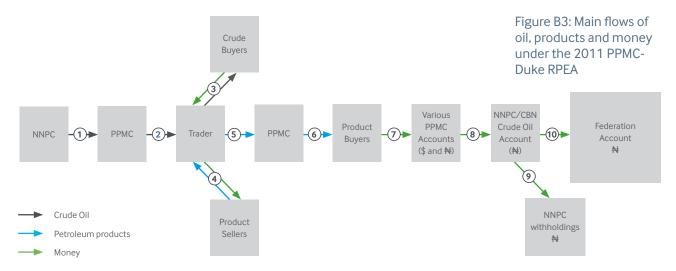
- 1 Choose competent parties.
- 2 Reconsider the pricing provisions in the contract.
- 3 Clarify some other terms in the contract.

As noted in section 1.1, PPMC signed the 90,000 barrel per day RPEA with Duke in early 2011. Duke then outsourced its activities to three Nigerian trading companies—Taleveras, Aiteo and Ontario (collectively, "the three traders")—each of which managed 30,000 barrels per day. The deal ended in 2014. According to the terms of the contract and other sources, ²⁹ the PPMC-Duke RPEA turned oil into fuel and money for Nigeria through the following steps:

- 1 NNPC allocated a cargo of crude (typically around 950,000 barrels) from the DCA to PPMC for the purpose of product exchange.
- 2 PPMC allocated the cargo to one of the three traders subcontracted to Duke.
- 3 The trader found a third party buyer to purchase the cargo. The third party buyer paid the trader for the cargo after lifting.
- 4 PPMC sent the trader a written program specifying the amounts of gasoline and kerosene it wanted to receive as payment for the crude, divided into cargoes ranging in volume from of 27,000 metric tons (MT) to 38,000 MT. The trader then purchased the cargoes from a third-party seller. The fuel could come from anywhere, so long as it met quality standards laid out in the Duke contract. Occasionally, steps 3 and 4 would be reversed, with the company providing products before lifting crude.
- 5 To pay PPMC in-kind for the crude cargo lifted, the trader delivered the products to one or more import points in Nigeria—some offshore but also onshore in Lagos—as ordered by PPMC.
- 6 PPMC sold the products to private buyers, presumably in Nigeria. The buyers were a mix of wholesale marketers of fuel and retail customers at NNPC filling stations.
- 7 The buyers paid for the products into various PPMC accounts, most often in Nigerian naira.
- NEITI, 2009-2011 Financial Audit Report p. 15f; NEITI, 2012 Oil and Gas Audit Report p. 285f; Report of the Technical Committee on Payment of Fuel Subsidies (Aigboje Aig-Imoukhuede, chair) ("the Aig Technical Committee Report"), June 2012, p. 21; Senate Finance Committee, Report on the Investigation of the Alleged Unremitted \$49.8 Billion Oil Revenue By Nigerian National Petroleum Corporation ("the Senate Finance Committee Report"), 2014, p. 22f.; author interviews, traders, industry consultants and NNPC officials, 2012-2014.

- 8 Periodically, PPMC transferred proceeds from refined product sales into the naira Crude Oil Account jointly held by NNPC and CBN.
- 9 NNPC sometimes withheld funds from the Crude Oil Account, ostensibly to pay its operational expenses, including the costs of selling fuel at subsidized prices.
- 10 Once a month, NNPC instructed CBN to transfer funds remaining in the Crude Oil Account to the Federation Account.

Shown graphically, the deal worked like this:



Once every two months, the parties were supposed to meet at an agreed location to reconcile the value of the crude the traders lifted versus the value of the fuel they delivered.³⁰

Our research, including a review of the contract, suggests that the Buhari administration should take the following steps to ensure future RPEAs contained fair and balanced terms.

2.1. CHOOSE COMPETENT PARTIES INSTEAD OF MIDDLEMEN

None of the parties chosen for the Duke RPEA were obvious candidates to manage a large-scale swap deal. After winning their contracts through opaque processes, all of them outsourced parts of the work—relying for instance on more experienced firms to sell the crude oil or source the refined products involved in the deal. The use of low-capacity, well-connected middlemen is a problem in NNPC oil sales generally. (For more on this, see pages 44-55 of the main report.) Also, assuming that the middlemen capture a margin, it follows that NNPC could potentially have kept that margin for itself had it dealt directly with a buyer instead of bringing extra players into the deal.

Although the analysis that follows focuses largely on deals between NNPC and Nigerian companies, we do not believe that either indigenous or foreign companies, as a group, are better equipped to manage NNPC's swaps. Likewise, choosing one group over the other will not necessarily fix or worsen the problems past deals had. Going forward,

government will receive the best returns if it negotiates and signs detailed, balanced contracts awarded to companies that can competitively demonstrate they have the capacity to manage the deals themselves instead of outsourcing the work in exchange for easy financial margins.

Duke. NNPC set up its subsidiary Duke in the 1980s as its full-service trading arm, yet the company never developed the capacity to fully market oil itself. (For more on NNPC's trading subsidiaries, see main report p.55) According to a 2012 government committee, in all of NNPC's oil trading subsidiaries, "capacity is limited, and most function as financial and operational black boxes." A former top Duke executive added: "Nothing much is going on there, and the workers probably wouldn't know how to trade oil in the market if somebody asked them." 32

Immediately after receiving its 90,000 barrel a day swap contract from PPMC in January 2011, as noted above, Duke signed three powers of attorney and operation and management agreements with Taleveras, Aiteo and Ontario. In exchange for the rights to manage 30,000 barrels a day of Duke's contract with PPMC, Taleveras agreed to pay Duke "commissions" of \$0.08/barrel for the crude they lifted under the deal, and \$5/metric ton for any products they imported to Nigeria. This could amount to significant revenue over time: assuming Aiteo and Ontario made the same commitments in their management subcontracts with Duke, Duke would have received nearly \$17 million in commissions in the first year alone (figure B4).

	Volumes shipped	Commission per unit (\$)*	Total commission due (\$)
Crude	30,594,110 barrels ³⁴	\$0.08	\$2,447,528.80
Products	2,908,374 MT ³⁵	\$5.00	\$14,541,870.00
		TOTAL	\$16,989,398.80

*These rates are from the Duke-Taleveras Subcontract. We applied them to the full amounts of crude and products the three traders handled in 2011, but the actual commissions in the other Aiteo and Ontario subcontracts are unknown to us.

It is not obvious why Duke would need this cash, having outsourced most of its responsibilities to three private oil traders. Under its subcontract, Taleveras agreed to fully "manage" 30,000 barrels per day of Duke's deal with PPMC.³⁶ Three powers of attorney gave each of them power to "operate, execute and deliver" one-third of Duke's contract.³⁷ In effect, this relieved Duke of its obligations to lift, finance, buy, sell or transport crude and products under its swap deal. As such, its costs to manage the RPEA should have been low.

Figure B4. Hypothetical commissions payable to Duke under its RPEA, 2011

Sources: NNPC Crude Oil Lifting Profiles for Domestic Consumption, Jan-Dec 2011; NEITI 2009-11 Physical and Process Audit Report.

³¹ Federal Ministry of Petroleum Resources, Report of the Petroleum Revenue Special Task Force (Nuhu Ribadu, chair) ("the PRSTF Report"), August 2012, p. 75.

³² Author interview, 2014.

³³ Payments were due within 30 days of lifting oil. See e.g., Duke-Taleveras Operation and Management Agreement ("the Duke-Taleveras Subcontract"), January 2011, Article 4.2.

³⁴ Collectively, Taleveras, Ontario and Aiteo were allocated 33 cargoes of oil on behalf of Duke in 2011. Most were shipments of Qua Iboe (21 cargoes) or Bonny Light (6 cargoes), followed by Amenam (two to Ontario, one to Aiteo), Brass Blend (one to Ontario, one to Taleveras) and Escravos (two to Taleveras). NNPC Crude Oil Lifting Profiles for Domestic Consumption, January-December 2011

³⁵ This figure is taken from data NNPC disclosed to NEITI. We cannot independently verify its accuracy.

³⁶ See the Duke-Taleveras Subcontract, Art.1.

³⁷ See e.g., Duke Oil Inc.-Taleveras Petroleum Trading BV, Power of Attorney executed January 24, 2011, Paragraph 1.

Also unclear are the final recipients of Duke's commissions. The contracts do not name specific accounts for lodging payments. No commissions were booked by Duke Oil Services Ltd. (UK), which had gross income of less than £1 million in 2011 and 2012. 38 January 2011 meeting notes show Duke assigning its swap contract to its offshore Panamanian arm Duke Oil Incorporated, an entity that does not publish financial statements or disclose the identity of its shareholders. 39 Moreover, because NNPC does not disclose its financials, there is no way of knowing whether Duke transferred any earnings from the swap to its parent company, or in turn whether NNPC forwarded anything to the country's Federation Account. (For more on revenue remittances by NNPC's trading companies, see main report p.55.) We asked NNPC, PPMC and Duke about this, but they did not respond.

The three traders. Aiteo and Ontario had very limited industry profiles before signing their 2011 subcontracts with Duke. Both won their first NNPC term contracts to lift crude in 2011, before which their experience was limited. Their shares of the Nigerian crude and products markets grew rapidly under the Jonathan government. Taleveras started lifting crude in 2008. All three contracted with larger international companies to move some or all of the hydrocarbons in their swap deals, though they did independently secure their own letters of credit for the crude and did varying degrees of marketing on their own. In 2011, for example, Morgan Stanley received most of Taleveras' swap cargoes, and Shell and Vitol bought most of Aiteo's crude. Ontario relied on a few foreign traders to take its allocation to market, both in 2011 and later (figure B5).

- 38 According to documents filed with the U.K. Companies House, Duke Oil Services's sole source of income in 2012 was GBP979,762 in "management services" fees from Duke Oil Incorporated in Panama. Amounts for 2011 were smaller. Duke Oil Services Ltd., Directors Report and Financial Statements for the Year Ended 31 December 2012.
- 39 As indicated by Minutes of Meeting between Duke Oil Inc. and Taleveras Petroleum Trading BV et al., held at NNPC Towers on 21 January 2011, p.2; and by Duke Oil Inc.-Taleveras Petroleum Trading BV, power of attorney executed January 24, 2011.
- 40 Over the 2000s, Aiteo had supplied and purchased some products in Nigeria, as had its sister companies Sigmund and Avidor Oil and Gas. We found no evidence of Ontario having a track record in product imports. PPPRA documents and market intelligence data on file with NRGI. See also *Energy Intelligence*, "Elections Add Complications to Nigerian Oil Trade," May 23, 2011.
- 41 Taleveras wrote to us that it "prioritizes selling crude oil directly to end users, and has maintained business relationships with refineries around the world for many years." The company added that it could not disclose the names of its clients for confidentiality reasons. Taleveras, 12 May 2015 letter to NRGI. Before Morgan Stanley, Taleveras sold most of its crude cargoes to ConocoPhillips. Market intelligence data on file with NRGI.
- 42 For the last five years, Aiteo has relied heavily on Shell to move the hydrocarbons from its Nigerian swap deals. By comparing NNPC sales records with market intelligence data, we found that Shell lifted 17 out of 37 cargoes allocated to Aiteo under the PPMC-Duke RPEA. (Aiteo received more than 37 cargoes during the life of the deal, but we did not obtain the relevant NNPC records for some months.) Shell's share of the crude from Aiteo's 2015 OPA has been even higher: the IOC lifted all but one of the cargoes from the deal's first five months. Some traders and industry consultants also claimed that Shell blended and supplied gasoline to Aiteo under its swaps, though we could not track Aiteo's gasoline shipments back to their origins. Author interviews, 2014-2015. Beyond the swaps, Shell also marketed crude cargoes that NNPC allocated to Aiteo and some of its sister companies under regular term contracts. These included 2011-2012 liftings for Valeska Tankers (five of six identified liftings) and for Avidor Oil and Gas (nine of 12), which has had a contract since 2011. The IOC bought the latter's cargoes so reliably that some traders began calling Avidor's crude allocation from NNPC "the Shell term contract." Author interviews, 2015.
- 43 Market intelligence data on file with NRGI.

Trader	Lifter(s)	Refiners*	Banks issuing letters of credit
Taleveras	Morgan Stanley	BPCL, Petrobras, ConocoPhillips66,Sunoco, Petroineos	BNP Paribas
Aiteo	Shell, Vitol	Sunoco, Sonara	Standard Chartered, Sun International
Ontario	Vitol, Gunvor, Glencore	BP, Indian Oil Corporation	First Bank Nigeria

^{*} Data on refiners included merely to show final destinations of liftings. The RPEAs did not require the parties to refine any of the oil lifted, or include refiners as parties.

Figure B5. Some of the lifters, refiners and financiers of swap crude oil cargoes, 2011

Source: Pre-shipment inspection reports; author interviews; market intelligence data on file with NRGI NOTE: List may not be complete as data was not available for all cargoes lifted.

On the products side, 2011 NEITI and NNPC documents show that all three traders bought their gasoline and kerosene off of large mother ships, mostly anchored offshore of Togo or Benin, instead of sourcing it directly from Europe or other markets. ⁴⁴ Foreign products traders loaded fuel aboard the mother ships and sailed them to the Gulf of Guinea. The three traders then chartered smaller ships, picked up products by shipto-ship transfer (STS) and carried them the short distance to Nigeria for discharge. ⁴⁵ This system built in added layers of players and costs that gave PPMC no obvious benefit, as PPMC could have dealt directly with traders that could deliver fuel from a foreign refinery or storage facility. Interviewees doubted that Aiteo and Ontario had experienced crude or products traders on staff when they signed the agreement with Duke. ⁴⁶ In later years, more of the vessels delivering products on behalf of the three traders sailed directly from Europe or other markets, though some of the traders still depended on foreign trading and refining companies to help organize the deliveries. ⁴⁷

We sent letters to each of the three traders asking about their qualifications and staff strengths at the time of their selection. Only Taleveras replied. The company told us that it "has been importing refined products into Nigeria and West Africa since 2004 and lifting crude oil since early 2008." On the question of in-house trading capability, Taleveras said only that its "trading personnel have over 75 years of combined experience in the Oil & Gas Industry with previous employers including Global Investment Banks, Major refiners and several large international trading houses."⁴⁸

⁴⁴ NEITI, 2009-11 Physical and Process Audit, Appendix C, Part 5.

⁴⁵ Author interviews, trading company personnel and industry consultants, 2015. This became a common practice under the PPPRA gasoline import system as well. Reflecting this, the PPPRA gasoline pricing template for calculating fuel subsidy has an allowance for transshipment costs.

⁴⁶ Author interviews, trading company personnel and industry consultants, 2014-2015.

⁴⁷ For instance, 2013-2015 tanker market reports on file with NRGI showed that Lukoil subsidiary Litasco and UK-French Petroineos chartered some of the ships that delivered gasoline to PPMC for Ontario.

⁴⁸ Taleveras, May 12, 2015 letter to NRGI.

Finally, Aiteo and Ontario were also implicated in Nigeria's 2012 \$6.8 billion domestic gasoline subsidy scandal. A government committee ultimately cleared Aiteo of fraud,⁴⁹ though not of other alleged abuses of the subsidy claims process.⁵⁰ Federal prosecutors charged Ontario with nine criminal counts.⁵¹ The company and its principals have been in court since 2012, yet Duke continued to renew Ontario's subcontract through late 2014.

2.2. BALANCE THE PRICING PROVISIONS IN THE CONTRACT

Fair pricing is critical to extracting decent value from an RPEA. The PPMC-Duke contract shows why: it specified that the amount of gasoline or kerosene Duke had to deliver was "based on the value of the crude oil" taken away. ⁵² In other words, the products supplied had to be of equal value to the crude, minus certain agreed costs and fees. Every two months, the parties were supposed to determine whether Duke had met its obligations by reconciling invoices for products the three traders had supplied for Duke against PPMC's invoices for the crude the three lifted. ⁵³ Under this system, Nigeria necessarily would get fewer products if the crude was priced low or the products high.

According to our examination of past practices, NNPC would at a minimum need to do the following for any new RPEAs:

Use regular NNPC OSPs to price all crude oil lifted. Several industry sources consulted for this report claimed, without offering hard supporting evidence, that NNPC "underpriced" at least some the oil it exchanged for products under the Duke RPEA. According to them, PPMC invoiced the three traders for the oil lifted at sizable discounts to the official selling prices (OSPs) that NNPC's subsidiary, the Crude Oil Marketing Division (COMD), sets for Nigerian crude sales each month. ⁵⁴

- 49 Specifically, Aiteo's bank initially disclaimed one transaction worth ₹2.9 billion, and two other subsidy payments to it worth ₹4.0 billion were not supported by proper documents. Aig Technical Committee Report p. 87-88. But a subsequent report by a presidential committee with similar members "verified as legitimate" all subsidy payments Aiteo received in 2011. Presidential Committee on Verification and Reconciliation of Fuel Subsidy Payments, final report ("Presidential Committee Report"), 2012, p. 12.
- 50 For example, the Aig Technical Committee found that Aiteo underperformed on their gasoline supply obligations to PPMC in 2011 but did not pay a required ★20 million "re-engagement fee" for each quarter in which they underperformed. Aiteo also received fuel import permits from PPPRA before applying, and received a gasoline import allocation before signing a contract with PPPRA. Aig Technical Committee Report, p.69, 74. Neither the presidential committee nor any body appears to have contradicted these claims.
- 51 Initially, an early-2012 parliamentary probe accused Ontario of collecting ₹4,248,727,148 in "unmerited" subsidy payments. Nigerian House of Representatives, Report of the Ad-Hoc Committee To Verify and Determine the Actual Subsidy Requirements and Monitor the Implementation of the Subsidy Regime in Nigeria (Farouk Lawan, chair) ("the Lawan Report"), April 2012, p.169 Thereafter, the presidential committee found four transactions in 2011 worth ₹4,585,421,262 that it could not verify as legitimate. Presidential Committee report, p.14. In August 2012, prosecutors arraigned Ontario and several of its executives in Federal High Court for obtaining property by false pretenses, alteration, forgery and conspiracy. The government alleged that the company claimed subsidy worth ₹414 million on 7 million liters of gasoline that it did not actually import. *Premium Times*, "₹1.9bn subsidy fraud: Alleged fraudsters submitted forged documents, EFCC tells court," July 25, 2013, available at: http://www.premiumtimesng.com/news/141660-n1-9bn-subsidy-fraud-alleged-fraudsters-submitted-forged-documents-efcc-tells-court.html.
- 52 PPMC-Duke RPEA, Art. 3(B)(vi). The contracts also say the traders will deliver to PPMC "products of equal value to the crude oil received." PPMC-Duke RPEA, Prologue point 4.
- 53 PPMC-Duke RPEA Art. 9(C)-(D); Art 17.
- 54 Author interviews, traders, industry consultant and oil journalist, 2013-14. For more on OSPs, see main report p.18 and 58.

We were unable to corroborate these claims. However, the Duke contract did leave open the possibility of sub-OSP sales. At first glance, the contract seems to call for the use of COMD's OSPs. As with NNPC's regular export sales, the oil in the RPEA was supposed to be priced in US dollars at a monthly premium or discount to the light sweet oil benchmark Dated Brent. Duke could choose from the same three pricing options (advanced, deferred or prompt) that NNPC export buyers have. ⁵⁵

But on a closer look, the contract picked PPMC, not NNPC COMD, as the party to set "official selling prices" for RPEA crude. This meant that PPMC could choose both the discount or premium to Brent and the pricing option costs. Unlike a standard NNPC term contract to lift crude, the RPEA does not define "official selling prices," nor does it mention COMD or its OSPs. It also differs from a standard NNPC term contract by not containing a provision specifying how many days of Platts quotations PPMC must average to fix the benchmark price for a cargo of crude. (A standard NNPC COMD term contract calls for five consecutive quotes.) All the Duke contract says is that the benchmark will be "the average of mid-range quotations for Dated Brent as published by Platts." This omission would have given the parties legal space to engage in price arbitrage, though we have seen no evidence that they in fact did so.

In its 2014 audit of NNPC oil sales, PwC found three cargoes of crude sold under an RPEA that were not priced at OSP. One was lifted by Aiteo pursuant to the Duke deal; Trafigura lifted the other two under its 60,000 barrel a day RPEA (figure 6). It is unclear whether these instances suggest a larger pattern or were one-off cases. We asked Trafigura about the two cargoes shown in figure B6, but it chose not to answer that question unless we signed a confidentiality agreement for purposes of the disclosure. NNPC told the Senate in February 2014 that it did not underprice RPEA crude, and that all pricing under the contracts was "based on the international market value of the petroleum products against the prevailing International market value of the crude oil." 58

Bill of lading (B/L) date	Trader	Crude grade	Barrels	Price used (\$)	Expected price (\$)	Under/over- payment (\$)
11/21/2012	Aiteo	Amenam	949,566	\$110.269	\$110.296	\$25,638.28
5/20/2013	Trafigura	Bonny Light	949,729	\$105.034	\$105.485	\$-428,327.78
7/30/2013	Trafigura	Forcados	906,088	\$110.766	\$112.116	\$1,223,218.80

Figure B6. Non-OSP pricing in RPEA crude oil invoices as found by PwC, 2012-2013

Source: PwC report p.141

Review the cost structures behind pricing premiums for gasoline and kerosene.

Any country that depends on imported fuel has to offer premiums that are generous enough to attract suppliers. As is typical for a West African fuel import contract, the Duke RPEA used formulas to price the products the three traders delivered. Similar to the rules for crude, the formulas consisted of a benchmark quoted by Platts plus a perunit premium (figure B7). The premiums are meant to cover some of the costs incurred by the trader, but also reflect the specific qualities of the particular type of product required by the Nigerian market.

⁵⁵ PPMC-Duke RPEA Art.9(A).

⁵⁶ Ibid.

⁵⁷ NRGI correspondence with Trafigura.

⁵⁸ NNPC, Response to the Memorandum Submitted by the Governor of CBN to the Senate Committee on Finance on the Non-Remittance of Oil Revenue to the Federation Account ("NNPC Response to Sanusi"), February 2014, p.7.

Product	Benchmark	Premium/MT
Gasoline	Average of 5 consecutive quotes for "Barges FOB Rotterdam" for Premium Gasoline 10ppm, as published in Platts European Marketscan (cargo's bill of lading date=day 3 of 5)	\$81.28
Kerosene	Average of 5 consecutive quotes for "CFI N.W.E. Basis ARA" for Jet A-1, as published in Platts European Marketscan (cargo's bill of lading date=day 3 of 5)	\$86.28

Figure B7. Product pricing formulas in the PPMC-Duke RPEA

Source: PPMC-Duke RPEA Art. 9(B)

While the two benchmarks are typical for Nigeria, industry experts told us that the premiums—both above \$80 per metric ton—were quite high. For example, multiple industry sources claimed that the full costs of delivering gasoline to Nigeria rarely top "Barges FOB Rotterdam" plus \$40/MT. When gasoline prices dip in the summer, two sources said, traders sometime can deliver at "barges flat"—meaning they don't require any premium to break even—or even at discounts of barges minus \$20/MT. Other interviewees thought it would seldom cost a trader more than benchmark plus \$10 or \$20/MT to deliver a cargo of kerosene to Nigeria. Wou could send that grade of kerosene from just about anywhere in the world to anywhere else and make a fantastic return at \$86 a ton," one West African products trader said after reviewing the Duke contract. By contrast, in their responses to our letters, Taleveras and Trafigura argued that the prices in their RPEAs were reasonable, with Taleveras claiming that "many cargoes make a loss at such premiums." The company claimed that it sometimes purchased gasoline cargoes for delivery to Nigeria at prices as high as benchmark plus \$50/MT.

Whether or not the PPMC-Duke premiums were fair to both sides, we recommend that the new government scrutinize the price structure of supplying products under an RPEA before signing any new deals. This will entail due diligence, studies and consultations with independent analysts and industry players. Traders often will have the best intelligence, given the opacity and large information asymmetries in the West African products market. To some extent, information asymmetry is an inevitable consequence of depending on outsiders for fuel. But officials should not listen solely to them, as most will naturally have their own agendas. Instead, the new government should cast a broader net in order to:

• Track what traders pay third parties for the products they deliver to Nigeria. As with OSP pricing in the crude market, product benchmarks like the ones in the PPMC-Duke RPEA are supposed to be good estimates of the product's market value. Yet Nigerian-grade gasoline and kerosene have their own unique qualities and demand patterns for which contract premiums are supposed to reflect. It is too simplistic to see the premium as merely a grab bag of added costs over and above what the trader had to pay a third-party seller for the products.

⁵⁹ Author interviews, traders and industry consultants, 2014-15. One experienced Nigerian fuel trader called the PPMC-Duke premiums "ridiculous" and added that as a "rule of thumb" a trader with an RPEA should be able fully deliver both products to NNPC at \$30 to \$40 per MT over the benchmark...

⁶⁰ Author interviews, WAfr gasoline traders and market analysts, 2014 and 2015. See also *International Oil Daily*, "Nigeria Reshuffles Controversial Deals with Oil Traders," December 23, 2014. One Nigerian gasoline trader thought this estimate was too low, however. Interview, 2015.

⁶¹ Author interviews, trader and West African products market analyst, 2015.

⁶² Author interview, 2015.

 $^{63\}quad \text{Taleveras and Trafigura, May-July 2015 correspondence and teleconferences with NRGI.}$

⁶⁴ Taleveras, July 17, 2015 letter to NRGI.

- Understand which costs should be included in the premiums. Under an RPEA, a trader
 can recoup costs either in the product premiums or through separate standalone
 charges. To prevent double-charging, the government should understand which
 costs belong under which headings. Future contracts should include a clear list of
 which costs the trader can and cannot recoup in direct offsets.
- Compile a master list of trader costs under an RPEA. Traders incur a range of costs in their execution of swap deals, including many payments to third-party service providers (e.g., freight, inspection fees, bank finance charges) or to governments (e.g., port dues, harbor taxes). Unless the RPEA allows the trader to invoice NNPC-PPMC separately for these and be paid either in cash or in oil, the premiums are meant to reflect these costs. The complex ways in which PPMC asked the three traders to deliver products under the PPMC-Duke RPEA probably increased the number of expenses they had to pay. ⁶⁵ In correspondence with NRGI, Taleveras listed no less than 25 items that should be factored into RPEA pricing premiums; ⁶⁶ NNPC officials enumerated seven "basic components" when testifying before the Senate Finance Committee; ⁶⁷ and interviewees for this report gave shorter but differing tallies. ⁶⁸ The government should know exactly what costs the traders will likely incur before it negotiates future premiums.
- Develop cost benchmarks where possible. Cost benchmarking is a basic tool in the petroleum sector for promoting fair prices. At present, only a few possible components of pricing premiums for a Nigerian RPEA are based on published, transparent, industry standard quotes—freight, demurrage and port fees, for example.⁶⁹

⁶⁵ Some of the costs originate from the fact that PPMC ordered RPEA holders to discharge the products they delivered in complex ways, often involving multiple port calls and instances of ship-to-ship transfer (STS) with smaller lightering vessels. Trafigura, in a 7 May 2015 written response to questions from NRGI, noted that "typically, products would be discharged into shore tanks and, in part, into PPMC vessels by ship to ship (STS) transfer of product or via discharge on an single point mooring (SPM) — as such, a higher than average premium would be warranted on the basis of complexity (and therefore cost) of delivery."

⁶⁶ Taleveras, 12 May 2015 letter to NRGI. In a subsequent (July 17, 2015) letter, Taleveras estimated that its total costs, before the costs of purchasing the fuel, could be as high as \$103/MT. The company later clarified that typical costs were "in the range of \$50-100/MT." July 31, 2015 correspondence with NRGI. Taleveras added that "There are numerous other costs that should also be taken into account, not least cost of personnel, office overheads, publication subscription etc." Letter p. 2. We have not independently verified the numbers.

⁶⁷ These were "Freight, Insurance, Financing (L/C Administration charges), Port dues, Interest, Demurrage, Trader's margin." NNPC Response to Sanusi p. 9.

⁶⁸ Interviews, traders, industry consultants and shipping agents, 2014-2015.

⁶⁹ Interviews, 2014-2015.

• Arrive at fair credit and performance risk premiums. One common argument for higher premiums is that supplying fuel to the Nigerian government is a risky business. Traders can come up against everything from long wait times at discharge points and multi-year payment delays to pirate attacks. 70 Trafigura noted that under its RPEA, it sometimes delivered products to PPMC before lifting a cargo of crude as payment for the products. Several players also pointed out that the RPEA premiums were much lower per ton that what suppliers received at the end of the PPMC open account system in 2011.71

While these points are valid, the new government should not allow traders to overplay them. The premiums for open account imports were high because suppliers had no financial security and PPMC had a dismal payment record. Contract holders had to deliver fuel to PPMC and hope the company would pay them within 45 days. By 2010, the company's rate of failure to pay was increasing. Traders who supplied PPMC toward the end of the open account system said that around half of the \$90- or \$100-plus premiums they negotiated were meant to cover their finance risks, including the years of bank interest and penalty charges PPMC would never cover.⁷²

The holders of PPMC's RPEAs since 2011 have not faced similarly serious default risks. The crude they lifted was the financing for the products they supplied. So long as NNPC gave them regular cargoes, their finance costs should have been low—mainly the cost of securing bank letters of credit for the crude they lifted. According to documents we reviewed for 2011, the three traders managing the Duke RPEA nearly always lifted oil before they delivered fuel. The companies did not bear anywhere near the same risks that PPMC would pay them years late, if at all.

• Open up kerosene supply to new players. The market for Nigerian-grade kerosene is smaller and even less transparent than the one for gasoline. This is partly because of quality specifications: Nigerian regulations and PPMC contracts demand that imported kerosene have a higher flash point than what most refiners can offer. Yet PPMC is also the country's only authorized importer of kerosene, and for years, it has bought nearly all of its kerosene imports from a few traders, Trafigura and Sahara above all. This has created a quasi-monopoly situation where market fundamentals are hidden from view. Asked about supply costs, one seasoned jet fuel trader replied, "It is impossible to run the numbers or break down costs, since the [Nigerian kerosene] market is so opaque and only has a few players. Nobody but the companies involved even bother to run the numbers anymore."

⁷⁰ For a summary of the main risks involved, see NEITI, 2012 Oil and Gas Audit Report p. 288.

⁷¹ NNPC told the Senate Finance Committee, for instance, that the premiums in the RPEAs were as much as \$25/MT lower than those in some of the last open account deals of 2010 and 2011. For this reason, the corporation claimed, switching to swaps saved the country \$144.3 million in 2011 alone. NNPC response to Sanusi p. 8. We have not independently verified this number.

⁷² Interviews, 2014-2015.

⁷³ Kerosene's flash point is the lowest temperature at which the substance vaporizes and ignites.

⁷⁴ PPMC fuel import records on file with NRGI.

⁷⁵ Interview, jet fuel trader with a large trading house, 2015.

Explore options for adjusting the pricing premiums more regularly for changes in the market. NNPC officials told the Senate in February 2014 that the premium for gasoline in the RPEAs did not change from at least 2010 to 2013. The European gasoline market, where the contract holders sourced much of their gasoline, saw significant price changes in that time. Gasoline is also a seasonal product, with predictable price dips in summer months. Traders interviewed for this report said that gasoline import contracts outside Nigeria tend not to last longer than a quarter, and those that do tend to allow the parties to review prices periodically.

2.3. CLARIFY OTHER TERMS IN THE CONTRACT

Our review of the PPMC-Duke RPEA found a number of unclear or conflicting terms. Some of these described critical processes in a swap that should not be left open to discretion. The more terms the contract does not nail down, the more opportunities the parties will have to negotiate outcomes in an *ad hoc* fashion and behind closed doors at the periodic reconciliation meetings. More detailed contracts are also more transparent and easier to audit for compliance. While the observations we make here are no substitute for a full contract review by trading lawyers and experienced downstream sector consultants, we recommend at a minimum that any future Nigerian RPEA contain clearer rules in the following areas:

2.3.1. Delivery due dates for refined products.

Article 3(B) required Duke to deliver fuel within 30 days of the corresponding crude cargo's bill of lading (B/L) date, while Article 2(iv) specified 60 days. How much time a trader has to supply products is a basic term of an RPEA; it should not be left in doubt.

2.3.2. Documents and figures for determining fuel prices and amounts of fuel delivered.

As noted already, the parties to the PPMC-Duke RPEA used periodic, paper-based reconciliation exercises to determine whether the three traders had supplied enough fuel to pay PPMC for the oil they lifted. This two-party, closed door system is already a weak oversight mechanism. Moreover, the underlying contract was not clear on which numbers and pieces of paper the parties must use in two key areas:

Fuel prices. Multiple sources within and outside of government claimed that some traders supplying fuel to PPMC falsify the date on a cargo's B/L in order to charge PPMC a higher price. This was possible because the fuel was priced using an average of published Platts quotations, and the B/L date determined which quotes to use. By shifting the date to a period when quotes were higher, some traders allegedly could overcharge PPMC by hundreds of thousands—or in extreme cases, even millions—of dollars for a cargo. So

⁷⁶ NNPC Response to Sanusi p. 8.

⁷⁷ Trafigura told NRGI that its "agreed premium did not take into consideration the seasonality of demand—this was ultimately to the benefit of PPMC. In negotiations, Trafigura formally proposed a two-tier pricing agreement however this was rejected by PPMC who, we understand, sought greater simplicity." Trafigura, 12 May 2015 letter to NRGI.

⁷⁸ Author interviews, 2015.

⁷⁹ Author interviews, trading company personnel, industry consultants, EFCC, NNPC and PPPRA officials, 2012-2015.

⁸⁰ Ibid.

By its terms, the PPMC-Duke RPEA carried similar risks, though our research found no definite cases of misconduct. As noted above (see figure B7), Article 9.B of the contract provided that the date on each refined product cargo's B/L determined which five Platts quotes should be averaged to fix the price benchmark for the cargo. As we explain below, delivering fuel to PPMC under the swap often involves multiple vessels. The complex vessel traffic patterns can result in the creation of multiple B/Ls for a single delivery, including but not necessarily limited to:

- One or more B/Ls issued when the cargo is loaded onto the first, usually larger tanker (called the "mother vessel") that collects the fuel from a foreign refinery or storage tank and takes it to Nigeria
- One or more B/Ls issued for parts of the fuel aboard the mother vessel, in cases where
 the original cargo is split into smaller parcels and discharged at multiple onshore
 locations in Nigeria, or pumped into one or more smaller tankers (called "lighter
 vessels") by ship-to-ship transfer (STS) offshore of Nigeria for further delivery.

Each of these B/Ls can have different dates, sometimes weeks or even months apart. Unfortunately, the PPMC-Duke RPEA did not state which of them the parties should use when figuring product prices. The provisions on invoicing simply said that for each fuel cargo, Duke was supposed to send PPMC "an invoice representing 100 percent of the contractual value of the Refined Products delivered" backed by a "clean on board ocean Bill(s) of Lading."⁸¹ The contract did contain a few basic safeguards against B/L date manipulation, ⁸² and according to Taleveras and some industry consultants, PPMC settled on the practice of using mother vessel B/L dates for pricing products. ⁸³ If this is correct, there is no reason why such a practice would not be written explicitly into the agreement. Moreover, through reviews of records for product deliveries under PPMC's RPEAs we found cases where the B/L dates used to price the fuel were contradictory—though again, this alone is not clear proof of abuse. ⁸⁴

Amounts of fuel delivered. The PPMC-Duke RPEA did not give the parties clear rules about which source document to use when establishing how much fuel the three traders had supplied. Articles 8.3.1-2 of the contract required representatives of a private inspection firm to measure the quantities of products discharged in Nigeria for each shipment of fuel under the deal. Article 8.3.1 said the numbers in the inspector's final report "shall be the basis for the determination of [...] quantity and shall be binding on the Parties." This language suggests that PPMC and the three traders were supposed to use outturn quantity—that is, the amount of fuel finally discharged from a ship—to reconcile crude liftings against product deliveries, and that the inspector's report would be the authoritative document for that purpose.

⁸¹ PPMC-Duke RPEA Art.9(D)(i).

⁸² See Art.7.12 (stating maximum allowable days difference between a cargo's arrival in Nigeria and its B/L

⁸³ Author interviews, 2015; 10 July 2015 teleconference with Taleveras representatives.

⁸⁴ PPMC fuel import records on file with NRGI.

Contrast this with Article 9.D.ii, however, which required Duke—or in practice, the three traders—to use the quantity figure on a fuel cargo's B/L when invoicing PPMC for the cargo. Furthermore, language in Article 8(C)(ii) reads as if the parties were supposed use the numbers in fuel cargo invoices from the traders as the final figures for reconciling what the traders owed. ⁸⁵ And once again, the contract did not specify which B/L(s) the traders should have used to draw up their invoices. ⁸⁶

Our research ultimately did not arrive at a clear understanding of how, in practice, PPMC and the three traders figured how much fuel the latter was credited with supplying. Unpublished NNPC spreadsheets for RPEA products deliveries have columns for both outturn and B/L quantities, but no indication of which was used in reconciliation meetings. Traders and industry consultants said that PPMC usually reconciled accounts using the smaller of the two, but nowhere does the PPMC-Duke contract state that.⁸⁷ This was a potentially serious omission: outturn and B/L quantities for swap cargoes regularly varied by around 1,000 MT.⁸⁸ Moreover, as we explain in section 4, the PPMC fuel supply chain reportedly includes a number of established rackets that profit by diverting, double-charging or over-claiming products delivered. In such an environment, clear rules about how much fuel traders can claim are essential to ensuring fair returns.

2.3.3. Rules for calculating and paying demurrage

Demurrage is an extra payment the charterer of a ship owes the ship's owner if the vessel is forced to stay at its discharge point past an agreed period. So Poor onshore fuel discharge and storage infrastructure and the complex, sometimes chaotic vessel traffic patterns around PPMC fuel imports mean that the traders party to swap contracts routinely pay demurrage to the owners of the ships they charter.

⁸⁵ The provision reads: "The parties hereby agree that where the value of the unpaid refined product invoiced exceeds the value of the unpaid crude oil invoiced, or the value of unpaid refined product invoiced is below the value of unpaid crude oil invoiced, such excess or shortage (as the case may be) shall be determined and reconciled by the parties during the bi-monthly reconciliation meetings."

⁸⁶ Article 17 of the contract, which describes the reconciliation process, likewise did not list which documents to use

⁸⁷ Author interviews, 2015.

⁸⁸ Figures taken from NEITI, 2009-2011 Physical and Process Audit, Appendix C, Part 2.

⁸⁹ The basic rule under the PPMC-Duke RPEA was that demurrage on product deliveries started accruing 42 hours after a vessel tendered notice of readiness (NOR), an announcement to PPMC that it had arrived and was ready to discharge its cargo. PPMC-Duke RPEA Art.14. Demurrage rates vary by classes of ships and over time. Although various trade periodicals publish prevailing rates, a trader transporting fuel by ship to Nigeria would negotiate a unique rate with the ship-owner for each voyage.

Swap demurrage payments are a major point of revenue loss from NNPC crude sales. Payments are high in large part because of chronic congestion at Nigeria's ports and PPMC's chaotic systems for scheduling fuel discharges. The PPMC-Duke RPEA allowed Duke to reduce the amounts of fuel it delivered to recoup its demurrage costs. This effectively meant that the country paid for demurrage in oil. Available data shows large demurrage offsets under the contract. For example, in 2011, according to NEITI, PPMC owed Aiteo \$23,118,074 on vessels carrying 949,143 MT of gasoline and kerosene. By dividing that figure by the total barrels of crude Aiteo lifted (10,231,122), we can estimate that demurrage under Aiteo's part of the Duke RPEA cost the nation an average of \$2.26 a barrel in 2011. Numbers for Taleveras and Ontario's product deliveries were similar. 90 NNPC also unilaterally deducts the value of swap demurrage offsets from domestic crude sale revenues, arguing that it should be reimbursed for the costs of maintaining a "strategic reserve" of fuel for the country. 91

Our research revealed some confusion about how PPMC calculated the amounts of demurrage it covered under the PPMC-Duke RPEA. Article 14.2(iv) of the contract obligated it to "pay demurrage [...] based on verifiable charter party rates." Yet traders and industry consultants claimed that PPMC has a longstanding practice of paying traders for demurrage based on average freight rate assessment (AFRA) figures published by the London Tanker Brokers Panel. AFRA rates, the interviews said, tend to be lower than charter party rates. Yet added that PPMC and traders typically "negotiate" demurrage rates during reconciliation meetings. How Similarly, NNPC told PwC that demurrage under the swaps is "agreed" at the reconciliation table.

Available information shows that the process of agreeing demurrage is not always straightforward. For example, NNPC told the Senate Finance Committee and PwC that it paid \$207.9 million in demurrage on all of the swaps contracts between January 2012 and July 2013. Yet during its audit, PwC could not verify \$64.8 million—or 31 percent—of the claims. ⁹⁶ Prior to the swaps, a 2004 presidential inquiry reportedly accused traders of overcharging PPMC \$108 million for demurrage on open account imports in two years. Seven senior NNPC managers were eventually sacked in the scandal. ⁹⁷

Finally, the PPMC-Duke RPEA did not contain enough supporting rules for calculating what PPMC owed to the traders. For instance, the contract did not have detailed provisions laying out when demurrage would stop running, and did not list the documents that must accompany demurrage claims.

⁹⁰ NEITI, 2009-2011 Physical and Process Audit Report p.129.

⁹¹ Annex A, p.A9-A16.

⁹² A charter party is the contract between the owner of a vessel and the charterer for the use of the vessel.

⁹³ Author interviews, 2015. Art.14.2(v) of the PPMC-Duke RPEA specified that PPMC would use AFRA rates to calculate demurrage payable on crude liftings, but not on product deliveries.

⁹⁴ Author interviews, 2015.

⁹⁵ PwC Report p. 114.

⁹⁶ Id., p. 37, 104-105.

⁹⁷ Mail & Guardian, "Nigeria sacks seven top oil executives," 19 April 2004, available at: http://mg.co.za/article/2004-04-19-nigeria-sacks-seven-top-oil-executives.

3. Abandoning OPAs: The 2010 SIR and 2015 Aiteo deals

The 2010 SIR and 2015 Aiteo OPAs are strong examples of why Nigeria should not sign more OPAs.

As mentioned above, under an OPA, the contract holder—either a refiner or trading company—is supposed to lift a certain amount of crude, refine it abroad, and deliver the resulting products back to NNPC. The contracts lay out the expected product yield (i.e., the respective amounts of diesel, kerosene, gasoline, etc.) that the refinery will produce from the particular grade of crude lifted. The company can also pay cash to NNPC for any products that Nigeria does not need. In 2010 to 2014, NNPC allocated 60,000 barrels a day to an OPA with SIR, the state-owned refinery in Côte d'Ivoire. This deal was managed by Sahara Energy Resources. In 2015, it launched two large OPAs of 90,000 barrels a day each with Sahara and Aiteo.

Some may argue that current market conditions favor choosing an OPA, but the advantages are not strong enough to override the negatives. Because the contract holder's fuel supply obligations are based on weight rather than price, OPAs could seem like an easier sell in this time of low, volatile oil prices and lackluster demand for Nigerian crude. But this upside does not appear to have come about. The SIR OPA did not help Nigeria find buyers for hard-to-sell crude. On the contrary, the grades of oil that PPMC ran through the OPA—mostly Yoho, Brass and Escravos—were among the country's priciest and most desirable at the time. Neither did PPMC use it to hedge against volatile world fuel prices or shifts in local demand, or to settle its existing fuel import debts.

As shown below, an OPA's inherent complexity makes it more opaque than an RPEA—and more open to abuse. The SIR and Aiteo deals were much more byzantine arrangements than the PPMC-Duke RPEA: they sent more streams of oil, fuel and money flowing in different directions, and relied on more formulas, conversions and moving parts. It is more difficult to monitor whether an OPA delivers fair value. RPEAs deliver poor value when their prices are suboptimal or they are mismanaged. By contrast, price and governance are but two factors affecting whether an OPA delivers value for a country. Our analysis of the Aiteo and SIR deals shows that Nigeria can win or lose based on many additional, highly technical and market variables—e.g. refining configurations and fees, freight costs, fuel quality specifications—that few officials can effectively negotiate or monitor.

We also found more points of possible government revenue loss in the OPAs than in the PPMC-Duke RPEA. The analysis that follows explains several of them, but it is by no means exhaustive. Parts of the contract were poorly drafted, creating ambiguities that may have been costly for Nigeria, depending on how the parties read them. Likewise, industry sources we interviewed consistently thought that the OPA contracts were

⁹⁸ For more on these problems, see main report p.21.

⁹⁹ In the 2000s, the national oil companies Pemex and PDVSA signed perhaps the most touted OPAs, which incentivized U.S. refiners to process their heavy, expensive-to-refine crudes. While interest in Nigeria's premium light sweet crude has dropped off lately, it does not face the sort of chronic low demand that Mexico or Venezuela did.

¹⁰⁰ PPMC owed roughly \$400 million to OPA holders Sahara and BP/Nigermed around the time it signed contracts with them in 2010. PRSTF Report p.101 (reproducing figures as at 31 December 2011).

more lucrative for SIR-Sahara and Aiteo than an RPEA would have been. 101 If traders are lobbying especially hard for new OPAs right now, this suggests that the deals would favor them more than RPEAs would.

The OPAs also failed to respond to Nigeria's actual fuel needs. The PPMC-SIR and Aiteo contracts called for six refined products when NNPC only required two—gasoline and kerosene. Sahara was supposed to make periodic payments for three of the others into unspecified NNPC accounts. An RPEA would have delivered only the products that Nigeria wanted.

To understand the basic mechanics of the OPA deals, it is crucial to appreciate that the contracts were structured in ways that did not reflect how they were actually run. Most notably, these two offshore refining deals have involved little or no refining. The SIR deal's main premise was that SIR would process oil that NNPC's troubled refineries could not. The product yields contained in the contract reflected typical outputs from its Abidjan plant (i.e., the precise mix of products that would result from the processing of particular Nigerian grades of crude). But PPMC and Sahara bypassed SIR altogether and ran the deal like an RPEA. Sahara sold the crude on the open market, and then imported the products due after buying them from a wide range of sources. Despite this, the deal remained governed by the SIR yield patterns, even though none of the refining happened in Abidjan.

The text of the Aiteo OPA does not specify that the oil will be processed by a particular refinery. Instead, the contract notes only that Aiteo "has access to operational refineries, whose services it shall make available." ¹⁰² But after tracking shipments of crude and fuel under the deal, we found no evidence of Aiteo delivering any oil for refining. Instead, other companies—mainly Shell—lifted and marketed the oil and Aiteo purchased fuel from overseas gasoline blenders for delivery to NNPC. (For more on this point, see section 3.1.)

As we explain further in sections 3.2 and 3.3, these ill-suited contract terms have led to workarounds and adaptations that left the deals' inner workings even more veiled and discretionary. The SIR and Aiteo OPAs also did not expressly give the parties the option not to refine. Indeed, some of its language, read literally, would seem to require Sahara and Aiteo to have all the lifted oil processed at a refinery. 103

 $^{101\} Author\ interviews, traders, bankers, industry\ consultants,\ government\ officials\ and\ analysts,\ 2012-2015.$

^{102 2015} Aiteo OPA, Preamble sec.3; see also Art.1(xxi).

¹⁰³ See e.g., SIR OPA Art.4(i), 4(v), 6; Aiteo OPA Art.3.3, 4(i), 4(iii), 4(v), 6.1).

With this divergence between contract terms and practice in mind, we present below a summary of how the deals were *actually* operated. According to our analysis of the PPMC-SIR contract, other relevant documents and interviews conducted, ¹⁰⁴ the arrangement turned oil into fuel and money for Nigeria through the following steps:

- 1 NNPC allocated a cargo of crude (typically around 950,000 barrels) from the DCA to PPMC for offshore processing.
- 2 PPMC allocated the cargo to Sahara for lifting.
- 3 Sahara found a third-party buyer for the cargo and delivered it. The buyer paid Sahara for the cargo.
- 4 Under the terms of the OPA, Sahara, as subcontractor to SIR, owed specified amounts of six different products whenever it lifted a cargo of crude. PPMC was supposed to advise Sahara which products to actually deliver and which to settle rather through payment to PPMC. In general, the split was:
 - Delivered products: gasoline and kerosene
 - Products not delivered (cash in lieu): diesel, liquefied petroleum gas (LPG), vacuum gasoil (VGO), fuel oil

Sahara would purchase the delivered products from a third-party seller. The products could come from anywhere, so long as they met quality standards laid out in the OPA.

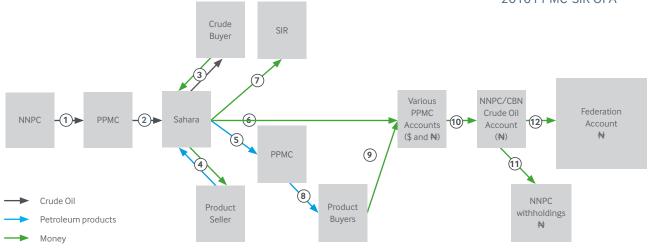
- 5 For deliveries, Sahara shipped the products to one or more import points in Nigeria specified by PPMC. The contract called for delivery within 60 days of the crude cargo's bill of lading (B/L) date.
- 6 For payments, Sahara was supposed to wire PPMC the value of any paid products it owed by the 15th of each month. At the same time, PPMC was supposed to pay Sahara for various costs that the OPA allowed Sahara, as SIR's stand-in, to recoup. These included freight, demurrage, inspection fees and a \$2.50-per-barrel crude oil processing fee.
- 7 Sahara separately committed to paying SIR a \$0.05/barrel commission for the right to manage the OPA—including rights to trade and profit from the oil lifted.
- 8 PPMC sold the delivered products to private buyers, assumedly in Nigeria. The buyers were a mix of wholesale marketers of fuel and retail customers at NNPC filling stations.
- 9 Proceeds from sales of the products were deposited into various PPMC accounts, mostly in naira.
- 10 Periodically, PPMC transferred some proceeds from refined product sales—and, we would assume, from the paid-in-lieu products—into a naira Crude Oil Account jointly held by NNPC and CBN.

¹⁰⁴ January 2011 SIR-Sahara Crude Oil Processing Supply Contract ("the SIR-Sahara Subcontract"); NEITI, 2009-11 Financial Audit Report p.15f.; NEITI, 2012 Oil and Gas Audit Report p.285f.; author interviews, traders, industry consultants and NNPC officials, 2012-14.

- 11 NNPC withheld some product sales proceeds from the Crude Oil Account, ostensibly to pay its operational expenses, including subsidy costs.
- 12 Once a month, NNPC instructed the central bank to transfer funds remaining in the Crude Oil Account to Federation Account, so it could be shared between the federal, state and local governments.

Or, shown graphically:

Figure B8. Main flows of oil, fuel and cash under the 2010 PPMC-SIR OPA



The workings of the Aiteo OPA are nearly identical, except that Aiteo contracted with NNPC rather than PPMC. We also assume it does not have to pay commissions to a refinery, as the contract does not include one as a named party.

Building on the broader concerns mentioned above, we detail three problem areas:

3.1. CHOICE OF PARTIES

As with the RPEAs, the choice of parties lacked adequate due diligence and followed an unclear rationale. As noted in other recommendations, the inclusion of passive intermediaries, such as SIR in this case, should be avoided.

SIR. SIR added no obvious value to the 2010 OPA with PPMC. Similar to the role of Duke in the RPEA, the SIR OPA created a situation where SIR was effectively a middleman that earned margins on oil it did not handle. In a bare bones, two-page subcontract with Sahara signed in January 2011, the Ivorian company transferred all of its "freight, operations, financial and administrative responsibilities," along with the rights to make "all decisions and executions" to Sahara. ¹⁰⁵ In exchange, Sahara committed to pay SIR "a minimum \$0.05 per barrel" for all oil it lifted. ¹⁰⁶ This would have entitled SIR to more than \$4.8 million over the life of the deal (figure B9). We asked SIR, PPMC and Sahara by letter how this money was paid and used, but none of them offered explanations.

Item	Oil lifted (barrels)	Amount per barrel (\$)	Total due (\$)
Commission	97,798,503	\$0.05	\$4,889,925

Figure B9. Commissions due to SIR under the OPA, 2010-2014

Sources: NEITI reports; NNPC Statistical Bulletins; PPMC-SIR OPA

Critically, the subcontract allowed Sahara to sell all of the oil it lifted on SIR's behalf in the international spot market, rather than processing it in Côte d'Ivoire, and then buy products from elsewhere for delivery to PPMC. ¹⁰⁷ According to finance ministry preshipment inspection reports, in 2011, Sahara apparently did not ship any of the barrels it lifted to SIR's refinery (figure B10). We haven't seen any proof that oil was refined in Abidjan in later years either. Instead, a handful of non-African refiners and other traders bought the oil (figure B11). At a minimum, this situation illustrates how the OPA as drafted was a poor framework for the actual transactions that took place.

Destination	Number of cargoes
US	10
Europe	7
Brazil	6
India	1
"Gulf of Guinea"	1
"One or more safe ports"	1
Côte d'Ivoire	0

Figure B10. Destinations of oil lifted under the PPMC-SIR processing deal, 2011

Source: Ministry of Finance preshipment inspection reports, 2011

Lifter	Buyers	Bank issuing L/Cs for crude cargoes	
Sahara	BP, Sunoco, Petrobras, Trafigura ¹⁰⁸	BNP Paribas	

Figure B11. Lifters, buyers and financiers of OPA crude oil cargoes, 2011

Sources: Market intelligence data; Ministry of Finance pre-shipment inspection reports Note: List may be incomplete as data was not available for all cargoes.

Sahara. Sahara had the capabilities to manage SIR's OPA: it is Nigeria's foremost indigenous trading house, and has bought and sold Nigerian government crude and imported fuel—especially gasoline, kerosene and diesel—since the early 2000s. Sahara also knew SIR well, having bought a 2 percent stake in the refinery, and having managed Côte d'Ivoire's government-to-government oil lifting deal with NNPC for some years. (For more on NNPC's g-to-g oil deals, see annex C.) There are questions around its suitability, however, since Sahara was implicated in the 2012 fuel subsidy scandal; it was then cleared of the worst—though not all—allegations. 109

¹⁰⁷ Under the SIR-Sahara Subcontract, Sahara had to offer SIR first refusal before selling the oil in the spot market. Art.6.

¹⁰⁸ This pattern continued through 2014, with Total largely replacing Sunoco as a buyer of Yoho cargoes in later years. Market intelligence data on file with NRGI.

¹⁰⁹ Specifically, a mid-2012 government investigation uncovered four payments to Sahara in 2011 worth

★6.293 billion that did not have documents showing gasoline actually discharged in Nigeria. Aig Technical
Committee Report p. 87-88. Later, a November 2012 report by a presidential committee with similar
members "verified as legitimate" all of the subsidy payments Sahara received that year. Presidential
Committee on Verification and Reconciliation of Fuel Subsidy Payments, final report, p.17. However, the
committee claimed that Sahara purchased \$33.7 million in US dollars in forex through the CBN's Dutch
auction system purportedly to finance petrol imports, but then apparently did not use the money for that
purpose. It also found that Sahara underperformed on its gasoline supply obligations to PPPRA in 2011 but
did not pay a required ★20 million "re-engagement fee" for each quarter in which they underperformed.
Aig Technical Committee report, pp. 69, 74. Neither the presidential committee nor any other government
body appears to have contradicted these claims.

Aiteo. We discuss Aiteo's qualifications to manage complex swap arrangements in section 2.1. We found no evidence of an open, competitive tender on the basis of which NNPC awarded the company the 2015 OPA. Neither Aiteo nor NNPC provided answers to our questions about the award process.

3.2. UNBALANCED CONTRACT TERMS

Our analysis finds that a number of critical terms in the SIR and Aiteo OPAs reduced the value that NNPC-PPMC and Nigeria received from the deals. We estimate that the three terms discussed below together cost PPMC \$381.3 million (or \$16.09 per barrel of crude lifted) in 2011 under the SIR OPA. This figure comes with several caveats, discussed below, and our analysis is no substitute for a full forensic audit of the deal. (The scale of losses under the Aiteo agreement could be similar, but we did not obtain enough data to carry out an analysis.)

3.2.1. Product yield patterns

The yield pattern rules in both contracts were mostly decent approximations of what products result from refining different grades of Nigerian crude in SIR's facility. However, these yield patterns when combined with the specific grades of crude that were allocated to Sahara and Aiteo resulted in the traders receiving relatively high priced, desirable oil while delivering fuel that was worth less to the nation.

Unlike the RPEAs, where price was the main factor in how much products the traders had to deliver, what the traders owed under the OPAs was determined based on weight. For each cargo of crude oil Sahara or Aiteo lifted, they were supposed to convert the total barrels into MT and then apply a "yield pattern" prescribed by the contracts. The yield pattern split the total MT due for the cargo into the six delivered or paid products the traders owed plus an allowance for refining fuel and loss (RF&L). Figure B12 contains the yield patterns for the 10 grades of crude that SIR could lift under its OPA.

Figure B12. Table of yield patterns from the PPMC-SIR OPA for Nigerian crude grades (percentage of total MT)

Source: PPMC-SIR OPA Art.6

Dunderst	Grades of crude oil										
Product	Antan	Bonny	Bonga	Escravos	Forcados	Okwori	Erha	Yoho	Qua Iboe	Brass	
LPG	1.4	1.9	1.1	1.0	1.0	1.5	1.6	1.5	1.6	1.5	
Gasoline	18.0	21.0	19.0	15.0	18.3	22.0	19.2	16.0	22.8	16.5	
Kerosene	18.0	25.0	22.0	18.0	24.3	29.7	24.1	20.0	26.5	19.0	
Diesel	21.0	27.1	28.1	31.0	28.0	27.0	33.1	30.0	25.9	31.0	
VGO	9.0	9.0	9.0	10.0	9.0	9.0	9.0	10.5	9.0	10.0	
Fuel oil	22.3	5.5	10.3	14.5	8.9	0.3	2.5	11.5	3.7	11.5	
RF&L	10.3	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	

The table in the Aiteo contract was mostly identical—with one important exception, discussed below. It also listed patterns for five additional grades.

Former CBN governor Sanusi described how this worked in his February 2014 submission to the Senate. "In essence," he wrote, "the contract says: for purposes of figuring out what SIR must deliver to PPMC, the parties will act as if all the Nigerian oil refined at SIR yielded fixed amounts of each product, regardless of what actually

happened day to day. This means that what SIR must send back to Nigeria is not the sum total of products it actually got from cooking the Federation's oil, but rather the products it is deemed under the contract to have gotten."¹¹¹ This type of mechanism is not uncommon for OPAs.

With such a system, which grades of crude Aiteo and Sahara received under the OPA had big implications for how much fuel and money Nigeria received in return. In 2011, Sahara only lifted Yoho, Escravos and Brass crude. Later years were largely the same, with some occasional cargoes of Amenam and Agbami. SIR, it should be noted, rarely, if ever refines any of these grades. It processes mostly Forcados or Bonga. For the first five months of 2015, Aiteo mainly lifted Escravos (five cargoes), Qua Iboe (four cargoes) and Amenam (three cargoes).

Lifting these five grades of crude under the OPAs rewarded Sahara and Aiteo and harmed NNPC and Nigeria in three ways: 115

1 The crudes lifted allowed the traders to deliver fewer metric tons of products. Yoho, Brass, Qua Iboe, Escravos and Amenam are among Nigeria's "lighter" grades of oil. 116 Lighter oil yields fewer MT of products per barrel when refined. For instance, for a standard-sized (950,000 barrel) cargo of crude oil, the traders would have owed PPMC 6 percent (or 7,658 MT) more fuel had they lifted heavier Bonga instead of Yoho (figure B13).

Item	Yoho	Amenam	Brass	Qua Iboe	Escravos	Forcados	Bonga
Barrels per MT	7.644	7.595	7.524	7.483	7.350	7.261	7.200
Cargo size (barrels)	950,000	950,000	950,000	950,000	950,000	950,000	950,000
Total MT due	124,284	125,086	126,271	126,947	129,248	130,841	131,942

Figure B13: Weights of products due under the OPA, by crude type

Source: PPMC-SIR OPA Art.5-6; Average crude assays published online by Chevron, Shell and Total

2 The crudes lifted allowed the traders to satisfy more of their obligations with cheaper products. Under the tables of yields in the contracts, Yoho, Brass, Qua Iboe, Escravos and Anemam gave PPMC more LPG, VGO and fuel oil than most every other grade of crude they could have lifted. These products regularly cost several hundred dollars less per MT to buy in the spot market than gasoline or kerosene, as the example in figure B14 shows.

¹¹¹ Sanusi Senate Submission, Appendix 6, p.3.

¹¹² NNPC Crude Profiles for Domestic Consumption, 2011.

¹¹³ Market intelligence data on file with NRGI; author interviews, traders and industry consultants, 2015.

^{114 2015} NNPC documents on file with NRGI, contents confirmed by market intelligence data and interviews with trading company personnel.

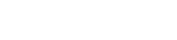
¹¹⁵ Sahara claims that "all crude oil allocations to SIR under the OPA were strictly as per the terms of the OPA and were, always, subject to availability and, strictly, at NNPC's discretion." http://www.sahara-group.com/cg/opa-explanation.pdf.

¹¹⁶ Lighter crudes have higher American Petroleum Institute (API) gravity and lower specific gravity.

Gasoline	Kerosene	Diesel	VGO	LPG	Fuel oil
\$1,044.00	\$1,051.00	\$960.25	\$838.00	\$837.50	\$785.40

Figure B14: Platts quotes for the delivered and paid products, 11 July 2011 (per MT)

3 The crudes lifted yielded relatively more diesel and less gasoline and kerosene—the two products Nigeria needed most from the swaps (figure B15). Having Aiteo and Sahara lift diesel-rich, gasoline-poor crudes also increased the need to substitute products using a murky procedure discussed in section 3.3.1.¹¹⁷



Source: Platts

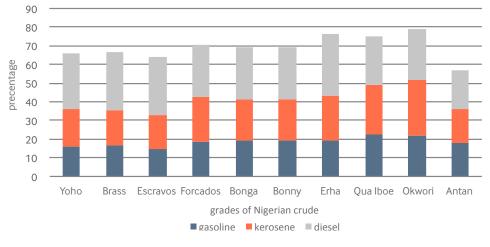


Figure B15. Yields of gasoline, kerosene and diesel under the SIR OPA (percentage of total MT due)

Source: PPMC-SIR OPA Art.6

The low outputs of gasoline and kerosene from the OPA's yields raise further doubts about the wisdom of including SIR in the deal. As noted above, the yield patterns in the contract were based on SIR's actual outputs from refining Nigerian crude; 118 yet these were not the most optimal for Nigeria's fuels needs. Because PPMC essentially ran the SIR OPA as a "deemed processing" deal, under which SIR did not refine the crude and Sahara sourced products from the market, PPMC could have chosen more efficient yield patterns. "Once you decide your processing deal is deemed, you can throw in the terms that get you the products you want," an experienced downstream sector consultant explained. "The yields don't have to match a particular refinery."119 A top NNPC downstream official concluded: "[PPMC] chose the wrong refinery. They should have picked a more complex facility that could turn more of the crude into gasoline."120 An experienced industry consultant qualified this somewhat, saying: "SIR is complex. It uses a hydrocracker which relies on distillate-rich grades like Forcados. However, a refinery with a Residue Fluid Catalytic Cracker (RFCC) can process a wider range of crudes more profitably and give more flexible outputs in terms of which products are produced."121

In a May 2015 press release, Sahara justified the yield patterns in the PPMC-SIR OPA by saying they were agreed "following detailed commercial negotiations which took into account a large number of factors including the value on the international market of the different grades of crude oil that could be made available by PPMC, the yields

¹¹⁷ Sahara has stated publicly that diesel was "rarely requested by PPMC" under the SIR OPA. http://www.sahara-group.com/cg/opa-explanation.pdf.

¹¹⁸ See http://www.sir.ci/index.php/commercialisation/produits.

¹¹⁹ Author interview, 2015.

¹²⁰ Author interview, 2015.

¹²¹ Author interview, 2015.

that could be achieved from refining those grades of crude oil at various refineries as well as the yield that is achievable by SIR, the cost of the refining process and the cost of transportation to and from the refinery." Yet since no party to the deal refined the oil Sahara lifted, the second, third and fourth factors seem largely irrelevant. Furthermore, had SIR processed any of the crude, the contract gave it a separate \$2.50 per barrel "processing fee" for refining costs and the right to recoup transport costs in cash. As such, it is unclear why these variables should have been built into the yields as well.

At first glance, the argument about market price makes more sense, but its validity is questionable. If PPMC allocated to Sahara relatively lower value crudes, it might make sense that they would receive less, or less valuable, fuels in return. However, the crude lifted by Sahara is not in fact worth less than alternative grades that would have resulted in higher value returns.

As an illustration, if we assume that NNPC's monthly OSPs are fair proxies for the international market values of the different Nigerian grades of crude oil, we notice the following: Under the OPA yields, Bonga and Forcados, the two Nigerian grades SIR actually processes most, gave PPMC more products per barrel and fewer of the cheaper products than the three grades Sahara lifted in 2011. This would make clear sense if Bonga and Forcados had higher OSPs. Yet in 2009 and 2010—the period when SIR and PPMC were negotiating the yields—their average premiums to Dated Brent, as assessed by NNPC, were within pennies of, or sometimes significantly lower than, Yoho and Brass (figure B16). OSPs for Bonga and Forcados did rise above the others in mid-2011, when European refiners started seeking out those grades as substitutes for Libyan barrels shut in by that country's civil war. ¹²⁴ But the conflict in Libya erupted suddenly in February 2011, months after the OPA was signed.

Grade	2009	2010	2011	2012	Four-year average
Yoho	\$1.68	\$1.47	\$2.79	\$2.01	\$1.99
Escravos	\$1.03	\$1.13	\$2.45	\$1.98	\$1.65
Brass	\$1.58	\$1.46	\$2.79	\$2.05	\$1.97
Forcados	\$1.50	\$1.40	\$3.43	\$3.35	\$2.42
Bonga	\$1.42	\$1.48	\$2.87	\$2.49	\$2.07

Figure B16. Average annual OSPs for five Nigerian grades, 2009-2012 (per barrel premiums over Dated Brent)

Sources: NNPC COMD monthly OSP sheets; Argus data

To show concretely how the choice of crudes lifted under the OPAs affected returns to Nigeria, we compare two scenarios under the SIR OPA, using 2011 data:

Scenario A: Outputs from Sahara's actual 2011 Yoho, Brass and Escravos liftings

Scenario B: Outputs had Sahara lifted the same amount of crude, but half Forcados and half Bonga (the grades SIR most often processed)

First, we start by finding the total equivalent tonnage due under the two scenarios by converting the barrels lifted under each into MT. Our calculations show that had Sahara lifted 50-50 Forcados and Bonga, it would have had to deliver or pay PPMC for an extra 128,495 MT of products:

¹²² http://www.sahara-group.com/cg/opa-explanation.pdf.

¹²³ PPMC-SIR OPA Art.8.1.

¹²⁴ Author interviews, traders, refiners and oil market analysts, 2012-14.

	Scenario A					Scenario B			
Item	Yoho	Brass	Escravos	Total	Forcados	Bonga	Total		
Bbls lifted	10,434,935	11,355,611	1,897,999	23,688,555	11,844,278	11,844,277	23,688,555		
Bbls/MT*	7.644	7.524	7.350	-	7.261	7.200	-		
Products due (MT)	1,221,813	1,350,868	231,110	2,803,791	1,460,001	1,472,485	2,932,286		

^{*}Sources: average crude assays published online by producers

Next, following the contract, we apply the yield patterns to see how much of the six products Sahara would have had to deliver under the two scenarios. We find that had Sahara lifted 50-50 Forcados and Bonga, it would have owed PPMC an extra 94,547 MT (approx. three tankers) of gasoline and 141,668 MT (roughly four tankers) of kerosene. Instead, the crude it received combined with the contract's yield patterns, gave Nigeria an extra 30,998 MT of diesel and 65,194 MT of fuel oil and VGO, the two cheapest products:

Product	Scenario A: MT due	Scenario B: MT due	Difference in MT due (A vs. B)
LPG	45,957	34,408	11,549
Gasoline	516,530	611,077	-94,547
Kerosene	616,617	758,305	-141,668
Diesel	950,006	919,008	30,998
VGO	317,516	294,867	22,649
Fuel oil	357,165	314,620	42,545
TOTAL	2,803,791	2,932,286	-128,495

Finally, if we price the products due under the two scenarios, we estimate that for the 23,688,555 barrels of crude SIR-Sahara lifted under the OPA in 2011, it would have owed PPMC a total of \$193,509,215 in extra product deliveries or payments had it lifted 50-50 Forcados-Bonga instead of the mix of Yoho, Brass and Escravos it actually received. This equates to an estimated per barrel loss of \$8.17/bbl. The details are shown here:

	Scenario A		Scenario B		Est. difference in value of	
Product	Total MT due*	Value (\$)!	Total MT due*	Value (\$)!	deliveries and payments to PPMC (\$, Scen. A v. Scen. B)	
LPG	45,957	\$36,650,708	34,408	\$27,440,380	\$9,210,328	
Gasoline	516,530	\$608,012,628	611,077	\$719,304,847	\$-111,292,219	
Kerosene	616,617	\$738,472,852	758,305	\$908,161,234	\$-169,688,382	
Diesel	950,006	\$921,743,322	919,008	\$891,667,512	\$30,075,810	
VGO	317,516	\$247,027,448	294,867	\$229,406,526	\$17,620,922	
Fuel oil	357,165	\$256,587,336	314,620	\$226,023,008	\$30,564,328	
TOTALS	2,803,791	\$2,808,494,293	3,095,414	\$3,002,003,508	\$-193,509,215	

^{*} Numbers assume SIR-Sahara did not substitute any products. See section 3.3.1 for more on this point.
!Numbers rely on PPPRA average 2011 landing costs for gasoline and kerosene to price those products and a single day of Platts quotes (July 11, 2011) to price the remaining four. We were not able to obtain annual averages of the relevant Platts quotes for 2011, so instead relied on data for a single day.

Finally, we note that the yield patterns in the Aiteo and SIR contracts are the same, with one glaring exception: the figures for Qua Iboe in Aiteo's have been altered to be closer to those for Yoho, Brass and Escravos in the SIR deal. The change was notable, given that most of the Aiteo OPA is identical to the older SIR agreement. Whoever drafted it clearly used the older contract as a template. It was also a financially significant change: under SIR's contract, Qua Iboe gave PPMC 12.9 percent more gasoline and kerosene and 8.8 percent less LPG, VGO and fuel oil (figure B17), as compared with the Aiteo OPA. As noted above, since the deal kicked off in January, NNPC has programmed Aiteo to receive more Qua Iboe than any other grade except Escravos. Shell lifted all of the Qua Iboe cargoes and sold them to overseas buyers, Indonesian state-owned refiner Pertamina foremost among them.¹²⁵

Product	SIR	Aiteo
LPG	1.6	1.6
Gasoline	22.8	17.0
Kerosene	26.5	19.4
Diesel	25.9	30.5
VGO	9.0	10.0
Fuel oil	3.7	11.5
RF&L	10.5	10.5

Figure B17. Qua Iboe yield pattern: SIR vs. Aiteo OPA (percentage of total MT)

Source: SIR and Aiteo OPAs Art.6.

3.2.2. High allowance for refining fuel and loss.

The OPAs also gave SIR and Aiteo an unnecessarily high allowance for oil lost in the refining process. This further lowered the amounts of products Sahara and Aiteo had to deliver. When a refinery processes crude oil, it always puts out an amount of product that is smaller than the amount of crude it took in. This is mainly because the chemical conversions that happen during refining use part of the oil for energy. Altogether, the lost portion is called "refining fuel and loss" (RF&L). The tables of yield patterns in the PPMC-SIR and Aiteo OPAs assumed that 10.5 percent of outputs would be RF&L. ¹²⁶ This is a steep number, both at SIR and globally for refiners of Nigerian crude. SIR has said publicly that its refinery on average consumes only 8 percent of each barrel for RF&L. ¹²⁷

As an example of potential losses: had the PPMC-SIR contract called for 8 percent RF&L instead of 10.5 percent, we estimate that SIR-Sahara would have owed PPMC an extra 70,095 MT of products worth \$70,211,896 in 2011 (figure B18). This equates to an estimated per-barrel loss of \$2.96/barrel.

¹²⁵ Market intelligence data on file with NRGI.

¹²⁶ The one exception is for cargoes of Antan grade of crude oil, for which the contract specifies 10.3 percent RF&L. SIR and Aiteo OPAs Art.6.

¹²⁷ SIR, 2007 slideshow presentation to UNCTAD, slide 14. Copy on file with NRGI.

Crude grade	Extra MT of products due*	Est. value of extra products due+	
Yoho	30,545	\$30,551,873	
Brass	33,772	\$33,768,950	
Escravos	5,778	\$5,891,073	
Total	70,095	\$70,211,896	

Figure B18: Estimated potential weight and value of extra products at 8 percent RF&L instead of 10.5 percent (2011 liftings)

3.2.3. Traders' ability to supply heavier gasoline.

Because Aiteo and Sahara's delivery obligations under their OPAs were calculated based on weight (MT), they were able to supply less fuel if they shipped NNPC-PPMC products that weighed more per unit of volume. The biggest opportunity here came from gasoline. The contracts allowed Sahara and Aiteo to deliver gasoline with specific gravity ranging anywhere from 0.72 to 0.78 (measured at 15 degrees Celsius). As a general rule, the higher gasoline's specific gravity, the heavier it is per unit of volume. Supplying heavier gasoline would also give NNPC-PPMC less of it to sell, since in Nigeria fuel is marketed in terms of volume (liters) rather than weight (MT). Heavier gasoline also is cheaper to buy in the spot market and can sell for less in Nigeria. This conferred a further benefit on Sahara and additional losses on PPMC.

Only a detailed audit could ascertain the extent to which SIR-Sahara and Aiteo took advantage of this option, or the full costs to NNPC-PPMC and Nigeria. Several industry sources interviewed for this report claimed that most traders selling direct to PPMC, both under the swaps and open account sales, supplied heavier gasoline, as PPMC was not discriminating. A trader who worked for a company that blended gasoline for Sahara confirmed that Sahara regularly ordered product as close as possible to 0.78 specific gravity. Sahara confirmed that Sahara regularly ordered product as close as possible to 0.78 specific gravity.

In 2011, according to NEITI data, Sahara shipped 1,253,773 MT of gasoline under the SIR OPA. As shown in figure 19, using the best available data and standard conversion factors, we estimate that this could have deprived PPMC—and ultimately, Nigeria—of up to 135.5 million liters of gasoline that year, worth an estimated \$117.6 million to PPMC. The estimated loss comes to \$4.96 per barrel.

^{*} Numbers assume SIR-Sahara did not substitute any products

⁺ We use the same yield patterns to determine the mix of products. To price the individual product volumes, we use PPPRA average 2011 landing costs for gasoline and kerosene to price those products, and a single day of Platts quotes (11 July 2011) to price the remaining four.

¹²⁸ AITEO OPA Appendix 2. This is a large range: The gasoline spec published by DPR stipulates specific gravity of 0.735-0.775. DPR, Premium Motor Spirit Specifications, 2014.

¹²⁹ Author interviews. By contrast, those selling to local marketers under PPPRA permits tended to deliver lighter grades. Their customers demanded lighter fare (typically around 0.745 specific gravity) to get more liters at the pump, PPPRA's subsidy calculations model pays more for lighter fuel, and lighter fuel would be easier to re-route and sell elsewhere if Nigerian buyers rejected their cargoes or deals fell through at the last minute. Ibid.

¹³⁰ Author interview, 2015.

Product	Total MT supplied*	Total liters supplied	Est. value of gasoline supplied to PPMC (₦)!	Est. value of gasoline supplied to PPMC (\$)#
(a) 0.72 gasoline	1,253,773	1,744,311,686	₦ 228,504,830,899	\$1,513,277,026
(b) 0.78 gasoline	1,253,773	1,608,753,749	₩210,746,741,183	\$1,395,673,783
Difference, (a) - (b)		135,557,937	₦ 17,758,089,716	\$117,603,243

^{*} NEITI 2009-11 Physical and Process Audit Report

Figure B19. Maximum potential losses to PPMC from SIR-Sahara's supply of heavier gasoline under the OPA. 2011

3.3. MISSING OR UNCLEAR CONTRACT TERMS

The Aiteo and SIR OPAs are also of concern for what they did *not* contain. Parts of them were poorly drafted, with conflicting or missing terms that could lower returns for Nigeria, depending on how the parties read them. The contracts' shortcomings gave PPMC, SIR and the traders too much discretion over some key processes in the deal. We cannot estimate any resulting losses because we do not know how the three parties managed the ambiguities. But at a minimum, any future investigation of the OPA should pay special attention to the following:

3.3.1. Unclear product substitution rules and processes

The OPAs had a fallback option if the yield patterns did not give enough of the products Nigeria needed. In both contracts, the parties could agree to substitute kerosene for "an equivalent amount of gasoline," or diesel for "an equivalent amount of gasoline or kerosene." Aiteo's current deal allows for further product substitution: the contract says the parties can substitute gasoline for four products—kerosene, diesel, VGO and fuel oil—not just kerosene and diesel. 131

Testifying before the Senate Finance Committee, NNPC explained this provision as offering Nigeria "the opportunity and flexibility to exchange products grades based on domestic need and immediate requirements." Data it sent to NEITI for 2011 suggests the parties substituted most of the diesel due that year for gasoline (figure B20)—the yields call for around 30 percent of product volumes to be diesel, but only around 6 percent of Sahara's volumes were diesel. Aiteo so far has delivered only gasoline and kerosene under its OPA, despite lifting diesel-rich crudes. This begs the question of why PPMC chose OPAs rather than RPEAs, which would give NNPC only two products.

 $^{! \,} Multiplying \, total \, liters \, by \, average \, 2011 \, PPPRA \, published \, landing \, cost \, for \, gasoline$

[#]Exchange rate: 151:1

¹³¹ PPMC-SIR OPA Art.12(c)-(d); Aiteo OPA Art.12(i)(e)-(f).

¹³² NNPC, Response to Sanusi p.6-7.

^{133 2015} NNPC documents, vessel traffic reports and other market intelligence data on file with NRGI.

Product	MT imported	Percentage of total	Yoho* yields in OPA	Brass* yields in OPA	Escravos* yields in OPA
Gasoline	1,253,773	45.3%	16%	16.5%	15%
Kerosene	577,587	20.9%	20%	19%	18%
Diesel	171,034	6.2%	30%	31%	31%

^{*} For 2011, all liftings were Yoho, Brass or Escravos

Figure B20. Apparent product substitution under the PPMC-SIR OPA, 2011

Sources: NEITI 2009-11 Physical and Process Audit Report; PPMC-SIR OPA Art.6.

Remarkably, given the extent to which this option has been used, the OPAs did not lay out rules or processes for product substitution. The SIR contract only says that the "equivalent amount" of a substituted product would be "delivered to PPMC as stated in Article 6."¹³⁴ But Article 6 only contains the table of yield patterns; it is silent about substitution. The contract did not define "equivalent amount."¹³⁵ Language in Article 13 suggests that substitution was done at least partly on the basis of price, but does not say how. The Aiteo OPA has essentially the same language. ¹³⁶

We cannot explain why the parties would go into the deal without locking down details of such a critical process. We cannot estimate losses or gains to any party from substituting products. Several interviewees thought that substitution was one of the things that cost Nigeria most, though none could say how it worked. PPMC, SIR and Aiteo did not respond to our query on this topic. Sahara argued publicly that it substituted products under the OPA "for the convenience and benefit of the Nigerian public" and that "the parties apply contractually defined OPA conversion formulae to determine the exact volume of 'Substitute Products' to be delivered for the particular grade of crude oil that has been supplied." Again, however, the problem we point to here is that the contract does not include any such formulas.

3.3.2. No specified premium for pre-delivery of products.

Article 12 of the SIR and Aiteo OPAs allowed PPMC-NNPC to request that the traders supply refined products before they lifted a corresponding crude oil cargo. Data submitted by NNPC to NEITI shows this did happen occasionally under the SIR deal, though it was not the norm. ¹³⁹ As with product substitution, though, the contract does not lay out detailed rules and procedures for pre-delivery. We understand pre-delivery as akin to SIR-Sahara offering PPMC a short-term credit line, which would entitle it to a premium for the service, either in extra oil or cash. But the PPMC-SIR OPA does not specify a premium. We asked NNPC, Aiteo and Sahara about this by letter in May 2015. Neither NNPC nor Aiteo responded. Sahara's response did not discuss premiums. ¹⁴⁰

¹³⁴ PPMC-SIR OPA Art.12.

¹³⁵ Art. 12 of both contracts also uses the terms "quantity" and "amount" somewhat interchangeably, without defining either.

¹³⁶ Aiteo OPA Art.12, 14.

¹³⁷ Author interviews, traders and industry consultants, 2014-2015.

¹³⁸ http://www.sahara-group.com/cg/opa-explanation.pdf.

¹³⁹ Figures contained in NEITI, 2009-2011 Physical and Process Audit, Appendix C, Part 2.

¹⁴⁰ The company wrote: "Proceeding by way of pre-delivery is much more expensive for product suppliers such as SIR because it exposes them to significantly higher financing costs. This is primarily because they are not in a position to offer the crude oil as security for the financing and must by necessity, bridge the costs." http://www.sahara-group.com/cg/opa-explanation.pdf.

3.3.3. Poorly defined rules and procedures for measuring the quality and quantity of delivered fuel

Both OPAs called for "a mutually acceptable independent inspector jointly appointed by NNPC and [the trader]" to test the quality and quantity of fuel delivered and issue certificates of quality and quantity based on its findings. The contracts say that these documents "shall be final and binding on the parties," but do not expressly state that they are the controlling documents for use during reconciliation meetings. Both add that the certificates are not binding in cases where the inspector "did not undertake or witness" the tests, yet do not suggest to NNPC or the traders how to arrive at agreed numbers in that event. 141

More specifically, regarding quality, neither contract sets clear rules, standards or procedures for measuring fuel quality. To assess whether the gasoline and kerosene Sahara supplied met the quality specifications in the contract, the SIR OPA specified only that the inspector had to carry out tests "at the discharge port [...] prior to commencement of discharge and in accordance with the test method(s) commensurate with current industry practice as approved by the Parties." The part of Aiteo's OPA headed "Refined Product Quality and Quantity Determination" does not discuss quality at all. 143

Regarding quantity, the contracts' terms for quantity measurement did not protect the government against losses that can occur when imported fuel is discharged. At first glance, both OPAs designated out-turn quantity as the measure of how much fuel Aiteo and Sahara delivered. Yet the SIR OPA included only one sentence on the subject: it specified that the inspector should measure out-turn quantity "at the Discharge Port," 144 but included no guidelines for how. Aiteo's contract is more detailed, but some terms raise red flags. For fuel discharged by STS, the contract actually defines "out-turn quantity" as "bill of lading quantity," and does not state clearly which B/L to use. (For an explanation of why this is important, see section 2.3.2). 145

Raising additional concern, for discharges at Lagos's Apapa Port the Aiteo OPA says that "out-turn quantity shall be determined based on the vessel arrival figures" reported by the inspector. This means that NNPC bears the costs of any fuel lost during discharge. Asked about typical product losses at Apapa, one fuel trader said, "It depends on how vigilant the inspection company is – some product can mysteriously disappear in the common pipeline network. But in my experience losses are pretty much always over 0.5 percent and sometimes as high as 1 percent or 1.5 percent." One percent of a 60,000 MT gasoline cargo (the size Aiteo most often delivers) is 600 MT, worth an estimated \$460,000 to NNPC at current prices. 148

¹⁴¹ PPMC-SIR OPA Art.17; Aiteo OPA Art.13.1.

¹⁴² PPMC-SIR OPA Art.17(B)(ii).

¹⁴³ Aiteo OPA Art.13.3.

¹⁴⁴ PPMC-SIR OPA Art.17(B)(i). The contract defined "Discharge Port" very broadly as "the berth, dock, anchorage, submarine line, single point or single berth mooring facility, offshore location, alongside Vessels or lighters or any other place in Nigeria at which the Refined Products to be delivered under this agreement are discharged." Id., Art.1(vii).

¹⁴⁵ Aiteo OPA Art.13.3(ii).

¹⁴⁶ Id., Art.13.3(d). Note also that "Apapa Port" is not defined, despite the fact that the port complex at Apapa contains a large number of government- and private-owned fuel discharge and storage facilities.

¹⁴⁷ Communication with authors, 2015.

¹⁴⁸ Using July 29, 2015 PPPRA published landing cost for gasoline of \$766.60/MT.

In another omission, the Aiteo and SIR contracts failed to designate a standard temperature at which the inspector must measure quantity. This would not change the amount of fuel the traders were logged as delivering, but it could affect how much PPMC earned from selling the fuel. Both gasoline and kerosene expand or contract depending on how hot or cold they are. Their weights stay the same per unit, but their volumes change. PPMC sometimes sells swap imports—of kerosene especially—directly off the mother ships that bring them to Nigeria. Sales take place in liters instead of MT, with volumes sold measured at the point of discharge. If the inspector does not adjust the volume measure to reflect the difference between a contractual temperature and the actual temperature, ¹⁴⁹ the buyers could receive more or fewer liters depending on how hot or cold the fuel is at the time. We do not have enough data to estimate gains or losses to NNPC from temperature differentials.

3.3.4. Insufficiently detailed rules for calculating demurrage.

The language in the SIR and Aiteo OPAs about demurrage shared the same basic weaknesses as that in the PPMC-Duke RPEA. (For more, see section 2.3.3.) Demurrage was a large cost under both OPAs. Some vessels chartered by Sahara and Aiteo to deliver fuel sat for weeks or even months in Nigerian waters before they discharged and sailed. Sahara reportedly invoiced PPMC over \$60 million for demurrage in the SIR deal's first fourteen months. According to data submitted by NNPC to NEITI, this was almost four times what BP-Nigermed collected under its OPA the previous year (figure B21). There was no corresponding drop in average demurrage rates in the shipping market between the two years. We wrote to Sahara asking them to comment on the difference, but they declined.

Company	Total volume of delivered product (MT)	Total demurrage	Demurrage per MT of product delivered
BP-Nigermed (2010)	2,350,159	\$14,745,244	\$6.27
SIR-Sahara (2010-2011)	2,561,856	\$60,193,196	\$23.50

Figure B21: OPA demurrage charges, BP-Nigermed versus SIR-Sahara, 2010-2011

3.3.5. No designated bank accounts for payments

By the fifteenth of each month, Aiteo and Sahara (the latter acting on SIR's behalf) were supposed to pay NNPC-PPMC for the value of any unpaid LPG, VGO or fuel they owed under their OPAs. Unlike some other NNPC trading contracts, however, the agreements did not include wiring instructions or bank account details. Instead, they said only that the companies should wire payments into "PPMC's nominated bank account." We do not know which accounts the traders paid into, or how the funds subsequently traveled. Neither they nor PPMC answered our written requests for information on this point. Past audit work by NEITI and PwC apparently did not audit the accounts.

Box 1: Recommendations in the event that the government elects to sign more OPAs

We stand strongly by our recommendation that Nigeria abandon OPAs, for the reasons laid out in this report. However, if Buhari administration officials decide to continue using OPAs, the deals should not confer such high benefits to traders at the expense of the nation. Even more so than with RPEAs, it is critical that the Nigerian government, not traders or refiners, proposes the opening terms and negotiates aggressively until it arrives at fair, transparent, auditable arrangements

One reason that OPAs are, by nature, opaque and hard to monitor is that the contracts do not state a fixed cost per barrel of having crude refined abroad. Instead, the cost is a function of the deal's key terms. The degree with which the terms favor NNPC or the contract holder depends, in turn, on market variables that are always moving—for instance, crude oil prices and qualities; refining costs, performance and margins; spot market fuel prices; international demand for oil and fuel tankers; and fuel losses during delivery. To capture fair returns to the nation out of all this complexity, the presidency would need to ensure that NNPC:

- Does not recycle the old SIR, Sahara and Aiteo contracts as models.
- Uses a new draft contract for negotiations that, at a minimum:
 - Has clear, balanced terms that reduce opportunities for abuse.
 - Contains cost and price structures that reflect market fundamentals, developed based on detailed, multi-scenario projections.
 - Sets out product yield patterns that are based on yields from reliable, complex refineries configured to deliver high outputs of gasoline and kerosene.
 - Requires the contract holder to refine most or all of the crude it lifts, instead of trading
 it. For cargoes that are traded, the contract holder should share margins with NNPC.
 - Is developed mainly by independent downstream sector experts and trading lawyers reporting to a presidency official (or, perhaps, a new NNPC board) rather than solely to internal NNPC staff.
 - Does not rely heavily on suggestions from traders and other parties with interests in the outcome.
- Holds an open, competitive tender for the new OPAs, including key terms in the tender announcement, to weed out unqualified applicants and establish a strong negotiating position at the outset.
- Carefully selects and oversees the internal staff who will manage the contracts after signing.
- Submits to more external oversight of deals.

4. Preventing mismanagement of swaps

A balanced contract that addresses the shortcomings noted in sections 2 and 3 will not by itself give Nigeria fair value from a swap. NNPC and the trader must also run the deal efficiently and according to the rules. Unfortunately, Nigeria's processes for importing fuel suffer from chronic mismanagement and abuses of discretion. Investigations from the 2012 fuel subsidy scandal found a leaky morass of a system that political insiders had squeezed for quick cash at almost every node. ¹⁵¹

The traders with NNPC-PPMC swap contracts deliver products into the existing supply chain for NNPC fuel imports. As was the case with PPMC's open account imports, none of the swaps signed since 2010 require the traders to find buyers for the products they deliver. All they have had to do is physically deliver fuel by ship to the discharge points in Nigeria chosen by NNPC-PPMC. The main options are NNPC-owned or private jetties, NNPC's single buoy mooring (SBM) facility offshore the Apapa Port Complex in Lagos, or ship-to-ship transfers onto other, smaller tankers (called "lighter" or "shuttle" vessels) nominated by NNPC-PPMC. The result is a complex, hard-to-track tangle of moving vessels, tanker trucks and pipeline deliveries; who owns the fuel in each is often unclear. ¹⁵²

For this report, we have not carried out a comprehensive study of the governance and performance of NNPC's downstream supply chain. Prior government reports and our interviewees describe multiple rackets around shipping, distribution and sales of fuel—rackets to which swap imports would be susceptible. For example, well-connected elites and criminal networks reportedly have been smuggling NNPC gasoline, kerosene and other fuels to neighboring countries with higher pump prices, both over land and by ship. ¹⁵³ In another practice called "round-tripping," companies reportedly buy fuel from NNPC's refineries at subsidized prices, and then sell it back to PPMC at import prices. ¹⁵⁴ By filing false paperwork and making payments to officials and inspectors, some also reportedly supply low-quality, adulterated products; overstate the amounts of fuel they import; over-claim fuel subsidy; or steal products owned by the government for private profit. ¹⁵⁵

¹⁵¹ For the most complete overviews of the scandal, see Lawan Report, Aig Technical Committee Report, and the Berne Declaration Nigeria Report.

¹⁵² PPMC told PwC that 283 vessels were involved in moving its fuel imports between January 2012 and July 2013. PwC Report p.78. Of 857 petrol transactions that PPPRA monitored in 2011, 308 (or 36%) involved three or more vessels. Some took as many as six. In some cases, a 2012 executive committee noted, following the products all the way, by satellite or other means, was "absolutely impossible." Aig Technical Committee Report p.40.

¹⁵³ Author interviews, trading company personnel, industry consultants and law enforcement officers, 201215. During the late military period, some industry sources estimated that up to 100,000 b/d were being smuggled into Benin, Niger and Cameroon. S.A. Khan, *The Political Economy of Oil and Gas in Nigeria*.

Oxford: Oxford University Press, 1994, p.127-8. See also S. Golub, "Government Policies, Smuggling, and the Informal Sector," 2012, available at: http://www.swarthmore.edu/sites/default/files/assets/documents/user_profiles/sgolub1/Chapter%209%20final.pdf. One study estimated that as much as 83 percent of Benin's gasoline imports in the 2000s were smuggled from Nigeria. V. Morillon and S. Afouda, "Le trafic illicite des produits pétroliers entre le Bénin et Nigeria," *Economie Régionale* (Cotonou: LARES), September 2005 issue, p.1-12.

¹⁵⁴ Author interviews, trading company personnel, industry consultants and law enforcement officers, 2012-15. Lawan Report p.78, 142, 200-201.

¹⁵⁵ Author interviews, trading company personnel, industry consultants and law enforcement officers, 2012-15. Lawan Report p.106.

These practices are widely acknowledged and deeply entrenched. Nigerian officials talk freely about them—routinely blaming smugglers, for instance, for fuel shortages and subsidy fraud. ¹⁵⁶ Yet they also tend to describe smuggling and the like as regrettable departures from the norm, when in fact they are basic parts of the supply chain. Although there are no good estimates of volumes lost, some of the fuel rackets may rival Nigeria's crude oil theft problem their complexity and scale. ¹⁵⁷ (For more on oil theft, see main report p.69.) Smuggling and round-tripping in particular have grown into cottage industries that feed expensive gray markets for fuel in Nigeria and beyond. "There are some marketers, ship owners and agents, mostly in Lagos, who have run these things for years. Everybody knows who they are, and who is behind them," said one West African gasoline trader. ¹⁵⁸ Nonetheless, the country has not successfully prosecuted any high-level suspects in over three decades. ¹⁵⁹

4.1. POTENTIAL IMPLEMENTATION PROBLEMS FACING SWAP IMPORTS

The problem with NNPC's fuel imports are bigger than the swaps, and pre-date the swaps. But the swap contracts themselves did not include strong protections to guard the transactions against the broader bad practices that have affected Nigerian fuel imports. The government did revamp some oversight procedures for fuel imports after the 2012 subsidy scandal, but most of the changes affected marketers with PPPRA permits, not PPMC suppliers. One former swap contract holder, Ontario, is still in court on charges that it over-collected N414 million in fuel subsidy by submitting false papers showing that it imported an extra seven million liters of gasoline in 2011. Again, while we have not carried out a systematic study of governance issues and possible loss points in the NNPC fuel supply system, our research found at least the following potential problems, which merit further scrutiny:

4.1.1. Questions about inspection of fuel imports and oversight of product movements.

As noted above, the swaps have relied on non-transparent, closed door, two-party reconciliation meetings to test whether the traders have supplied enough products. Without a strong, reliable regime of on-site inspections by outsiders to the deals, the parties would have near-total say over what products came on and off of the ships involved. This, in turn, could make the swaps difficult to audit should allegations of mismanage arise, as they lately have.

¹⁵⁶ See e.g., Vanguard Nigeria, "We have demystified the oil industry – Alison-Madueke," February 26, 2015, available at: http://www.vanguardngr.com/2015/02/we-have-demystified-the-oil-industry-alison-madueke/; This Day, "NNPC: Smugglers, peddlers, others bane of effective kerosene supply," February 19, 2014, available at: http://www.thisdaylive.com/articles/nnpc-smugglers-peddlers-others-bane-of-effective-kerosene-supply/171850/; https://www.youtube.com/watch?v=FgITJLD2194.

¹⁵⁷ Author interviews, trading company personnel and government officials, 2013-15.

¹⁵⁸ Author interview, 2015.

¹⁵⁹ It is said that the Buhari military government arrested more than 350 individuals for smuggling and related offenses after seizing power. T. Turner, Nigeria: "Oil Smuggling & Other Economic Troubles," *The Multinational Monitor*, Volume 5 Issue 5 (May 1984 issue), available at: http://www.multinationalmonitor.org/hyper/issues/1984/05/turner.html.

¹⁶⁰ For a list, see NEITI 2012 Oil and Gas Audit Report, Appendix 8.2.4.

¹⁶¹ See footnote 51 for more detail.

The recent swap contracts, together with Nigerian regulations and existing institutional practices, call for what sounds like a rigorous, multi-agency inspection process. Checks for each tanker carrying fuel to NNPC-PPMC are supposed to start outside Nigeria, at the loading port, and continue en route. ¹⁶² Once the vessel anchors offshore of Lagos, NNPC-PPMC and the trader must jointly hire and pay an inspector to verify the amounts and quality of what is on board. ¹⁶³ Multiple layers of onboard and onshore checks by government actors—including PPPRA, the Department of Petroleum Resources (DPR), the Nigerian Navy, the Nigeria Port Authority (NPA), private inspection companies working on contract—are also supposed to confirm how much fuel the vessel discharges and where the fuel goes, both to help the government manage inventory and verify fuel subsidy claims. ¹⁶⁴ NNPC and some swap contract holders say that procedures are consistently followed. ¹⁶⁵

However, in practice, the inspection system appears to have serious weaknesses and falls well short of written rules. Heads of PPPRA and DPR have said as much in writing and before parliament. Heads of PPPRA and the Senate Finance Committee, PPPRA's oversight of NNPC imports is a "book keeping verification exercise rather than physical verification of products and claims." A 2012 House of Representatives committee report found that NNPC fuel imports "were not subjected to the apparently stringent [...] inter-agency verification exercise," and further that "NNPC was the sole keeper of the records of the volume of its imports." The committee concluded that "the non-availability of alternative sources of data [...] enabled NNPC to fix the volume claimed to have been actually imported and offloaded." 169

Past probes also raised doubts about oversight of where NNPC fuel goes once it comes onshore. KPMG noted, for instance, that DPR did not have "an integrity inventory management system to capture and monitor inventory across all depot locations." Instead, staff at the depots manually entered data into their own individual Excel workbooks.¹¹⁰ NEITI reported that the gauges and meters installed at PPMC fuel depots, jetties, tank farms and pipelines were often mis-calibrated, unreliable and in need of repairs.¹¹¹ Its 2012 review of PPMC fuel depot records also could not account for №11.702 billion (or \$74.3 million) in gasoline supposedly pumped through the depots that year. Its auditors "observed irreconcilable differences" in depot balances and noted that PPMC records in the area were "incomplete."¹¹²

¹⁶² See e.g., PPMC-Duke RPEA Art.8; PPMC-SIR OPA Art.17; http://www.sahara-group.com/cg/opa-explanation.pdf.

¹⁶³ lbid.

¹⁶⁴ Aig Technical Committee report p.21; Lawan report p.31; NNPC Response to Sanusi p.7.

¹⁶⁵ See e.g., http://www.sahara-group.com/cg/opa-explanation.pdf; NNPC Response to Sanusi p.7.

¹⁶⁶ See e.g., PPPRA, Response to Questions Posed by Members of the Petroleum Revenue Special Task Force, April 2012, p.3.; transcripts of February 2012 Farouk Lawan Committee hearings.

¹⁶⁷ KPMG Project Anchor Report sec.6.3; Senate Finance Committee Report p.54. PwC also found that "there was no evidence that PPPRA verified any of the DPK imported into Nigeria by NNPC/PPMC between January 2012 and July 2013 within the same period." PwC Report p.69. For more problems with PPPRA approvals of NNPC fuel imports and subsidy claims, see annex A p.A17-A18.

¹⁶⁸ Lawan Report p.91, 126.

¹⁶⁹ ld, p.126.

¹⁷⁰ KPMG Project Anchor Report sec.6.3.15.

¹⁷¹ NEITI, 2009-11 Physical and Process Audit report, Appendix F: Hydrocarbon Metering Processes.

¹⁷² NEITI, 2012 Oil and Gas Audit Report p.338.

The 2012 parliamentary investigation of the fuel subsidy scandal claimed that these management practices facilitated some of the rackets around NNPC fuel supply. For example, the committee in its final report claimed that "lack of monitoring of trucked out products, distribution/sales of petroleum products as well as poor supervision of retail outlets by DPR led to diversion and smuggling of petroleum products." The study concluded that there was a pattern "of collusion established between some facility/depot owners, staff of DPR, PPPRA and consultants which clearly undermined the accurate reporting of movements of petroleum products in and out of the facilities/depots." As an example of the risks created, the committee cited a case in which inspectors and staff at the various oversight agencies allegedly signed off on papers for a cargo of NNPC gasoline that never existed.

4.1.2. Unclear vessel and product movements

Our research also found fuel cargoes with incomplete or contradictory shipping and discharge records. For example, a 2012 Nigerian House of Representatives committee, working with Lloyd's List Intelligence, found that thirteen swap cargoes in 2011 came with documents that:

- did not state where any of the products on board were discharged
- · did not show discharges of the full amount of products reported on board
- contradicted each other on discharge amounts or locations.¹⁷⁶

We reviewed commercial vessel traffic reports for 2013 to 2015 that showed similar issues. ¹⁷⁷ We cannot independently confirm the accuracy of this data, and we understand that there may well be legitimate explanations in some cases. For example, some of the fuel onboard could have been for delivery to other parties under other contractual arrangements, or the traders could have been holding the products until they received a cargo of crude from NNPC to pay for them. Poor government recordkeeping could account for some of the gaps, which no party has publicly explained to date.

4.1.3. Incomplete published records for sales and distribution of kerosene and gasoline imported under the swaps

Our analysis of NNPC's own published data on PPMC's product imports found some sizable, unexplained anomalies. From 2012 to 2014, the corporation reported that it supplied between 8.5 and 12.5 MT of kerosene and gasoline per year to the Nigerian market. All of this reportedly either came from its refineries or the swaps. But out of this total pool of products, NNPC records annual sales and distribution figures that are far lower than the total amounts it claims to have supplied. Most dramatically, in 2012 NNPC logged over 1.3 million MT of gasoline as supplied but not sold. This large

¹⁷³ Lawan Report p.109.

¹⁷⁴ ld., p.126.

¹⁷⁵ Id., p.79, citing the "case of a vessel which was said to have brought products for NNPC and was recorded in the documentation of NAVY, NPA, PPPRA, FMF etc. but was found out through Lloyds List Intelligence (LLI) that the vessel was in South Africa and not in the Nigerian waters as at the date recorded." The committee did not name the supplier of this supposed phantom cargo, or say if it was from the swaps. For other examples, see Aig Technical Committee report p.32-39.

¹⁷⁶ Lawan Report p.132f.

¹⁷⁷ Copies on file with NRGI.

amount of fuel could fill roughly 39 mid-sized (35,000 MT) tanker ships. We estimate its market value at \$1.44 billion. The following year, NNPC's numbers for kerosene distributed in Nigeria fell short of what it claimed to have supplied by 823,957 MT— or about 23.5 tankers worth an estimated \$972 million (figure B22). Again, poor recordkeeping could account for some of the discrepancies, but so could smuggling, round-tripping, over-claiming of import amounts, and other bad practices. Further investigation is warranted.

Figure B22. PPMC gasoline and kerosene unaccounted for in published NNPC records, 2012-2014

Sources: 2012, 2013 and 2014 NNPC Annual Statistical Bulletins. Blank cells indicate unavailable data.

	Gasoline			Kerosene			
Item	2012	2013	2014	2012	2013	2014	
(a) Total fue	(a) Total fuel that NNPC reports supplying the Nigerian market						
Supplied amount (MT)	7,287,152	5,601,342	5,816,579	2,631,769	2,916,353	6,677,615	
	(b) Total fuel tha	t NNPC reports	selling				
Sold amount (MT)	5,917,512	5,516,310	4,875,489	2,453,479	2,899,741	2,456,603	
(c) Shortfall between NNPC supply and sales figures –i.e., fuel reported as supplied but not recorded as sold (a) – (b)							
Amount (MT)	1,369,640	85,032	941,090	178,290	16,612	221,012	
Precentage of total supply	18.8	1.5	16.3	6.8	0.6	8.2	
No. of 35,000MT cargoes	39.1	2.4	26.9	5.1	0.5	6.3	
(d) Total fue	el that NNPC rep	orts as distribu	ted from its sup	ply			
Distributed amount (MT)					2,092,396	2,265,610	
(e) Shortfall between NNPC supply and distrit	oution figures –i	.e., fuel reported	d as supplied but	t not reported as	distributed (a)	– (d)	
Amount (MT)					823,957	412,005	
Precentage of total supply					28.6	15.2	
No. of 35,000MT cargoes					23.5	11.8	
Other Factors Other Factors							
(f) PPMC product pipeline losses (MT)#+	181,670	327,480	335,690	0	0	0	
(g) PPMC exports	0	0	0	0	0	0	

^{*} Figures based on invoices rather than discharge records

4.1.4. Sales of kerosene to swap holders at subsidized prices.

In addition to their activities under the swaps, Aiteo and Sahara both bought imported kerosene from PPMC's Inland Sales Department in 2011—at least 60,287 MT and 48,248 MT, respectively. 180 The vast majority of this fuel was imported under the swaps, the records suggest. 181 We examined a random selection of ten of the sales which showed that the companies consistently paid PPMC N40.9 (approximately

[#] Figures may include some volumes of lost diesel

⁺ PPMC does not transport kerosene via its pipeline network

¹⁷⁸ Figure uses an average 2012 sales value for petrol of \$1150/MT. More extensive forensic analysis would be needed to determine the actual gross sales revenues PPMC would have earned by selling the product in the Nigerian market.

¹⁷⁹ Figure uses an average 2012 sales value for kerosene of \$1180/MT. Again, more extensive forensic analysis would be needed to determine the actual gross sales revenues PPMC would have earned by selling the product in the Nigerian market.

¹⁸⁰ Data taken from records of PPMC sales of coastal liftings of kerosene submitted to NEITI and reprinted in NEITI, 2009-11 Physical and Process Audit Report, Appendix C, Part Three.

¹⁸¹ The records identified offshore Lagos—where swap holders deliver kerosene—rather than the refineries as the load port for most of the sales. By 2011, the swaps accounted for nearly all kerosene imports, according to records of PPMC fuel imports on file with NRGI.

\$0.25) per liter. 182 This came at a time when PPPRA regularly calculated the market costs of importing kerosene into Nigeria at \$140-\$160 (approximately \$0.90-\$1.00) per liter. 183 In later years, Taleveras and Ontario also occasionally purchased small parcels from PPMC. We do not have pricing data for those sales. 184 To the best of our knowledge, none of the RPEA or OPA holders have retail kerosene distribution businesses.

At a minimum, allowing intermediaries to buy subsidized PPMC kerosene and sell it for profit runs counter to the purported goal of Nigeria's kerosene subsidy: the provision of affordable lighting and cooking fuel for the country's poor. More than one government report has found that PPMC regularly sold kerosene at below-market prices to intermediaries with no retail stations, allowing the companies to re-sell the product at higher rates, either to bona fide retailers or other buyers. Among retailers, only NNPC's own stations—36 in total—regularly sold at the official regulated price of N50 per liter (\$0.35), but they make up a small portion of the market. A 2012 executive committee estimated that two-thirds of PPMC kerosene traffic from 2009 to 2011 flowed through at least one intermediary between the importer and retailer.

The kerosene subsidy was "a bonanza for rent-seeking middlemen," the committee concluded.¹87 The most visible outcomes of this system are high prices for consumers,¹88 product scarcity and profits to middlemen.¹89 Nigerian officials, traders, industry consultants and commercial airline staff also claim that some marketers divert kerosene purchased from PPMC to the country's airports, where it is sold as jet fuel at market prices.¹90

¹⁸² The PwC audit also found that "DPK was sold before arrival in Nigeria, to other marketers between January 2012 and July 2013 at N40.90." PwC Report p.73, 75.

¹⁸³ For example, the documents we reviewed showed that Sahara loaded 6,279,464 liters of kerosene on the Meteora (B/L date April 20, 2011) with a "value" of ₹256,830,077.60 (or ₹40.9/liter). A PPPRA Pricing Template for April 2011 showed that landing costs for kerosene were above ₹150/liter in early April.

¹⁸⁴ Market intelligence data on file with NRGI. Taleveras wrote to us that "at no time during the subsistence of the [Duke RPEA] did Taleveras claim or receive any subsidy." Taleveras, 17 July 2015 letter to NRGI, p.6.

¹⁸⁵ Lawan Report p.103; author interview, downstream consultant, 2015.

¹⁸⁶ Aig Technical Committee Report p.10.

¹⁸⁷ Id., p.25; also see Lawan Report p.100.

¹⁸⁸ For his February 2014 submission to the Senate Finance Committee, Sanusi commissioned two studies on retail kerosene prices in Nigeria. The studies found that in 2012-2013, average monthly pump prices for kerosene, both in Lagos and nationwide, ranged from ₹120 to ₹300/liter. Sanusi Senate Submission, Exhibits 26 and 27. When asked for the per-liter retail price of kerosene in Nigeria during 2012 hearings on fuel subsidy fraud, the heads of DPR, NNPC, PPPRA and PPMC gave numbers ranging from ₹50 and ₹151. Press clippings and hearing transcripts.

¹⁸⁹ Using rough calculations, Sanusi told the Senate Finance Committee that a "syndicate" of well-connected players was earning "rent of \$20 million/vessel" on kerosene entering Nigeria, or about "\$100 million every month for a number of years." The governor described this as part of "a racket in which NNPC bought kerosene at ₩150/litre, sold to marketers at ₩40/litre knowing well that the retail price was more in the region of ₩170 — ₩250 litre," adding: "The margin of 300% - 500% over purchase price is economic rent, which never got to the man on the street." Sanusi Senate Submission p.7.

¹⁹⁰ Author interviews, 2012-2015; see also http://www.vanguardngr.com/2015/02/we-have-demystified-the-oil-industry-alison-madueke/. Taleveras wrote to us that it did not sell any of the kerosene it bought from PPMC for use as jet fuel. 17 July 2015 letter. We asked Sahara and Aiteo the same question, but the companies did not respond.

4.1.5. Late deliveries of fuel under some deals

In early 2015, several companies party to swaps fell behind on their delivery obligations, then picked up the pace around April, after Goodluck Jonathan lost the 28 March presidential poll. These transactions have included:

• 2015 Taleveras and Ontario deliveries under the PPMC-Duke RPEA. Taleveras and Ontario, as Duke's subcontractors, lifted their last crude cargoes in December 2014, when the PPMC-Duke RPEA expired. 191 Their final product deliveries should have shown up offshore Nigeria by sometime in February, since the contract required them to supply all products due within sixty days of the crude cargoes' B/L dates. 192 However, tankers chartered by the two companies to deliver fuel for PPMC kept arriving in later months (figure B23).

Month	Taleveras	Ontario
March	30,000 MT gasoline, Torm Gerd	
A : I	30,000 MT gasoline, British Tenacity	35,000 MT gasoline, Isola Bianca
April	27,000 MT gasoline, Torm Vita	35,000 MT gasoline, Mare Caribbean
May	49,000 MT gasoline, Two Million Ways	
	27,000 MT gasoline, Maersk Elizabeth	
June	35,000 MT gasoline, Sti Milwaukee	
	30,000 MT gasoline , Nord Thyra	
July	31,000 MT gasoline, Hafnia Libra	

Figure B23. Taleveras and Ontario product deliveries to PPMC, March-July 2015, by cargo and vessel

Sources: Commercial vessel traffic reports and satellite imagery Note: Delivery quantities are all approximate.

In an 8 June 2015 press release, Taleveras explained that it had to deliver some products later because PPMC did not hold a final reconciliation meeting to settle accounts until 5-8 May, despite Taleveras having asked for an earlier meeting date. ¹⁹³ The company added that in the interim it had imported "over 102 million litres of gasoline" to help Nigeria avoid fuel shortages. ¹⁹⁴ The company told us by letter that "all delivery obligations have been met post reconciliation to date."

This situation does not accord with the terms of the PPMC-Duke RPEA, in two ways. First, the contract called for periodic reconciliation meetings every two months, and a final meeting within 15 days of the contract's end. ¹⁹⁶ Taleveras understandably would not want to be a creditor to debt-ridden PPMC, and so would not want to deliver its final fuel cargoes under the RPEA until its precise outstanding obligations to the company were known. But the Duke contract made no exception for late product shipments in the event that the final reconciliation meeting did not take place on time. It is unclear why PPMC chose to delay the reconciliation meeting for such a long period.

¹⁹¹ NNPC Crude Profiles for Domestic Consumption, December 2014; market intelligence data on file with NRGI.

¹⁹² PPMC-Duke Art. 2(iv). In our reading, the agreement contains no exceptions to this rule for end-of-contract deliveries.

¹⁹³ In correspondence with us, the company added that "setting a date for the reconciliations and getting four different organizations (NNPC, PPMC, Duke, Taleveras) together at the same time proved challenging." Taleveras, 17 July letter to NRGI, p.4.

¹⁹⁴ *This Day*, "NNPC oil swaps: Taleveras says it was not asked to refund 115mn," 8 June 2015, available at: http://www.thisdaylive.com/articles/nnpc-oil-swaps-taleveras-says-it-was-not-asked-to-refund-115m/211451/.

¹⁹⁵ Taleveras, 17 July 2015 letter to NRGI, p.4.

¹⁹⁶ PPMC-Duke RPEA Art.17(iii)-(iv).

Second, the Duke contract did not foresee such large arrears. Its main provision about final deliveries, Article 2(iii), specified that Duke could pay PPMC cash at the contract's end if Duke owed less than half of a cargo of fuel. By contrast, our research found that Taleveras delivered eight full cargoes—or approximately 258,000 MT—of gasoline to PPMC more than sixty days after the contract expired (figure B23). As a rough rule of thumb, for each 950,000 barrel cargo of crude lifted under the RPEA, Taleveras was obligated to supply around three cargoes of products. Using this rule, it would appear that by 60 days after the end of the Duke agreement, the company still owed PPMC products of a value equivalent to two to three full liftings of oil. 197

Ontario put out a statement the day after Taleveras. In it, the company did not comment on its apparently tardy gasoline deliveries. Instead, it simply wrote that under the PPMC-Duke RPEA it had "lifted 47 crude cargoes and corresponding refined products have been supplied against every single crude cargo lifted." Ontario added that it is "a law abiding and responsible organization" with a "reputation for probity and accountability [that] is unassailable," and that any claims that it had not supplied PPMC with enough fuel came from "surreptitious efforts by some persons who, out of envy for the progress made by our company, are eager to spread malicious and concocted rumours." ¹⁹⁹

2015 Aiteo deliveries under its OPA. We also obtained and analyzed vessel traffic
reports and NNPC records showing Aiteo's crude liftings and fuel deliveries under its
OPA in the first quarter of 2015. Like the PPMC-Duke RPEA, the Aiteo OPA called
for all products that Aiteo owed NNPC to arrive within two months of receiving
crude.²⁰⁰ But Aiteo fell behind for some liftings, the records said.²⁰¹ April 2015
reporting by the oil sector trade journal Energy Compass also found shortfalls.²⁰²

A comparison with Sahara Energy raises further questions about Aiteo's performance. According to the data we reviewed, Aiteo supplied 8 product cargoes—three of kerosene and five gasoline, totaling approximately 347,000 MT—under the OPA in the first quarter of 2015. In the same period, Sahara sent NNPC at least 35 cargoes—or a total of approximately 1,204,000 MT—under its OPA.²⁰³ Because both companies were operating under 90,000 b/d OPAs signed around the same time, the 27 cargo discrepancy during this period between their respective deliveries warrants scrutiny. Aiteo's imports under its OPA picked up in the second quarter: from the best available data, we estimate that it supplied NNPC with at least 947,000 MT of gasoline between April and June 2015. We do not have to sufficient data to determine whether the company was current on its delivery obligations during that period.²⁰⁴

¹⁹⁷ When we shared this estimate with Taleveras, the company responded that "as a rule of thumb 950,000 bbls of crude was approximately three cargoes of product, but at the end of the RPEA, the amount of crude vs product has to net-off at 'zero' to either party and so the correct amount of product will be delivered versus the amount of crude loaded and not delivered against a 'rule of thumb.' In order to ensure that the net result between the contractual parties was 'zero,' with neither side having over or under delivered, it was important that the reconciliation be held prior to the delivery of final cargoes." 17 July 2015 letter to NRGI, p.5.

¹⁹⁸ *This Day*, "Ontario: We have supplied all fuel cargoes to NNPC," 9 June 2015, available at: http://www.thisdaylive.com/articles/ontario-we-have-supplied-all-fuel-cargoes-to-nnpc/211550/.

¹⁹⁹ Ibid.

²⁰⁰ Aiteo OPA Art 2(iv)

²⁰¹ For example, the data showed that by the close of March 2015, Aiteo had not supplied any products to pay NNPC for its 24 January 2015 lifting of 949,969 barrels of Escravos crude aboard the Kokkari.

²⁰² Energy Compass, "Nigeria: Buhari Mulls Corruption Fight," 24 April 2015.

²⁰³ NNPC documents and commercial vessel traffic reports on file with NRGI.

²⁰⁴ Figure based on our analysis of 2015 NNPC documents, commercial vessel traffic reports, tanker market reports and other market intelligence data on file with NRGI.

We asked Aiteo to confirm that the accuracy of the numbers we computed, and for an explanation as to the differences between what Aiteo and Sahara supplied in first quarter 2015. The company asked NRGI to sign a non-disclosure agreement before it would discuss details, writing that in order to answer our questions it would have to volunteer "a significant amount of proprietary and or confidential information." In the interests of transparency, we declined to sign the non-disclosure agreement, and asked that they still provide some information. One day later, Aiteo released a statement saying that "at the end of a reconciliation meeting with the NNPC, the company was declared up to date in its contractual performance." Therefore, Aiteo claimed, it had "discharged its obligations creditably" and had "not breached any obligation in [its] OPA." OPA.

4.2. FURTHER STUDY AND REFORMS NEEDED

To fundamentally improve how fuel imports work, Nigerian officials would first have to study the status quo closely and ask difficult, pointed, politically sensitive questions. Before deciding on reforms, they would need to know who makes the costly decisions now; where their influence and incentives come from; and what gaps in rules, processes and accountability give them cover. For reforms that seem obvious but have gone nowhere, it would be important to ask why. The new administration will find a decadeslong backlog of remedial and preventive opportunities missed. And NNPC cannot be left to clean up its own house, as that is where many of the worst problems lie.

We do not offer recommendations here for a full course of reforms. Further study is needed to determine which steps would bring better results. Removing NNPC from the Nigerian fuel market altogether may be the only cure for some existing ills. We would suggest that government:

- Commission an independent baseline study of governance issues with NNPC fuel imports.
- Review the inspection processes for imports, including the conduct of the private companies and government agencies involved.
- Explore what additional rules and oversight are needed for STS operations by tankers carrying fuel.
- Audit how PPMC manages coastal liftings of fuel, including the vessels and private companies involved, and replace those actors involved in malpractice.
- Commission periodic external audits of product movements through the NNPC fuel imports supply chain, and holding responsible actors to account for irreconcilable losses.
- Develop robust due diligence functions for choosing service providers.

²⁰⁵ NRGI, May 2015 letter to Aiteo.

²⁰⁶ Aiteo, 18 May 2015 email to NRGI.

²⁰⁷ See *Premium Times*, "Aiteo not front for Jonathan, Diezani, says spokesperson," 19 May 2015, available at: http://www.premiumtimesng.com/business/183282-aiteo-not-front-for-jonathan-diezani-says-spokesperson.html.

- Institute more open, competitive tender processes for service contracts relating to fuel imports.
- Review record-keeping and reporting for NNPC imports, with a view to improving transparency and accuracy.
- Stop subsidized sales of kerosene to swap holders.
- Formally end the kerosene subsidy.
- Make and enforce a clear policy about whether companies can sell NNPC-imported kerosene as jet fuel.
- Cancel NNPC's contracts with any service providers found to have engaged in malpractice around fuel imports.
- Design and implement a program of internal sanctions for NNPC and other agency staff caught engaging in malpractice.
- Write and enforce rules against awarding export, import or swap contracts to companies linked to PEPs.
- Force holders of swap and related service contracts to declare their beneficial owners, and impose legal penalties for false declarations.
- Refer offenders to the EFCC for prosecution, including top officials when appropriate.

5. Conclusion

This report has offered recommendations for how Nigeria can obtain better value from oil-for-product swaps. We recognize that government may have to use swaps for some time, and want to provide realistic, useful advice. If the country must barter with its most valuable asset, it should strike deals that deliver optimal returns.

Nonetheless, the Buhari government should treat swaps as a short-term measure. The administration should not let swaps become a permanent feature of Nigeria's energy landscape. Their governance risks are inherently high. The new administration might sign better contracts than those from the 2010-2014 period, but it will not be able to drive out all of the entrenched rackets and rent-seeking around NNPC fuel imports. Liquidation of the corporation's downstream operations would seem to be the only feasible way forward. (See main report p.67.)

The recent swaps are also another unfortunate example of NNPC relying on short-term, stop-gap measures instead of tackling deeper problems. In the five years that the Goodluck Jonathan government poured crude worth approximately \$35 billion into swaps, officials could have worked on finding a workable corporate finance model for NNPC, fixing (or selling) the refineries, cleaning up the DCA—of which the swaps are a part—or stemming the unsustainable losses from NNPC's downstream businesses. As recommended throughout this report, targeted reforms to the swaps should be accompanied by solving the deeper problems with NNPC that made the swaps necessary in the first place.

Report Annex

August 2015



Inside NNPC Oil Sales: A Case for Reform in Nigeria

Annex C. Government-to-Government Sales

INTRODUCTION

Each year, foreign governments or state-owned companies feature among the list of entities that buy oil from NNPC. This annex explores the structure and management of these government-to-government ("g-to-g") crude oil sale arrangements.

Although they make up a relatively small part of total NNPC oil sales—reports range from 8 to 24 percent in recent years (see figure C1)—the Nigerian government should re-examine NNPC's g-to-g sales. Offering oil to other governments could be a useful way to find new buyers for Nigerian crude or pursue foreign policy aims. But in recent years NNPC executed these g-to-g deals in ways that appear not to have advanced either of these agendas. Moreover, some past g-to-g transactions have exhibited significant governance risks. This is particularly true for deals struck with small countries that lack the capability to refine the crude they receive. Public scandals have ensued, including investigations into NNPC's g-to-g deals with Liberia, Jamaica, Zambia, Malawi and South Africa.

In the sections that follow, we present information about how NNPC has engaged with other governments in selling Nigeria's oil, and identify the most pressing concerns about this particular subset of NNPC sales.

BACKGROUND

Each year NNPC issues several contracts that allow other nations to buy portions of the Nigeria's crude oil production. The country has been selling oil through such deals since at least 1974, when Gen. Yakubu Gowon was head of state. Most of the contracts likely have identical, or at least broadly similar terms to those found in a one-year NNPC COMD term contract. The crude that buyer countries lift under their contracts comes out of NNPC's equity share of Nigeria's production.

¹ We reviewed only one g-to-g term contract (from 2011). However, several traders with experience managing g-to-g deals told us that most of the terms tend to be identical to those in the term contracts NNPC signs with private export buyers. Author interviews, 2011, 2013-2014.

² As shown on NNPC Crude Oil Lifting and Sales Profiles, 2005-2014. For more on how NNPC term contracts work, and NNPC's sources of oil, see main report p.16.

In recent years, NNPC has had two broad categories of g-to-g customers:

• Established NOCs with refining and trading capabilities: NNPC routinely sells cargoes of oil to NOCs in Brazil (Petróleo Brasileiro S.A.), China (mostly Unipec, the trading arm of Sinopec), and India (the Indian Oil Corporation). Less often, the corporation has sold oil to state-owned companies from Azerbaijan (Socar Trading) and Thailand (PTT Public Company Ltd.).

In many ways, these large and capable companies behave just like NNPC's other crude buyers, which are mostly privately-owned trading companies. However, they can differ for two reasons. First, other oil-producing countries have leveraged export arrangements with large NOCs to secure other assets, such as financing or infrastructure. Second, these sales relationships could be used to find new markets for Nigerian crude. This is an important concern in the current environment, when demand for Nigerian barrels is weak, mainly due to a glut of light sweet crude in the Atlantic market and the rise of shale oil production in the US.³

• Governments and state-owned companies of smaller countries: The governments of Ghana, Côte d'Ivoire and Senegal have been regular buyers of NNPC oil for decades. The state-owned Tema refinery in Accra and the Ivorian government's Société Ivoirienne de Raffinage (SIR) facility in Abidjan mostly use Nigerian crude as feedstock. Senegalese NOC Petrosen has shipped some of the oil it bought from NNPC to the partially state-owned Société Africaine de Raffinage (SAR) in Dakar. As discussed below, however, many of the cargoes sold to these refineries are not refined in their facilities, but are sold by traders into the spot market while the refineries act as passive middlemen.

Each year NNPC also sells crude to a handful of smaller countries that do not—and often cannot—refine oil at all. Most of these are located in sub-Saharan Africa, or are Commonwealth countries. The refineries of a few, such as Jamaica and Zambia, are not configured to process Nigerian crude. Others—Burkina Faso, Liberia and Malawi, for instance—do not have working refineries.

Available records show that between 2004 and 2014, NNPC awarded other governments an average of eight term contracts per year. Twenty-one countries won at least one contract (figure C1).

Volumes allocated* Volumes Large, established allocated* (barrels Year **NOCs** (barrels per day) per day) Smaller government buyers 2004 300,000 China, India 90,000 Cameroon, Côte d'Ivoire, Ghana, Jamaica, Kenya, Sao Tome, Senegal, South Africa 2005 China, India 90,000 Burundi, Côte d'Ivoire, Ghana, Jamaica, 285,000 Kenya, Sao Tome, South Africa 230,000 2006 China, India 140,000 Burundi, Côte d'Ivoire, Ghana, Burundi, Jamaica, Kenya, Liberia, Senegal, South Africa 2007 China, India 120,000 Côte d'Ivoire, Ghana, Sao Tome, 190,000 Senegal, South Africa 2008 China, India 120,000 Côte d'Ivoire, Ghana, Senegal 110,000 2009 China, India 120,000 Côte d'Ivoire, Ghana, Senegal 120,000 2010 120.000 China, India Benin, Côte d'Ivoire, Ghana, Liberia, 205.000 Sao Tome, Senegal, Sierra Leone 2011 Azerbaijan, Brazil, 180,000 110,000 Burkina Faso, Senegal, Sierra Leone, China, India Zambia 2012 Azerbaijan, Brazil, 150.000 Burkina Faso, Côte d'Ivoire, Ghana, 260.000 China, India, Liberia, Malawi, Senegal, Sierra Leone, Thailand 2013 [2012 contracts 150,000 260,000 [2012 contracts were rolled over] were rolled over 2014 90,000 China, India, Malawi 30,000 Vietnam

Sources: NNPC approved term contract lists

Most of the discussion in the next section focuses on this latter group of countries, as their policy objectives are less easily discerned and sales to them come with greater governance risks.

GOVERNANCE CONCERNS ARISING FROM G-TO-G DEALS

Our research into these deals led to concerns in two main areas: an apparent absence of policy goals, and the abundance of middlemen.

We conclude that at least some g-to-g deals signed in the last decade had no strong financial or policy justifications and came with substantial risks of mismanagement. Sales to smaller countries that did not refine the oil they bought were the most problematic. As five case studies in the following sections show, the added layers of complexity and opacity in these deals left them open to abuse, and they delivered to Nigeria no clear additional benefits.

Absence of policy goals

Our research indicates that past Nigerian administrations failed to follow clear policy strategies in their g-to-g oil sales. For sales to large NOCs like those in China, India or Brazil, this absence of an explicit policy is not particularly unsettling, as these NOCs have large trading operations that differ little from those of NNPC's private crude

Figure C1. G-to-g contracts awarded by NNPC, 2004-2014

^{*} These figures indicate the ex-ante volume of the term contract allocations, not actual cargoes sold to these customers.

oil customers. However, for smaller governments that lack either trading or refining capacity, the absence of a clear policy objective raises more questions. As explained below, the rationale for these deals becomes even muddier when their mechanics are unpacked.

G-to-g contract holders and top buyers vary year by year (figure C2), yet it is difficult to observe correlations between these fluctuations and known shifts in government policy, or the launch of new bilateral initiatives. NNPC offers little help on this question, since it does not publish guidelines for how it awards term contracts, or how it then parcels out cargoes of oil among contract-holding companies. The corporation told a government task force in 2012 that it signs lifting deals with countries "based on federal directive" and "has no control over the selection or the volumes" allocated to a particular foreign nation.

Rank	2005	2006	2007	2008	2009	2010	2011	2012	2013 Q1&Q2
1	South Africa	China	Côte d'Ivoire	No data	China	China	India	China	Malawi
2	Côte d'Ivoire	India	China		Côte d'Ivoire	India	China	Azerbaijan	Thailand
3	Ghana	South Africa	India		India	Côte d'Ivoire	Senegal	India	Zambia
4	China	Ghana	Ghana		Senegal	Ghana	Liberia	Côte d'Ivoire	India
5	Sao Tome	Côte d'Ivoire	Senegal		Ghana	Senegal	Zambia	Zambia	Azerbaijan
6	India	Sao Tome	Sao Tome		Sao Tome	Sierra Leone	Sierra Leone	Malawi	Ghana
7	Jamaica	Senegal	Jamaica		-	Sao Tome	Côte d'Ivoire	Burkina Faso	China
8	Kenya	Jamaica	Liberia		-	Liberia	Benin	Senegal	Liberia
9	Burundi	Burundi	Kenya		-	-	Brazil	Ghana	Brazil
10	Senegal	Kenya	Burundi		-	-	Sao Tome	Liberia	Côte d'Ivoire

Figure C2. Top ten g-to-g buyers of NNPC crude oil by volume, 2005-2013

Source: NNPC Lifting and Sales Profiles. Figures based on actual volumes lifted, not contract allocations.

Data on the volume of sales also does not point to an underlying strategy. Volumes of oil sold to other governments peaked under President Olusegun Obasanjo (1999-2007). In 2005, for example, NNPC sold an average of 247,000 barrels per day—or 24 percent of its total liftings—to nine governments. G-to-g sales fell sharply under his successor Umaru Yar'adua (2007-2010), to only around 68,000 barrels per day in 2009. The Goodluck Jonathan administration (2010-2015) channeled a bit more oil to government buyers in its first three years, but then it slashed the number of g-to-g contracts to four in 2014 without explaining the change (figure C1).

There are no obvious correlations between this performance record and known shifts in Nigerian security, energy, trade or investment policies over time. One could speculate about possible motives, though the links are far from obvious. For example, the growth of sales to China in 2006 may have been part of President Obasanjo's push that year to attract new Asian investors to the oil sector. More generally, President Obasanjo was the

⁴ For more on this point, see main report pp. 53-54.

⁵ NNPC, Responses to Questions on the Dynamics of Oil & Gas Revenue by the Task Force on Petroleum Revenue, undated PowerPoint, slide 16.

⁶ NNPC Crude Oil Lifting and Sales Profiles, 2005.

⁷ Id., 2009.

most internationally oriented of the three leaders, particularly with respect to neighbors on the African continent.⁸ Officials from the Yar'adua administration claimed that the lower numbers of g-to-g contracts signed in 2008 and 2009 reflected a general desire on the part of the president to "clean up" the oil sales process and "weed out" underperforming companies he saw as close to his predecessor, rather than any new foreign policy choices. Production outages caused by an insurgency in the Niger Delta also meant the Yar'adua government had less oil to sell.⁹

Below we identify a few potential motives that could justify the patterns of g-to-g sales in Nigeria, and assess whether they appear to apply.

Do sales to NOCs boost demand for Nigerian crude?

G-to-g sales have done little to help develop reliable sources of demand for the oil sold by NNPC, despite NNPC having signed contracts with state-owned companies in important markets. NOCs from Brazil, ¹⁰ China¹¹ and India¹² are frequent buyers, for example, and have well-established trading operations. Given their size and global presence, it is quite normal for these companies to feature on NNPC's list of term contract recipients, even if Nigeria was not courting these markets. It is unclear that these deals have achieved the additional upside of developing new markets for Nigerian crude. (Again, developing new demand is a priority for Nigeria, given that the market for its crude has shifted significantly of late.)

Available data suggests that from the BRIC countries, only India has played a major role in meeting Nigeria's market challenges, and NNPC oil sales have played a limited role in facilitating that interest. Nigerian oil imports by Brazil and China have remained relatively flat since shale oil production started in the US. By contrast, reported average daily shipments to India rose by nearly 100,000 barrels per day from 2012 to 2014. This increase in demand is second only to Europe, to which Nigerian imports have roughly doubled since 2010 (figure C3). Indian purchases of Nigerian crude have continued to grow in 2015, due to lower prices and strong refining margins.

- 8 For more on Obasanjo's foreign policy priorities, see John Iliffe, *Obasanjo, Nigeria and the World.* London: James Currey, 2011.
- 9 Author interviews, former Yar'adua aide and former top NNPC executive, 2010 and 2014.
- 10 Petrobras has bought Nigerian oil since the 1980s, well before Brazil became a major oil producer. According to available loading and shipping data, the main grades Brazil purchases for its refineries are Agbami, Akpo, Yoho and Brass. Between 2002 and 2011, average annual Nigerian oil imports ranged from 103,000 to 230,000 b/d. Katsouris and Sayne Oil Theft Report p.28.
- 11 In the six years reviewed for this report, Chinese state-owned entities on average purchased anywhere from roughly 20,000 to 43,000 b/d from NNPC. This made China a leading g-to-g buyer during the period, and the top buyer for three of the six years (see figure C2). Chinese purchases were highest in 2006, the year that President Obasanjo aggressively courted Asian investors for an oil block licensing round and other investment initiatives. By 2009, however, they had dropped back to about cargo per month. NNPC Crude Oil Lifting and Sales Profiles, 2005-7 and 2009-11.
- 12 State-owned Indian Oil Corporation, which manages 10 of India's 22 refineries, controls the country's g-to-g contract. Under this deal, the company purchased approximately one cargo a month between 2005 and 2011. NNPC Crude Oil Lifting and Sales Profiles, 2005-2011. The Indian Oil Corporation favors only a few of Nigeria's 26 oil grades for refining, mainly Bonny Light, Bonga, Qua Iboe, Amenam and Brass Blend. Ibid.
- 13 Beginning in 2011, cargoes of Nigerian oil quickly filled much of the sizable gap in light sweet crude supply to Europe created by the conflict in Libya. This arguably created opportunities for strengthening buyer relationships on the continent and supported prices for some Nigerian grades. Petroleum Intelligence Weekly, March 3, 2014.
- 14 Platts, "India's appetite for West African crude oil grades sees big boost," July 15, 2015, available at: http://www.platts.com/latest-news/oil/london/indias-appetite-for-west-african-crude-oil-grades-26149214

Importer	2010	2012	2013	2014
US	983	406	255	92
Europe	451	870	830	923
Brazil	179	171	[no data]	205
India*	316	282	292	370
China	26	19	21	27

*India 2011-2012 and 2010-2011 based on official data for April-March fiscal years.

Figure C3. Imports of Nigerian oil before and after the start of US shale oil production ('000 barrels per day)

Sources: US Energy Information Administration; Chinese General Administration of Customs; Indian Federal Oil Ministry; Brazilian customs data; OECD customs data.

Unfortunately, NNPC's g-to-g sales are not a major part of this evolving story. Indian refiners buy most of their Nigerian crude through monthly open tenders to trading companies, not directly from NNPC. According to NNPC oil sale records and interviews with traders and market analysts, COMD sales to g-to-g buyer Indian Oil Corp. have actually fallen since 2012. The Indian refiner did not even make the preliminary list of 2014 term contract winners, and was only added late in the award process. The Jonathan government also dropped Brazil's NOC Petrobras as a term buyer in 2014, effectively shutting a door on Nigeria's main Atlantic market outside of the US and Canada. Even the higher European sales are not due to NNPC seeking out new end-user buyers in that market. Rather, it was traders with NNPC term contracts who sold more of their cargoes on the continent as demand there rose.

G-to-g buyers also tend to re-sell much of the oil they buy from NNPC in the spot market instead of importing it for use at home. Among the BRICs, for instance, while India and Brazil do refine most of the crude they buy, Chinese NOCs re-sell many of their cargoes. Chinese refiners are highly cost-sensitive, and many of their facilities are set up to process cheaper, medium sweet crudes from Angola and other producers; they tend to see Nigerian crude as unnecessarily expensive. ¹⁸ Given this weak local demand, Sinopec's trading arm, Unipec, has sold many of its cargoes to refiners in Brazil and the US, or to the trading divisions of big buyers like Shell, BP or Vitol. The traders then re-sell the parcels. ¹⁹ Figure C4 shows this trend for the years 2009 to 2011, with the number of sales to Asian companies far outweighing the number of cargoes that ever enter Asian refineries. This means that companies like Sinopec are acting as any other trader of Nigerian crude, and that NNPC sales to Chinese NOCs should not be mistaken as "accessing the Chinese market."

¹⁵ Author interviews and NNPC Crude Oil Lifting and Sales Profiles, 2012-2014. Note: We did not have access to data for some months in 2013 and 2014, but the records available were complete enough to identify the trend reliably.

¹⁶ Author interviews, trading company personnel; copy of preliminary list seen by authors; see also *Reuters*, "TABLE: Nigeria's expanded list of oil contract winner," June 5, 2014, available at: http://in.reuters.com/article/2014/06/05/nigeria-oil-sales-idlNL6N00K42O20140605

¹⁷ Market intelligence data and author interviews, trading company personnel and market analysts, 2012-2015.

¹⁸ Petroleum Intelligence Weekly, "A new market for Nigerian Crude – Nigeria," March 3, 2014, p1.

¹⁹ NNPC Crude Oil Lifting and Sales Profiles; author interviews, trading company executives, refinery buyers, ship brokers and industry analysts, 2010-2014.

	2009			10	2011	
Countries	Total oil purchased under g-to-g contracts, by region	Destinations of oil purchased under g-to-g contracts, by region	Total oil purchased under g-to-g contracts, by region	Destinations of oil purchased under g-to-g contracts, by region	Total oil purchased under g-to-g contracts, by region	Destinations of oil purchased under g-to-g contracts, by region
All North American	0	7.6	0	23.2	0	7.2
All South American	0	0	0	1.9	0.9	0.9
All European	0	2.9	0	6.0	0	7.5
All Asian	13.2	4.7	16.7	6.3	14.2	7.6
All African	11.8	9.8	30.2	9.5	15.9	4.0
No data	-	-	-	-	-	3.8
Totals	25.0	25.0	46.9	46.9	31.0	31.0

Figure C4. G-to-g liftings — which contract holders bought the oil versus where it went, 2009-2011 (million bbls)

Sources: NNPC Crude Oil Lifting and Sales Profiles; Ministry of Finance pre-shipment inspection reports; market intelligence data on file with NRGI; author interviews.

Of 118 total g-to-g cargoes identified for the three years, only 31—or 26 percent—went to the countries that bought them in the first place. While the data has limitations, it broadly confirms comments from industry players that g-to-g buyers often do not themselves need the cargoes they buy for refining, and instead sell them in the spot market for undisclosed profits, typically to a trader or foreign refinery.

NNPC in recent years has also sold less crude to West African refiners, which have been small but dependable buyers of Nigerian oil for years. Ghana for instance had an NNPC oil allocation as far back as 1992, available data shows. Selling more oil within West Africa could make sense given lower demand elsewhere, the lesser transport costs involved, and the broader goals shared within the Economic Community of West African States (ECOWAS) of boosting regional trade and economic cooperation. Yet without saying why, the Jonathan government did not to renew NNPC's g-to-g deals with the state-owned refineries in Ghana, Côte d'Ivoire and Senegal in 2014 – just when demand for Nigerian crude needed support.

Moreover, as with the BRICs, significant amounts of the oil NNPC sold to Ghana, Côte d'Ivoire and Senegal on a g-to-g basis never reached the refineries of those countries. For instance, government data suggests that only two out of twelve cargoes sold to Ghana's Tema Refinery in 2010 actually went to Tema. The rest—some 6 million barrels, or 85 percent of total shipments—was reportedly re-routed to buyers in the Netherlands, Germany, Uruguay, Canada and the US Gulf Coast.²³ Output problems could explain part of the problem, as both Tema and SIR often run well below their full capacities due to technical and funding problems. They also have experienced cash flow

²⁰ NNPC Crude Oil Lifting and Sales Profiles, 2009-2011; Ministry of Finance pre-shipment inspection reports.

²¹ For example, some cargoes are sold on the water to a third party after they are loaded and their original bill(s) of lading are drawn up. A typical term contract gives NNPC a contractual right to know where its crude goes. Sample NNPC term contract, General Conditions Art. 1.5 requires buyers to send NNPC a report showing volumes discharged at final delivery points within 45 days of discharge. Art. 20.3 requires the buyer to provide NNPC documentation of the final destination, if NNPC requests to know. Trading sources noted, however, that not all buyers consistently comply with this obligation. The importer data are collected using a variety of methods, some more reliable than others. Author interviews, [source descriptions and dates]. Moreover, COMD's sales records sometimes list general destinations such as "Gulf of Guinea" or label cargoes "for orders," both of which suggest a parcel could have been stored or transferred to another vessel offshore.

²² Author interviews, trading company executives, refinery buyers, ship brokers and industry analysts, 2010-2014.

²³ NNPC Crude Oil Lifting and Sales Profiles, 2010.

problems which caused downtime.²⁴ These numbers nevertheless suggest that g-to-g sales to West African governments have not effectively stimulated end-user demand for Nigerian crude.

If NNPC genuinely wanted to secure more dependable outlets for its crude, it could sign longer-term supply agreements directly with other overseas refineries. (For more on this point, see main report p.59.) Other governments have had considerable success with such deals, though the gains in stability can mean lower sale prices. ²⁵ Some oil producing countries also turn to other governments when their usual buyers lose interest. Several US and European refiners have been relatively consistent end-users of Nigerian crude for some years, though US imports have dropped of late. A buyer at one refinery told us that his firm would gladly negotiate a term contract directly with NNPC, but the corporation insists on imposing traders. ²⁶

Do g-to-g sales help Nigeria access other assets?

Some nations sell oil to their foreign partners to gain access to goods which they lack. This can includes trading oil for credit—often through "oil-backed loans"—or bartering crude for new roads, rail lines or other public works. Cash-rich China frequently prepays its trade partners for oil deliveries.²⁷ In the early 2000s, many resource-rich but underdeveloped African governments signed such "oil-for-infrastructure" deals with Asian nations with booming economies, primarily with China.²⁸

However, unlike other African oil producers—most notably Angola—Nigeria has not sought these kind of exchanges from its government counterparts. NNPC has operated crude oil-for-product swap deals since 2010 (for more information, see annex B), but these are with private companies rather state-owned ones. The most significant try at oil-for-infrastructure deals in Nigeria came during the 2005 and 2006 oil block auctions, not through NNPC oil sales. Prior to awarding new term contracts each year, COMD does issue an invitation to bid saying applicants "must show commitment" to

- 24 Energy Compass, "Ghana: New President in Energy Related Struggles," January 11, 2013.
- 25 Saudi Aramco for example has entered into a number of such deals with US, South Korean and Chinese refining companies. Information gleaned from these arrangements help Aramco optimally price the oil it sells to other buyers, while the refineries get first chances at Saudi crude in the event of supply cuts. In Mexico, NOC Pemex found regular takers for its heavy "Maya" crude by entering into concessionary supply agreements that encouraged foreign refineries to build new cokers for processing their specific type of crude. In time, these deals helped create a new market for Maya and boosted its price. Interviews, oil market analysts, 2012-2013; John van Shaik, "How Governments Sell Their Oil," Revenue Watch Institute, 2012.
- 26 Author interview, 2013.
- 27 Such deals can be opaque and skewed against the creditor: war-time Angola is widely thought to have had some especially unbalanced deals. Author interviews, Angola analysts, 2012-2013.
- 28 By the late 2000s, the China Ex-Im Bank had extended credit lines for financing infrastructure projects—mainly in power and transport—to around 35 nations on the continent, with repayment to take place in oil or minerals rather than cash. For an overview, see V. Foster et al., *Building Bridges: China's Growing Role as Infrastructure Financier for Sub-Saharan Africa*, World Bank, 2009. Some of the arrangements—notably though involving the opaque conglomerate China Sonangol—have been criticized on the grounds of poor performance; opaque, unduly concessionary terms; and provision of finance to rogue regimes. See e.g., International Center for Investigative Journalism (ICIJ), "China-based corporate web behind troubled Africa resource deals," 9 November 2011; Global Witness, Financing a Parallel Government?, 2012; J.R. Mailey, The Anatomy of the Resource Curse: Predatory Investment in Africa's Extractive Industries, Africa Center for Strategic Studies Special Report, May 2015.
- There was an effort to secure infrastructure commitments from Asian state-owned companies during the 2005-2006 licensing rounds, such as Korea's KNOC and India's ONGC. However, these involved the allocation of upstream licenses rather than the sale of oil, and they did not produce many positive results.
- 30 Sinopec eventually gained more access to Nigerian oil reserves by buying out Addax, a private company, in 2009. For more information on the activities of Asian NOCs in Nigeria's upstream sector, see Chatham House, *Thirst for African Oil*, 2009; G, Mutembu-Salter, China's Engagement with the Nigerian Oil Sector, China in Africa Project, 2009.

investing in priority economic projects.³¹ But these appear to be largely aspirational statements: no one we interviewed recalled an instance in which NNPC denied companies denied contracts for failure to meet this soft "requirement."

Are g-to-g deals used as tools of "oil diplomacy"?

In addition to state-owned refining companies in the BRICs and West Africa, Nigeria sells crude to smaller governments that do not refine what they buy. One possible explanation for these deals could be that they serve the country's foreign policy aims, but we see limited evidence that this is the case.

Governments sometimes do use oil sales to pursue foreign policy aims. An ambitious recent attempt was late Venezuelan President Hugo Chavez's Petrocaribe program, which in 2005 began exporting up to 180,000 barrels per day of subsidized oil to 17 Caribbean countries with the aim of furthering Chavez's "Bolivarian revolution." Countries also can offer their partners cheap oil to buy political protection against future economic and national security threats, or to influence another country's decision-making. The Saudi government long attempted to do this by selling discounted crude to some US refineries, even when sales to Asia or Europe would earn more. Some believe that NOC Saudi Aramco also sends over 200,000 barrels per day by pipeline to neighboring Bahrain at low prices as a tool for influencing state policy.

It is harder to discern foreign policy as a motive behind Nigerian g-to-g sales. Some interviewees argued loosely that the sales to smaller African countries reflect Nigeria's continental foreign policy, which at moments—and especially under Obasanjo—focused on regional economic cooperation, peacekeeping and bilateral investment promotion. Others supposed that g-to-g sales could be one arm of Abuja's long-standing campaign to win a permanent African seat on the UN Security Council, should one become available. In theory, because they are negotiated at high political levels, g-to-g oil deals with smaller African countries could help create fresh goodwill for Nigeria on the continent as it asserts its political dominance or attempts to negotiate bilateral trade deals for non-oil goods.

Ultimately, however, our research found no instances since the return of democracy in 1999 of Nigeria selling oil to smaller, non-refining countries in pursuit of concrete policy aims. Neither government officials nor NNPC have pointed to any in their public statements. No one we interviewed either in government or the private sector could point to clear examples of the government using g-to-g sales as instruments of diplomacy.³⁷ As noted above, we see no clear correlations between fluctuations in

- 31 Examples given in 2012 included "railway construction," "solid mineral development," "independent power plants," "downstream" and "gas utilization projects. NNPC COMD, Invitation for Crude Oil Term Contract Application, 2012-2013.
- 32 Under Petrocaribe, for instance, some 60 percent of the oil bill is paid at delivery and the balance is financed over 25 years at 1 percent interest. Countries can also repay with goods, typically agricultural products. In the case of Cuba, Havana sends medical doctors as payment. Recent data suggests, however, that the Dominican Republic owed \$3 billion and Jamaica owed \$1.9 billion. Instead of pulling the plug on the program, some players in Caracas want higher interest rates and some countries are calling for tighter economic integration. Russia has done similar deals with former Soviet states such as Ukraine and Belarus, and both Iraq and Saudi Arabia sell Jordan discounted oil to grow alliances. Submission from oil market analyst on file with NRGI.
- 33 Analysis of 2012-2013 market data suggested that Saudi Arabia would have made \$2.5 billion more in those years if it had sold the oil Saudi Aramco allocated to the US into Asian markets. Ibid.
- 34 Author interview, Middle Eastern oil market analyst, 2013.
- 35 Author interviews, traders, market analysts and Nigerian government officials, 2011-2013.
- 36 Ibid.
- 37 Ibid.

contract recipients or sale volumes and known shifts in foreign policy. Traders, echoing comments from officials in the Nigerian presidency and Federal Ministries of Petroleum Resources and Trade and Investment, claimed that many g-to-g deals are not negotiated as part of bigger bilateral trade deals, or through formal avenues like trade missions or summits. Rather, the interviewees said, individuals with strong political contacts in both countries broker them "in private," as more or less unrelated "side deals." These persons might be businessmen active in both places, or diplomats. "It is all very informal, there is no pomp and circumstance," said another experienced trader, adding: "Sometimes the parties don't even announce the deals once they're signed."

The erratic, unreliable ways in which NNPC supplies oil to its g-to-g deals would also seem to undermine their value as instruments of diplomacy. Available data show that NNPC collectively promised foreign governments between 34 and 75 percent more oil that it delivered over the eight years we reviewed (figure C5). This stems from the larger problem of NNPC allocating term contracts for volumes that exceed the actual amount of crude they have available to sell. When it comes to allocating cargoes for sale, "bilaterals are the low men on the totem pole," said one experienced trader. He went on to imply that payments to officials could sometimes get a g-to-g contract holder "more attention."

Year	Volumes allocated to other governments ('000 barrels per day)	Actual sales to other governments ('000 barrels per day)	Percentage shortfall
2005	375	247	34
2006	370	219	41
2007	310	182	42
2008	230	No data	No data
2009	240	68	72
2010	325	129	60
2011	220	85	61
2012	410	101	75
2013 Q1-Q2	410	107	74

Figure C5. Under-supply of g-to-g deals by NNPC, 2005-2011

Sources: NNPC crude oil lifting and sales profiles; NNPC approved term contract lists

Further back in history, it appears that the federal government did have specific foreign policy goals for its g-to-g sales to smaller African countries. In the mid-1970s, the Yakubu Gowon and Murtala Mohammed military governments reportedly sold oil at below-OPEC rates to Liberia, Senegal and Sierra Leone, mainly to help them weather the 1973 Arab oil embargo.⁴¹ Nigeria apparently offered Niger free oil at the time, though the

³⁸ Author interviews, 2013-2014.

³⁹ Author interview, 2011.

⁴⁰ Author interview, 2010.

⁴¹ Despite strong economic and political pressures, two Nigerian governments decided in mid-1970s, around the time the ECOWAS treaty was signed, to sell crude at concessionary, below-OPEC rates to Senegal, Liberia, Sierra Leone, and Ivory Coast. The deals reportedly affected less than five percent of Nigeria's exports, and were justified in part as a means to help poor countries weather the 1973-1974 oil price shocks. Initial discounts were roughly \$5 under OPEC. See O. Aluko, Oil at Concessionary Prices for Africa: A Case-Study in Nigerian Decision-Making, African Affairs Vol. 75, No. 301 (Oct., 1976), pp. 425-443.

deal did not go through. ⁴² Protracted cabinet-level discussions and consultations with interest groups in and outside Nigeria preceded the deals. The Gowon regime offered the oil with the condition that receiving countries had to refine it themselves. ⁴³ Senior and retired NNPC and petroleum ministry officials recalled that the military governments signed subsequent g-to-g deals on the continent to boost Nigeria's influence within then-young regional economic and security-related bodies like the Organization of African Unity (OAU, now the African Union) and ECOWAS, and build new alliances with other Commonwealth states. ⁴⁴

However, by the late 1980s, governance of the smaller country deals changed. Traders brought in to manage contracts on behalf of the other countries started selling much of the oil into the spot market. NNPC signed its first g-to-g deals with countries that had no working refineries. Well-connected middlemen collecting margins on sales proliferated. The prominence of a proposed deal's political "sponsors," more than the deal's usefulness as public policy, determined its chances of getting signed. ⁴⁵ We discuss these problems in the next section.

Abundance of middlemen

NNPC's g-to-g oil sales have often been crowded with middlemen, even more so than its other export sales. ⁴⁶ The deals with smaller non-refining countries tend to involve the highest numbers of passive, largely non-contributory parties. Intermediaries in these deals can at times be stacked as many as three layers high:

1 Traders. Large oil trading companies are often the key movers in these deals. They typically arrange loading and transport on behalf of the foreign government that holds the contract, and find buyers in the spot market for any cargoes the government receives. Some also handle financing for the government, including wiring payments to NNPC.

For the rights to access the oil, the trader will pay the government recipient either per barrel "commissions" or a fixed percentage margin from all sales under a profit-sharing arrangement. ⁴⁷ Most governments do not report what they earn, but Kenyan parliamentary documents cited commissions of \$0.07 to \$0.15 per barrel from its 2005-2007 contract, and Jamaica in 2007 negotiated \$0.25 per barrel with Glencore, its chosen trader. ⁴⁸ In total, Kenya earned \$1.2 million from six Nigerian cargoes between 2004 and 2006, ⁴⁹ while in six years the Jamaican government collected \$2.4 million from the 34 million barrels that passed through its hands. ⁵⁰

A small cadre of traders—at first foreign, but increasingly Nigerian—have lifted the oil from most of the g-to-g contracts signed since 1999 (figure C6). Some claim that g-to-g contracts first emerged as devices to allow big trading companies to circumvent an informal NNPC rule that no term lifting contract holder could receive more than

⁴² A.A. Nwankwo, Nigeria: The Stolen Billions. Enugu: Fourth Dimension Publishers, 2002, p.79.

⁴³ Aluko (1976, op. cit.) p.426.

⁴⁴ Author interviews, 2013-14.

⁴⁵ Ibid.

⁴⁶ For more on the use of intermediaries in NNPC oil sales, see main report p.46-59.

⁴⁷ Author interviews, Nigerian oil traders, 2010 and 2014.

⁴⁸ Kenyan National Assembly, Hansard: Official Report, 19 July 2007, p.2649f.

⁴⁹ Ibid.

⁵⁰ Jamaican Office of the Contractor General, Special Report of Investigation Conducted into the Oil Lifting Contracts between the Petroleum Corporation of Jamaica (PCJ) and Trafigura Beheer, August 2010, p.16.

60,000 barrels per day.⁵¹ As such, buying g-to-g cargoes helped the bigger traders protect their market shares and lift more than their own daily allocations from NNPC.

Trader	Lifted g-to-g oil on behalf of:
Addax	Liberia
Arcadia	India, Sao Tome, Senegal
Glencore	India, South Africa
Mercuria	Senegal, Thailand
Sahara	Côte d'Ivoire, Ghana, Liberia, Senegal, Sierra Leone
Trafigura	India, Jamaica
Vitol	Burkina Faso, Kenya, Zambia

Figure C6: Examples of traders lifting oil under non-refining g-to-g oil deals, 1999-2013

Sources: NNPC lifting and sales profiles; market intelligence data; author interviews, trading company personnel and industry consultants

Not all g-to-g deals are created equal in this area. Some BRIC buyers typically lift their own crude, so those deals feature fewer middlemen. For example, Sinopec and Petrobras lift and finance their cargoes by themselves. However, the Indian Oil Corporation usually buys oil through tenders rather than NNPC's preferred model of term contracts, and has smaller trading and shipping desks; as a result, it does employ the services of traders. The Switzerland-based trading houses Arcadia, Glencore, Trafigura and Vitol all have lifted oil for the Indian Oil Corporation, available records and interviews suggest—an example of an intermediary serving a useful commercial purpose. ⁵²

2 Passive intermediaries and "briefcase" companies. The smaller non-refining country deals are more likely to feature companies that lack significant trading credentials (figure C7). In the language of the Nigerian crude oil market, these are often referred to as "briefcase companies." They are typically a small entity that routinely re-sells (or "flips") cargoes of crude to another intermediary—for example, a larger, more experienced commodities trading firm, which then re-sells the cargo to a third buyer. For some g-to-g deals, it is this type of company that actually enters into the contract with NNPC, rather than the foreign government. The case studies from Zambia and South Africa below illustrate this arrangement, with privately owned Sarb Energy and South African Oil Company holding those contracts for the two respective governments. The passive or briefcase intermediary is typically contractually entitled to collect a margin, either on a commission or profit share basis.⁵³

While they vary from contract to contract, typical duties for a non-trading intermediary under a g-to-g deal can include liaising with NNPC and the trader that lifts and markets the oil, and making payments to NNPC, the foreign country and other parties to the deal. Not every g-to-g arrangement involves a briefcase company or similar entity, however: Liberia and Kenya held their g-to-g contracts directly through their national oil companies, for example, and the large trading company Sahara Energy has managed purchases for other countries, such as Sierra Leone, with no briefcase company involved.

⁵¹ Author interview, trader with experience managing g-to-g deals, 2010.

⁵² Finding based on author interviews with trading company personnel and a comparison of NNPC Crude Oil Lifting and Sales Profiles with market intelligence data.

⁵³ Author interviews, trading company personnel, 2011-13.

Country	Company
Benin	Concept Series
Burkina Faso	PSTI
Burundi	MGG Energy
Jamaica	Goodworks Ltd.
Malawi	Petroleos de Geneve SA Ltd. (PDG)
Sao Tome	Overt Energy, United Energy
South Africa	South African Oil Corp.
Zambia	Sarb Energy

Figure C7. Entities associated with non-BRIC NNPC term contracts, 1999-2013

Sources: NNPC lifting and sales profiles; author interviews; media accounts

3 Other passive third parties. Some of the smaller country deals have a further tier of middlemen below the briefcase level, commonly referred to as "agents," "consultants" or "deal negotiators." One g-to-g deal we reviewed for this report included nine separate such parties, organized into different "groups" aligned with either the buyer or the seller. According to traders and also documents from g-to-g deals, these actors typically earn one or two cents per barrel of oil lifted. It is unclear what they do to receive such fees.

Figure C8, drawn from an accounting document from a recent g-to-g arrangement between NNPC and a smaller African country, gives a concrete example of how oil and money can change hands in these deals:

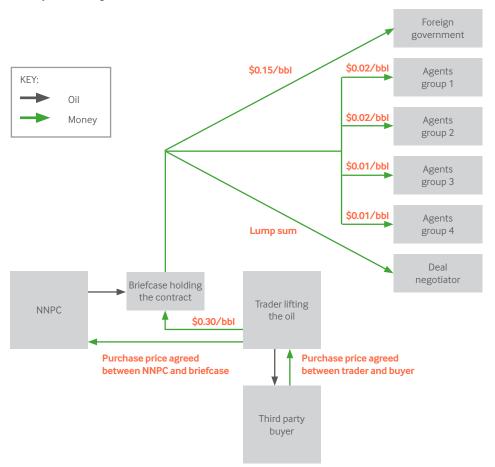


Figure C8. Structure, players and flow of funds of a g-to-g deal

Source: Confidential accounting document about a smaller country g-to-g deal, on file with NRGI

Do the deals pose risks of payments to government officials?

Because these deals involve two government parties and allow for participation by passive players who serve little commercial purpose, they do pose some risk of involving politically exposed persons (PEPs) in ways that create inappropriate conflicts of interest. This is a problem in other NNPC oil sales as well. (See main report p.49-50.) Controversies that arose in three of the smaller, non-refining countries illustrate some of the risks:

G-to-g case example: Jamaica. In October 2006, opposition politicians in Jamaica accused the then-ruling People's National Party (PNP) of financing its annual conference with bribes linked to that country's g-to-g deal with Nigeria. Government investigators reportedly later found evidence that Trafigura, which had managed the deal since 2000, had written three checks worth roughly US \$490,000 to an account controlled by the minister of information, who was also the PNP's general secretary. No final law enforcement action was taken in Jamaica or abroad.⁵⁴

G-to-g case example: South Africa. South Africa presents a less clear-cut but still troubling case. In August 1999, according to an investigation by the Mail & Guardian, NNPC offered a 55,000 barrel per day term contract to the "Republic of South Africa" after high-level diplomatic discussions. While African National Congress officials applauded the deal as a win for their government, the final contract was signed by "South African Oil Company" (SAOC), a firm registered in the Cayman Islands. Glencore managed SAOC's liftings—the first of which took place in October 1999—reportedly paying the offshore SAOC \$0.07 per barrel, or roughly \$1.4 million in the first year. 55

The *Mail & Guardian* reported in 2003 that no oil or revenue from the deal had reached the South African government. Instead, SAOC retained the South African margin for itself. SAOC was a private company 75 percent-owned by the Camac Group, which in turn was controlled by Kase Lawal, a Nigerian-American businessman seen as close to the Nigerian presidency. ⁵⁶ The owners of the last quarter of shares were unknown, but several ANC officials or their family members and associates reportedly sat on SAOC's board. ⁵⁷ In a public statement, Lawal's lawyer said that "no political party or politician in South Africa has ever benefited from the contracts" or from "donations by Mr. Lawal and/or any entity within the group." ⁵⁸

Despite the negative press, SAOC continued to lift NNPC oil regularly until November 2006. In 2005 and 2006, it lifted a reported 33.9 million barrels with a sales value to NNPC of \$1.95\$ billion. ⁵⁹ The company was Nigeria's largest g-to-g buyer by volume in 2005, when it received some 24.4 million barrels. ⁶⁰

⁵⁴ Office of the Contractor General, Special Report of Investigation Conducted into the Oil Lifting Contracts between the Petroleum Corporation of Jamaica (PCJ) and Trafigura Beheer, 2010. Nigeria: Good works, bad behavior, Le Monde, July 1, 2007.

⁵⁵ Mail & Guardian, "Oil scandal rocks SA," May 30, 2003, available at: http://mg.co.za/article/2003-05-30-oil-scandal-rocks-sa.

⁵⁶ Ibid.

⁵⁷ Mail & Guardian, "Just who is Kase Lawal," May 30, 2003, available at: http://mg.co.za/article/2003-05-30-just-who-is-kase-lawal.

⁵⁸ Mail & Guardian, "The responses: those who talk and those who don't," May 30, 2003, available at: http://mg.co.za/article/2003-05-30-the-responses-those-who-talk-and-dont.

⁵⁹ NNPC Crude Oil Lifting and Sales Profiles, 2005-2006.

⁶⁰ NNPC Crude Oil Lifting and Sales Profiles, 2005.

G-to-g case example: Zambia. The 2011-2013 g-to-g deal with Zambia also illustrates how these arrangements have sparked controversy, and how they have involved politically influential persons in both sets of countries.

In March 2013, the Zambian government arrested its former president Rupiah Banda and charged him with multiple violations of the country's anti-corruption laws. Part of the charges stemmed from a 20,000 b/d g-to-g deal his government finalized with NNPC in April 2011. The Lusaka Magistrate's Court acquitted Mr. Banda in June 2015 after finding that the prosecution had not proven that the former leader's alleged behavior around the g-to-g deal constituted abuse of office under Section 99(1) of the Zambian Penal Code. Nigeria's Economic and Financial Crimes Commission (EFCC) apparently looked into the Zambia g-to-g contract in May 2013, 2 but no enforcement action was taken.

The sworn trial testimony from the Banda case and Nigerian corporate filings indicates that current and former government officials may have played a role in the deal. The Zambia deal was managed by a Nigerian company named Sarb Energy, which held the contract with NNPC on Zambia's behalf.⁶³ The Lusaka court acquitted Banda of allegations related to payments made by Sarb to a Singapore-based company called Iexoria that was allegedly controlled by Henry Banda, the president's son. ⁶⁴ Two former Nigerian government officials also were affiliated with Sarb, according to records filed with the Corporate Affairs Commission (CAC). Brigadier General Sylva Ogbogu, a retired Nigerian Army officer owned 30 percent of the company. ⁶⁵ The second was Nimi Barigha-Amange, a former People's Democratic Party (PDP) senator (2007-2011), who also served as Director of Planning, Research and Strategy for former president Jonathan's re-election campaign in 2014. ⁶⁶ Barigha-Amange was a director in Deltoil Nigeria and Pixy Energy, two local companies that held stakes in Sarb.

The volume of crude sold through the deal is unclear. Sarb's CEO told the court in the Banda trial that a total of 5.7 million barrels changed hands under the Zambia g-to-g deal, with the last cargo loading in December 2012.⁶⁷ Our review of NNPC and Finance Ministry records found eleven cargoes (or 8,010,746 barrels) allocated to Sarb, worth \$969.6 million according to NNPC.⁶⁸ The last lifting, according to NNPC data, happened in October 2013.⁶⁹ As with several other g-to-g deals, the parties knew that Zambia would not refine any of the oil sold under the deal.⁷⁰ Instead, loading schedules indicate that Sarb sold the crude to traders including Vitol and Sahara Energy who lifted the oil.⁷¹

- 61 Zambia Daily Mail, "Rupiah acquitted," July 1, 2015, available at: https://www.daily-mail.co.zm/?p=34852.
- 62 Banda trial transcript, Akpan Ekpene and Richard Kachingwe testimony.
- 63 At trial, a Sarb representative claimed that his company paid NNPC Zambia's \$2.5 contract signing deposit and arranged letters of credit for cargoes of crude loaded under the deal. Transcript of Rupiah Banda trial ("Banda trial transcript"), Akpan Ekpene testimony.
- 64 Banda trial testimony, Remarks of Court.
- 65 Reports of 2014 and 2015 CAC records searches carried out on the companies Sarb Energy Ltd., Deltoil Ltd. and Pixy Energy Ltd. For copies, see http://www.resourcegovernance.org/publications/inside-nnpc-oil-sales.
- 66 Premium Times, "Full list of Jonathan's Campaign Officials," available at: http://www.premiumtimesng.com/news/174134-full-list-of-jonathans-campaign-officials-directorate-and-committee-levels.html.
- 67 Ibid
- 68 NNPC Crude Oil Lifting and Sales Profiles and Ministry of Finance Pre-shipment Inspection Reports, 2011-2013.
- 69 NNPC Crude Oil Lifting and Sales Profile, October 2013.
- 70 Ibid. Zambia's Indeni Refinery runs mostly on heavier crudes from the Middle East.
- 71 Market intelligence data.

Do non-refining countries receive the funds they are owed?

For three NNPC deals with smaller non-refining country, questions arose around whether earnings reached the buyer countries or were retained by the intermediaries involved. In addition to the Sarb Energy-Zambia case discussed above, two other past controversies suggest that intermediaries in g-to-g deals may withhold payments due the country, at least in terms of the commissions a country is supposed to earn.

G-to-g case example: Liberia. In the first case, the government that received the deal accused the trader managing its sales of hiding profits. A 2009 report by Liberia's auditor-general accused Geneva-based trader Addax of retaining the funds due to his country under a g-to-g deal. Addax had managed the Liberia Petroleum Refining Corporation's (LPRC) 2006 term contract with NNPC, under which the Liberia agreed to buy 10,000 barrels per day (despite having no refining capacity itself). A separate management agreement required Addax to pay LPRC a commission of \$0.14 per barrel for any oil sold. According to the auditor-general, Addax concealed 749,938 barrels of the oil it lifted under the 2006 contract, short-changing LPRC by more than \$98,000. When queried, Addax admitted the discrepancy—which it claimed "was an oversight resulting from personnel changes"—and eventually paid LPRC the missing commissions. Nigeria's National Assembly probed the allegations in 2009, but no sanctions or other law enforcement activity followed.

G-to-g case example: Malawi. In 2012, the National Oil Company of Malawi (Nocma) won a 30,000 barrel per day g-to-g deal, its first such deal with Nigeria. According to an investigation by Malawi's Nation newspaper, a Nigerian businessman with an honorary Malawian diplomatic title signed the contract on behalf of Nocma in May 2012. Shortly thereafter, according to official correspondence seen by the Nation, Malawi hired a Swiss firm run by the man's brother to act as a financing "agent" for the deal. When approached by the Nation, local officials and the agent disagreed on how much oil had been lifted, and whether the government had received its full share of profits. No public accounting followed, though one government agency later said Malawi earned \$1.26 million in commissions between through end of April 2013, most of which it had spent. The Jonathan administration reportedly renewed the Malawi contract into 2015.

⁷² General Auditing Commission, Report of the Auditor General on the Liberia Petroleum Refining Company for the Financial Years 31 December 2006 and 2007, April 2011, p.ivf.

⁷³ The Nation, "Malawi's State House in shady oil deal," April 13, 2013, available at: http://www.nyasatimes. com/2013/04/13/malawis-state-house-in-shady-oil-deal-with-nigeria/; see also Premium Times, "Jonathan, Nigerian wealthy family named in "dubious" Malawi oil deal," April 13, 2013, available at: http://premiumtimesng.com/news/129913-jonathan-nigerian-wealthy-family-named-in-dubious-malawi-oil-deal.html?wpmp tp=1.

⁷⁴ Nyasa Times, "Kapito queries Malawi government on Nigeria oil deal: US\$1mn earned," March 15, 2014, available at: http://www.nyasatimes.com/2014/03/15/kapito-queries-malawi-govt-on-nigeria-oil-deal-us1m-earned/.

⁷⁵ Reuters, June 5, 2014 (op. cit.).

CONCLUSION

When deciding whether to enter into more g-to-g oil contracts, Nigeria's new administration should weigh the contracts' potential policy benefits against the governance risks they carry. Not all g-to-g deal types are created equal in this regard, as the performance of deals from the past decade shows. Contracts with state-owned companies in Brazil, China and India have done little to ensure stable demand for NNPC crude, partly because the corporation has under-supplied them. Yet the deals mostly function like other sales under regular COMD term contracts, and the incidence of extra middlemen is lower. G-to-g sales to refineries in Côte d'Ivoire, Ghana and Senegal are a middle category with respect to risk. All three countries are obvious buyers of Nigerian crude, but their deals come with more middlemen, including traders that re-sell much of the oil on the spot market.

NNPC's g-to-g contracts with smaller, non-refining countries have the highest governance risks and the lowest policy benefits for Nigeria. The most obvious purpose they serve is to share margins with intermediaries, some of whom reportedly include PEPs. They are examples of NNPC's tendency to enter into opaque, needlessly complicated transactions when a simpler type of sale to an established and capable buyer would better serve the public interest.

We recommend that NNPC:

- Develop a comprehensive strategy for boosting demand for Nigerian crude, of which g-to-g sales to well-established NOCs could form part.
- Award NNPC term contracts through a transparent and competitive tender process that includes robust pre-qualification standards.
- Perform robust due diligence on intermediaries in g-to-g deals. (For more on this point, see main report p.54-55.)
- End sales to smaller non-refining countries unless NNPC can publicly explain the deals' policy benefits.

