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Currency units

NGN	Nigerian Naira
EUR	Euro
USD	United States Dollar
Conversion NGN 1 = E USD 1 = E EUR 1 = N	n rate as of 30.01.2024 EUR 0.001031 EUR 0.9354 IGN 969.4831

Source: https://fxtop.com/en/historical-exchange-rates.php

Technical units

W	Watt
kW	Kilowatt
kWh	Kilowatt hour
MW	Megawatt
MWp	Megawatt peak

Abbreviations/acronyms

ADB	Authorised Dealer Bank
BEPS	Base Erosion and Profit Shifting
CAC	Corporate Affairs Commission
CAMA	Companies and Allied Matters Act
CBN	Central Bank of Nigeria
CCI	Certificate of Capital Importation
CGT	Capital Gains Tax
CHP	Combined Heat and Power
CIT	Corporate Income Tax (referred to as Companies Income Tax in Nigeria)
CITA	Nigerian Companies Income Tax Act
C&I	Commercial and Industrial
DFI	Designated Financial Institution
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
	Boproolation and Amortioation
ECOWAS	Economic Community of West African States
ECOWAS EDT	Economic Community of West African States Education Tax
ECOWAS EDT EPC	Economic Community of West African States Education Tax Engineering, Procurement and Construction
ECOWAS EDT EPC ETA	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act
ECOWAS EDT EPC ETA ETF	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act Education Trust Fund
ECOWAS EDT EPC ETA ETF FIRS	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act Education Trust Fund Federal Inland Revenue Service
ECOWAS EDT EPC ETA ETF FIRS FiT	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act Education Trust Fund Federal Inland Revenue Service Feed-in-Tariff
ECOWAS EDT EPC ETA ETF FIRS FIT FRCN	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act Education Trust Fund Federal Inland Revenue Service Feed-in-Tariff Financial Reporting Council of Nigeria
ECOWAS EDT EPC ETA ETF FIRS FIT FRCN GIZ	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act Education Trust Fund Federal Inland Revenue Service Feed-in-Tariff Financial Reporting Council of Nigeria Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
ECOWAS EDT EPC ETA ETF FIRS FIT FRCN GIZ HS	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act Education Trust Fund Federal Inland Revenue Service Feed-in-Tariff Financial Reporting Council of Nigeria Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Harmonised System
ECOWAS EDT EPC ETA ETF FIRS FIT FRCN GIZ HS IAS	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act Education Trust Fund Federal Inland Revenue Service Feed-in-Tariff Financial Reporting Council of Nigeria Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Harmonised System International Accounting Standard
ECOWAS EDT EPC ETA ETF FIRS FIT FRCN GIZ HS IAS IFRS	Economic Community of West African States Education Tax Engineering, Procurement and Construction Education Tax Act Education Trust Fund Federal Inland Revenue Service Feed-in-Tariff Financial Reporting Council of Nigeria Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Harmonised System International Accounting Standard

LLP	Limited Liability Partnership
LP	Limited Partnership
LTD	Limited Liability Company
NAS	Nigerian Accounting Standards
NASENI	National Agency for Science and Engineering Infrastructure
NCS	Nigeria Customs Service
NIPOST	Nigerian Postal Service
NITD	National Information Technology Development
PDP	Project Development Programme
PIT	Personal Income Tax
PITA	Personal Income Tax Act
PPA	Power Purchase Agreement
PV	Photovoltaic
RE	Renewable Energy
SEP	Significant Economic Presence
SIRS	State Internal Revenue Services
SPV	Special Purpose Vehicle
TCC	Tax Clearance Certificate
TCN	Transmission Company of Nigeria
TIN	Tax Identification Number
TPO	Third Party Ownership
VAT	Value Added Tax
VATA	Value Added Tax Act
WC0	World Customs Organization
WHT	Withholding Tax
WTO	World Trade Organization

Disclaimer

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ENERGY SOLUTIONS – MADE IN GERMANY The German Energy Solutions Initiative

The German Energy Solutions Initiative, coordinated and financed by the German Federal Ministry for Economic Affairs and Climate Action (BMWK), aims to globalise German and European technologies and expertise in climate-friendly energy solutions.

Years of promoting smart and sustainable energy solutions in Germany have led to a thriving industry known for world-class technologies. Thousands of specialised small and medium-sized enterprises (SMEs) focus on developing renewable energy systems, energy efficiency solutions, smart grids and storage technologies. Cutting-edge energy solutions are also built on emerging technologies like Powerto-Gas, fuel cells and green hydrogen. The initiative's strategy is shaped around ongoing collaboration with the German business community.

THE PROJECT DEVELOPMENT PROGRAMME (PDP)

Implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, the Project Development Programme (PDP) is an integral part of the German Energy Solutions Initiative. The PDP combines development cooperation with private-sector engagement to promote climate-friendly energy solutions and facilitate market access for German and European small businesses in selected developing and emerging countries. This fosters economic growth and international cooperation, and contributes to climate change mitigation. The PDP works closely with the German Chambers of Commerce Abroad (AHK) to implement tailor made local solutions.

The PDP team keeps a constant eye on key market sectors in the target countries for providers of climate-friendly energy solutions. Using these insights, they generate sector analyses for areas where renewable energies or energy efficiency measures can compete effectively without extra subsidies.

PROJECT OPPORTUNITIES IN DEVELOPING AND EMERGING COUNTRIES

The markets in developing countries and emerging economies are promising, but also pose challenges for international business partners. The PDP team provides free and impartial advice to local companies, in particular, and puts them in contact with German or European business partners.

The team collects data from the energy consumer and evaluates it from a technical and economic perspective, thus developing financially viable projects focused on renewable energies and energy efficiency with local companies. It also offers business initiation opportunities with German or European small and mid-sized companies.

At the same time, the project provides training courses, analyses and studies on the risks and potential of renewable energies to help support market development. Visiting reference projects within the countries also promotes the creation of private-sector business partnerships.

In addition to commerce and industry, operators of refugee camps are a further target group for the transition to renewable energies as many still use diesel generators to supply energy or water.

The focus of activities currently lies in 15 countries across Southeast Asia, South Asia, Sub-Saharan Africa, and the Middle East.

Executive summary

NIGERIA'S LEGAL FRAMEWORK FOR RENEWABLE ENERGY

The Nigerian electricity market enables grid-connected and off-grid generation as well as self-consumption. Grid power generation is highly centralised, and the government owns and operates the central transmission grid through the Transmission Company of Nigeria (TCN). There are over 25 power plants that supply the central grid and are either privately owned or government-owned. Eleven private companies sell electricity to final consumers and are the only electricity suppliers in certain areas. Off-grid power generation is decentralised, but the development of mini-grids is regulated. Self-sufficiency with electricity over 1 MW is also regulated. Due to the inadequate grid supply, self-sufficiency plays an important role on the market, covering about 68.5% of the total electricity demand in Nigeria.

According to the regulations, a permit is required for the self-generation of electricity with a capacity of more than 1 MW; however, this is not required for electricity generation of less than 1 MW. It is estimated that over 48 GW, or 22 million small, gasoline-powered generators with outputs between 0.5 kW and 4.0 kW, power homes and businesses across the country, which spend around USD 12 billion each year to purchase and operate these generators.

Zusammenfassung

NIGERIAS RECHTLICHER RAHMEN FÜR ERNEUERBARE ENERGIEN

Der nigerianische Strommarkt ermöglicht die netzgebundene und netzunabhängige Erzeugung sowie den Eigenverbrauch. Die netzgebundene Stromerzeugung ist stark zentralisiert. Die Regierung besitzt und betreibt das zentrale Übertragungsnetz über die Transmission Company of Nigeria (TCN). Es gibt über 25 Kraftwerke, die das zentrale Netz versorgen und sich entweder in privatem oder staatlichem Besitz befinden. 11 private Unternehmen verkaufen Strom an Endverbraucher und sind in bestimmten Gebieten der einzige Stromversorger. Die netzunabhängige Stromerzeugung ist dezentralisiert, aber die Entwicklung von Mini-Netzen ist reguliert. Die Selbstversorgung mit Strom über 1 MW ist ebenfalls geregelt. Aufgrund der unzureichenden Netzversorgung spielt die Selbstversorgung eine wichtige Rolle auf dem Markt und deckt etwa 68,5 % des gesamten Strombedarfs in Nigeria.

Gemäß der Verordnung ist für die Eigenerzeugung von Strom mit einer Kapazität von mehr als 1 MW eine Genehmigung erforderlich. Bei einer Stromerzeugung von weniger als 1 MW ist hingegen keine erforderlich. Schätzungen zufolge versorgen über 48 GW oder 22 Millionen kleine, benzinbetriebene Generatoren mit einer Leistung zwischen 0,5 kW und 4,0 kW Haushalte und Unternehmen im ganzen Land mit Strom, die jährlich etwa 12 Milliarden Dollar für den Kauf und Betrieb dieser Generatoren aufwenden.

TARGETS TO INCREASE THE RENEWABLE ENERGY SHARE

Nigeria's primary electricity supply comes from thermal and fossil fuel-based resources, while a small chunk of grid electricity is derived from large hydropower-based plants. However, a large share of the population of Nigeria still lacks access to electricity. In the National Renewable Energy Action Plan 2015, the Federal Ministry of Power plans to increase power generation capacity to 30 gigawatts, which is almost double the current generation capacity. In addition, the country aims to achieve around 30% of this target using renewable energy sources.

Moreover, since a high percentage of the population relies on diesel and fuel generators for reliable power supply, and a lot of industries self-generate using fossil fuels, the Nigerian power market presents an interesting case for renewable energy development and investment.

TAILORED GUIDE TO ACCOUNTING AND TAXATION FRAMEWORKS FOR RENEWABLE ENERGY

To support both new market entrants and existing players, this guide offers a comprehensive overview of the accounting and taxation frameworks for engineering, procurement and construction (EPC) and third-party ownership (TPO) contracts in Nigeria. It provides detailed information on how to handle depreciation, taxes and profits from a regulatory and reporting perspective. The focus goes beyond analysing various tax mechanisms for different contracts on a commercial and industrial renewable energy scale, starting from the import of materials, project execution, to the transfer of profits from Nigeria. The applicable taxes within Nigeria for such proceeds and revenues are also covered.

ZIELE ZUR STEIGERUNG DES ANTEILS ERNEUERBARER ENERGIEN

Nigeria bezieht seine Elektrizität in erster Linie aus Wärmekraftwerken und fossilen Brennstoffen, während ein kleiner Teil des Netzstroms aus großen Wasserkraftwerken stammt. Ein Großteil der nigerianischen Bevölkerung hat jedoch immer noch keinen Zugang zu Strom. Im Nationalen Aktionsplan für erneuerbare Energien 2015 plant das nigerianische Energieministerium, die Stromerzeugungskapazität auf 30 Gigawatt zu erhöhen, was nahezu einer Verdoppelung der derzeitigen Erzeugungskapazität entspricht. Darüber hinaus will das Land rund 30 % dieses Ziels aus erneuerbaren Energiequellen erreichen.

Da zudem ein hoher Prozentsatz der Bevölkerung für eine zuverlässige Stromversorgung auf Diesel- und Treibstoffgeneratoren angewiesen ist und viele Industriezweige sich selbst mit fossilen Brennstoffen versorgen, ist der nigerianische Strommarkt ein interessantes Beispiel für die Entwicklung erneuerbarer Energien und Investitionen.

MASSGESCHNEIDERTER LEITFADEN FÜR RECHNUNGSLEGUNGS- UND STEUERSTRUKTUREN FÜR ERNEUERBARE ENERGIEN

Um sowohl neue Marktteilnehmer als auch bestehende Akteure zu unterstützen, bietet dieser Leitfaden einen umfassenden Überblick über den buchhalterischen und steuerlichen Rahmen für EPC- und TPO-Verträge in Nigeria. Er enthält detaillierte Informationen über die Handhabung von Abschreibungen, Steuern und Gewinnen aus Sicht der Vorschriften und der Berichterstattung. Der Schwerpunkt geht über die Analyse verschiedener Steuermechanismen für unterschiedliche Verträge im kommerziellen und industriellen Bereich der erneuerbaren Energien hinaus, angefangen von der Einfuhr von Materialien über die Projektdurchführung bis hin zum Transfer von Gewinnen aus Nigeria. Die in Nigeria geltenden Steuern für solche Erlöse und Einnahmen werden ebenfalls behandelt. This guide provides an easy entry point for German and European companies looking to engage in the Nigerian market but seeking assistance with the applicable accounting and tax regulations for various contract types. Additionally, the guide offers insights for local off-takers regarding applicable regulations on how to treat renewable energy systems on their financial statements for different contract models.

The structure allows readers to jump directly to the relevant contract model to review the applicable regulations, making the guide more accessible and reducing complexity. Diagrams and tables in the text support the understanding of processes and provide a clear view of default tax rates under different categories. The guide is suitable for both a quick overview and a detailed understanding of the relevant accounting and tax regulations in Nigeria. Dieser Leitfaden bietet einen einfachen Einstieg für deutsche und europäische Unternehmen, die sich auf dem nigerianischen Markt etablieren wollen und Unterstützung bei den geltenden Rechnungslegungs- und Steuervorschriften für verschiedene Vertragsarten suchen. Darüber hinaus bietet der Leitfaden Einblicke für lokale Abnehmer hinsichtlich der geltenden Vorschriften für die Behandlung von erneuerbaren Energiesystemen in ihren Jahresabschlüssen für verschiedene Vertragsmodelle.

Die Struktur ermöglicht es den Lesern, direkt zum jeweiligen Vertragsmodell zu springen, um die geltenden Vorschriften zu überprüfen, was den Leitfaden leichter zugänglich macht und die Komplexität reduziert. Diagramme und Tabellen im Text unterstützen das Verständnis der Prozesse und bieten einen klaren Überblick über die Standardsteuersätze in den verschiedenen Kategorien. Der Leitfaden eignet sich sowohl für einen schnellen Überblick als auch für ein detailliertes Verständnis der relevanten Rechnungslegungs- und Steuervorschriften in Nigeria.

Background



1.1 Commercial and industrial power consumer projects

Falling system prices for renewable energy (RE) systems, a challenging environment for the development of large-scale utility projects and rising power prices for commercial and industrial power consumers (C&I consumers) have led RE project developers to increase their focus on the development of distributed renewable energy systems with C&I consumers as direct counterparts (C&I projects).

With the C&I market segment gaining traction in various jurisdictions and increasingly threatening the traditional business model of electricity utilities, the segment is also attracting increasing attention from regulators.

Delivery models in the C&I segment can generally be differentiated between:

- 'EPC models', where the C&I consumer is selffinancing the RE project, and
- "third-party ownership models', where investment and, most often, the operational risks are borne by the RE service provider

Under third-party ownership models, RE system services are provided to C&I consumers through a variety of contractual structures such as power purchase agreements (PPA) or lease agreements, with the possible transfer of system ownership to the C&I consumer at some point during the project lifetime.

The concrete contract design of these delivery models not only raises various regulatory concerns for developers and beneficiaries, but also has implications for accounting/financial reporting and tax treatment, which need to be particularly well considered by the C&I consumer.

With the aim of a functional and efficient market for C&I projects, the project development programme (PDP) intends to mitigate existing information asymmetries, leading to high transaction costs and risks, by providing market information knowledge products for RE project developers as well as C&I consumers. In this study, the information needs of Germany-based RE developers, in particular, are considered. This study focuses on the regulatory, tax and corporate aspects to be considered for the three dominant delivery models in the C&I segment: EPC model, PPA model and lease model. Similar studies have been carried out by GIZ for other countries in Sub-Saharan Africa and Asia.

1.1.1 Solar or hybrid power generation systems

This study looks at C&I projects where power generation equipment is deployed 'on-site', meaning on the premises of a C&I consumer.

In this context, power generation equipment can consist of:

- photovoltaic (PV) and storage systems,
- PV and diesel generator systems, or
- PV and natural gas hybrid systems.

A combination of these systems is also possible. This study focuses on on-site power generation systems with an installed capacity between 50 kW and 20 MW (the RE/hybrid system).

The C&I consumer can either be off-grid or on-grid. The RE/hybrid system may be grid-connected or function as an 'islanding system' that is only connected to the on-site distribution grid. RE/hybrid systems are specifically designed by the RE service provider to adapt the power supply to the needs of the C&I consumer (e.g. load profile, existing net metering, feed-in tariffs - FiT).

This study does not consider systems reliant on wheeling¹, i.e. off-site or virtual PPAs and/or open access, etc.

1 Wheeling is the transportation of electric energy from within an electrical grid to an electrical load beyond the grid boundaries.

1.1.2 Delivery models in C&I projects

The delivery models in C&I projects can be represented as follows:

FIGURE 1. Delivery models in C&I projects



Source: Own illustration (BBH, 2023)

Upfront purchase model (EPC model)

EPC stands for engineering, procurement and construction.

In this delivery model, the EPC contractor provides a detailed engineering design of the RE/hybrid system according to the C&I consumer's needs. The EPC contractor will then procure equipment and parts required for the RE/hybrid system from manufacturers and construct the system on the C&I consumer's site. In this model, the consumer is the off-taker as well as the RE service provider in the same entity.

Under the EPC model, the C&I consumer must finance the RE/hybrid system themselves (self-financing). The C&I consumer may avail loans to partially finance the system. This delivery model impacts the C&I consumer's capital expenditures (CapEx).

FIGURE 2. Upfront purchase model/EPC model



Leasing model with ownership transfer

A lease is 'an agreement between two parties whereby one party allows the other to use his/her property for a certain period of time in exchange for a periodic fee².'

In the context of third-party ownership (TPO) models, the lease structure means that the RE service provider leases a RE/hybrid system to the C&I consumer. The RE service provider installs a RE/ hybrid system on the C&I consumer's site and retains ownership.

The C&I consumer is legally the operator of the RE/ hybrid system and generates electricity to cover its needs in exchange for rent. However, the C&I consumer can hire a RE service provider for operation and maintenance (O&M) services.

Lease structures in the C&I segment usually have:

- contract periods of 5 to 15 years,
- transfer-of-ownership clause at the end of the contract term,
- early purchase options,
- down payments,
- fixed payment rates (independent of energy output),
- 2 Farlex Financial Dictionary (2009). Leasing, <u>https://financial-dictionary.</u> <u>thefreedictionary.com/leasing</u> (Accessed on 28.01.2023)

- O&M guarantee, and
- a clause on payment in local or foreign currency.

Nevertheless, leases do in fact include a wide variety of contract features, some additional or even contrary to those mentioned above.

Legally, leases are classified, according to the country, in different categories (e.g. equipment lease, finance lease, etc.) with distinct legal regimes.

In Nigeria, there are certain contractual obligations and performance guarantees that both parties typically agree upon. These obligations and guarantees help ensure the smooth operation of the leasing arrangement and protect the interests of both parties:

- Performance guarantees the constructor may provide performance guarantees to the consumer to ensure that the energy system meets specific performance criteria. These guarantees encompass factors such as energy generation capacity, efficiency levels, uptime and maintenance requirements. The purpose of these guarantees is to ensure that the energy system operates as intended and delivers the promised benefits.
- Contractual obligations the leasing agreement establishes the specific obligations of both parties. The lessor (constructor) is responsible for tasks

related to the installation, operation, maintenance and repair of the energy system. The lessee, on the other hand, is obliged to adhere to usage and maintenance guidelines and make timely payments for the lease. Clear delineation of responsibilities ensures the smooth functioning of the energy system during the lease period.

- Ownership transfer the leasing model with ownership transfer entails the transfer of ownership from the lessor to the lessee upon completion of the agreed lease term. The leasing agreement explicitly details the terms and conditions governing this ownership transfer, including any associated costs or procedural requirements. Once the transfer is complete, the lessee assumes full ownership and all accompanying responsibilities for the energy system.
- Contractual termination the leasing agreement outlines the conditions and procedures for terminating the contract. Such circumstances may include breach of contract, non-payment of rent or any other mutually agreed conditions. The agreement specifies the rights and obligations of both parties in the event of contract termination, including any applicable penalties or compensation.

FIGURE 3. Leasing model with ownership transfer



Renting model with ownership transfer

A rent is 'a regular, usually monthly, payment that a person makes in exchange for the use of an asset he/she does not own. That is, rent is the payment on a lease³.' The term is most often used to refer to payments on a leased dwelling or another piece of real estate.

In the context of third-party ownership models, the rent structure means that the RE service provider leases a RE/hybrid system to the C&I consumer. The RE service provider installs a RE/hybrid system on the C&I consumer's site and sells ownership to the credit institute for a sale-and-leaseback contract between the consumer and the credit institute.

The C&I consumer is legally the operator of the RE/ hybrid system and generates electricity to cover its needs in exchange for rent. However, the C&I consumer can hire a RE service provider for operation and maintenance (O&M) services. In general, the C&I consumer is the off-taker in this model, while the developer is the RE service provider.

Rent structures in the C&I segment usually have:

- contract periods from 5 to 15 years,
- transfer-of-ownership clause at the end of the contract term,
- 3 Farlex Financial Dictionary (2009). Renting financial definition of renting (<u>thefreedictionary.com</u>) (Accessed on 28.01.2023)

- early purchase options,
- down payments,
- fixed payment rates (independent of energy output),
- O&M guarantee, and
- a clause on payment in local or foreign currency.

Nevertheless, rents do in fact include a wide variety of contract features, some additional or even contrary to those mentioned above.

FIGURE 4. Renting model with ownership transfer



Source: Own illustration (BBH, 2023)

1.1.3 Build-own-operate-transfer (BOOT) model and PPA

Build-own-operate-transfer (BOOT)

The build-own-operate-transfer model is a widely used framework in infrastructure projects, including renewable energy endeavours such as power generation facilities. The following provides a formal description of how this model typically functions:

- Build within the BOOT model, a private entity (referred to as the developer or construction company) assumes responsibility for financing, designing and constructing the power generation facility. This encompasses various types of renewable energy projects, such as solar, wind or other renewable sources.
- Own once the facility is completed, the developer assumes ownership and operation of the power generation facility. They undertake the maintenance, operation and management of the facility for a specific duration, usually ranging from 15 to 25 years.
- Operate during the operational phase, the developer sells the electricity generated by the facility to an off-taker, typically a utility company or a large energy consumer, through a long-term PPA. The

PPA establishes the terms and conditions of the electricity sale, including pricing structures and the duration of the agreement.

 Transfer – on conclusion of the agreed period (typically aligned with the duration of the PPA), ownership of the power generation facility is transferred to the off-taker or another designated entity. This transfer may involve a nominal or predetermined price, contingent on the terms outlined in the agreement.

In this model, the C&I consumer is the off-taker, while the developer is the RE service provider.

Power purchase agreement structure

A PPA is a contract between two parties, one which generates electricity (the seller) and one looking to purchase electricity (the buyer).

The PPA defines all commercial terms concerning the sale of electricity between the two parties, including when the project will begin commercial operation, the schedule for delivery of electricity, penalties for under-delivery, payment terms and termination. The PPA fixes the price for the electricity provided by the seller (here the RE service provider) to the off-taker (here the C&I consumer) over a fixed period.

At the end of the PPA, there are different options:

- Reconditioning signing of a new PPA and updating of the entire RE/hybrid system with the latest technology.
- Contract extension extending the contract duration for a fixed period.
- Decommissioning removing the RE/hybrid system.
- Transfer transferring the RE/hybrid system to the C&I consumer.

There are two types of PPAs: physical and virtual (or synthetic/structured). Whilst physical PPAs are characterised by the 'physical' delivery of the energy generated to the off-taker, virtual PPAs are financially settled arrangements between two contracting parties who do not need to be in the same grid region. Only physical PPAs are considered in the context of this study.

These PPAs often have the following characteristics in the C&I segment:

- long-term contract periods,
- options to transfer ownership of the RE/hybrid system,
- variable payment rates (dependent on energy output),
- performance guarantee, and
- payment in local or foreign currency.

Nevertheless, PPAs do in fact include a wide variety of contract features, some additional to or even contrary to those mentioned above.

The BOOT model with PPA offers numerous advantages for both developers and off-takers. Developers can secure long-term revenue through the PPA, ensuring a stable and predictable income stream. Off-takers benefit from a reliable supply of electricity over an extended period at predetermined prices, supporting energy security and renewable energy objectives



FIGURE 5. Build-own-operate-transfer (BOOT) model and PPA

Third-party ownership model

Third-party ownership (TPO) models are a financing solution for C&I consumers to obtain the benefits of having a RE/hybrid system on their site without the upfront costs of purchasing the system.

The RE service provider owns and maintains the RE/hybrid system while the C&I consumer can use the RE/hybrid system to produce electricity or directly use the electricity generated. For the C&I consumer, the TPO model provides the advantage of being relieved from upfront costs (CapEx). By shifting the CapEx to the third-party entity, the consumer can conserve their own financial resources and avoid the need for significant upfront capital investment.

The main contractual structures involved in the third-party ownership model are PPAs as well as lease or rental agreements.

FIGURE 6. Third-party ownership (TPO) model



Source: Own illustration (BBH, 2023)

1.2 Market snapshot - Nigeria

This study looks at the taxation framework(s) and the financial requirements in Nigeria for developing C&I projects.

1.2.1 Overview of the electricity market in Nigeria

The Nigerian electricity market enables grid-connected and off-grid generation as well as self-consumption. Grid power generation is highly centralised, and the government owns and operates the central transmission grid through the Transmission Company of Nigeria (TCN). There are over 25 power plants that supply the central grid which are either privately owned or government owned. Eleven private companies sell electricity to final consumers and are the only electricity suppliers in certain areas. Off-grid power generation is decentralised, but the development of mini-grids is regulated. Self-sufficiency with electricity over 1 MW is also regulated. Due to the inadequate grid supply, self-sufficiency plays an important role on the market, covering about 68.5% of the total electricity demand in Nigeria.

According to the regulation, a permit is required for the self-generation of electricity with a capacity of more than 1 MW. However, this is not required for electricity generation of less than 1 MW. It is estimated that over 48 GW, or 22 million small, gasoline-powered generators with outputs between 0.5 kW and 4.0 kW, power homes and businesses across the country, which spend around USD 12 billion each year to purchase and operate these generators. Nigeria's manufacturing sector is one of the largest and most dynamic on the continent, accounting for 23% of the value of total manufacturing production in Sub-Saharan Africa. However, manufacturing companies must deal with unannounced and unpredictable power outages several times a month. Therefore, most manufacturing companies rely on self-generation with the help of diesel generators to meet their electricity needs, but this is very expensive. Around 86% of companies own their own or shared generator, which covers about 48% of their total electricity needs. Recently, some manufacturing companies have opted for self-generation of electricity with photovoltaic systems to reduce the use of their diesel generators. In some cases, these proprietary PV systems can cover up to 30% of these companies' electricity needs. These PV solar solutions have also proven to be more cost-effective than diesel generators. There is a possibility that these solutions will be used by more companies in the manufacturing and agricultural sectors in the future.

Nigeria increased access to electricity from 48% in 2010 to 55% in 2020 (Figure 7).

FIGURE 7. Access to electricity 100% 80% 0 **59.3%** 60% **56.5% 55.9% 55.6%** 55.4% 55.4% 54.4% **54.05%** 53.23% **52.5%** 48% 40% 20% 0% 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Foundations

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2.1 Taxation regulations

2.1.1 Relevant tax and tax depreciation regulations

The main law governing the income tax system in Nigeria is the Personal Income Tax (Amendment) Act 2011, as amended from time to time. The bases of opinion for the taxation regulations are presented in Figure 8. FIGURE 8. Bases of opinion



Taxes payable in Nigeria

There are two categories of taxpayers in Nigeria which are subject to different types of taxes: they are categorised as either individual or corporate taxpayers. Generally, Nigerian companies are liable to tax in Nigeria on their worldwide income regardless of where the income is generated, whether or not the income is received or brought into Nigeria. The different types of taxes payable per category in Nigeria include the following:

TABLE 1. Categories of taxpayers and applicable taxes

INDIVIDUAL TAXPAYERS	CORPORATE TAXPAYERS
Personal Income Tax	Corporate Income Tax
Value Added Tax	Value Added Tax
Stamp Duty	Stamp Duty
Withholding Tax	Withholding Tax
Capital Gains Tax	Capital Gains Tax
-	Education Tax
-	Petroleum Profits Tax
-	Police Trust Fund Levy
-	Others include NITD Levy and NASENI Levy (applicable to specific industries)

Furthermore, different taxes are applicable to different legal forms. This can be seen below:

TABLE 2. Legal forms and applicable taxes

LEGAL FORMS	TAX TYPES
Business Name	Personal Income Tax, Value Added Tax, Capital Gains Tax, Stamp Duty
Limited Liability Partnership	Personal Income Tax, Value Added Tax, Capital Gains Tax, Stamp Duty
Limited Partnership	Personal Income Tax, Value Added Tax, Capital Gains Tax, Stamp Duty
Limited Liability Company	Corporate Income Tax, Value Added Tax, Withholding Tax, Capital Gains Tax, Education Tax, Petroleum Prof- its Tax, Stamp Duty

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Case law

Case law in Nigeria regarding taxation is derived from judicial decisions made by courts of law, including the Supreme Court of Nigeria, the Court of Appeal, and the High Courts. These decisions help to establish legal precedent and provide guidance on how tax laws and regulations should be interpreted and applied.

Tax clearance certificates

The Federal Inland Revenue Service (FIRS) and State Internal Revenue Service (SIRS) shall issue a tax clearance certificate to the taxpayer for a specific or general purpose, as applicable. A tax clearance certificate is required for the following transactions:

- clearance of specific goods in commercial quantities from any customs port or factory in Nigeria;
- registration of any document conferring title to land;
- departure (at the point of departure) of a foreigner who has resided and earned in Nigeria; and
- tendering of projects or contracts awarded by public institutions, agencies, corporations and bodies in Nigeria.

Taxation of companies

In Nigeria, companies are subject to various taxes, including corporate income tax, value added tax, withholding tax, capital gains tax, education tax and stamp duty.

Value added tax is a consumption tax imposed on the supply of goods and services in Nigeria. The current VAT rate is 7.5%, and is charged on most goods and services consumed in Nigeria.

Corporate income tax is the primary tax that companies pay in Nigeria. It is imposed on the profits of companies that are incorporated in Nigeria to carry on business in Nigeria.

Withholding tax is a tax deducted at source from payments made to a non-resident person or company for services rendered in Nigeria. The tax is usually 10% of the total amount paid, and is remitted to the FIRS.

Capital gains tax is levied on gains arising from the sale or transfer of capital assets in Nigeria. The tax rate is currently 10%.

Education tax is a tax levied on the assessable profit of companies in Nigeria at a rate of 2% to fund education in Nigeria. Stamp duty is tax levied on certain types of transactions, such as agreements, conveyancing and other legal instruments.

In addition to the above taxes, companies may also be subject to other taxes and levies, such as environmental tax, road tax and local government taxes, depending on the location and nature of their business.

RESIDENCY

A company is considered resident in Nigeria for tax purposes if it is incorporated under Nigerian law or if its management and control are exercised in Nigeria. In the case of a foreign company, it is considered resident if it carries on business in Nigeria through a fixed base or agent.

Once a company is deemed resident in Nigeria, it is subject to tax on its worldwide income. This includes income derived from Nigeria as well as income earned outside of Nigeria. Non-resident companies, on the other hand, are only taxed on income earned from Nigerian sources.

ASSESSMENT PERIOD

Under Nigerian tax law, the assessment period for income tax is generally three years after the end of the tax year to which the return relates. However, there are some exceptions to the three-year assessment period. For instance, when a taxpayer fails to file a return or provides incomplete information, the assessment period does not expire until seven years after the end of the relevant tax year. Similarly, when a taxpayer is suspected of tax evasion, the tax authorities can go back up to 10 years to assess tax liabilities.

A company is free to choose its financial year.

ACCOUNTING AND VALUATION METHODS

Companies are required to prepare their financial statements in accordance with the International Financial Reporting Standards (IFRS) as adopted by the Financial Reporting Council of Nigeria (FRCN). The IFRS provide guidance on the accounting and valuation methods to be used when preparing financial statements.

Some of the common accounting and valuation methods used in Nigeria include:

- Historical cost method this method involves valuing assets and liabilities at their original cost of acquisition or production.
- Fair value method this method involves valuing assets and liabilities at their current market value.
- Amortised cost method this method involves valuing assets and liabilities at their original cost less any accumulated amortisation.

- Net realisable value method this method involves valuing assets at the amount expected to be received from their sale or use, less any costs of sale.
- Impairment method this method involves recognising a loss when the carrying amount of an asset exceeds its recoverable amount.

Companies are required to choose an appropriate accounting method based on the nature of their assets and liabilities, and the purpose of the financial statements. The accounting and valuation methods used should be consistent from year to year to enable the meaningful comparison of financial statements.

Value added tax (VAT)

VAT is a consumption tax in Nigeria which is levied on the supply of goods and services within the country. VAT was introduced in Nigeria in 1993 to diversify the country's revenue base and reduce dependence on oil revenues. The tax is administered by the FIRS.

VAT is an important source of revenue for the Nigerian government, accounting for a significant portion of total tax revenue. The government has been exploring ways to increase revenue from VAT, such as by expanding the tax base to cover more goods and services and improving compliance and enforcement measures. VAT is charged at 7.5% on the supply of goods and services, except for those expressly exempted by law. VAT in Nigeria is governed by the provisions of the VAT Act and the VAT (Modification) Order. Variations for VAT include:

- VATable supplies
- zero-rated supplies
- VAT-exempt supplies.

Details of VAT-exempt supplies are contained in the First Schedule to the VAT Act. It provides a comprehensive list of goods and services such as:

- basic food items such as milk, bread and vegetables;
- medical and pharmaceutical products;
- educational materials such as textbooks and educational services;
- goods and services exported from Nigeria;
- services rendered by community banks, people's banks and mortgage institutions;
- services provided by microfinance banks and mortgage institutions;
- medical services provided by registered medical partners; and
- services rendered by public transport operators.

Businesses that deal with items that are not on the list of exemptions are required to register for VAT and charge VAT on the supply of these items.

The tax base for VAT is the value of the supply and the consumer of such supply is the tax debtor. Note that VAT is not a tax expense to the supplier as it is chargeable on the invoice issued to the recipient of the supply. However, VAT is a tax-deductible expense in the hands of the consumer. VAT returns are due to be filed on or before the 21st day of the succeeding month of supply.

INPUT VAT

VAT incurred by a company on goods purchased for resale and raw materials used for production is recoverable from output VAT collected, while VAT incurred on overhead expenses is tax deductible.

VAT ON THE PURCHASE OF ASSETS

VAT incurred on the purchase of assets is neither deductible nor recoverable but capitalised along with the cost of assets to be recovered via the capital allowance medium.

Corporate income tax

CIT is a tax on the profits of companies and corporations in Nigeria. The tax is administered by the FIRS and is governed by the Companies Income Tax Act (CITA). Companies carrying on business in Nigeria are required to pay up to 30% of their profits as CIT. Other bases of CIT include company turnover and any dividends distributed where such dividends are higher than the profit for the year. Some companies are exempt from CIT in Nigeria by reason of their size, activities, profits or location. The due date for filing CIT is on or before six months after the accounting year end.

Possible exemptions from CIT include:

- companies with Pioneer status;
- companies operating within a free trade zone (FTZ):
- companies operating in gas utilisation;
- companies operating in primary agricultural production;
- companies with turnover less than NGN 25 million: and
- companies whose profits are exempt under Section 23 of the CITA⁴.

The CIT rates in Nigeria are shown below:

TABLE 3. CIT rates in Nigeria⁵

CLASSIFICATION OF COMPANIES	TURNOVER THRESHOLD	TAX RATE (%)
Small	Not more than NGN 25 million	0
Medium	Above NGN 25 million but less than NGN 100 million	20
Large	NGN 100 million and above	30

4 FIRS (2021). Company-Income-Tax-Act.pdf (firs.gov.ng)

Companies are required to file their tax returns and pay their tax liabilities within a certain timeframe. The deadline for filing tax returns is six months after the end of the company's financial year. Companies that fail to file their tax returns on time or fail to pay their tax liabilities may be subject to penalties and interest charges.

MINIMUM TAX

Minimum tax is a form of tax that is imposed on companies that have not made any profits or have made profits that are less than the amount of tax that would be payable under the normal tax rules. It is a mechanism to ensure that companies pay a minimum level of tax, regardless of their actual profits.

Companies may also be subject to minimum tax at 0.5% of their turnover where:

- there is no total profit; or
- tax payable on total profit is less than the minimum tax.

Companies that are subject to minimum tax are required to file their tax returns and pay the minimum tax within a certain timeframe. The deadline for filing tax returns is six months after the end of the company's financial year. Companies that fail to file their tax returns on time or fail to pay their minimum tax liability may be subject to penalties and interest charges. It is important to note that the minimum tax is separate to the CIT. Therefore, even if a company has paid the minimum tax, it may still be liable for CIT if it makes a profit in subsequent years.

Taxes on interest

In Nigeria, interest income is subject to taxation under the CITA and Personal Income Tax Act (PITA), depending on the recipient of the interest income.

For companies, interest income received from investments or other sources is subject to CIT and education tax at a rate of 30%/20% and 2.5%, respectively. The tax base for interest taxation is the total interest received by the company. For non-resident lenders, interest payments by Nigerian borrowers is subject to a withholding tax (WHT) deduction of 10%. Treaty benefits are applicable when the lender is located in a treaty country. The interest paid is an allowable expense to the extent allowed by law, subject to certain conditions.

Interest on long-term foreign loans by non-resident lenders enjoys tax exemptions under the Third Schedule of the CITA, as shown below:

TABLE 4. WHT exemption for foreign loans

REPAYMENT PERIOD INCLUDING MORATORIUM	GRACE PERIOD ALLOWED	TAX EXEMPTION (%)
More than 7 years	Not less than 2 years	70
5 to 7 years	Not less than 18 months	40
2 to 4 years	Not less than 12 months	10
Less than 2 years	-	Nil

Source: BBH, 2023

The payer of the interest is expected to deduct WHT at 10% and remit the same to the relevant tax authority within 21 days after the month of payment or when payment became due.

The following interest incomes are exempt from tax:

- interest on deposit accounts of a non-resident company where the deposit was brought into Nigeria in foreign currencies;
- interest on foreign currency domiciliary accounts in Nigeria;
- interest derived by a company from a country outside Nigeria and brought into Nigeria through government-approved channels;
- interest on loans granted by banks to companies operating in primary agricultural production;
- interest on loans granted by banks to companies for the fabrication of any local
- plant and machinery;
- interest on loans granted by banks to provide working capital for any cottage industry established by the company.

Interest paid by a Nigerian company on funds borrowed for the operation of the company qualifies as an allowable deduction for income tax purposes regardless of whether or not the lender is a related party. However, when the loan is from a foreign related party, the total interest expense deductible is limited to 30% of earnings before interest, taxes, depreciation and amortisation (EBITDA), the excess of which may be carried forward for a maximum period of five years. This is in line with the Base Erosion and Profit Shifting (BEPS) Action 4 (Limitation on Interest Deductions). Therefore, interest expense can be made fully deductible if the loan is from a Nigerian entity or from a foreign, unrelated lender, but partially deductible if the loan is from a foreign related party.

Interest paid to a non-resident lender is liable to WHT at 10%, subject to exemptions (see Table 4).

Taxation of dividends

Dividend income is taxed at 10% of the total dividends received, except for those that are specifically exempted under any legislation. There is no minimum tax for the purpose of dividend taxation. The recipient of the dividend income is the tax debtor, while the payer of the dividend is expected to deduct WHT at 10% at the point of payment. The tax deducted is considered the final tax on the income. WHT deducted is to be remitted within 30 days of the declaration of the dividend. Treaty benefits are available when the recipient of such a dividend is from a country which has a tax treaty with Nigeria.

The following dividends are exempt from WHT:

- dividends received from a wholly export-oriented country;
- dividends received from a company with a pioneer status incentive;
- dividends received from a company with a gas utilisation incentive;
- dividends received by a real estate investment company;
- dividends received from a small manufacturing company in the first five years;
- dividends distributed by a unit trust;
- dividends received by a company in Nigeria from abroad and brought into Nigeria via approved channels; and
- dividends received in a regulated securities lending transaction.

When a company declares or distributes dividends which are higher than the total profits for the year, such dividends are taxed at either 20% or 30% depending on the size of the company. This is referred to as excess dividends tax. However, when such dividends are paid out of exempt profits or profits which have already been subject to tax, this will not apply.

Dividends paid to non-resident shareholders are liable to WHT at 10% as the final tax, subject to exempt dividends, as highlighted above.

Income from operating sites

Income from operating sites in Nigeria is subject to the standard corporate income tax rate of 30%. This rate applies to all companies, including those engaged in the exploration and production of oil and gas. However, there are certain tax incentives available to companies that operate in certain sectors or regions in Nigeria.

For example, companies which are located in free trade zones (FTZs) are eligible for a tax holiday period of up to five years, during which they are exempt from paying income tax. Additionally, companies engaged in agricultural production, solid minerals mining and certain other sectors are eligible for investment tax credits and other incentives aimed at promoting economic growth in those industries. RE companies operating within FTZs can benefit from the favourable business environment and incentives provided within the zone. These incentives may include tax holidays, customs duty exemptions on imported equipment and materials, streamlined regulatory processes and access to infrastructure and utilities.

By establishing their operations within an FTZ, RE companies can take advantage of these incentives to enhance their competitiveness, reduce costs and expand their activities. This can include activities such as the manufacturing of renewable energy equipment, installation and maintenance of renewable energy systems and the generation and distribution of renewable energy.

While specific tax incentives may vary depending on the zone and sector, some general provisions related to tax holidays in FTZs concerning the energy sector in Nigeria are listed following:

- CIT exemption companies operating in FTZs may enjoy a CIT exemption for an initial period. The duration of the tax holiday can range from 3 to 7 years, depending on the zone and sector.
- WHT exemption businesses operating in FTZs may be exempt from withholding tax on dividends paid to non-resident shareholders during the tax holiday period.

- VAT exemption businesses within FTZs may be eligible for VAT exemption on goods and services rendered withing the zone during the tax holiday period.
- Customs duty exemption imported machinery, equipment and raw materials used in the energy sector withing FTZs may be exempt from customs duties during the tax holiday period.

Income derived by non-resident companies from operating sites within the country is subject to tax. Tax is usually withheld at source by the payer and remitted to the FIRS. The tax rate is usually 10% of the gross income derived from the operating site.

The term 'operating site' refers to any fixed place of business through which a non-resident company carries on business in Nigeria. This could include a branch, an office, a factory, a workshop or any other place where business activities are carried out.

The income subject to tax includes profits, gains or income derived from the operating site, as well as any other income deemed to be derived from Nigeria by the non-resident company. Examples of such income include rent, royalties, interest, dividends and management fees. It is important to note that the tax on income from operating sites is separate from other taxes that may apply to non-resident companies in Nigeria, such as withholding tax on dividends, interest and royalties. The tax is also separate from the corporate income tax that applies to resident companies in Nigeria.

Education tax

Education tax is a tax levied on companies operating in Nigeria by the Federal Government of Nigeria to fund education in the country. The tax was introduced in 1993 by the Education Tax Act (ETA) and applies to all Nigerian companies registered with the Corporate Affairs Commission (CAC) and who make a profit of over NGN 100,000 per annum.

The tax rate for education tax is currently 2% of the assessable profit of the company, and this is paid along with the company's income tax. The assessable profit is the taxable profit of the company with certain deductions allowed by the ETA.

The education tax collected is remitted to the Education Trust Fund (ETF), which is managed by the Federal Ministry of Education. The ETF is responsible for the disbursement of funds to tertiary institutions in Nigeria for the purposes of improving facilities, research and development. Companies are required to file an education tax return with the FIRS alongside their income tax return. Failure to file or pay the education tax may attract penalties and interest.

Withholding tax

Withholding tax is a tax deducted at the source of payment by a taxpayer on behalf of the tax authority. In Nigeria, withholding tax is an important aspect of tax collection and is governed by the provisions of the CITA, PITA and the Value Added Tax Act (VATA).

Withholding tax is applied to various types of payments, such as salaries, fees, rent, dividends and interest. The rate of withholding tax varies depending on the type of payment and the status of the recipient. For example, the withholding tax rate on dividends paid to a non-resident company is 10%, while the rate on rent paid to a non-resident individual is 15%.

The tax is deducted by the payer of the income and remitted to the tax authority on behalf of the recipient. The recipient can then claim a credit for the tax withheld against their final tax liability.

Withholding tax is an effective tool for tax collection because it ensures that tax revenue is collected at the source of payment, making it easier for the tax authority to enforce compliance. It also helps to reduce the tax burden on taxpayers by spreading it across a larger group of people.

Capital allowances

Capital allowances are permitted deductions against taxable income in respect of qualifying capital expenditures incurred by companies for the purpose of their business operations. These capital expenditures include expenditures incurred on the acquisition of tangible assets such as buildings, machinery, equipment and vehicles, as well as on intangible assets such as patents, trademarks and goodwill.

In Nigeria, the Companies Income Tax Act governs the rules and regulations relating to capital allowances. The act provides for several allowances that companies can claim against their taxable income.

Depreciation is considered a disallowable expense for income tax purposes. However, Nigeria operates a standard accelerated capital allowance mechanism (initial, annual and investment) in respect of assets used in earning income during the project life time. The mechanism functions as follows:

 Initial allowance – this is a one-time allowance granted to companies in respect of qualifying capital expenditures incurred during the first year of acquisition of the asset. The rate of initial allowance varies depending on the type of asset acquired.

- Annual allowance this is an allowance granted to companies in respect of the qualifying capital expenditures incurred during each year of the useful life of the asset. The rate of annual allowance varies depending on the type of asset acquired.
- Investment allowance this is an allowance granted to companies that invest in qualifying assets in certain designated industries or areas. The rate of investment allowance varies depending on the type of asset and the location of the investment.

The maximum capital allowance that can be claimed by a company in a year is limited to 66.67% of taxable profits. This restriction does not, however, apply to companies in the manufacturing business and agriculture. Power generation companies are typically classified as manufacturing companies for this purpose.

The capital allowance rates are fixed rates as stipulated in the Second Schedule to the CITA, as presented in Table 5.

TABLE 5. Capital allowance rates

QUALIFYING EXPENDITURE	INITIAL ALLOWANCE (%)	ANNUAL Allowance (%)
Building	15	10
Mining	95	0
Plant (excl. Furniture and Fittings)	50	25
Public Transportation Vehicle	95	0
Ranching and Plantation	30	50
Motor Vehicles	50	25
Research and Development	95	0
Furniture and Fittings	25	20
Housing Estate	50	25
Agricultural Plantation	95	0

There is also an additional investment allowance of 10% on the cost of qualifying expenditures in respect of plant and machinery which is available as a deduction from the assessable profits in the year of purchase. Please note that this allowance will be withdrawn when the asset is sold within five years of claiming the allowance.

Balancing allowances and charges

Balancing allowances and balancing charges are accounting adjustments made to reflect the difference between the disposal proceeds and the written-down value of an asset when it is sold or disposed of.

A balancing allowance is granted when the disposal proceeds of a qualifying asset are less than the written-down value of the asset. This means that the company has suffered a loss on the disposal of the asset, and the balancing allowance is intended to compensate for this loss. The balancing allowance is added back to the taxable profits of the company for the year in which the disposal occurred.

A balancing charge, on the other hand, is imposed when the disposal proceeds of a qualifying asset are more than the written-down value of the asset. This means that the company has made a gain on the disposal of the asset, and the balancing charge is intended to tax this gain. The balancing charge is deducted from the taxable profits of the company for the year in which the disposal occurred.

Balancing allowances and charges are commonly associated with capital allowances, and they are used to ensure that companies receive tax relief for capital expenditures only to the extent that the expenditure has been incurred. They also ensure that companies are taxed appropriately when they dispose of qualifying assets.

It is important to note that balancing allowances and charges are separate from capital allowances and do not affect the rates or amounts of the allowances that a company can claim. Instead, they are simply adjustments made to reflect the true cost of the asset of the company, and to ensure that the tax treatment of the asset is fair and consistent.

Applicable depreciation types and rates

As mentioned in Section 2.3, the accounting and taxation treatment of depreciation methods is largely aligned with the IFRS and the CITA, respectively.

Under the IFRS, companies can use a variety of depreciation methods to calculate the cost of an asset over its useful life, including straight-line depreciation, diminishing balance depreciation, unit of production depreciation and the revaluation model. These methods are also recognised by Nigerian Accounting Standards (NAS). For tax purposes, the CITA requires companies to use the straight-line method of depreciation for all tangible assets. This means that companies cannot use other depreciation methods, such as diminishing balance or units of production, for tax purposes. However, for intangible assets, companies are allowed to use the straight-line method, the diminishing balance method or the units of production method.

There are several differences in the tax treatment of depreciation between Nigerian tax law and the IFRS. For example, the CITA allows companies to claim capital allowances on the cost of assets used in their business, whereas the IFRS do not recognise capital allowances. Additionally, the CITA requires companies to use a set percentage rate for the calculation of depreciation, whereas the IFRS allow for more flexibility in the choice of depreciation method and rate.

Capital gain taxes

Capital gains tax (CGT) is a tax imposed on the profit that arises from the disposal of a chargeable asset. Chargeable assets include land, buildings, securities and other types of property. The capital gains tax rate in Nigeria is 10% of the net chargeable gain. Gains on the disposal of assets situated in Nigeria by a non-resident are also liable to CGT at 10%.

The net chargeable gain is calculated by subtracting the cost of the asset, the cost of improvements and any other allowable deductions from the sale price. The capital gains tax is payable within three months of the disposal of the chargeable asset.

However, certain types of transactions are exempt from capital gains tax. These include the:

- disposal of Nigerian government securities;
- disposal of shares when total proceeds are less than NGN 100 million;
- disposal of assets in the course of a business restructuring provided that the stipulated criteria are satisfied;
- disposal of decorations awarded for valour or gallant conduct;
- gains accruing to charitable organisations with public character.

CGT paid is not tax deductible. CGT on disposals made on or before 30 June in any year of assessment is to be remitted by 30 June of the same year, while CGT on disposals made between 1 July and 31 December is to be remitted by 31 December of the same year.

Stamp duty

Stamp duty is a type of tax imposed on certain types of documents or transactions in Nigeria. The Stamp Duties Act, enacted in 1939, governs the administration of stamp duty in Nigeria. The act specifies various types of instruments or transactions that are liable to stamp duty, such as agreements, contracts, bonds, leases and stock and shares transfers. Currently, both written and electronic documents are considered dutiable instruments upon which stamp duty may be imposed at applicable rates.

Stamp duty is collected by the FIRS and the Nigerian Postal Service (NIPOST) through the issuance of adhesive or electronic stamps. The amount of stamp duty payable varies depending on the nature and value of the instrument or transaction. Stamp duty may be levied either at an ad valorem or fixed sum depending on the type or nature of the instrument. While ad valorem rates refer to the value of the transaction by applying a percentage to the value, fixed sums are charged without regard to the value nor consideration of the transaction to which it applies. Examples of ad valorem documents include lease agreements, loan agreements, deeds of assignment of real estate, etc., while receipts, proxy forms and simple contracts are charged at fixed sums. A dutiable document is expected to be stamped on or before its initial execution. There is, however, a grace period for unstamped or insufficiently stamped documents 40 days from the date of execution in the case of documents to be stamped at fixed sums, and 30 days in the case of ad valorem documents.

Stamp duty is used to generate revenue for the government and to ensure the legal validity of certain documents or transactions. Failure to pay the required stamp duty may result in the document or transaction being considered invalid or unenforceable.

In recent years, the Nigerian government has increased its efforts to enforce the collection of stamp duty, particularly in the financial sector.

Customs duties and excise taxes

Customs duties and excise taxes are types of taxes imposed on goods and services in Nigeria. These duties are usually imposed to protect domestic industries, generate revenue and regulate the flow of goods across borders.

IMPORT DUTY

Import duties are taxes levied on imported goods, which are collected by the Nigeria Customs Service (NCS) on behalf of the Federal Government of Nigeria. The amount of customs duty payable on imported goods is based on the value of the goods, as well as the classification of the goods under the Harmonized System (HS) of the World Customs Organization (WCO).

The rates of customs duties in Nigeria are published in the Customs and Excise Tariff (CET Tariff) and can vary from 0% to as high as 70% depending on the type of goods being imported. The Nigerian government has also implemented several trade agreements with other countries and international organisations, such as the Economic Community of West African States (ECOWAS) and the World Trade Organization (WTO), which have an impact on the rates of customs duties applicable to goods imported from these countries.

Customs duties are collected at the point of entry into the country, usually at seaports, airports and border posts. The NCS also has the authority to search and inspect goods being imported into the country to ensure compliance with customs laws and regulations.

ADMINISTRATIVE FEES

Administrative fees are charges imposed by the NCS for the performance of certain customs-related services. These fees are usually in addition to the customs duties and excise taxes paid by importers and exporters.

Administrative fees are determined based on the value of the imported or exported goods and the services rendered by the NCS. Some of the services that attract administrative fees include customs processing, inspection, scanning and documentation.

The NCS is responsible for setting and collecting administrative fees in Nigeria. The fees are usually published in the official gazette, and importers and exporters are required to pay them before their goods are cleared at the port of entry or exit.

EXCISE TAXES

Excise tax is a type of tax levied on certain goods that are considered harmful or non-essential, such as tobacco, alcohol and petroleum products. The tax is typically included in the price of the product and paid by the manufacturer or importer, who passes on the cost to the consumer.

In Nigeria, excise tax is regulated by the Excise Duty Act of 2015 and is administered by the FIRS. Excise tax is levied on a variety of goods, including tobacco, alcoholic beverages, soft drinks and petroleum products. The rates of excise tax vary depending on the type of product and are subject to periodic reviews by the government. One of the main objectives of excise tax is to discourage the consumption of harmful or non-essential goods by making them more expensive. The revenue generated from excise tax is also used to fund government programmes and projects.

In addition to the federal excise tax, some states in Nigeria also impose their own excise taxes on certain goods. For example, Lagos State imposes an excise tax on carbonated drinks produced and sold within the state.

EXPORT DUTY

Export duty is a tax imposed by the government on the export of certain goods from a country. In Nigeria, export duty is levied on specific goods listed in the CET Tariff, and the rate of duty varies depending on the nature of the goods being exported.

Export duties are usually implemented as a means of raising revenue for the government, protecting domestic industries and regulating the export of certain goods that may be in short supply or needed for domestic consumption.

Export duties in Nigeria are administered by the NCS, which is responsible for collecting and enforcing customs duties and other charges on exports. The NCS also ensures that exports comply with relevant laws and regulations, including those related to trade, health, safety and the environment.

2.1.2 Ability and methods to carry forward losses

In Nigeria, companies that incur losses each year are allowed to carry forward those losses to offset against future profits. This is referred to as 'loss relief'.

In this respect, companies are allowed to carry forward their losses for an indefinite amount of years or as long as they have taxable profits.

In the Finance Act 2019, a restriction was established on the use of tax losses to offset future profits. The act introduced a restriction on the amount of tax losses that can be offset against future profits, limiting it to 80% of the taxable profits in any given year. This means that companies cannot offset all of their tax losses against future profits and will still be required to pay a minimum tax based on their income.

Companies making losses would, however, be subject to minimum tax at 0.5% of their turnover, provided that it is not within its first four years of commencement, and it is not a small company.

2.1.3 Taxation of transfers of funds and equipment

The taxation of the transfer of funds and equipment depends on the specific context of the transfer. Transfers of funds or equipment can trigger different types of taxes, such as VAT, WHT, CGT and customs duties, among others. For example, if a company transfers funds to a foreign entity for the purchase of equipment, it may be subject to withholding tax on the amount transferred, depending on the specific transaction and tax laws in Nigeria. Additionally, if the equipment is imported, customs duties and VAT may also apply.

Similarly, if a company sells equipment, it may be subject to CGT on the profit made from the sale. If the equipment is exported, export duties may also apply.

2.1.4 Taxation of foreign income in Germany and double taxation agreements

Non-resident companies are liable to tax in Nigeria as provided under Section 13(2) of the CITA where such companies:

- have fixed bases (or a permanent establishment) in Nigeria;
- do not have fixed bases but habitually operate business in Nigeria;
- transmit or receive signals, messages or data by cable or any other electronic means to Nigeria, provided such companies have a significant economic presence (SEP) in Nigeria;

- are involved in a single contract for surveys, deliveries, installation or construction;
- earn investment income from Nigeria, e.g. interests, dividends and royalties;
- provide technical, professional, management or consultancy services to a person resident in Nigeria provided that such companies have an SEP in Nigeria.

The Significant Economic Presence Order provides guidance on what constitutes SEP for foreign companies in Nigeria. However, please note that there are currently no double taxation agreements (DTAs) with Germany.

Please note that income from an operating site as well as profits derived from the site's operations are liable to tax in Nigeria at the applicable rate when any of the above-mentioned conditions are fulfilled.
2.2 Financing and transfer of funds and equipment

Investment in a local subsidiary can take two forms – equity and debt. The returns on equity would be dividends, while returns on debt would be interest. It should be noted that a certificate of capital importation (CCI) would need to be procured to prove that these funds have been brought in via the appropriate channels.

A foreign investor is allowed to hold a foreign exchange account. There are no special rules for foreign investors; instead, any person is validly allowed to open a domiciliary account with an authorised dealer that is a commercial bank in Nigeria. Limitations to the execution of payments and transactions are as provided by the extant laws from time to time.

The Foreign Exchange Act allows for investment in any enterprise or security with foreign currency of capital imported into Nigeria through an authorised dealer. The authorised dealer is to issue a certificate of importation and the imported foreign currency is guaranteed unconditional transferability through an authorised dealer in freely convertible currency, relating to:

- dividends or profits (net of taxes) attributable to the investment;
- payments in respect of loan servicing when a foreign loan has been obtained; and

• the remittance of proceeds (net of all taxes) and other obligations in the event of sale or liquidation of the enterprise or any interest attributable to the investment.

The benefits of procuring a CCI are:

- unrestricted repatriation of returns, either dividends or interest;
- the enjoyment of tax benefits on foreign loans contained in the Third Schedule to the CITA (see Table 4).

The law provides that all foreign exchange be converted through authorised dealers in Nigeria. Although there are no transaction fees levied on the conversion of foreign exchange, the dealers/commercial banks may charge fees for their services.

Please note that there is currently no restriction on the amount of local currency which can be converted into USD, EUR or any foreign currency, even daily.

When a company intends to obtain a loan from local banks, some of the documents which must be submitted include:

- certificate of incorporation and other incorporation documents;
- audited financial statements;

- valid means of ID of directors;
- Board resolution approving the loan;
- tax clearance certificates, etc.

2.2.1 Relevant tax and tax depreciation regulations

When financing and transferring funds and equipment in Nigeria, there are several relevant tax and tax depreciation regulations to consider:

- Withholding tax when payments are made to a non-resident for the use of intellectual property or for technical services, withholding tax of 10% is typically required to be deducted at source. The withholding tax rate for other payments such as dividends and interests may vary.
- Capital allowances capital allowances can be claimed on qualifying capital expenditures. These expenditures include the cost of acquiring, constructing or improving fixed assets such as buildings, plant and machinery, furniture and fittings and motor vehicles. The rate at which capital allowances are granted varies by asset category and asset class.
- Transfer pricing regulations the transfer pricing regulations in Nigeria require that transactions

between related parties can be conducted at arm's length prices. Tax authorities may impose adjustments to prices or impose penalties if related-party transactions are deemed not to be at arm's length.

- Stamp duty when transferring title to land, buildings or shares, stamp duty is required to be paid on the value of the transaction.
- VAT when transferring goods and services in Nigeria, VAT of 7.5% is charged on the transaction value of the goods and services. However, some transactions may be exempt from VAT, such as exports and certain agricultural produce.
- Tax clearance certificate companies are required to obtain a TCC before certain transactions are completed. This includes the transfer of shares or property and before contracts can be awarded by government agencies. TCCs are issued by the FIRS after a company has paid all outstanding taxes and filed all necessary tax returns.

Transfer of funds out of the country

When funds are transferred out of Nigeria, there are certain tax regulations that apply. One of the regulations is the requirement of a Form A, which is a declaration of shipment of goods and services. This form is used to ensure that funds are transferred in compliance with the foreign exchange laws and regulations of Nigeria.

Additionally, there may be withholding tax obligations that arise when funds are transferred out of Nigeria, depending on the nature of the payment being made. For instance, if the payment is for a service rendered by a non-resident company, there may be withholding tax obligations on the payment, and failure to comply with these obligations may result in penalties and interest.

Furthermore, when equipment is being transferred out of Nigeria, there may be capital gains tax implications, as the transfer of ownership may result in a disposal of the asset. There may also be tax depreciation implications, as the transfer may trigger a balancing charge or allowance.

REMITTANCE OF PROFITS

When a company or individual earns profits in Nigeria and wishes to transfer those profits out of the country, there are tax implications that need to be considered. Specifically, there are regulations around the remittance of profits that dictate how much tax needs to be paid and when.

In Nigeria, the remittance of profits is subject to withholding tax. The rate of withholding tax on profits remitted out of Nigeria is currently 10%. It is important to note that the remittance of profits is not the same as the repatriation of capital. The latter refers to the transfer of funds that were originally invested in Nigeria, whereas the former refers to the transfer of profits earned in Nigeria.

In addition to the withholding tax on the remittance of profits, there may be other tax implications depending on the specific circumstances. For example, if the profits are being remitted to a country with which Nigeria has a tax treaty, the terms of the treaty may impact the amount of tax owed.

REMITTANCE OF DIVIDENDS

The remittance of dividends from Nigeria to a foreign country is subject to withholding tax at a rate of 10%. The tax withheld by the paying company or its agent is remitted to the FIRS within 21 days of the end of the month in which the payment was made.

The withholding tax on dividends may be reduced under the terms of a double taxation agreements between Nigeria and the recipient's country of residence. To claim the benefit of a double tax treaty, the recipient must provide a certificate of tax residence from the relevant tax authority in their country of residence. It is also important to note that there are restrictions on the repatriation of dividends from Nigeria. For example, dividends can only be paid out of profits that have been earned and retained following the payment of taxes and other statutory deductions. Additionally, the Central Bank of Nigeria (CBN) imposes limits on the amount of foreign currency that can be transferred out of the country, which may affect the timing and amount of dividend remittances.

REPATRIATION OF SALES PROCEEDS

The repatriation of sales proceeds refers to the transfer of funds realised from the sale of goods or services outside of Nigeria to a foreign bank account. The repatriation of sales proceeds is subject to various regulations and guidelines in Nigeria.

The CBN is responsible for regulating the repatriation of sales proceeds. To repatriate sales proceeds, a company must provide evidence of the transaction, such as a sales contract, invoice and export declaration, to the authorised dealer bank (ADB). The ADB will verify the documents and ensure that the funds were repatriated via the appropriate channels.

The repatriation of sales proceeds is subject to withholding tax. The withholding tax rate is set at 10% of the repatriated amount. However, companies can apply for a waiver or reduction of the withholding tax if they meet certain criteria, such as having a tax clearance certificate and proof of payment of all taxes due.

In addition to WHT, companies must comply with other regulatory requirements when repatriating sales proceeds. For instance, the CBN imposes limits on the amount of foreign exchange that can be repatriated and the type of transaction.

REMITTANCE OF SALARIES AND SAVINGS BY EXPATRIATES

When expatriates work and earn income in Nigeria, they are subject to Nigerian tax laws. However, if they choose to remit their salaries or savings outside of the country, they may also be subject to certain tax regulations.

The remittance of salaries and savings by expatriates is subject to withholding tax in Nigeria, which is deducted at source from the income of the expatriate. The rate of withholding tax depends on the type of income being remitted and can range from 7.5-10%.

Expatriates may also be subject to exchange control regulations when remitting their salaries or savings out of Nigeria. The CBN sets limits on the amount of foreign currency that can be remitted out of the country. As such, expatriates may need to obtain approval from the CBN before remitting their salaries or savings outside of Nigeria.

REMITTANCE OF ROYALTY AND TECHNICAL KNOW-HOW FEES

When a Nigerian company pays royalties or technical fees to a foreign company for the use of intellectual property or technical know-how, the remittance of such fees is subject to taxation. The tax rate is typically 10% of the gross amount remitted, but this can vary depending on the applicable tax treaty between Nigeria and the foreign company's home country.

To remit these fees, the Nigerian company must obtain a certificate of acceptance of royalty or technical fees from the FIRS, which confirms that the tax on the fees has been paid. The certificate must be obtained before the remittance of the fees can be effected.

REMITTANCE ON ACCOUNT OF TRAINING AND CONSULTANCY

Remittance on account of training and consultancy refers to the transfer of funds out of the country by a Nigerian resident or a Nigerian company to pay for training or consultancy services rendered by a non-resident company or individual.

In Nigeria, remittances on account of training and consultancy are subject to withholding tax. The WHT rate on consultancy fees is 10%, while that on training fees is 5%. The tax is deducted by the Nigerian company making the payment and remitted to the FIRS on behalf of the non-resident service provider.

The tax is based on the gross amount of the payment, and the Nigerian company making the payment is required to issue a withholding tax certificate to the non-resident service provider as evidence of the tax payment.

Interest and loan repayments and dividends

When it comes to financing and the transfer of funds and equipment, interest, loan repayments and dividends may also have tax implications.

Interest payments on loans may be subject to WHT at a rate of 10%. This tax is usually deducted by the borrower and remitted to the tax authorities. However, certain types of interest payments may be exempt from withholding tax, such as interest paid on loans granted by a Nigerian bank or other financial institution for a period of at least seven years.

Loan repayments, on the other hand, are generally not subject to tax in Nigeria. However, if the loan is a foreign loan, the repayments may be subject to WHT at a rate of 10%.

Dividends paid by Nigerian companies to non-resident shareholders are also subject to WHT at a rate of 10%. This tax is usually deducted at source by the company and remitted to the tax authorities. However, the tax rate may be reduced under certain tax treaties to which Nigeria has become party with other countries.

Payment of insurance premiums or payments for other services

When a company obtains insurance coverage, it is required to pay an insurance premium to the insurer. In Nigeria, the payment of insurance premiums is subject to VAT at a rate of 7.5%. The VAT paid on insurance premiums can be recovered as input VAT, which can be offset against the VAT charged on sales made by the company.

In addition to VAT, there may also be other taxes and levies applicable to insurance premiums depending on the type of insurance policy and the insurer. For example, some insurance policies may attract stamp duty.

Payments for other services relate to fees paid for a variety of services such as management fees, consulting fees, legal fees and other professional services. These fees may be paid to non-residents or foreign companies for services rendered in Nigeria or abroad.

When making such payments, it is important to note that they may be subject to withholding tax in Nigeria. The rate of WHT on payments for services rendered in Nigeria by non-residents or foreign companies is generally 10%. However, the rate may be reduced under applicable double tax treaties.

2.2.2 Further restrictions regarding currency conversion and loans

The CBN regulates currency conversion and loans in Nigeria and imposes certain restrictions to control the flow of foreign currency and prevent money laundering.

One of the restrictions is the requirement that all foreign currency transactions be conducted through authorised dealers or banks. This means that individuals and businesses are not allowed to hold or trade foreign currency outside of authorised channels.

In addition, the CBN regulates the amount of foreign currency that can be purchased or sold by individuals and businesses and sets limits on the amount of foreign currency that can be transferred out of the country.

In the case of loans, the CBN requires all foreign loans to be registered with it and imposes restrictions on the maximum amount and tenor of such loans. The CBN also monitors the use of foreign loans to ensure that they are used for legitimate business purposes.

2.3 Accounting regulations

2.3.1 Accounting principles

The accounting principles in Nigeria are largely based on the International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (GAAP). Financial assets are accounted for in line with IFRS 9. In addition to these, the Financial Reporting Council of Nigeria (FRCN) has developed Nigerian Accounting Standards (NAS) that are tailored to local conditions and requirements.

The key accounting principles in Nigeria include:

- Accrual-based accounting this principle requires that transactions be recorded when they occur, not when the cash is received or paid.
- Materiality this principle requires that financial statements reflect all material items, including those that may have a significant impact on the financial position of the company.
- Consistency this principle requires that accounting methods and practices be consistent from one period to the next, to ensure the comparability of financial statements.
- Prudence this principle requires that a cautious approach be taken in financial reporting, to ensure that all liabilities and expenses are fully recognised, even if they are uncertain.

- Going concern this principle assumes that the company will continue to operate for the foreseeable future, and financial statements should reflect this assumption.
- Substance over form this principle requires that transactions be recorded based on their substance, rather than their legal form.
- Dual aspect this principle requires that every transaction has two aspects, a debit and a credit, which must be recorded to ensure that the accounting equation (assets = liabilities + equity) is always in balance.

Adherence to these accounting principles is important to ensure accurate and reliable financial reporting, which is necessary for informed decision-making by investors, lenders and other stakeholders.

The key difference between the accounting and income tax treatment for financial instruments is the interest deductible in a financial year. Tax law limits such deduction to the amount paid or payable in line with the contract.

Companies in Nigeria are classified into different size classes based on their annual turnover and total assets. This classification is used to determine the level of regulatory compliance and reporting requirements that apply to the company, as well as the level of taxation and other obligations that the company must fulfil.

The size classes of companies in Nigeria are as follows:

TABLE 6. Size classes of companies in Nigeria

	ANNUAL TURNOVER	TOTAL ASSETS
Micro Enterprises	Less than NGN 10 million	Less than NGN 5 million
Small Enterprises	Between NGN 10 million and NGN 100 million	Between NGN 5 million and NGN 500 million
Medium Enterprises	Between NGN 100 million and NGN 1 billion	Between NGN 500 million and NGN 2 billion
Large Enterprises	More than NGN 1 billion	More than NGN 2 billion

Source: BBH, 2023

2.3.2 Depreciation types and rates

Companies may choose to adopt any depreciation method recognised by the IFRS and are free to adopt accounting policies suitable to their specific circumstances provided that such policy conform with the IFRS. However, the depreciation charged on the company's assets is discounted for tax purposes and, instead, standard capital allowances are granted in line with the Second Schedule of the CITA.

Straight-line depreciation

Straight-line depreciation is a commonly used method for calculating depreciation under the IFRS. It is a simple method that spreads the cost of the asset evenly over its estimated useful life.

Under the straight-line method, the cost of the asset (less its residual value) is divided by its estimated useful life, resulting in an annual depreciation expense that is the same for each year of the asset's life.

The straight-line method is commonly used for assets that have a predictable and consistent pattern of wear and tear, such as buildings, vehicles and office equipment. It is also a useful method for companies that wish to simplify their accounting process and minimise the risk of error or inconsistency in depreciation calculations.

However, the straight-line method may not always accurately reflect the actual pattern of an asset's usage or wear and tear. In such cases, other depreciation methods, such as units of production or diminishing balance, may be more appropriate.

Reducing balance depreciation

Reducing balance depreciation is a method of calculating depreciation that results in higher depreciation charges in the early years of an asset's life, and lower charges in later years. This is because the depreciation charge is based on the remaining carrying value of the asset, which declines each year as the asset is used and wears out.

Under this method, a fixed percentage rate of depreciation is applied each year to the net carrying value of the asset, which is the cost of the asset less its accumulated depreciation and any impairment losses. This results in a higher depreciation charge in the early years, when the asset is new and has a higher carrying value, and a lower charge in later years as the carrying value declines.

The reducing balance method is commonly used for assets that have a high initial value and a rapid rate of technological obsolescence, such as computer equipment or software. It is also useful for companies that wish to allocate more of the depreciation expense to the early years of an asset's life when the asset is likely to have a higher impact on the company's operations and financial results.

Units of production depreciation

Units of production depreciation is a method of calculating depreciation that is based on the actual usage of an asset rather than its age or time. Under this method, depreciation is charged based on the number of units produced, hours used or any other measure of actual usage of the asset.

The key factor in this method is the estimation of total estimated production or usage, which is used to calculate the depreciation charge per unit of production or usage.

Units of production depreciation is commonly used for assets that are directly related to production, such as manufacturing equipment, and assets that are subject to heavy usage, such as vehicles or aeroplanes. It is also useful for companies that wish to allocate the depreciation expense more accurately based on the actual usage of the asset, rather than a predetermined rate or period. However, it can be difficult to accurately estimate the total production or usage of an asset, which can make this method less reliable for certain assets.

Sum-of-the-years' digits depreciation

The sum-of-the-years' digits depreciation is a method of calculating depreciation that considers the useful life of an asset. It is also known as the 'accelerated depreciation' method because it results in higher depreciation charges in the early years of an asset's life, compared to the straight-line method.

Under this method, the total number of years of the asset's useful life is added up, and each year's depreciation expense is calculated as a fraction of the total. The numerator of the fraction is the remaining years of useful life, and the denominator is the sum of the years of useful life.

The sum-of-the-years' digits depreciation method is often used for assets that have a higher rate of depreciation in the early years of their life, such as vehicles or machinery. It allows companies to allocate more of the asset's cost to the early years when it is likely to be generating more revenue. However, this method can result in higher depreciation charges in the early years, which can impact a company's financial statements and tax liability.

Revaluation model

Under the revaluation model, depreciation is calculated based on the asset's revalued amount, which is its fair value less any accumulated depreciation and impairment losses. This method is used when an asset's fair value can be reliably measured.

The revaluation model allows a company to revalue its assets to reflect their current fair value. This can result in a higher carrying value for the asset on the company's balance sheet, which can have a positive impact on the company's financial statements. However, it can also result in higher depreciation charges in future periods since depreciation is calculated based on the revalued amount rather than the original cost.

The revaluation model is not commonly used as it requires frequent revaluations of assets to reflect their current fair value. This can be costly and time-consuming for companies and may not always result in a reliable estimate of fair value. As such, most companies use the cost model for depreciating their assets under the IFRS.

2.3.3 Accounting treatments of RE service providers and the C&I consumer

RE service providers and C&I consumers have different accounting treatments, depending on the type of renewable energy arrangement they possess.

In the PPA model, where the RE service provider generates and supplies electricity to the C&I consumer, the RE service provider recognises revenue based on the terms of the PPA, which could be fixed or variable. The C&I consumer, on the other hand, recognises the electricity purchased as an expense on their income statement. In the BOOT model, where the RE service provider builds and operates the renewable energy project on behalf of the C&I consumer, the RE service provider capitalises the project cost as a fixed asset and recognises revenue from the C&I consumer based on the terms of the arrangement. The C&I consumer recognises the project cost as a liability and depreciates it over the useful life of the project.

In both cases, any payments made by the C&I consumer to the RE service provider are treated as operating expenses, and any financing costs associated with the project are treated as interest expense. The RE service provider may also be required to recognise intangible assets, such as renewable energy credits or carbon offsets, if applicable.

It is important to note that accounting treatments may vary depending on the specific terms of the renewable energy arrangement, as well as the accounting standards and regulations applicable in the country in which the parties are located.

2.3.4 Ability and methods to carry forward losses

The accounting treatment of losses is governed by the IFRS, which is the accounting framework adopted by Nigerian companies. According to the IFRS, losses are recognised when they occur and are deducted from the company's equity. The company should also provide disclosures on the financial statements regarding the nature of losses and the circumstances that led to them.

When a company carries forward tax losses to offset against future taxable profits, it should provide a deferred tax asset on its financial statements. The deferred tax asset represents the estimated future tax benefit that the company will receive from utilising the tax loss carryforward. The deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available to utilise the tax loss carryforward.

2.3.5 Possible legal forms

There are different legal forms with different applicable taxes. These include the following legal forms.

Limited liability company (LLC)

An LLC describes a business structure that provides limited liability protection to its owners while allowing them to retain flexibility in management and ownership.

An LLC is a legal entity separate from its owners, which means that it can enter into contracts, own assets and conduct business operations in its own name. The owners of an LLC are referred to as members, and their ownership interests are represented by membership units, which can be assigned and transferred among members.

One of the main benefits of an LLC is limited liability protection for its members. Therefore, the personal assets of the members are generally protected from the debts and obligations of the LLC. However, members may still be personally liable for their own wrongful acts or negligence.

Another advantage of an LLC is that it offers passthrough taxation, which means that the company itself is not taxed on its income. Instead, the profits and losses of the LLC are passed through to its members and taxed at their individual rates.

Limited liability partnership (LLP)

An LLP describes a partnership with a body corporate and perpetual succession similar to a limited liability company. An LLP is a business structure or arrangement with its own distinct legal personality, separate from the partners. Two or more companies can form an LLP. It is also possible that individual persons and companies can form an LLP. In an LLP, the liabilities of the partners are limited to the amount undertaken to contribute or the outstanding contribution. An LLP shall consist of a minimum of two designated partners with no maximum number of partners. They are responsible for compliance with the Companies and Allied Matters Act (CAMA), including the filing of documents, returns, statements and other reports under the CAMA or under the limited liability agreement.

One of the partners of an LLP must be resident in Nigeria and will be responsible for regulatory compliance.

The registered name of an LLP must end with the words 'Limited Liability Partnership' or the abbreviation 'LLP'. Any change in the partners of an LLP does not affect the existence, rights or liabilities of the LLP.

An LLP is suitable for joint ventures in which all partners are involved in the day-to-day running of the partnership business.

The LLP shall be liable for all debts and obligations as an entity, just like a limited liability company. There is corporate responsibility in respect of the LLP's business. Assets of individual partners cannot be used to settle the LLP's debts of other liabilities unless in cases of fraud or personal guarantee.

The cost of incorporating an LLP varies depending on the authorised share capital of the partnership. The authorised share capital is the maximum amount of share capital that the LLP can issue to its partners or members. The fees for incorporating an LLP are determined by the CAC, which is the government agency responsible for regulating the registration and operation of businesses in Nigeria. Additionally, there may be other costs involved in the incorporation of an LLP, such as legal fees and the cost of obtaining a tax identification number (TIN) from the FIRS.

The registration of a business as an LLP presents the partnership with the following opportunities:

- a separate legal entity that can sue and be sued in its name;
- acquisition, holding, ownership, development and disposal of immovable of movable property;
- performance of any other acts in which a body corporate may lawfully engage.

The registration process should be completed within 14 days.

A foreign LLP that intends to carry on business in Nigeria must be incorporated in Nigeria as a separate entity. However, the Minister has the power by law to grant an exemption to a foreign LLP from the incorporation requirement. Exceptions apply in the following cases:

• an LLP in Nigeria for the execution of specific individual loan projects on behalf of a donor country or international organisations;

- an LLP invited to Nigeria by or with the approval of the Federal Government to execute any specific individual project;
- an LLP owned by a foreign government and solely engaged in export promotion activities;
- an engineering and technical expert engaged in any individual specialist project under contract with any of the governments in the Federation or any of their agencies or with any other body or person, where such contract has been approved by the Federal Government.

Limited partnership (LP)

An LP is a partnership arrangement with at least two partners in which the liabilities of a general partner are unlimited, while the liabilities of a limited partner are limited to their undertaking within the partnership. Usually, an LP is recommended when any of the partners are mere sponsors of a joint business and are not or will not be partaking in the daily affairs or management of the partnership business. The designated partner of an LP is responsible for compliance with the CAMA, including the filing of documents, returns, statements and other reports under the CAMA or under the limited liability agreement.

An LP consists of one or more persons called general partners, who shall be liable for all debts and obligations of the firm. Individual partners are liable for the business of the partnership. When the LP cannot meet its liabilities, the assets of the partners can be applied to settle those liabilities.

The registered name of an LP must end with the words 'Limited Partnership' or the abbreviation 'LP'. Resignation of a partner from an LP does not excuse them from liability.

An LP is suitable for business ventures in which some of the limited partners are not involved in the day-today running of the partnership business.

The cost of incorporating an LP varies depending on various factors such as the legal fees charged by lawyers, the cost of obtaining a TIN from the FIRS and the fees charged by the CAC.

The registration of a business as an LP presents the partnership with the following opportunities:

- an allowance for greater flexibility in management as an LP allows for the separation of management and ownership;
- LPs offer tax benefits such as pass-through taxation, which means that the partnership itself is not subject to income tax.

A foreign LP that intends to carry on business in Nigeria must be incorporated in Nigeria as a separate entity.

Framework for C&I projects in Nigeria



3.1 Specific requirements for the upfront purchase model

3.1.1 Description of the upfront purchase model

The upfront purchase model

In general, the upfront purchase model is a business model commonly used in the sale of goods or services. In this model, a customer pays a lump sum upfront for the right to use or access a product or service over a specific period, rather than paying for it on a recurring basis.

This model can be beneficial for both the customer and the business. For the customer, it can provide a sense of ownership and flexibility when using the product or service, without the worry of recurring payments. For the business, it can provide a steady stream of revenue upfront, as well as potentially reducing administrative costs associated with recurring billing.

However, this model also carries some risks for the business, such as the possibility of overestimating the revenue that will be generated from the upfront payment and the potential for customers to feel locked into a product or service they no longer want or need. In accounting, revenue from an upfront purchase is generally recognised as deferred revenue and recognised over the period during which the customer is entitled to use the product or service. This is achieved through the process of amortisation, which gradually reduces the deferred revenue balance and increases revenue recognised on the income statement.

In this study, the consumer will purchase the RE system through the execution of a purchase contract with the constructor who is outside Nigeria. The consumer may make an upfront purchase, that is, pay the constructor ahead of delivery of the system; this could either be by the consumer taking a loan from a credit institute or by self-financing the purchase of the system. Upon purchase of the system, the consumer contracts the services of a manager in charge of system operations. The consumer generates electricity from the RE system for its own use while the excess is sold back to the public grid.

Relevant contractual relationships

In the upfront purchase model, the relevant contractual relationships for the off-taker and the RE service provider are as follows:

- purchase contract between the constructor of the energy generation system and the consumer, whereby the constructor is in charge of project planning and construction;
- loan agreement between the consumer and the credit institute, provided that the financing is not equity-based;
- service contract between the manager and the consumer, whereby the manager is responsible for the operational activity of the energy generation system;
- contract for feeding surplus energy into the public grid.

3.1.2 Analysis of the accounting and tax implications for the off-taker

Accounting implications

In the upfront purchase model, the C&I consumer who purchases the renewable energy system incurs a significant initial cost. This cost is recorded as a fixed asset on the balance sheet of the C&I consumer, reflecting the amount paid for the renewable energy system. The asset is then depreciated over its useful life, and the depreciation expense is recognised as an operating expense on the income statement.

The C&I consumer may also incur additional costs related to installation and maintenance of the renewable energy system, which are recognised as operating expenses on the income statement as incurred.

In terms of the accounting treatment of any financing arrangements, the C&I customer would record any financing obtained for the purchase of the renewable energy system as a liability on the balance sheet, with interest expense recognised on the income statement over the term of the financing arrangement.

Further accounting implications are described following.

PURCHASE OF THE RE SYSTEM

The consumer shall capitalise the RE system as property, plant and equipment (PPE) in line with IAS 16. Any depreciation of assets would be realised in line with IAS 16.

IMPORTATION OF COMPONENTS

Import duties are to be capitalised along with the cost of the asset.

FINANCING AGREEMENT

The consumer may recognise loan liabilities in line with IFRS 9. Interest expense paid or payable by the consumer is to be debited to the income statement. Interest accrued up to the date of commissioning of the RE system is to be capitalised.

SALE OF EXCESS POWER BACK TO THE PUBLIC GRID

The consumer may recognise income from the sale of excess power on the credit income statement. Credit the VAT payable account with VAT on the sale of excess power.

COST OF OPERATING THE RE SYSTEM (THROUGH A MANAGER OR BY THE CONSUMER THEMSELVES)

The consumer may recognise the costs of operating the RE system themselves or through a manager as debit on the income statement.

STAMP DUTY

Stamp duty paid by the consumer in respect of the financing arrangement is to be expensed on the income statement.

Taxation implications

In the upfront purchase model, the C&I consumer typically owns the renewable energy system and is responsible for its maintenance and operation. As such, the consumer may be eligible for certain tax incentives, such as investment tax credits and accelerated depreciation, which can help reduce the cost of the system.

FINANCING AGREEMENT

In the case of financing agreements, to implement the upfront purchase model, the following tax implications may arise:

- VAT at a rate of 7.5% payable on non-interest fees.
- 10% WHT to be deducted from fees and interest payable to the credit institute. However, there would be no WHT if the credit institute is an exempt designated financial institution (DFI). Interest may be partially exempted (up to 70%) depending on the tenure and moratorium if the credit institute is foreign (see Table 4).
- There is no CGT to be considered.
- Stamp duty is payable at a rate of 0.125% of the loan amount.
- There are no import duties to be considered.
- For CIT, interest is deductible subject to prescribed restrictions, applicable when the consumer is related to a foreign credit institute. VAT paid on loan charges is also deductible.

UPFRONT PURCHASE AGREEMENT

In the case of the purchase agreement, the following tax implications may arise:

- VAT at a rate of 7.5% payable on the earlier of payment or delivery.
- WHT at a rate of 5% is deducted from the purchase price on every milestone payment.

- There is no CGT to be considered.
- There is nominal stamp duty on the agreement.
- There are no import duties to be considered.
- With regard to CIT, the capital allowance claimable on the system is set at 50% and 25% as initial and annual rates, respectively. Effectively, the first year's capital allowance will be 62.5%, while the second to fourth years' will be 12.5% each. an investment allowance of 10% of the actual expenditure incurred on the equipment is also deductible in the first year for tax purposes.

OPERATION OF THE RE SYSTEM

A manager may be hired to operate the RE system. This could trigger the following tax implications:

- The fees to the manager will include VAT at a rate of 7.5%. Reimbursement of expenses will not attract any additional VAT if the manager is already paid with VAT.
- There is WHT at a rate of 10% to be deducted from the fee payable to the manager. No WHT is to be deducted from the payment of reimbursables to the manager.
- There is no CGT to be considered.

- There is nominal stamp duty to be paid on the contract of appointment of manager.
- There are no import duties to be considered.
- For CIT, annual fees and VAT paid to the manager are deductible for tax purposes.

SALE OF SURPLUS ENERGY BACK TO THE PUBLIC GRID

In the case of the sale of surplus energy back to the public grid, the following tax implications may arise:

- There is VAT at a rate of 7.5% to be included on the invoice issued to the grid operators. Failure to charge VAT will result in the consumer bearing the VAT cost.
- The payment from the grid operators is to attract WHT at a rate of 5%. This is to be used to offset future income tax liabilities.
- There is no CGT to be considered.
- There is nominal stamp duty to be paid on the contract of supply to the grid.
- There are no import duties to be considered.
- With regard to CIT, the profit generated from supply is subject to CIT at 30% and education tax (EDT) at 2.5%.

3.1.3 Analysis of the accounting and tax implications for the RE service provider

Accounting implications

In the upfront purchase model, the RE service provider receives payment for the renewable energy system upfront and transfers ownership of the system to the consumer. As a result, the RE service provider will recognise the entire revenue at the time of sale.

However, the RE service provider may also incur significant costs associated with the installation of the renewable energy system, including equipment, labour and other related expenses. These costs will be recognised as expenses as incurred.

Additionally, the RE service provider may need to recognise a provision for warranty costs, which represent the estimated cost of replacing any defects in the system during the warranty period.

From an accounting perspective, the upfront purchase model may result in significant revenue recognition in the short term, but the associated expenses and warranty costs will be recognised over a longer period. It is important for the RE service provider to accurately estimate and recognise these costs to ensure that the financial statements reflect the true financial position and performance of the company.

Taxation implications

TRANSFER OF THE RE SYSTEM TO THE CONSUMER

In the case of transfer of the RE system to the consumer, the following tax implications may arise:

- There is no VAT to be applied. However, the constructor will act as an agent to collect 7.5% VAT if the constructor is a Nigerian company.
- The payment to the constructor will attract 5% WHT to be deducted by the consumer on every milestone payment.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- With regard to CIT, the payment received from the consumer will be subject to income tax in Nigeria, with the WHT deducted by the consumer recognised as an advance payment.

IMPORTATION OF COMPONENTS

In the case of the importation of components, the following tax implications may arise:

- Most components of RE equipment are exempt from VAT.
- There is no WHT to be considered.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- Import duties are payable at specific rates.
- With regard to CIT, the cost is to be deducted from the purchase price to determine the taxable profit.

The VAT (Modification) Order exempts certain renewable energy equipment from VAT. This includes:

- wind-powered generators;
- solar-powered generators;
- solar cells, whether or not in models or made up into panels;

- other photosensitive semiconductor devices;
- solar DC generators with an output not exceeding 750 W;
- solar DC generators with an output exceeding 750 W but not exceeding 75 kW;
- solar DC generators with an output exceeding 75 kW but not exceeding 375 kW;
- solar DC generators exceeding 375 kW.

At the construction phase of the project, all materials purchased and services employed to facilitate the construction of the system will be subject to VAT, except for the purchase of materials that have been exempted from VAT by virtue of the VAT Act and the VAT (Modification) Order. The party liable to VAT is currently the party enjoying the benefit of the construction, which is the consumer.

Notwithstanding the exemption conferred on the components above, there is no express exemption for the sale of the energy generation system. Therefore, the eventual transfer of the system from the constructor to the consumer will attract VAT at 7.5% to be paid by the consumer. Interest taxation under this model is as discussed previously. That is, when the consumer obtains a loan from a foreign related party, the total interest expense deductible is limited to 30% of EBITDA, the excess of which may be carried forward for a maximum period of five years. Therefore, interest expense can be made fully deductible if the loan is from a Nigerian entity or from a foreign unrelated lender, but partially deductible if the loan is from a foreign related party.

Meanwhile, although the consumer is entitled to claim both capital and investment allowances on the RE system, note that the investment allowance will be withdrawn if the RE equipment is sold within five years of purchase.



3.2 Specific requirements for the leasing model with ownership transfer

3.2.1 Description of the leasing model with ownership transfer

The leasing model with ownership transfer

In the leasing model with ownership transfer for C&I projects, the RE service provider retains ownership of the renewable energy system and leases it to the C&I consumer. The lease agreement typically includes an option for the C&I consumer to purchase the system at the end of the lease term at a pre-agreed price, which is often lower than the fair market value of the system.

The constructor may sell the RE system to either the consumer or the credit institute. When the consumer is the purchaser, the consumer would sell the RE system to the credit institute and lease the system back from the credit institute to generate electricity for the use of the consumer. On the other hand, when the sale is to the credit institute, the consumer simply leases the RE system from the purchaser. In either option, the consumer uses the system to generate electricity for themselves and sells any surplus back to the public grid, whilst the consumer appoints a manager to run the system's operations.

From an accounting perspective, the RE service provider records the renewable energy system as a fixed asset on their balance sheet and depreciates it over its useful life. The lease payments received from the C&I consumer are recognised as revenue over the term of the lease, and any profit or loss on the sale of the system to the C&I consumer at the end of the lease term is recorded accordingly.

In the case of the C&I consumer, the lease payments are typically treated as operating expenses and deducted from their taxable income, while the option to purchase the system at the end of the lease term may be recorded as a contingent liability until exercised. From a taxation perspective, the lease payments are subject to VAT and WHT, while the sale of the system to the C&I consumer at the end of the lease term may be subject to CGT. The tax treatment may vary depending on the specific details of the lease agreement and the applicable tax laws and regulations.

Further tax implications considered in this model are based on the following assumptions:

- Ownership of the asset will revert to the consumer at the end of the lease term.
- The consumer has control over the asset, evidenced by the obligation to appoint a manager.
- The consumer is the sole user of the asset.
- The asset is located on the consumer's premises.

Relevant contractual relationships

In the leasing model with ownership transfer, the relevant contractual relationships for the off-taker and the RE service provider are as follows:

- purchase contract between the constructor of the energy generation system and the consumer, whereby the constructor is in charge of project planning and construction;
- sale-and-leaseback agreement between the consumer and the credit institute;
- service contract between the manager and the consumer, whereby the manager is responsible for the operational activity of the energy generation system;
- contract for feeding surplus energy into the public grid.
- 3.2.2 Analysis of the accounting and tax implications for the off-taker

Accounting implications

In the leasing model with ownership transfer for C&I projects, the accounting implications for the consumer depend on whether the lease arrangement is classified as a finance lease or an operating lease. If the lease is classified as a finance lease, the consumer er is deemed to have acquired the asset, and the asset should be recognised as an asset on the consumer's balance sheet. The consumer should also recognise a liability equal to the present value of lease payments. The asset should be depreciated over its useful life, and interest expense should be recognised in the lease liability.

If the lease is classified as an operating lease, the asset should not be recognised on the consumer's balance sheet. Instead, lease payments should be recognised as an expense on the consumer's income statement over the lease term on a straight-line basis or using another systematic method.

In either case, any upfront payments made by the consumer to the lessor should be treated as a repayment of assets and recognised as an expense over the lease term. Additionally, any potential residual value guarantees or obligations should be recognised on the consumer's balance sheet as a liability.

It is important for the consumer to carefully evaluate the lease terms and classification, as they can have significant implications for the financial statements and related key ratios, such as leverage ratios and return on assets.

Further accounting implications are following.

PURCHASE OF THE RE SYSTEM

The consumer shall capitalise the RE system as property, plant and equipment (PPE) in line with IAS 16. Depreciation of assets would be realised in line with IAS 16. Ownership and control are deemed to remain with the consumer, irrespective of the lease agreement.

LEASEBACK OF RE SYSTEM

The leaseback of the RE system will be accounted for in line with IFRS 16, as follows:

- On the books of the consumer (on initial recognition): debit right-of-use asset account; credit lease liability account with the present value of the minimum lease payment.
- On subsequent recognition: amortisation of rightof-use asset: debit depreciation expense account; credit right-of-use asset account.
- On the books of the credit institution: debit lease interest receivable account; credit lease interest income account.

SALE OF EXCESS POWER BACK TO THE PUBLIC GRID

The consumer may recognise income from the sale of excess power on the credit income statement. Credit VAT payable account with VAT on the sale of excess power.

COST OF OPERATING THE RE SYSTEM (THROUGH A MANAGER OR BY THE CONSUMER THEMSELVES)

The consumer may recognise the costs of operating the RE system themselves or through a manager as debit on the income statement.

STAMP DUTY

Stamp duty paid by the consumer in respect of the financing arrangement is to be expensed on the income statement.

Taxation implications

PURCHASE OF THE ENERGY GENERATION SYSTEM FROM THE CONSTRUCTOR

In the case of the purchase of the energy generation system from the constructor, the following tax implications may arise:

- VAT at a rate of 7.5% payable on the earlier of payment of delivery.
- WHT at a rate of 5% of the purchase price is to be deducted on every milestone payment.
- There is no CGT to be considered.
- There is nominal stamp duty on the agreement.
- There are no import duties to be considered.
- There is no CIT to be considered.

SALE OF THE ENERGY GENERATION SYSTEM TO THE CREDIT INSTITUTE BY THE CONSUMER

This contractual relationship is typically viewed as a financing arrangement that does not equate an outright sale of the equipment. There are no tax implications that may arise.

LEASEBACK/LEASING OF THE ENERGY GENERATION SYSTEM FROM THE CREDIT INSTITUTE

In the case of a leaseback of the energy generation system from the credit institute, the following tax implications may arise:

- There is no VAT to be considered.
- The payment of lease interest attracts a WHT deduction of 10%. Credit notes can be used to offset future income tax liability when the credit institute is a Nigerian company.
- There is no CGT to be considered.
- There is nominal stamp duty on the agreement.
- With regard to CIT, the capital allowance claimable on the system is set at 50% and 25% as initial and annual rates, respectively. Effectively, the first year's capital allowance will be 62.5%, while the second to fourth years' will be 12.5% each. An investment allowance of 10% of the actual expenditure incurred on the equipment is also deductible in the first year for tax purposes.

The total capital allowance is limited yearly to the lease paid or payable throughout the year.

OPERATION OF THE ENERGY SYSTEM

A manager may be hired to operate the energy system. The following tax implications may therefore arise:

- Fees to the manager will include VAT at a rate of 7.5%. The reimbursement of expenses will not attract any additional VAT if the manager is already paid with VAT.
- WHT at a rate of 10% of the fee payable to the manager is to be deducted. No WHT is to be deducted from the payment of reimbursables to the manager.
- There is no CGT to be considered.
- There is nominal stamp duty payable on the contract of appointment of the manager.
- There are no import duties to be considered.
- With regard to CIT, annual fees and VAT paid to the manager are deductible for tax purposes.

SALE OF SURPLUS ENERGY TO GRID OPERATORS

In the case of the sale of surplus energy to the public grid, the following tax implications are triggered:

- There is VAT at a rate of 7.5% to be included on the invoice issued to the grid operators. Failure to charge VAT will result in the consumer bearing the VAT cost.
- The payment from the grid operators is to attract WHT at a rate of 5%. This is to be used to offset future income tax liabilities.
- There is no CGT to be considered.
- There is nominal stamp duty to be paid on the contract of supply to the grid.
- There are no import duties to be considered.
- With regard to CIT, the profit generated from supply is subject to CIT at 30% and EDT at 2.5%.

3.2.3 Analysis of the accounting and tax implications for the RE service provider

Accounting implications

In the leasing model with ownership transfer, the RE service provider would construct the C&I project according to the needs of the consumer. The constructor may sell the RE system to either the consumer or the credit institute. As a result, the RE service provider will recognise the entire revenue at the time of sale. However, the RE service provider may also incur significant costs associated with the installation of the renewable energy system, including equipment, labour and other related expenses. These costs will be recognised as expenses as incurred.

Additionally, the RE service provider may need to recognise a provision for warranty costs, which represent the estimated cost of replacing any defects in the system during the warranty period.

From an accounting perspective, the leasing model with ownership transfer may result in significant revenue recognition in the short term, but the associated expenses and warranty costs will be recognised over a longer period. It is important for the RE service provider to accurately estimate and recognise these costs to ensure that the financial statements reflect the true financial position and performance of the company.

Further accounting implications are following.

IMPORTATION OF COMPONENTS

Import duties are to be capitalised along with the cost of the asset.

Taxation implications

SALE OF THE RE SYSTEM TO THE CONSUMER OR CREDIT INSTITUTE

In the case of transfer of the RE system to the consumer or the credit institute, the following tax implications are triggered:

- There is no VAT to be applied. However, the constructor will act as an agent to collect 7.5% VAT if the constructor is a Nigerian company.
- The payment to the constructor will attract 5% WHT to be deducted by the consumer on every milestone payment.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- With regard to CIT, the payment received from the consumer will be subject to income tax in Nigeria, with the WHT deducted by the consumer recognised as an advance payment.

IMPORTATION OF COMPONENTS

In the case of the importation of components, the following tax implications may arise:

- Most components of RE equipment are exempt from VAT. Any VAT paid on importation is capitalised with the cost of the asset.
- There is no WHT to be considered.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- Import duties are payable at specific rates.
- With regard to CIT, all costs are capitalised and recovered via capital allowances.

The VAT (Modification) Order exempts certain renewable energy equipment from VAT. This includes:

- wind-powered generators;
- solar-powered generators;
- solar cells, whether or not in models or made up into panels;
- other photosensitive semiconductor devices;
- solar DC generators with an output not exceeding 750 W;
- solar DC generators with an output exceeding 750 W but not exceeding 75 kW;

- solar DC generators with an output exceeding 75 kW but not exceeding 375 kW;
- solar DC generators exceeding 375 kW.

At the construction phase of the project, all materials purchased and services employed to facilitate the construction of the system will be subject to VAT, except for the purchase of materials that have been exempted from VAT by virtue of the VAT Act and the VAT (Modification) Order. The party liable to VAT at that time is the party enjoying the benefit of the construction, which is the consumer.

Notwithstanding the exemption conferred on the components above, there is no express exemption for the sale of the energy generation system. Therefore, the eventual transfer of the system from the constructor to the consumer will attract VAT at 7.5% to be paid by the consumer. Interest taxation under this model is as discussed previously. That is, when the consumer obtains a loan from a foreign related party, the total interest expense deductible is limited to 30% of EBITDA, the excess of which may be carried forward for a maximum period of five years. Therefore, interest expense can be made fully deductible if the loan is from a Nigerian entity or from a foreign unrelated lender, but partially deductible if the loan is from a foreign related party.

Meanwhile, although the consumer is entitled to claim both capital and investment allowances on the RE system, note that the investment allowance will be withdrawn if the RE equipment is sold within five years of purchase.

3.3 Specific requirements for the renting model with ownership transfer

3.3.1 Description of the renting model with ownership transfer

The renting model with ownership transfer

In the renting model with ownership transfer for C&I projects, the RE service provider (lessor) retains ownership of the renewable energy system and leases it to the C&I consumer (lessee) for a fixed term. At the end of the lease term, ownership of the renewable energy system is transferred to the lessee. The lease payments cover the financing costs and the depreciation of the renewable energy system. The rental payments are often structured to be lower than the energy savings achieved, allowing the lessee to generate cost savings from day one of the lease term.

The accounting treatment of the renting model with ownership transfer for C&I projects involves recognising the lease payment as income for the RE service provider over the term of the lease. The lease payments are also recognised as an expense for the C&I consumer. The renewable energy system is recorded as an asset on the lessor's balance sheet and is depreciated over its useful life, while the lessee records the rental payments as an operating expense and the renewable energy system as a leased asset on their balance sheet. When ownership of the renewable energy system is transferred to the lessee at the end of the lease term, the lessor recognises the transfer as a sale and records a gain or loss on the sale. The lessee records the renewable energy system as a purchased asset on their balance sheet, and the cost of the system is recognised as a capital expenditure.

Overall, the renting model with ownership transfer allows the C&I consumer to access renewable energy technology without incurring upfront costs or taking on debt, while the RE service provider generates a steady stream of income from the lease payments and retains ownership of the renewable energy system until the end of the lease term.

Relevant contractual relationships

In the renting model with ownership transfer, the relevant contractual relationships from the off-taker and the RE service provider are as follows:

- rental contract between the constructor of the energy generation system and the consumer, whereby the constructor is in charge of project planning and construction;
- loan agreement between the constructor and the credit institute, provided that the financing is not equity-based;
- service contract between the manager and the consumer, whereby the manager is responsible for the operational activity of the energy generation system;
- contract for feeding surplus energy into the public grid.

3.3.2 Analysis of the accounting and tax implications for the off-taker

Accounting implications

In the renting model with ownership transfer for C&I projects, the consumer is essentially leasing the renewable energy system for a period of time with the option to eventually own it.

From an accounting perspective, the consumer would record the periodic lease payments as an operating expense on their income statement. If the lease agreement includes a bargain purchase option, the consumer may also record an asset on their balance sheet for the estimated value of the renewable energy system at the end of the lease term.

If the consumer chose to exercise the ownership transfer option, the asset would be transferred to their balance sheet and the lease payments would be discontinued. The transfer would be recorded at the fair market value of the system at the time of the transfer and any difference between the fair market value and the carrying value of the asset on the lessor's balance sheet would be recognised as a gain or loss on their income statement.

It is important to note that the specific accounting treatment may vary depending on the lease agreement and applicable accounting standards. Further accounting implications are described below.

PURCHASE OF THE RE SYSTEM

The consumer shall capitalise the asset upon eventual transfer from the constructor at the transfer value in line with IAS 16. Depreciation of the asset would be realised by the party capitalising at each stage in line with IAS 16.

RENTAL OF THE RE SYSTEM

The lease rental expense is to be debited to the income statement of the consumer.

SALE OF EXCESS POWER BACK TO THE PUBLIC GRID

The consumer may recognise income from the sale of excess power on the credit income statement. Credit VAT payable account with VAT on the sale of excess power.

COST OF OPERATING THE RE SYSTEM (THROUGH A MANAGER OR BY THE CONSUMER THEMSELVES)

The consumer may recognise the costs of operating the RE system themselves or through a manager as debit on the income statement.

STAMP DUTY

Stamp duty paid by the consumer in respect of the financing arrangement is to be expensed on the income statement.

Taxation implications

RENTAL OF THE ENERGY GENERATION SYSTEM FROM THE CONSTRUCTOR

In the case of rental of the energy generation system from the constructor, the following tax implications may arise:

- VAT at a rate of 7.5% payable on the lease rental.
- The payment of rental attracts a deduction of 10% WHT.
- There is no CGT to be considered.
- There is nominal stamp duty on the agreement.
- There are no import duties to be considered.
- With regard to CIT, there is no capital allowance claimable. All rentals are deductible expenses for CIT.

SALE OF SURPLUS ENERGY TO GRID OPERATORS

In the case of the sale of surplus energy back to the public grid, the following tax implications are triggered:

- There is VAT at a rate of 7.5% to be included on the invoice issued to the grid operators. Failure to charge VAT will result in the consumer bearing the VAT cost.
- The payment from the grid operators is to attract WHT at a rate of 5%. This is to be used to offset future income tax liabilities.
- There is no CGT to be considered.
- There is nominal stamp duty to be paid on the contract of supply to the grid.
- There are no import duties to be considered.
- With regard to CIT, the profit generated from supply is subject to CIT at 30% and EDT at 2.5%.

EVENTUAL PURCHASE OF THE RE SYSTEM

In the case of eventual purchase of the RE system, the following tax implications may arise:

- VAT at a rate of 7.5% is payable on the earlier of payment or delivery.
- WHT at a rate of 5% is deducted from the purchase price on every milestone payment.
- There is no CGT to be considered.
- There is nominal stamp duty on the agreement.
- There are no import duties to be considered.
- With regard to CIT, the capital allowance claimable on the system is set at 50% and 25% as initial and annual rates, respectively. Effectively, the first year's capital allowance will be 62.5%, while the second to fourth years' will be 12.5% each. An investment allowance of 10% of the actual expenditure incurred on the equipment is also deductible in the first year for tax purposes.

3.3.3 Analysis of the accounting and tax implications for the RE service provider

Accounting implications

In the renting model with ownership transfer, the RE service provider retains ownership of the renewable energy system and leases it to the C&I consumer. The rental payments made by the C&I consumer typically include a portion that goes towards the purchase of the system over the lease term, after which ownership is transferred to the C&I consumer.

From an accounting perspective, the RE service provider initially records the renewable energy system as a fixed asset on their balance sheet. As rental payments are received, a portion of these payments is recognised as revenue, and the portion allocated to the purchase of the system is recorded as a reduction in the asset value of the system on the RE service provider's balance sheet.

The C&I consumer records the rental payments as operating expenses on their income statement. As the payments are made, the C&I consumer also records a liability on their balance sheet representing the outstanding amount owed to the RE service provider for the purchase of the system. Once the ownership transfer occurs, the RE service provider records a gain or loss on the sale of the system, based on the difference between the net book value of the system and the purchase price paid by the C&I consumer. The C&I consumer records the system as a fixed asset on their balance sheet at the purchase price paid.

Overall, the accounting treatment for the renting model with ownership transfer is similar to that of the leasing model with ownership transfer, with the main difference being that the C&I consumer's payments are classified as operating expenses rather than lease payments.

Further accounting implications are described below.

PURCHASE OF THE RE SYSTEM

The constructor shall capitalise the RE system as PPE during the rental period in line with IAS 16. Depreciation of the asset would be realised by the party capitalising at each stage in line with IAS 16.

IMPORTATION OF COMPONENTS

Import duties are to be capitalised along with the cost of the asset.

RENTAL OF THE RE SYSTEM

The lease rental income is to be credited to the income statement of the constructor.

FINANCING ARRANGEMENT WITH A CREDIT INSTITUTE

The constructor shall recognise loan liability in line with IFRS 9. Interest expense paid or payable by the constructor is to be debited to the income statement. Interest accrued up to the date of commissioning of the RE system is to be capitalised.

Taxation implications

FINANCING ARRANGEMENT

In a financing arrangement, the following tax implications may arise:

- VAT at a rate of 7.5% payable on non-interest fees.
- There is 10% WHT to be deducted from fees and interest payable to the credit institute. However, there would be no WHT if the credit institute is an exempt DFI. Interest may be partially exempted (up to 70%) depending on the tenure and moratorium if the credit institute is foreign (see Table 4).
- There is no CGT to be considered.

- There is stamp duty payable at a rate of 0.125% of the loan amount.
- There are no import duties to be considered.
- With regard to CIT, the interest is deductible subject to prescribed restrictions, applicable when the consumer is related to a foreign credit institute. VAT paid on loan charges is also deductible.

IMPORTATION OF COMPONENTS

In the case of the importation of components, the following tax implications may arise:

- Most components of RE equipment are exempt from VAT. Any VAT paid on importation is capitalised with the cost of the asset.
- There is no WHT to be considered.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- Import duties are payable at specific rates.
- With regard to CIT, all costs are capitalised and recovered via capital allowances.

The VAT (Modification) Order exempts certain renewable energy equipment from VAT. This includes:

- wind-powered generators;
- solar-powered generators;
- solar cells, whether or not in models or made up into panels;
- other photosensitive semiconductor devices;
- solar DC generators with an output not exceeding 750 W;
- solar DC generators with an output exceeding 750 W but not exceeding 75 kW;
- solar DC generators with an output exceeding 75 kW but not exceeding 375 kW;
- solar DC generators exceeding 375 kW.

At the construction phase of the project, all materials purchased and services employed to facilitate the construction of the system will be subject to VAT, except for the purchase of materials that have been exempted from VAT by virtue of the VAT Act and the VAT (Modification) Order. The party liable to VAT at that time is the party enjoying the benefit of the construction, which is the consumer.

Notwithstanding the exemption conferred on the components above, there is no express exemption for the sale of the energy generation system. Therefore, the eventual transfer of the system from the constructor to the consumer will attract VAT at 7.5% to be paid by the consumer.

Interest taxation under this model is as discussed previously. That is, when the consumer obtains a loan from a foreign related party, the total interest expense deductible is limited to 30% of EBITDA, the excess of which may be carried forward for a maximum period of five years. Therefore, interest expense can be made fully deductible if the loan is from a Nigerian entity or from a foreign unrelated lender, but partially deductible if the loan is from a foreign related party.

Meanwhile, although the consumer is entitled to claim both capital and investment allowances on the RE system, note that the investment allowance will be withdrawn if the RE requirement is sold within five years of purchase.

RENTAL OF THE ENERGY GENERATION SYSTEM TO THE CONSUMER

When renting the energy system to the C&I consumer, the following tax implications may arise:

- There is no VAT to be applied. However, the constructor will act as an agent to collect 7.5% VAT if the constructor is a Nigerian company.
- The payment to the constructor will attract 5% WHT to be deducted by the consumer on every milestone payment.

- There is no CGT to be considered.
- There is no stamp duty to be considered.
- Import duties will be applied by the constructor.
- With regard to CIT, rents received are subject to CIT at a maximum of 30% and EDT at a rate of 2.5%. The capital allowance claimable on the system is set at 50% and 25% as initial and annual rates, respectively. Effectively, the first year's capital allowance will be 62.5%, while the second to fourth years' will be 12.5% each. An investment allowance of 10% of the actual expenditure incurred on the equipment is also deductible in the first year for tax purposes.

OPERATION OF THE RE SYSTEM

A manager may be hired to operate the energy system. The following tax implications may therefore arise:

- Fees to the manager will include VAT at a rate of 7.5%. The reimbursement of expenses will not attract any additional VAT if the manager is already paid with VAT.
- WHT at a rate of 10% of the fee payable to the manager is to be deducted. No WHT is to be deducted from the payment of reimbursables to the manager.

- There is no CGT to be considered.
- There is nominal stamp duty payable on the contract of appointment of the manager.
- There are no import duties to be considered.
- With regard to CIT, annual fees and VAT paid to the manager are deductible for tax purposes.

EVENTUAL SALE OF THE RE SYSTEM TO THE CONSUMER

In the case of transfer of the RE system to the consumer, the following tax implications may arise:

- There is no VAT to be applied. However, the constructor will act as an agent to collect 7.5% VAT if the constructor is a Nigerian company.
- There is no WHT to be considered.
- Gains from the sale of the RE system to the consumer will attract CGT at a rate of 10%.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- With regard to CIT, the income generated from the sale of the energy system to the consumer is subject to CIT and EDT at 30% and 2.5%, respectively.

Please note that a RE system generation capacity of more than 1 MW will require approval and licensing in order to generate electricity from the RE system in Nigeria. Therefore, in the event that this model is to be adopted, the constructor will have to be a Nigerian entity.



3.4 Specific requirements for the build-ownoperate-transfer (BOOT) model and power purchase agreement (PPA)

3.4.1 Description of the BOOT model and PPA

The BOOT model and PPA

The BOOT model and PPA are two common models used for C&I renewable energy projects.

Under the BOOT model, the developer or service provider designs, finances, builds and operates the renewable energy project for a defined period. The developer owns and operates the project during this period and recovers the investment costs through the sale of energy generated by the project. At the end of the agreed period, ownership of the project is transferred to the C&I consumer.

A PPA is a contractual agreement between a C&I consumer and a developer or service provider. Under this agreement, the developer takes on the responsibility of designing, financing, building and operating a renewable energy project. In return, the C&I consumer commits to purchasing the energy generated by the project for a specific duration at a predetermined price. In simpler terms, a PPA involves a partnership between the C&I consumer and the developer/service provider. The developer handles all aspects of the renewable energy project, from its inception to its operation, while the C&I consumer agrees to buy the electricity produced by the project at a mutually agreed rate. This arrangement allows the C&I consumer to benefit from clean and sustainable energy without the need to invest in the infrastructure and resources required for the project's development.

From an accounting perspective, in the BOOT model, the developer or service provider records the investment costs, depreciation and operating expenses during the project's operating period. The developer also records the revenue from energy sales. On the other hand, the C&I consumer records the energy purchases as expenses on their income statement. In the PPA model, the developer or service provider records the investment costs, depreciation and operating expenses for the renewable energy project. The revenue recorded will be the energy sales revenue received from the C&I consumer. The C&I consumer records the energy purchases as expenses on their income statement.

In both models, the transfer of ownership of the renewable energy project to the C&I consumer may result in additional accounting and tax implications, which need to be carefully considered and addressed.

In this study, we look at the following case: the constructor builds, owns and operates the RE system with a loan facility from the credit institute. Thereafter, the constructor executes a PPA, through which it sells power to the consumer. The consumer will use the power purchased from the constructor and sell the excess power generated back to the public grid.

Relevant contractual relationships

In the BOOT model with PPA, the relevant contractual relationships for the off-taker and the RE service provider are as follows:

- loan agreement between the constructor and the credit institute, provided that the financing is not equity-based;
- service contract between the manager and the consumer, whereby the manager is responsible for the operational activity of the energy generation system;
- contract for feeding surplus energy into the public grid.

3.4.2 Analysis of the accounting and tax implications for the off-taker

Accounting implications

In the BOOT model with PPA for C&I projects, the consumer does not have any ownership rights to the system. The RE service provider or developer retains ownership of the system throughout the BOOT period, which is typically 10-15 years.

As the consumer does not have any ownership rights to the system, they do not have any assets or liabilities to record on their balance sheet. Instead, the consumer enters into a long-term contract with the RE service provider for the purchase of electricity generated by the system from the RE service provider at a fixed price per unit for the duration of the PPA.

Under the PPA, the consumer agrees to purchase all, or a portion, of the electricity generated by the system from the RE service provider at a predetermined price. This price is typically lower than the prevailing electricity rates, providing the consumer with cost savings on their electricity bills.

From an accounting perspective, the consumer records the payments made to the RE service provider for electricity as an expense on their income statement. As the payments are fixed for the duration of the PPA, the consumer can accurately forecast their electricity costs for the term of the agreement.

It is important for the consumer to ensure that the terms of the PPA are in line with their long-term business objectives, as any changes to the agreement may result in significant financial implications. The consumer should also ensure that the PPA includes provisions for regular maintenance and repairs of the system, to ensure optimal performance and to minimise downtime.

Overall, the BOOT model with PPA provides the consumer with a cost-effective and reliable source of

electricity without the need for significant upfront capital investment.

Further accounting implications are described below.

PURCHASE OF THE RE SYSTEM

The consumer shall capitalise the asset following eventual transfer from the constructor in line with IAS 16. Depreciation of the asset would be realised by the party capitalising at each stage in line with IAS 16.

SALE AND PPA

The cost of power purchased is to be debited to the income statement of the consumer.

SALE OF EXCESS POWER BACK TO THE PUBLIC GRID

The consumer may recognise income from the sale of excess power on the credit income statement. Credit VAT payable account with VAT on the sale of excess power.

COST OF OPERATING THE RE SYSTEM (THROUGH A MANAGER OR BY THE CONSUMER THEMSELVES)

The consumer may recognise the costs of operating the RE system themselves or through a manager as debit on the income statement.

STAMP DUTY

Stamp duty paid by the consumer in respect of the financing arrangement is to be expensed on the income statement.

Taxation implications

PURCHASE OF POWER FROM THE CONSTRUCTOR

When purchasing power from the constructor, the following tax implications may arise:

- VAT at a rate of 7.5% is applicable to the purchase price payable by the consumer. VAT paid is recoverable from output VAT generated from sales.
- WHT is to be deducted at a rate of 5% of the power purchase price.
- There is no CGT to be considered.
- There is nominal stamp duty payable on the power purchase agreement.
- There are no import duties to be considered.
- With regard to CIT, the power purchase cost is deductible from the taxable profit.

SALE OF SURPLUS ENERGY BACK TO THE PUBLIC GRID

In the case of the sale of surplus energy back to the public grid, the following tax implications are triggered:

- There is VAT at a rate of 7.5% to be included on the invoice issued to the grid operators. Failure to charge VAT will result in the consumer bearing the VAT cost.
- The payment from the grid operators is to attract WHT at a rate of 5%. This is to be used to offset future income tax liabilities.
- There is no CGT to be considered.
- There is nominal stamp duty to be paid on the contract of supply to the grid.
- There are no import duties to be considered.
- With regard to CIT, the profit generated from supply is subject to CIT at 30% and EDT at 2.5%.

EVENTUAL PURCHASE OF THE RE SYSTEM

In the case of the eventual purchase of the RE system, the following tax implications may arise:

- VAT at a rate of 7.5% is payable on the earlier of payment or delivery.
- There is no WHT to considered.
- There is no CGT to be considered.
- There is nominal stamp duty on the agreement.
- There are no import duties to be considered.
- With regard to CIT, the capital allowance claimable on the system is set at 50% and 25% as initial and annual rates, respectively. Effectively, the first year's capital allowance will be 62.5%, while the second to fourth years' will be 12.5% each. An investment allowance of 10% of the actual expenditure incurred on the equipment is also deductible in the first year for tax purposes.

3.4.3 Analysis of the accounting and tax implications for the RE service provider

Accounting implications

In the BOOT model with PPA for C&I projects, the constructor is responsible for designing, building and owning the renewable energy project until the end of the PPA term. During this time, the constructor is also responsible for operating and maintaining the project.

From an accounting perspective, the constructor will need to recognise the construction costs as an asset on their balance sheet, which will be depreciated over the useful life of the project. They will also need to recognise the revenue from the PPA as income over the term of agreement.

Additionally, the constructor may need to account for any financing arrangements that they enter into to fund the construction of the project. If they take on debt or other financing, they will need to recognise this as liability on their balance sheet and make interest payments for the duration of the financing.

Overall, the accounting implications for the constructor in the BOOT model with PPA for C&I projects will involve recognising the costs of construction, accounting for any financing arrangements and recognising revenue over the term of the PPA. Further accounting implications are described below.

PURCHASE OF THE RE SYSTEM

The constructor shall capitalise the RE system as an asset at build-own-operate stage in line with IAS 16. Depreciation of the asset would be realised by the party capitalising at each stage in line with IAS 16.

IMPORTATION OF COMPONENTS

Import duties are to be capitalised along with the cost of the asset.

FINANCING ARRANGEMENT WITH A CREDIT INSTITUTE

The constructor shall recognise loan liability in line with IFRS 9. Interest expense paid or payable by the constructor is to be debited to the income statement. Interest accrued up to the date of commissioning of the RE system is to be capitalised.

SALE AND PPA

Income from the sale of power is to be credited to the income statement of the constructor.

Taxation implications

FINANCING ARRANGEMENT

In a financing arrangement, the following tax implications may arise:

- VAT at a rate of 7.5% payable on non-interest fees.
- There is 10% WHT to be deducted from fees and interest payable to the credit institute. However, there would be no WHT if the credit institute is an exempt DFI. Interest may be partially exempted (up to 70%) depending on the tenure and moratorium if the credit institute is foreign (see Table 4).
- There is no CGT to be considered.
- There is stamp duty payable at a rate of 0.125% of the loan amount.
- There are no import duties to be considered.
- With regard to CIT, the interest is deductible subject to prescribed restrictions, applicable when the consumer is related to a foreign credit institute. VAT paid on loan charges is also deductible.

IMPORTATION OF COMPONENTS

In the case of the importation of components, the following tax implications may arise:

- Most components of RE equipment are exempt from VAT*. Any VAT paid on importation is capitalised with the cost of the asset.
- There is no WHT to be considered.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- Import duties are payable at specific rates.
- With regard to CIT, all costs are capitalised and recovered via capital allowances.

The VAT (Modification) Order exempts certain renewable energy equipment from VAT. This includes:

- wind-powered generators;
- solar-powered generators;
- solar cells, whether or not in models or made up into panels;
- other photosensitive semiconductor devices;
- solar DC generators with an output not exceeding 750 W;

- solar DC generators with an output exceeding 750 W but not exceeding 75 kW;
- solar DC generators with an output exceeding 75 kW but not exceeding 375 kW;
- solar DC generators exceeding 375 kW.

At the construction phase of the project, all materials purchased and services employed to facilitate the construction of the system will be subject to VAT, except for the purchase of materials that have been exempted from VAT by virtue of the VAT Act and the VAT (Modification) Order. The party liable to VAT at that time is the party enjoying the benefit of the construction, which is the consumer.

Notwithstanding the exemption conferred on the components above, there is no express exemption for the sale of the energy generation system. Therefore, the eventual transfer of the system from the constructor to the consumer will attract VAT at 7.5% to be paid by the consumer.

Interest taxation under this model is as discussed above. That is, when the consumer obtains a loan from a foreign related party, the total interest expense deductible is limited to 30% of EBITDA, the excess of which may be carried forward for a maximum period of five years. Therefore, interest expense can be made fully deductible if the loan is from a Nigerian entity or from a foreign unrelated lender, but partially deductible if the loan is from a foreign related party.

Meanwhile, although the consumer is entitled to claim both capital and investment allowances on the RE system, note that the investment allowance will be withdrawn if the RE requirement is sold within five years of purchase.

SALE OF POWER TO THE CONSUMER

When selling power to the consumer, the following tax implications may arise:

- There is no VAT to be applied. However, the constructor will act as an agent to collect 7.5% VAT if the constructor is a Nigerian company.
- The payment to the constructor will attract 5% WHT to be deducted by the consumer on every milestone payment.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- There are no import duties to be considered.

• With regard to CIT, the income generated from the PPA is subject to CIT and EDT at 30% and 2.5%, respectively. The capital allowance claimable on the system is set at 50% and 25% as initial and annual rates, respectively. Effectively, the first year's capital allowance will be 62.5%, while the second to fourth years' will be 12.5% each. An investment allowance of 10% of the actual expenditure incurred on the equipment is also deductible in the first year for tax purposes.

OPERATION OF THE RE SYSTEM

In the case of operation of the energy system, the following tax implications may arise:

- VAT at a rate of 7.5% will apply to VATable services relating to the operation.
- WHT at a rate of 5% is applicable to third parties' contracts relating to the operation.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- With regard to CIT, operating expenses are deductible for tax purposes.

EVENTUAL SALE OF THE RE SYSTEM TO THE CONSUMER

In the case of transfer of the RE system to the consumer, the following tax implications may arise:

- There is no VAT to be applied. However, the constructor will act as an agent to collect 7.5% VAT if the constructor is a Nigerian company.
- There is no WHT to be considered.
- Gains from the sale of the RE system to the consumer will attract CGT at a rate of 10%.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- With regard to CIT, the income generated from the sale of the energy system to the consumer is subject to CIT and EDT at 30% and 2.5%, respectively.

3.5 Specific requirements for the third-party ownership (TPO) model

3.5.1 Description of the TPO model

The TPO model with ownership transfer

The TPO model is a financing arrangement in which a third party, such as a developer or investor, owns and operates a renewable energy system on a customer's property. In this model, the customer enters into a PPA with the third-party owner to purchase the energy generated by the system at an agreed rate for a set period of time.

In this study, the constructor transfers the RE system to the special purpose vehicle (SPV), who in turn either leases the system to the consumer or sells power to the consumer upon the execution of a PPA, whilst remaining the manager of operations of the RE system. The consumer either leases the system or purchases power for its use while the excess electricity generated is sold back to the public grid. Furthermore, upon expiration of the PPA, the SPV can either sell the RE system to the consumer or renew the PPA arrangement.

The accounting implications for the customer in the TPO model with PPA depend on the specific terms of the agreement, but, generally, the customer is treated as a purchaser of energy under the PPA. The customer may also be required to make an upfront payment or agree to a minimum purchase amount over the term of the agreement.

From an accounting perspective, the customer would record the energy purchased under the PPA as an expense on their income statement, and any upfront payment or deposits as an asset on their balance sheet. The customer would not record the renewable energy system as an asset or liability, as they do not own or operate the system.

The accounting implications for the third-party owner in the TPO model with PPA for C&I projects involve recording the renewable energy system as an asset and any financing or lease payments made by the customer as revenue on their income statement. The third-party owner may also be eligible for tax credits or other incentives related to the installation and operation of the renewable energy system.

It is important to note that the accounting treatment of the TPO model may vary depending on the specific accounting standards and regulations applicable to the jurisdiction in which the project is located.

Relevant contractual relationships

In the TPO model, the relevant contractual relationships for the off-taker and the RE service provider are as follows:

- agreement on the transfer of equipment between the constructor and the SPV;
- loan agreement between the SPV and the leasing company located in Germany;
- lease agreement or PPA between the SPV and the consumer;
- service contract between the manager and the consumer, whereby the manager is responsible for the operational activity of the energy generation system;
- contract for feeding surplus energy into the public grid.

3.5.2 Analysis of the accounting and tax implications for the off-taker

Accounting implications

In the TPO model, the SPV owns and operates the renewable energy system and sells the electricity generated to the C&I consumer under a PPA.

From an accounting perspective, the C&I consumer typically treats the payments made to the SPV as operating expenses, and the payments made under the PPA as a reduction in electricity expenses. The C&I consumer does not recognise any assets or liabilities related to the renewable energy system.

The C&I consumer also needs to consider the potential impact of changes in the PPA terms on their financial statements. For example, changes in the pricing or quantity of electricity sold under the PPA could result in increases or decreases in operating expenses. Similarly, changes in the renewable energy system's capacity or expected useful life could impact depreciation expenses.

Overall, the TPO model offers the C&I consumer the benefits of accessing renewable energy without incurring the upfront costs of purchasing and installing the system. However, the C&I consumer should carefully consider the terms of the PPA and the financial implications of the agreement before entering into any arrangement. Further accounting implications are described below.

RENTAL OF THE RE SYSTEM

The lease rental income is to be credited to the income statement of the consumer.

SALE AND PPA

The consumer may recognise the costs of power purchased as a debit to the income statement.

SALE OF EXCESS POWER BACK TO THE PUBLIC GRID

The consumer may recognise income from the sale of excess power on the credit income statement. Credit VAT payable account with VAT on the sale of excess power.

COST OF OPERATING THE RE SYSTEM (THROUGH A MANAGER OR BY THE CONSUMER THEMSELVES)

The consumer may recognise the costs of operating the RE system themselves or through a manager as debit on the income statement.

STAMP DUTY

Stamp duty paid by the consumer in respect of the financing arrangement is to be expensed on the income statement. **Taxation implications**

PROJECT PLANNING AND CONSTRUCTION

There are no tax implications for project planning and construction in this model.

LEASING OF THE ENERGY GENERATION SYSTEM FROM THE SPV

In the case of leasing the energy generation system from the SPV, the following tax implications may arise:

- VAT is payable at a rate of 7.5% on the lease rental.
- The rental payment attracts a WHT deduction of 10%.
- There is no CGT to be considered.
- There is nominal stamp duty on the agreement.
- With regard to CIT, profit generated from supply is subject to CIT at a rate of 30% and EDT at a rate of 2.5%.

PURCHASE OF POWER UNDER A PPA

When purchasing power from the SPV under a PPA, the following tax implications may arise:

- VAT at a rate of 7.5% is payable on the power purchased by the consumer. VAT paid is recoverable from output VAT generated from sales.
- WHT is to be deducted at a rate of 5% of the power purchase price.
- There is no CGT to be considered.
- There is nominal stamp duty payable on the power purchase agreement.
- There are no import duties to be considered.
- With regard to CIT, the power purchase cost is deductible from the taxable profit. There is no capital allowance claimable.

SALE OF SURPLUS ENERGY BACK TO THE PUBLIC GRID

In the case of the sale of surplus energy back to the public grid, the following tax implications are triggered:

- There is VAT at a rate of 7.5% to be included on the invoice issued to the grid operators.
- The payment from the grid operators is to attract WHT at a rate of 5%. This is to be used to offset future income tax liabilities.
- There is no CGT to be considered.

- There is nominal stamp duty to be paid on the contract of supply to the grid.
- There are no import duties to be considered.
- With regard to CIT, the profit generated from supply is subject to CIT at a rate of 30% and EDT at a rate of 2.5%.

3.5.3 Analysis of the accounting and tax implications for the RE service provider

Accounting implications

In the TPO model including PPA, the RE service provider typically owns and operates the renewable energy system on the consumer's property and sells the generated electricity to the consumer under a PPA. However, in this case, the RE service provider sells the energy system to the SPV. The accounting implications for the RE service provider in this model are similar to those in the upfront purchase model.

The RE service provider recognises revenue from the sale of electricity under the PPA over the contract term, usually on a straight-line basis. The service provider also records the capital cost of the renewable energy system as a fixed asset on their balance sheet and depreciates it over its useful life. Additionally, the RE service provider may also incur ongoing operating and maintenance expenses for the renewable energy system, which are expensed as incurred. These expenses include costs such as insurance, repairs and maintenance, monitoring and reporting and administrative costs related to managing the PPA.

It is important for the RE service provider to properly account for revenue recognition and expenses related to the renewable energy system to ensure accurate financial reporting and compliance with accounting standards.

Further accounting implications are described below.

IMPORTATION OF COMPONENTS

Import duties are to be capitalised along with the cost of the asset.

Taxation implications

TRANSFER OF THE RE SYSTEM TO THE SPV

In the case of transfer of the equipment to the SPV, the following tax implications may arise:

- There is no VAT to be applied. However, the constructor will act as an agent to collect 7.5% VAT if the constructor is a Nigerian company.
- The payment to the constructor will attract 5% WHT to be deducted by the consumer on every milestone payment.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- Payments received from the SPV will be liable to income tax in Nigeria. The WHT deducted by the SPV is treated as an advance payment.

3.5.4 Analysis of the accounting and tax implications for the SPV

Accounting implications

As the accounting implications for the SPV are not required in this study, we would still like to provide an insight into the accounting implications for some of the contractual relationships.

PURCHASE OF THE RE SYSTEM

The SPV shall capitalise the RE system as property, plant and equipment (PPE) in line with IAS 16. Depreciation of the asset would be realised in line with IAS 16.

RENTAL OF THE RE SYSTEM

The lease rental expense is to be debited to the income statement of the SPV.

FINANCING ARRANGEMENT WITH A CREDIT INSTITUTE OR LEASING COMPANY

The SPV shall recognise the loan liability in line with IFRS 9. Interest expense paid or payable by the SPV is to be debited to the income statement. Interest accrued up to the date of commissioning of the RE system is to be capitalised.

SALE AND PPA

Income from the sale of power is to be credited to the income statement of the SPV.

SALE OF EXCESS POWER BACK TO THE PUBLIC GRID

The consumer may recognise income from the sale of excess power on the credit income statement. Credit VAT payable account with VAT on the sale of excess power.

STAMP DUTY

Stamp duty paid by the SPV in respect of the financing arrangement is to be expensed on the income statement.

Taxation implications

As this model requires a third party, the SPV, this will also be considered from a taxation point of view in this study.

PURCHASE OF THE RE SYSTEM FROM THE CONSTRUCTOR

When purchasing the RE system from the constructor, the following tax implications may arise:

- VAT at a rate of 7.5% is applicable to the purchase price of the system.
- WHT is to be deducted at a rate of 5% of the purchase price on every milestone payment to the constructor.
- There is no CGT to be considered.
- There is nominal stamp duty to be considered on the agreement.
- There are no import duties to be considered.
• With regard to CIT, a capital allowance claimable on the system is set at 50% and 25% as initial and annual rates, respectively. An investment allowance of 10% of the actual expenditure incurred on the equipment is allowed for tax purposes.

LEASING OF THE RE SYSTEM TO THE CONSUMER

When leasing the RE system to the consumer, the following tax implications may arise:

- There is no VAT to be applied. However, the SPV will act as an agent to collect 7.5% VAT if the constructor is a Nigerian company.
- WHT applies at a rate of 10% on the lease rental.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- With regard to CIT, profits from leasing are subject to CIT at a maximum rate of 30% and EDT at a rate of 2.5%.

OPERATION OF THE RE SYSTEM

In the case of operation of the energy system, the following tax implications may arise:

- VAT at a rate of 7.5% will apply to VATable services relating to the operation.
- WHT at a rate of 5% is applicable to third parties' contracts relating to the operation.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- With regard to CIT, operating expenses are deductible for tax purposes.

SALE OF POWER TO THE CONSUMER

When selling power to the consumer, the following tax implications may arise:

- There is no VAT to be applied. However, the SPV will act as an agent to collect 7.5% VAT.
- The price of the PPA is subject to WHT at a rate of 5%.
- There is no CGT to be considered.
- There is no stamp duty to be considered.
- There are no import duties to be considered.
- With regard to CIT, the income generated from the PPA is subject to CIT and EDT at 30% and 2.5%, respectively.

FINANCING AGREEMENT

In the case of the financing agreements to purchase the energy system, the following tax implications may arise:

- VAT at a rate of 7.5% payable on non-interest fees.
- 10% WHT to be deducted from fees and interest payable to the credit institute. However, there would be no WHT if the credit institute is an exempt DFI. Interest may be partially exempted (up to 70%) depending on the tenure and moratorium if the credit institute is foreign (see Table 4).
- There is no CGT to be considered.
- Stamp duty is payable at a rate of 0.125% of the loan amount.
- There are no import duties to be considered.
- With regard to CIT, interest is deductible subject to prescribed restrictions, applicable when the consumer is related to the leasing company. VAT paid on loan charges is also deductible.

3.5.5 Specific requirements for establishment of foreign companies in Nigeria

Foreign companies such as German entities are allowed to set up local subsidiaries in Nigeria. Where this is the preference, it is recommended to incorporate a limited liability company as this business vehicle has a legal personality separate from its owners and has the capacity to enjoy more tax incentives than other legal forms. Foreign investment protection regulations exist for investors and the provisions of these regulations are applicable in the TPO model.

Some of the requirements for obtaining investment certificates include:

- a certificate of incorporation,
- a certificate of capital importation,
- an operating licence issued by the Nigerian Electricity Regulatory Commission.

In the event that a contract is entered into under this model between a German entity and a local off-taker, the provisions of the NERC Regulations for generation, transmission, system operations, distribution, and trading would apply.



3.6 Reality check and recommendation

In Nigeria, the C&I segment is increasingly investing in solar PV systems to reduce the cost of electricity supply to its businesses. Solar PV has become a cost-effective energy source, especially after considering tax incentives.

All of the models proposed above were reviewed with respect to their tax and regulatory implications based on the applicable tax laws in force in Nigeria. Nigeria currently has no double taxation agreement with Germany; as such, the provisions of local laws will fully apply to the taxation of entities carrying on business in Nigeria regardless of their relationship with other entities operating within the German jurisdiction.

Although all models are allowed in Nigeria, the upfront purchase model as well as the renting model with ownership transfer are recommended as there are fewer parties to the transaction in each of these models compared to others, hence resulting in fewer tax points. These models therefore offer optimum tax efficiency, particularly in respect of transaction taxes.

Conclusions

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The taxation and accounting framework for C&I projects in Nigeria has been presented in this study.

The study has been prepared for GIZ by BBH lawyers and tax experts in cooperation with legal and tax experts in Nigeria.

The study aims to provide a guideline on relevant taxation and accounting aspects for RE project developers and C&I consumers in the implementation of a C&I project in Nigeria. It is not intended to address the specific circumstances of any specific individual or project. The study does not provide binding legal advice and cannot replace an individual assessment or legal advice in specific cases. General information is provided on the three possible delivery models in the C&I segment: the EPC model and the third-party ownership models, PPA and lease.

The main findings are summarised in the tables 7 and 8.

TABLE 7. Summary of taxes payable by the consumer

TAXES APPLICABLE TO THE CONSUMER										
Models	Corporate Tax		VAT	CGT	Stamp	Import	WHT			
	CIT	Cap/Incor- poration Allowance			υυτγ	Duties				
Upfront pur- chase model	V	V	√	x	√	x	√			
Leasing model	√	\checkmark	x	x	√	x	√			
Renting model	√	x	\checkmark	x	\checkmark	x	\checkmark			
BOOT model	√	\checkmark	\checkmark	x	\checkmark	x	\checkmark			
TPO model	\checkmark	\checkmark	\checkmark	x	\checkmark	x	\checkmark			

TABLE 8. Summary of taxes payable by the RE service provider

TAXES APPLICABLE TO RE SERVICE PROVIDER

Models	Corporate Tax		VAT	CGT	Stamp	Import	WHT
	CIT	Cap/Incor- poration Allowance			Duty	Duties	
Upfront pur- chase model	V	x	x	x	x	V	\checkmark
Leasing model	\checkmark	x	x	x	x	\checkmark	\checkmark
Renting model	\checkmark	\checkmark	x	x	x	\checkmark	\checkmark
BOOT model	\checkmark	√	x	\checkmark	x	\checkmark	√
TPO model	\checkmark	x	\checkmark	x	x	√	√

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