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Abbreviations/acronyms

C&I	Commercial & industrial
CIF	Cost, insurance, and freight value
DER	Draft Distributed Energy Resources Regulation
DTA	Double taxation agreement
EAC	East African Community
EACCMA	East African Community Customs Management Act, 2004
EBITDA	Earnings before interest, taxes, depreciation and amortisation
EFRIS	Electronic Fiscal Receipting and Invoicing System
EPC	Engineering, procurement and construction
EUR	Euro
ESIA	Environmental and social impact assessment
FEA	Foreign Exchange Act, 2004
FiT	Feed-in tariffs
GoU	Government of the Republic of Uganda
IFRS	International Financial Reporting Standards
IPP	Independent power producer
Isolated Grid Systems Regulations	Electricity (Isolated Grid Systems) Regulations, 2020
ITA	Income Tax Act, Chapter 340
kWh	Kilowatt hour
Minister of Energy	Minister of Energy and Mineral Development of the Government of the Republic of Uganda

MW	Megawatts
MWp	Megawatt peak
NM	Net metering
NEA	National Environment Act, 2019
NEMA	National Environment Management Authority
0&M	Operation and Maintenance
OT	Offtaker
PDP	Project Development Programme
PPA	Power purchase agreement
PPE	Property, Plant & Equipment
Quality of Service Code	Electricity (Quality of Service Code) Regulations, 2003
RE	Renewable energy
REA	Rural Electrification Agency of Uganda
ROU	Right of use
SPV	Special purpose vehicle
SYSCOA	West African Accounting Standards
ToRs	Terms of reference
TPA	Tax Procedures Code Act, 2014
TP0	Third-party ownership
UEDCL	Uganda Electricity Distribution Company Limited
UETCL	Uganda Electricity Transmission Company Limited
UIA	Uganda Investment Authority
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees

URA	Uganda Revenue Authority
URSB	Uganda Registration Services Bureau
USD	United States dollar
VAT	Value added tax
WHT	Withholding tax

Currency units

EUR	Euro
USD	United States Dollar
UGX	Ugandan Shilling

Conversion rate as of 10.11.2023

USD 1 = EUR 0.9354 EUR 1 = USD 1.0691

Source: https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-usd.en.html

Technical units

kWH	Kilowatt hour
MW	Megawatt
MWp	Megawatt peak

Contributors

Trinity International LLP, ENSafrica and KPMG Uganda were contracted by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH to provide a regulatory framework analysis for commercial and industrial (C&I)/captive renewable energy projects in Uganda.

Trinity's role in the consortium of consultants has been one of overview, in light of Trinity's experience in jurisdictions across the continent. In addition, Trinity has prepared the template agreements that are annexed to this study as possibilities to be used in various scenarios.

The role of ENSafrica has been to review the legal and regulatory environment in Uganda, including the regulations relating to taxation.

The role of KPMG in the consortium is to review the accounting/financial reporting implications for both developers and power consumers of the above-mentioned delivery models as a result of globally/regionally recognised accounting/financial reporting standards such as the International Financial Reporting Standards (IFRS) or the West African Accounting Standards (SYSCOA).

Trinity, ENSafrica and KPMG disclaimer

This study was prepared based on abstract legal and accounting rules, in some cases in draft form, with due care and to the best of our knowledge. However, Trinity, ENSafrica and KPMG assume no liability for the topicality, correctness, completeness or quality of the information provided in this study. Trinity, ENSafrica and KPMG accept no liability for material or immaterial damage caused, directly or indirectly, by the use or non-use of the information provided or by the use of incorrect or incomplete information. This study cannot, under any circumstances, replace an individual assessment and individual legal and/or accounting advice on a specific case. Feedback is requested on any known legal, regulatory or accounting changes and on the application and interpretation of such changes. Feedback on the overall usefulness of this document is also very welcome to improve future versions.

GIZ disclaimer

It should be noted that this study reflects the opinion of the author Trinity and its partners ENSafrica and KPMG. It is for informational purposes only and users should be aware that regulations, laws or procedures may change and be subject to different interpretation and application. Do not rely on the information in this document as an alternative to legal, technical, financial and/or tax advice.

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ENERGY SOLUTIONS - MADE IN GERMANY

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 8

Executive summary

UGANDA'S ENERGY LANDSCAPE – COMPREHENSIVE INSIGHTS INTO REGULATORY, FINANCIAL AND TAX ASPECTS

The guide 'Commercial and industrial renewable energy projects in Uganda – Review of regulatory, financial reporting and tax aspects' provides detailed insights into the regulatory dimensions of renewable energy projects in Uganda's commercial and industrial (C&I) sector.

Developed as a guide for German and European companies offering climate-friendly energy solutions in the promising market of C&I solar projects in Uganda, it specifically addresses challenges related to self-consumption projects, the associated business environment and legal principles.

OPPORTUNITIES IN UGANDA'S REGULATORY ENVIRONMENT

Uganda has significant potential for the application of renewable energy technologies, especially in the field of solar photovoltaics (PV). Despite the limited utilisation of available resources so far, local companies in the C&I sector are increasingly seeking alternative, solar-powered solutions due to unstable grids and rising electricity tariffs.

The regulatory framework for the specific niche of C&I projects within the general solar PV market is not yet fully defined.

The aim of this guide is to comprehensively guide companies offering climate-friendly energy solutions through all currently applicable areas in the development of renewable energy projects for commerce and industry. This is intended to minimise the uncertainty caused by pending and unclear regulations as well as inconsistent information from various interest groups, thus avoiding potential project failures.

Zusammenfassung

UGANDAS ENERGIELANDSCHAFT: UMFASSENDE EINBLICKE IN REGULATORISCHE, FINANZIELLE UND STEUERLICHE ASPEKTE

Der Leitfaden "Commercial and Industrial Renewable Energy Projects in Uganda – Review of Regulatory, Financial Reporting, and Tax Aspects" bietet detaillierte Einblicke in die regulatorischen Dimensionen erneuerbare Energieprojekte im gewerblichen und industriellen (C&I) Sektor Ugandas.

Entwickelt als Orientierungshilfe für deutsche und europäische Anbieter klimafreundlicher Energielösungen im vielversprechenden Markt für C&I-Solaranlagen in Uganda, widmet er sich speziell den Herausforderungen bei Eigenstromprojekten, dem dazugehörigen Geschäftsumfeld und rechtlichen Grundsätzen.

CHANCEN IM REGULATORISCHEN UMFELD UGANDAS

Uganda verfügt über erhebliches Potenzial für die Anwendung erneuerbarer Energien, insbesondere im Bereich der Solar-Photovoltaik (PV). Trotz bisher begrenzter Nutzung der verfügbaren Ressourcen, suchen lokale Unternehmen im C&I Sektor aufgrund instabiler Netze und steigender Stromtarife zunehmend nach alternativen, solarbetriebenen Lösungen.

Die regulatorischen Rahmenbedingungen für die C&I-Nische innerhalb des Solar-PV-Marktes sind noch nicht vollständig definiert. Ziel dieses Leitfades ist es, Anbieter klimafreundlicher Energielösungen umfassend durch alle derzeit geltenden Aspekte der Entwicklung von erneuerbaren Energieprojekten für Gewerbe und Industrie zu führen. Dies soll Unsicherheiten durch ausstehende und unklare Regulierungen sowie uneinheitliche Informationen verschiedener Interessengruppen minimieren und somit potenzielle Projektausfälle vermeiden.

Executive summary

TAILORED SUPPORT FOR PRACTICAL IMPLEMENTATION, WITH CONCRETE EXAMPLES

This guide offers practical insights into Uganda's C&I solar market based on interviews with German and European service providers. It provides a clear guide for the successful development of solar projects and makes complex legal language accessible.

For providers of climate-friendly energy solutions looking to establish a presence in Uganda, the guide provides crucial support in establishing businesses and overcoming project-related challenges. For already established providers of climate-friendly solutions, it offers guidance and important information to sustain their business. The guide serves as a key resource for both newcomers and established companies, providing insights into essential aspects that every solar PV developer in the C&I sector should be aware of.

THE NEXT STEP BEGINS HERE

This guide marks the first step in a country assuming a leading role on the journey towards a more sustainable industry. It not only sheds light on the rules and financial aspects of C&I photovoltaic projects, but also provides practical tools. Legally vetted contract templates for EPC, PPA and leasing, accompanied by an Operation and Maintenance (O&M) template, facilitate both initial and subsequent projects in Uganda.

MASSGESCHNEIDERTE UNTERSTÜTZUNG FÜR DIE PRAXIS MIT KONKRETEN BEISPIELEN

Basierend auf Interviews mit deutschen und europäischen Anbietern, gewährt dieser Leitfaden praxisnahe Einblicke in Ugandas Markt für C&I-Solaranlagen. Er bietet eine klare Anleitung für die erfolgreiche Entwicklung von Solarprojekten und macht die komplexe Rechtssprache zugänglich.

Für Anbieter klimafreundlicher Energielösungen, die in Uganda Fuß fassen wollen, bietet der Leitfaden entscheidende Unterstützung bei Unternehmensgründung und Bewältigung von projektbezogenen Herausforderungen. Bereits ansässigen deutschen und europäischen Anbietern gibt er Orientierungshilfen und wichtige Informationen zur Geschäftsaufrechterhaltung. Der Leitfaden bietet allen - Neueinsteigern und ansässigen Unternehmen - einen Schlüssel zu relevanten Aspekten, die jeder Solar-PV-Entwickler im C&I-Bereich kennen sollte.

DER NÄCHSTE SCHRITT BEGINNT HIER

Dieser Leitfaden dient als erster Schritt in ein Land, das sich auf den Weg zu nachhaltigeren Industrien begibt. Er beleuchtet nicht nur die Regeln und finanziellen Aspekte von C&I-Photovoltaikprojekten, sondern stellt auch praktische Werkzeuge zur Verfügung. Juristisch geprüfte Vertragsvorlagen für EPC, PPA und Leasing, jeweils begleitet von einer Vorlage für Betrieb und Wartung (O&M), erleichtern sowohl Erst- als auch Folgeprojekte in Uganda.

C&I context

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1.1 Commercial and industrial power consumer projects

Falling system prices for renewable energy systems (RE systems), environments challenging the development of large-scale utility projects and rising power prices for commercial/industrial consumers have led renewable energy project developers (RE developers) to increase the focus on developing smaller-scale distributed renewable energy systems with commercial/industrial power consumers (offtaker – OT) 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 increased attention from regulators.

Most entities interested in C&I power projects in Uganda seek to offer rooftop solar power systems and solar equipment to industrial and commercial customers. The customers may be grid-connected and, in certain cases, off-grid. Companies would typically supply the solar system and supporting equipment and install these on the customer's premises. Installation is either undertaken directly by the supplier of the equipment or by an independent contractor engaged by the supplier.

1.2 Characteristics of C&I projects

C&I projects have the following characteristics:

- 1. energy generation equipment is deployed on the premises of the C&I power consumer. Energy generation equipment may consist of (or be a combination of) photovoltaic/storage energy systems, photovoltaic/storage-diesel/natural-gas hybrid systems;
- **2.** the C&I power consumers may be either off-grid or on-grid;
- **3.** energy systems may be grid-tied or function as islanding systems/only connected to on-site distribution grid;
- **4.** the on-site generation capacity ranges between 50 kWp up to 20 MW;
- **5.** there is partial feed in of electricity to a public grid via net metering/a feed-in tariff;
- **6.** this excludes systems dependent on wheeling.

1.3 C&I delivery models

The study considers the typical delivery models in the C&I power segment, namely:

- 1. up-front purchase/self-financing by C&I power consumers; or
- **2.** third-party ownership models where investment and operational risks are borne by the renewable energy project developers (RE developers).

Delivery models in the C&I segment can generally be differentiated between 'up-front purchase/self-financing' by commercial/industrial power consumers a well as 'third-party ownership models', where investment and also operational risks, in particular, are borne by RE developers. In these latter cases, RE system services/benefits are provided to commercial/industrial power consumers via a variety of contract structures, such as power purchase agreements (PPAs) or leasing/rental arrangements, possibly with the transfer of system ownership to the C&I power consumer at one point during the project lifetime. The most common contractual arrangement, however, is an outright sale of the solar system to the customer.

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The above-mentioned delivery models not only give rise to various regulatory questions for developers and beneficiaries alike, but also come with accounting/financial-reporting and tax-treatment implications which are particularly pertinent to industrial/commercial power consumers.

1.4 Scope of this study

This study is divided into five parts:

- Part I. This introductory section
- Part II. A description of the regulatory framework governing C&I power projects in Uganda covering, an evaluation of the legality of C&I power projects, the environmental and social considerations for C&I power projects, the legality of the concept of third party-ownership models, local content considerations and options for establishment of a local subsidiary, options for transfer of funds
- Part III. A consideration of the various accounting and financial reporting implications of these different models on the delivery of C&I projects
- Part IV. A summary of the tax treatment of C&I power projects

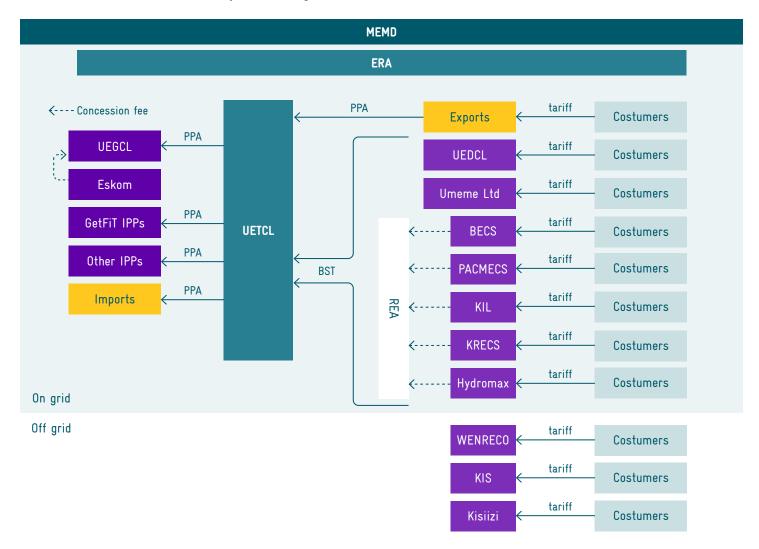


2.1 Overview of Regulation

2.1.1 Overview of the regulation of Uganda's electricity sector

The electricity sector in Uganda is divided into the generation, transmission and distribution segments. The sector is governed by the Electricity Act, 1999 (as amended in 2022) (Electricity Act) and is regulated by the Electricity Regulatory Authority (ERA). ERA reports to the Minister of Energy and Mineral Development (the Minister of Energy). The mandate of the Minister of Energy is to establish and promote the development of energy and mineral resources for social and economic development.

FIGURE 1. Structure of the electricity sector in Uganda



- a. The generation segment comprises Government of Uganda (GoU) owned power plants (including Isimba hydropower plant, Karuma hydropower plant and Kiira power station), independent power producers (IPPs) and public-private partnerships. Uganda's power generation is mainly diversified across four (4) different sources, namely hydro, thermal, cogeneration and grid-connected solar.
- b. The transmission segment is wholly owned by the GoU and managed by a single operator, the Uganda Electricity Transmission Company Limited (UETCL). Uganda operates a single-buyer model. UETCL executes power purchase agreements with the IPPs directly and manages the scheduling and actual dispatching of power plants. UETCL holds the licence for operation of the high-voltage transmission grid, the system operator licence, the export and import of electricity licence and the bulk supply licence.
- c. The distribution segment comprises a GoUowned distribution company, the Uganda Electricity Distribution Company Limited (UEDCL) and private power distributors. There are eight (8) other entities licensed to undertake electricity distribution, six (6) of which wheel electricity through the national grid, namely Umeme Limited (the largest distributor), Pader Abim

Community Multi-Purpose Electric Cooperative Society (PAMECS), Bundibugyo Energy Cooperative Society (BECS), Kyegegwa Rural Electricity Cooperative Society (KRECS), Hydromax and Kilembe Investments Limited (KIL). Two (2) of the distribution licensees are off-grid, namely West Nile Rural Electrification Company Limited (WENRECO) and Kalangala Infrastructure Services Limited (KIS) (Electricity Regulation Authority, 2021).

2.1.2 Energy policy plans

The Electricity Act mandates the Minister of Energy, in consultation with the relevant stakeholders, to develop and publish an energy policy and energy plan which is to be reviewed every five years. The objective of the 2022 Energy Policy is to meet the energy needs of Uganda's population for social and economic development in an environmentally sustainable manner.

2.1.3 Functions of the ERA

The following figure summarises the functions of the ERA:

FIGURE 2. Functions of the ERA



- Responsible for the licensing function, including issuance of licences, receipt and processing of licence applications, prescribing conditions and terms of licences and licence modification
- Establishes tariff structure and investigates tariff charges
- Approves rates of charges and terms and conditions of electricity services provided by transmission and distribution companies
- Reviews the organisation of generation, transmission and distribution companies
- Develops and enforces standards for the generation, transmission and distribution of electricity
- Prepares industry reports and gathers information from industry players
- Establishes a uniform system of accounts for licensees
- Prescribes and collects licence fees
- · Approves codes of conduct
- Carries out investigations relating to any of its functions
- Advises the Minister on any matters relating to the electricity sector

2.1.4 Grid regulation

The regulatory framework for the grid code is set out under the Electricity (Primary Grid Code)
Regulations, 2003 (the Grid Code). The Grid Code provides the guidelines and procedures for licensees' operation of the Ugandan power system. All generation licensees, the grid system operator, distribution licensees and consumers connected to the High Voltage Transmission Grid (HVTG) are required to comply with the Grid Code. UETCL is licensed as the grid system operator.

UETCL owns, operates, develops and maintains the High Voltage Transmission Grid. The grid connects power generation plants to load centres throughout the country as well as interconnecting with neighbouring countries. UETCL owns a National Control Centre which coordinates and monitors grid operations and maintenance activities (UETCL, 2018).

The main grid refers to the grid interconnected with the transmission facilities operated by the system operator (UETCL, 2018) (refer also to the Isolated Grid Systems Regulations).

In November 2015, ERA conducted a study on Grid Analysis for Integration of Wind/Solar Generation Plants, the objective of which was to determine the amount of wind and solar capacity that could be integrated into the national generation mix without affecting grid stability in cognisance of commissioning

of 200 kV and 400 kV transmission lines, 600 MW Karuma, 183 MW Isimba hydropower plants and the GET FiT projects. The study concluded that for the period 2017–2024, more than 100 MW from solar/wind plants could be integrated into the grid considering the fact that the spinning reserve is expected to increase following the commissioning of the large hydropower plants such as Karuma and Isimba. The study further concluded that the specifications of the inverters used for the solar plants was crucial to the stability of the grid.

2.1.5 The functions of the grid system operator

The following figure summarises the functions of the grid system operator:

FIGURE 3. Functions of the UETCL as grid system operator



- Supervises the operation of the grid system
- Coordinates the planning of the grid system with generators, distributors and big consumers
- Performs the monitoring and reporting function required for the effective implementation of the Grid Code
- Submits periodic reports to the licensees, the Grid Code Committee and ERA
- Provides services to coordinate interconnections to the grid
- Provides data to ERA to support the development and expansion plans for the grid system

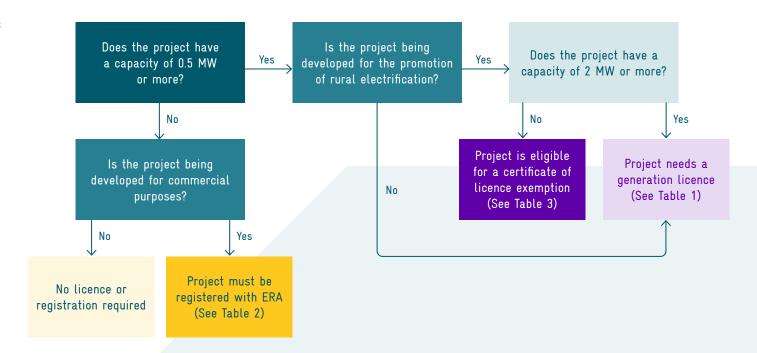
2.2 Licensing of C&I projects

2.2.1 Energy licensing requirements for C&I projects

Under the Electricity Act, 1999, the requirement to register or license a power generation project depends on: (1) the installed energy capacity of the project and (2) whether the generation plant is constructed, owned and operated for commercial purposes. The Electricity (Isolated Grid Systems) Regulations, 2020, define 'commercial purposes' as electricity that is generated for the primary objective of supporting commercial or industrial activities through captive power.

The following figure presents a diagrammatic overview of the need for a licence:

FIGURE 4. Does a generator need a licence?



Projects with a capacity of or exceeding 0.5 MW require a generation licence from ERA. Projects with a capacity of less than 0.5 MW, if constructed, owned or operated for commercial purposes, must be registered with ERA. In the context of a C&I power project, this registration requirement applies to both third-party delivery models and to up-front purchase or self-financing models on the basis that the power plant is constructed, owned and operated for commercial purposes. Projects with a capacity not exceeding 2 MW, if developed for the promotion of rural electrification, are eligible for a licence exemption. ERA retains its regulatory control over these projects.

2.2.2 The licensing procedure

The Electricity Act requires a person intending to establish a generation plant for commercial purposes to obtain a generation licence. ERA confirms that this responsibility lies with the person who owns the generation system. Accordingly, for delivery models involving up-front purchase/self-financing, the C&I power consumer would be responsible for obtaining the generation licence. In this case, the generation licences would be granted for 'own use'. With respect to third-party ownership models where investment and operational risks are borne by the RE developers, the responsibility to obtain the generation licence lies with the RE developer.

TABLE 1. Process for obtaining a generation licence for a generating plant with a capacity of or exceeding 0.5 MW

1. Notice of Intended Application

The process for obtaining a generation licence is set out under the Electricity Act and the Electricity (Application for Permit, Licence and Tariff Review) Regulations, 2007.

A developer must notify ERA of its intended application. The Notice of Intended Application is in a prescribed form and must contain the following information:

- · the financial and legal status of the intended applicant;
- the technical and industrial competence and experience of the intended applicant;
- · a description of the project and timeline for its execution;
- a review of the land use for the project and the relation of the project to the local authorities;
- a review of the public and private measures necessary to carry out the project;
- information relating to permission required from public authorities (such as physical planning permission and/or building permits);
- a description of the impact of the project on electricity supply, socioeconomics, cultural heritage, the environment, natural resources and wildlife; and
- · any other relevant information requested by ERA.

The Notice of Intended Application form can be found at: <u>Notice of Intended Application Form - ERA - Electricity Regulatory Authority.</u>

2. Publication of the Notice of Intended Application

Once the applicant provides all of the required information, ERA must facilitate publication of the Notice of Intended Application in the gazette and in at least one widely circulated national newspaper. The publication of the notice must contain a summary of the notice and inform the public of the opportunity to inspect the notice at ERA's offices and at the public office where the project is located.

Timeframe: within 30 days after receipt of the Notice of Intended Application.

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	3. Comments from affected parties and affected public	ERA must forward any comments received from affected parties and affected public agencies to the intended applicant. Timeframes:
	agencies	 any affected party or affected public agency must submit its comments within a fixed period of not less than 30 days after the publication;
		 the applicant must respond to comments within 15 days of receiving the comments from ERA.
	4. Issuance of permit to undertake feasibility	After receiving comments from affected parties and affected public agencies, ERA must issue a permit to the applicant to carry out feasibility studies and any other activity which may be necessary to enable the applicant to prepare an application for a licence.
	studies	Timeframe: not more than 30 days after receiving comments from affected parties and affected public agencies.
	5. Renewal for feasibility studies	The permit to conduct feasibility studies may be renewed by ERA under such terms and conditions determined by it.
		Timeframe: the application for renewal must be made within 90 days before the expiry of the permit. This step is only applicable where the applicant requires an extension of the permit to conduct feasibility studies.
	6. Application for a generation	The application for a generation licence is in a prescribed form. The application must contain the following information:
	licence	• the legal and financial status of the applicant;
		• a technical and economic description of the project;
		 a description of how the project fits in with the existing and planned power supply system;
		 the planned time of commencement and completion of the con- struction of the project;
		 a view of the project's adaption to the landscape, including necessary maps and drawings;
		 the impact of the project on public interests and possible mitigation;
		 the results of assessments, including environmental impact assessments and studies carried out and reports of those assess- ments and studies;

 impacts of the project on private interests, including the interests of affected landowners and holders of other rights and consents and permits required under any other law.
The application must be accompanied by an evaluation by the applicant of all comments arising from the publication of the Notice of Intended Application.
ERA must only process the application if all requirements and information in the application form have been submitted. When the requirements and information in the application are incomplete, ERA must inform the applicant that the application is incomplete.
ERA may request additional information from the applicant that it deems necessary.
Timeframe: ERA must inform the applicant of any missing information within 30 days after the date of submission of the application.
The applicant may be required to make arrangements for the execution of a bond or other form of security for the performance and observance of the licence conditions. ERA would prescribe the amount of the performance bond to be provided. The commercial terms of the bond would be negotiated between the applicant and an appropriate third party, including a commercial bank.
The applicant is required to take out the necessary insurance policies to protect against liabilities that may arise as a result of activities undertaken under the licence.
ERA must facilitate the publication of a notice of the application in the gazette and in at least one widely circulated national newspaper in Uganda. The notice of application is required to do the following:
• indicate receipt of the application for the licence;
 contain a description of the nature and location of the proposed undertaking;
• inform members of the public that the application may be inspect-

ed at ERA's offices or at any other place determined by ERA;
invite directly affected parties and public agencies in the area affected by the project to submit in writing any objection and comments on the project within 30 days after publication of the notice.

Timeframe: within 40 days after receiving the application.

7. Processing the application

8. Request for performance bonds and insurance

9. Publication of the notice of application

10. Factors to be considered in processing the application

In granting or rejecting an application for a licence, ERA must take into consideration, as far as is adequate for the project applied for:

- the energy needs of the country, region or community;
- the impact of the operations of the undertaking on the social, cultural and recreational life of the community;
- the need to protect the environment and to conserve the natural resources;
- · land use and siting or route of the project;
- · the costs of the project;
- the ability of the applicant to operate in a manner designed to
 protect the health and safety of users of the service for which the
 licence is required and other members of the public who would be
 affected by the operations of the applicant;
- the technical, economic and financial capacity of the applicant to render the service for which the licence is required;
- energy efficiency;
- any representations and objections made by any affected stakeholder;
- other public and private interests affected by the operation for which the licence is required; and
- · the price of the tariffs offered.

11. Granting of a licence

In granting a licence, ERA must take into consideration the policies of the GoU, matters provided for under the Electricity Act and any other relevant law, the report of the public hearing and any other matter that ERA may consider to have a bearing on the operations of the applicant.

Timeframes:

- the total timeframe for obtaining a permit to undertake feasibility studies is approximately 105 days;
- the total timeframe for obtaining a generation licence is approximately 70 days;
- the Electricity Act requires ERA to process all applications for a licence expeditiously, and in any case not later than 180 days after ERA receives the application.
- 12. Licence fees
- Permit for feasibility studies USD 3,000
- · Licence application fees USD 3,500
- Permit extension application fees USD 1,000

TABLE 2. Process for registering a power plant with a capacity of less than 0.5 MW

1. Application to register a power plant of less than 0.5 MW	The process for registering a power plant is set out under the Electricity (Isolated Grid Systems) Regulations, 2020. A developer of a generating station not exceeding 0.5 MW for commercial purposes must apply to ERA for registration in a prescribed form.			
2. Publication of the application and invitation for comments	ERA must publish the application in the gazette or in at least one widely circulated national newspaper and invite the public to make representations. Timeframe: ERA has the discretion to specify the timeframe for receiving comments from the public on the published notice.			
3. Approval or rejection of the application for registration	 ERA may approve or reject the application for registration, taking into account: the impact of the proposed project on the social, cultural and recreational life of the community; the need to protect the environment and to conserve the natural resources; land use and siting or route of the project; the ability of the applicant to operate in a manner designed to protect the health and safety of the consumers of the electrical energy and other members of the public who would be affected by the operations of the applicant in accordance with the Electricity (Safety Code) Regulations; the technical, economic and financial capacity of the applicant to render the service for which the registration is required; 			

	 energy efficiency; any representations and objections made arising from the public consultations; and other public and private interests affected by the operation for
	which the registration is required. Timeframe: the Electricity Act requires ERA to process all applications for a licence expeditiously, and in any case not later than 180 days after ERA receives the application. ERA confirms that from its experience, it takes about 60 days to complete the registration of a power plant.
4. Registration fees	The law does not prescribe registration fees.

TABLE 3. Process for obtaining a certificate of exemption for a power plant not exceeding 2 MW (intended for the promotion of rural electrification)

1. Exclusivity period for pre-feasibility study

The process for obtaining a certificate of licence exemption is set out under the Isolated Grid Systems Regulations.

A developer of an isolated grid system¹ with a generation capacity not exceeding 2 MW must undertake a feasibility study. The developer must obtain confirmation of exclusivity over the proposed site from the Rural Electrification Agency ('REA').Refer to this guide for content of a technical brief for solar/solar hybrid projects with a capacity of less than 2 MW: <u>Technical Brief Template SolarPV below 2MW - ERA - Electricity Regulatory Authority.</u>

2. Application for certificate of exemption

A developer of an isolated grid system with a generation capacity not exceeding 2 MW must apply to ERA for an exemption from the requirement to hold a licence for generation, distribution or sale of electricity in a prescribed form. The application for exemption must:

- state the legal status and financial capacity of the applicant;
- state the technical and economic description of the project including capacity, technology, storage, location and map of the power station and distribution network:
- describe how the project fits into the existing Grid Master Plan issued by REA;
- be accompanied by confirmation from REA and a distribution licensee operating in that area, stating that the intended site:
 - is appropriate for isolated grid system development in accordance with rural electrification planning; and
 - is not subject to site exclusivity by another person;
- state the impact of the project on private interest including interests of affected landowners and holders of other rights;

- state the results of assessments, including environmental impact assessments and feasibility studies carried out in respect of the project;
- state the planned time of commencement and completion of the construction of the project;
- state the details of any other certificate of exemption or licence awarded to the applicant by ERA;
- state the projected consumer connections, electricity demand forecast, revenues and expenses;
- provide information relating to the financing structure of the proposed project;
- state the proposed tariff including financial justification for the proposal;
- attach a sample of the consumer service agreement. The consumer service agreement is prescribed under the Regulations;
- attach proof of payment of the prescribed application fees;
- attach a tariff review form indicating the proposed tariffs specified under the Regulations;
- provide information regarding the required permissions and approvals from other authorities, including:
 - a letter of support of the proposed isolated grid system from REA; and
 - proof of the project approval from the National Environment Management Authority (NEMA); and
- state the expected operating hours for power supply.

¹ Isolated grid system means any isolated electricity supply system with its own power generation and distribution network, supplying electrical energy to consumers, and which is not connected to the main grid.

9. Licence fees

10. Timeframes

The total timeframe for the application of a certificate of licence

The Electricity Act requires ERA to process all applications for a licence expeditiously, and in any case not later than 180 days after

Application for licence exemption USD 3,000

exemption is 90-120 days.

ERA receives the application.

3. Request for additional information	ERA may request that an applicant submit missing or additional information relating to the application. Timeframe: within 30 days from the date of receipt of the application.	6. Application for multiple isolated grid systems	A person may submit one application for multiple isolated grid systems within the same geographical location provided that the total generation capacity of all isolated grid systems in the application not exceed 2 MW. When the applicant applies for multiple isolated grid systems:
4. Publication in the gazette	ERA must publish the notice of the application in the gazette or in at least one widely circulated newspaper in the region of the proposed isolated grid system. The notice published must: • describe the nature and location of the proposed project; • inform the public that the application may, within the limits of commercial confidentiality, be inspected at ERA's offices, the local council offices or other place as may be determined by ERA; • invite directly affected local community and local authorities in		 the information applicable to all multiple isolated grid system must be submitted once; and unique information varying between systems, including system design characteristics, community agreements and tariff information, must be submitted for each isolated grid system. A person may be granted more than one certificate of licence exemption when the cumulative generation capacity applied for each respective application does not exceed 2 MW.
	areas affected by the project to submit to ERA representations or objections concerning the application within 30 days. ERA must forward any objections or representations received from the public to the applicant. Timeframe:	7. Duration of the certificate of licence exemption	The certificate of exemption is valid for the period specified in the certificate or when the isolated grid system interconnects to the main grid or the installed generation capacity of the isolated grid system is upgraded to a capacity exceeding 2 MW. Timeframe: as specified in the certificate of exemption.
	 publication in the gazette must occur within 14 days of receipt of a complete application; affected persons must submit any representations or objections to ERA within 30 days of the publication. 	8. Obligations of the holder of a certificate of exemption	A holder of a certificate of exemption must: • construct, operate and maintain the authorised isolated grid system in accordance with applicable laws, regulations, terms and conditions of the certificate of exemption, instructions, guidelines,
5. ERA's decision on the application for a certificate of exemption	ERA may either approve the application or reject it. When ERA rejects an application for exemption, it must provide the applicant with reasons for the rejection in writing. Timeframe: ERA must decide upon the application for a certificate of exemption within 90 days from the date of receipt of the complete application.		standards and technical codes issued by ERA; comply with environmental requirements prescribed under the NEA; protect the safety of consumers and the public when operating the system; and comply with the terms and conditions outlined in the consumer service agreement approved by ERA.

Source: Author's own table, ENSafrica Advocates (2023), derived from the (Electricity Isolated Grid Systems Regulations, 2020)

2.2.3 Licensing fees

TABLE 4. Annual licensing fees

NATIONAL GRID-CONNECTED SYSTEMS				
Category III — medium generators (10 MW and above but less than 50 MW)	USD 12,000 fixed plus USD 3,000 per 10 MW			
Category IV — small generators (0.5 MW and above but less than 10 MW)	USD 12,000			
Category V — very small generators				
(a) 0.5 MW and above but less than 2 MW	(a) USD 6,000			
(b) Below 0.5 MW	(b) USD 2,500			
ISOLATED GRID SYSTEMS (COMBINED GENER	ATION AND SALES LICENCES)			
Category I — medium generators (10 MW and above but less than 50 MW)	USD 12,000 fixed plus USD 6,000 per 25 MW or part thereof			
Category II — small generators (2 MW and above but less than 10 MW)	USD 12,000			
Category III — very small generators				
(a) 0.5 MW (4 GWh) and above but less than 2 MW (16 GWh)	(a) USD 3,500			
(b) Less than 0.5 MW	(b) Exempt			

2.2.4 Environmental and social impact assessment and licensing requirements for C&I projects

The National Environment Act, 2019 (the 'NEA'), governs the management of the environment in Uganda. The NEA provides for the management of the environment for sustainable development. The National Environment Management Authority (NEMA) is responsible for coordinating, monitoring, regulating and supervising all activities relating to the environment.

The purpose of environmental and social impact assessments is to evaluate environmental and social impacts, risks or other concerns of a given project or activity, taking into account the environmental principles set out in the NEA.

Under the NEA, the obligation to undertake an environmental and social impact assessment depends on the installed energy capacity of the project.

A developer of a project for the generation of power from a solar PV power plant of at least 2 MW or more for commercial purposes must undertake an environmental and social impact assessment.

A developer of a project for the generation of power from a solar PV power plant of at least 2 MW for commercial purposes must undertake a project brief and submit it to NEMA. This requirement applies to projects with capacities below 2 MW.

2.2.5 The licensing procedure

TABLE 5. Process for submitting a project brief for a solar PV power plant of at least 2 MW for commercial purposes

1. Submission of project brief

The process for submitting a project brief is set out under the National Environment (Environmental and Social Assessment) Regulations, 2020.

A developer must submit a project brief, in prescribed form, in three hard copies and an electronic copy. The project brief should contain the following information:

- a description of the proposed project, including the name, purpose and nature of the project in accordance with the categories set out in the NEA;
- the proposed location and physical boundaries, including a map and coordinates of the project clearly showing the projected area of land or air that may be affected by the project activities;
- an evaluation of project alternatives, including a zero or no-project alternative in terms of project location, project design or technologies to be used, and justification for selection of the chosen option;
- the design of the project and any other project-related components and associated facilities, including the activities that will be undertaken and a description of the major material inputs to be used during the construction or development and operation of the project;
- the estimated cost of the project evidenced by a certificate if valuation of the capital investment of the project, issued by a qualified and registered valuer;
- · the size of the workforce;
- a description of the manner in which the proposed project and its location conform to existing laws, standards and international agreements governing the projects, including reference to relevant plans required under the Physical Planning Act, 2010 and the Building Control Act, 2013;
- an indication of permits, licences or other approvals that may be required for the project;

- baseline conditions of the physical, biological and socio-economic environment of the project area, including results of relevant studies and other geophysical and geotechnical studies;
- a description of potential direct, indirect, induced, cumulative, transboundary, temporary and permanent environmental, health, social, economic and cultural impacts of the project and their severity, and the proposed mitigation measures to be taken during the planning, design, pre-construction, construction, operational and decommissioning phases of the project;
- proposed mitigation and preparedness measures for potential undesirable impacts that may arise on project implementation, but were not contemplated at the time of undertaking the project brief;
- a description of climate-related impacts associated with the project, including potential climate benefits and carbon footprints of the proposed project, as well as the potential vulnerability of the proposed project or activity to climate change, and the proposed adaptation and mitigation measures;
- a description of alternative resettlement areas for persons affected by the project, if any, their associated environmental and social impacts and/or any plans for compensation for such persons;
- an environmental management and monitoring plan developed in accordance with the Regulations, incorporating a climate adaptation and mitigation plan;
- plan for stakeholder engagement throughout the proposed project or activity development, including details on how to address potential related grievances or requests for information, and evidence of stakeholder consultation; and
- · any other information required by NEMA or the lead agency.

TABLE 6. Process for submitting an environmental and social impact assessment for solar PV power plants of at least 2 MW or more for commercial purposes

2. Review of project brief

- When NEMA deems that the project brief submitted is complete, it must send a copy to the relevant lead agency for comments.
- Timeframes: NEMA must submit a copy to the lead agency within 7 days of receipt of a complete submission. The lead agency must submit its comments within 14 days of receipt of the project brief from NEMA.
- 3. NEMA's
 decision on the
 project brief
 and issuance
 of a certificate
 of approval of
 the environmental and
 social impact
 assessment
- Following receipt of the comments from the lead agency, NEMA must consider the project brief. When NEMA determines that the project brief discloses sufficient mitigation measures to address the anticipated impacts or that the project will have no significant impact on human health or the environment and interrelated socio-economic and cultural impacts, it may approve the project or part thereof.
- NEMA must issue a certificate of approval of the environmental and social impact assessment in accordance with the Regulations.
- When NEMA finds that the project will have a significant impact on human health or the environment and interrelated socio-economic and cultural impacts, or that the project brief does not disclose sufficient measures to address anticipated impacts, NEMA shall require the developer to undertake a detailed environmental and social impact assessment in accordance with the NEA.
- Timeframes: NEMA must communicate its decision on the project brief to the developer within 30 days of receipt of a complete project brief.

 Scoping and environmental and social impact study The process for submitting an environmental and social impact assessment is outlined in the National Environmental and Social Assessment) Regulations, 2020.

A developer must initiate the environmental and social impact study by undertaking a scoping exercise in accordance with the Environmental and Social Assessment Guidelines issued by NEMA. The scoping exercise must:

- determine the nature of the project area, including its physical, biological, socio-economic and cultural aspects;
- identify significant issues to be considered during the environmental and social impact assessment;
- · identify the key stakeholders;
- include initial stakeholder consultations with the relevant lead agencies and the public likely to be affected by the project;
- define the boundaries for an environmental and social impact assessment in terms of time, space and subject matter;
- · define reasonable and practical project alternatives;
- set requirements for the collection of baseline information and include any other relevant information; and
- lead to identification of the relevant interdisciplinary expertise necessary to address the identified significant impacts.
- 2. Scoping exercise and terms of reference

The developer must prepare and submit to NEMA a scoping report and terms of reference of the environmental and social impact study.

NEMA will consider the terms of reference and may consult a lead agency or persons likely to be affected by the project, require the developer to undertake an environmental risk assessment, approve the terms of reference and require the developer to undertake an environmental and social impact study, request that the developer make amendments to the terms of reference and to re-submit them within 3 weeks for consideration or reject the terms of reference.

Timeframe: NEMA must undertake these actions within 7 days of receipt of the scoping report and the terms of reference.

3. Environmental and social impact study and environmental and social impact statement Upon approval of the terms of reference, the developer must undertake an environmental and social impact study to assess the anticipated positive and negative direct, indirect, induced, cumulative and transboundary environmental, health, socio-economic, cultural and climate change impacts of the proposed project, including the expected carbon footprint.

The developer must prepare an environmental and social impact statement on completion of the study. The developer must submit three hard copies and an electronic copy of a complete environmental and social impact statement to NEMA in the form prescribed in the Regulations.

Timeframe: none prescribed.

4. Review of the environmental and social impact statement

NEMA will transmit the statement to the relevant lead agency for review. NEMA may also invite the public in the area of the project's proposed location and communities likely to be affected by the project to comment verbally or in writing on the statement.

Timeframe: NEMA must submit the environmental and social impact statement to the lead agency within 7 days of receipt.

The lead agency must submit its comments within 21 days following receipt of the complete environmental and social impact statement.

Any invitations to the public must be made within 10 days of receipt of the complete environmental and social impact statement.

5. Consideration of the environmental and social impact statement and issuance of a certificate of approval of the environmental and social impact assessment NEMA must consider the complete environmental and social impact statement in accordance with the Regulations. After considering the environmental and social impact statement, NEMA may approve, defer its decision or reject the environmental and social impact statement.

When NEMA approves the project, it must issue a certificate of approval of the environmental and social impact assessment in accordance with the Regulations.

Source: Author's own table, ENSafrica Advocates (2023), derived from the (National Environment (Environmental and Social Assessment) Regulations, 2020)

2.2.6 Environmental and social impact assessment fees

TABLE 7. Process for submitting a project brief for a solar PV power plant of at least 2 MW for commercial purposes

CATEGORY DESCRIPTION	EIA RATE
Where the total value of the project does not exceed UGX 50 million	0.500%
Where the total value of the project is more than UGX 50 million but does not exceed UGX 100 million	0.475%
Where the total value of the project is more than UGX 100 million but does not exceed UGX 250 million	0.375%
Where the total value of the project is more than UGX 250 million but does not exceed UGX 500 million	0.280%
Where the total value of the project is more than UGX 500 million but does not exceed UGX 1 billion	0.200%
Where the total value of the project is more than UGX 1 billion but does not exceed UGX 2.5 billion	0.090%
Where the total value of the project is more than UGX 2.5 billion but does not exceed UGX 5 billion	0.075%
Where the total value of the project is more than UGX 5 billion but does not exceed UGX 70 billion	0.070%
Where the total value of the project is more than UGX 70 billion	0.050%

2.2.7 Construction licensing requirements for C&I power projects

TABLE 8. Development permission

1. Requirement	The Physical Planning Act, 2010 requires any person intending to carry out a development activity within a planning area to obtain the permission of the physical planning committee. The applicant must submit the following information:	
	 (a) nature of interest in the land (registered owner, lessee, tenant by occupancy, sub-lessee or customary tenant); 	
	(b) the purpose for which the land or buildings are currently being used. If not used, the purpose for which and the date on which the land or buildings were last used;	
	(c) the method of water supply, sewerage disposal, surface water disposal and refuse disposal;	
	(d) a description of the proposed development, including the purpose for which the land or buildings are to be used.	
	Drawings and specifications must be prepared and signed by a qualified physical planner.	
2. Application	The application for development permission is in a prescribed form set out in the Schedule to the Physical Planning Act. The application is made to the relevant local government, which is then required to forward the application to the relevant physical planning committee.	
3. Considerations in granting the development permission	in a property of the property	

	(a)	be bound by any approved relevant regional or local physical development plan;
	(b)	have regard to the general health, amenities and conveniences of the community and to the proper planning and density of development and land use in the area;
	(c)	have regard to any comments received from the physical planner or authorities; and
	(d)	in the case of a leasehold, have regard to any special conditions stipulated in the lease.
	an envii out, the approva an envii	development application relates to matters that require conmental and social impact assessment to be carried physical planning committee may grant its preliminary of the application subject to the applicant obtaining conmental and social impact assessment certificate in since with the National Environment Act, 2019.
4. Approval or refusal of the development permission	mission the Phy notify the decision develop	sical planning committee may grant the development per- or refuse to grant the development permission, subject to sical Planning Act. The physical planning committee must he applicant of its decision within 30 days of making a h and must specify the conditions, if any, attached to the ment permission granted, or, in the case of a refusal to he permission, the grounds for refusal.
5. Timeline	30-60	lays

TABLE 9. Building permit

1. Requirement	ing out the Bui out the electric	Building Control Act, 2013 prohibits any person from carryout a building operation without a valid building permit from Building Committee in the areas in which it intends to carry the building operation. A 'building' is defined as including an etrical installation or other installation connected to it or any er part of a building or of an installation connected to the ding.		
2. Application		cess for applying for a building permit is set out under the g Control Regulations.		
	The appand mu	olication for a building permit must be in a prescribed form st:		
	(a)	be accompanied by a letter from the chairperson of the village council of the area;		
	(b)	contain the name and physical and postal address of the applicant;		
	(c)	be accompanied by proof of ownership of land in accordance with the Land Act, 1998, including the certificate of title, power of attorney from the registered proprietor or other satisfactory proof of ownership of the land;		
	(d)	when the applicant is not the owner of the land on which the building operation is to be carried out, contain the name of the landowner, the land title or other proof of ownership of the land and a statement of the legal rela- tionship between the applicant and the landowner;		
	(e)	contain the name, registration number and a copy of the certificate of professional practice of the architect and their signature, and official stamp of the Uganda Society of Architects and, in the case of an engineer, a certificate of good structural practice;		
	(f)	development permission from the physical planning committee;		
	(g)	a sketch plan;		

	(h)	be accompanied by such number of copies of building plans and other documents as may be required by the regulations;		
	(i)	proof of payment of application fees; and		
	(j)	any other document as may be required by the building control officer.		
8. Other required information	Electrical engineering installation plans, drawings and diagrams must contain the following information, as applicable:			
	(a)	mains and standby power supply;		
	(b)	power reticulation;		
	(c)	lighting layout;		
	(d)	small power layout;		
	(e)	fire protection;		
	(f)	private automatic branch exchange system (PABX);		
	(g)	local area data network (structured cabling); and		
	(h)	closed circuit television (CCTV).		
9. Other requirements		ding plans, sections and elevations required by the Build- nmittee must be prepared by an architect or engineer and		
	(a)	be clearly and accurately delineated in ink or another suitable permanent manner, on a suitable and durable material to the extent prescribed by the Regulations;		
	(b)	describe the class or nature of the building and clearly demonstrate the purpose for which the building is to be used;		
	(c)	indicate the stages and method by which it is intended to construct the building, if it is not to be built in one operation;		

	(d)	indicate the materials of which the building will be constructed and show clearly and accurately the position, form and dimensions of the foundations, walls, floors and other parts of the buildings;
	(e)	include a plan of every floor and complete sections of the foundations and of every storey, floor and roof of the building;
	(f)	clearly differentiate between new work and existing work, if the building permit applied for is for work on an existing building; and
	(g)	include any other particulars that the Building Committee may require.
10. Timing	A Building Committee may, upon receipt of an application for a building permit, issue a building permit within 30 days after the date of receipt of a complete application.	
11. Fees	submitt	licable fee for the consideration of plans of new buildings ed for approval must be calculated on the basis of the rea of the proposed development using a per-square-me-

Source: Author's own table, ENSafrica Advocates (2023), derived from the (Building Control Act, 2013) and the (Building Control Regulations, 2020)

2.2.8 Operating (servicing) licensing requirements for C&I projects

The Electricity (Quality of Service Code) Regulations 2003 impose service quality standards for players in the electricity sector. ERA enforces minimum service standards and a licensee must consequently adopt service rules incorporating minimum service standards and file them with ERA for approval.

Each licensee must construct, install, operate and maintain its plant, structure, equipment and lines in accordance with the best industry standard and in a manner to best accommodate the public and to prevent interference with the services furnished by other utilities.

2.2.9 Net metering and a feed-in tariff for photovoltaic regulations (or a combination of both)

There are no regulations for net metering or a feed-in tariff for solar photovoltaic projects. The Electricity Act, 1999 provides that ERA may prepare regulations relating to net metering. ERA is yet to prepare such regulations.¹

2.2.10 Technical and equipment standards

The Grid Code provides that all installations, equipment, plants or apparatus must comply with the Uganda National Bureau of Standards and Codes of Practice or, in their absence, the IEEE or British and IEC standards. In the absence of each standard or code of practice, the responsible agency must be consulted, along with ERA, to obtain permission for the utilisation of good professional practice.



¹ As of July 31st, 2024, a new net metering regulation was introduced by ERA, affecting residential, commercial and industrial prosumers generating electricity on the consumer's side of the meter, using renewable energy sources. This regulation was enacted after the completion of this study and is not reflected in the analysis.

2.3 Third-party ownership models for C&I projects

This section evaluates two contractual structures in which an RE developer – that is, a third party (TPO) – owns the power generation asset during the tenor of the contract, namely:

- 1. power purchase agreements; and
- 2. leasing.

2.3.1 Power purchase agreements

a. Are bilateral power purchase agreements (PPAs) between private entities legally possible? If so, under which conditions?

Until December 2022, Uganda's energy policy was based on a single-buyer model. The Electricity Act, 1999 requires ERA to designate a bulk supplier who is responsible for the transmission and sale of electricity in bulk to distribution and sales companies. UETCL is designated as the bulk supplier. UETCL is also designated as the system operator. Prospective applicants of generation licences are required to negotiate and enter into a power purchase agreement with UETCL.

The law was amended to allow for the direct sale and purchase of electric energy under specified terms and conditions. The Electricity (Supply of Electricity in Bulk to Specified Consumers)
Regulations, 2022 permit the sale and purchase

of electrical energy in bulk between a generation licensee, transmission licensee or distribution licensee, and an eligible consumer under specified circumstances, namely:

- i. from an eligible seller through a transmission facility to an eligible consumer;
- ii. (from an eligible seller through a distribution facility to an eligible consumer;
- iii. from an eligible seller through transmission and distribution facilities to an eligible consumer: and
- iv. from an eligible seller to an eligible consumer:
- v. provided that the eligible consumer is not a generation licensee, transmission licensee, distribution licensee or system operator;
- vi. an eligible consumer is defined as a consumer entitled to receive a supply of electrical energy directly from an uncontracted generator or licensee. An eligible seller includes a generation licensee or bulk supplier authorised under the Electricity Act and an uncontracted generator to sell electrical energy in bulk to eligible consumers. A consumer may be classified as an eligible consumer if the consumer's point of connection, energy load

and proportion of energy demand meets the criteria set by ERA. ERA defines the proportion of electrical energy that an eligible consumer may purchase in bulk under the Regulations.

The Regulations require the eligible consumer and eligible seller to enter into a power purchase agreement. An eligible seller intending to supply an eligible consumer must:

- vii. submit a notice of intention to sell electrical energy in bulk to ERA with no objection;
- viii. enter into a power purchase agreement with the eligible consumer;
- ix. enter into a wheeling and interconnection agreement with a network licensee; and
- x. enter into a supply agreement with a bulk supplier, where applicable.

ERA has a broad mandate to establish and approve tariffs. ERA therefore maintains regulatory oversight over tariffs charged under these Regulations and determines the tariff and other charges payable by eligible consumers under the Regulations, in accordance with the Electricity (Tariff Code) Regulations, 2003. In determining such tariff and charges, ERA takes the following into consideration:

- xi. the reasonable costs of network operation in supplying the eligible consumer;
- xii. the additional costs imposed by eligible consumers on licensees for meter reading and settlement activities, market operation services, provision of back-up capacity by bulk suppliers and transmission, distribution and supply losses;
- xiii. any additional costs imposed upon noneligible consumers;
- xiv. the need to eliminate cross-subsidies between specified classes or categories of consumers; and
- xv. any other factors that ERA may deem necessary.

With respect to power plants not exceeding 2 MW intended to promote rural electrification, the relationship between the developer and a consumer is to be governed by a consumer service agreement. The consumer service agreement must be submitted to ERA for approval. The agreement must include all relevant clauses affecting the provision of electricity to the consumer as well as a specific clause on dispute settlement between

- the holder of a certificate of exemption and its consumer as specified in the Regulations. The Regulations provide a template for the consumer service agreement.
- b. Which licences are required by the RE developer to enter into a PPA with a private offtaker?
 - The RE developer would need to hold a generation licence to be able to enter into a power purchase agreement with a private offtaker, and such sale of electricity to a private party must be in compliance with the Electricity Act, as discussed in Section 2.
- c. Can the transfer of asset ownership be agreed in the PPA contract and, if so, which conditions/ implications apply? Is there any regulation on financing leases or hire purchase that would prevent such a transfer clause or that require a leasing/ banking/hire purchase licence?

The transfer of asset ownership can be agreed in the PPA. However, when the transfer of asset ownership requires a transfer of the licence, such transaction must be approved by ERA. The Electricity Act provides that a licence must not be transferred without written consent from ERA.

The application for transfer of a licence must be accompanied by the application in prescribed from for the person to whom the licensee intends to transfer the licence, and the prescribed fee payable on approval of the transfer.

There is no regulation on financing leases that would prevent such a transfer clause. There is no requirement for a leasing or banking or hire purchase licence.

2.3.2 Leasing or renting

a. Are alternative contract structures such as leasing/renting possible?

ERA does not regulate the leasing of solar PV equipment. Parties can enter into such arrangements as a matter of contract.

Such arrangement would be governed by the terms of the leasing or renting agreement between the RE developer and the consumer.

Please refer to Section 4.1. below for an analysis of the tax implications of finance leases.

b. What are the energy and financial market licensing (e.g. banking licence) conditions?

There are no energy and financial marketing licences relating to C&I energy projects prescribed under Ugandan law.

c. Can the transfer of asset ownership be agreed in the lease contract and, if so, which conditions/implications apply?

The transfer of asset ownership can be agreed in the contract between the RE developer and the C&I consumer.

Please refer to Section 4.1 below for an analysis of the tax implications of finance leases. d. Who is responsible for the operation & maintenance of the asset (by law), and can the O&M be outsourced to a private service provider? If so, who requires an O&M licence (if applicable)?

The law does not provide any rules on the operation and maintenance of the leased assets. Issues relating to the operation and maintenance of assets are at the discretion of the parties. O&M can be outsourced to a private service provider. There is no applicable O&M licence.

e. Which performance guarantees (e.g. performance ratios, availability, yield, etc.) can be included (from a legal point of view)?

Under the Quality of Service Code, ERA is required to enforce minimum service standards and, consequently, a licensee must adopt service rules incorporating minimum service standards and file them with ERA for approval. The minimum service standards must provide for:

- i. continuity of service;
- ii. maintenance of proper customer relations;
- iii. the right of a licensee to refuse service;
- iv. the right of the licensee to demand a deposit from customers against future service;
- v. the adoption of proper billing procedures;

- vi. the establishment of principles governing new constructions: and
- vii. a procedure for abandonment or discontinuance of service.

A licensee must undertake to take all reasonable efforts to prevent interruptions of service. Should there be an interruption of service, a licensee must seek to re-establish service within the shortest possible time consistent with prudent operating principles, so that the smallest number of customers is affected. A licensee must make reasonable provisions to meet emergencies resulting from a failure of service and must issue instructions to its employees covering procedures to be followed in the case of an emergency in order to prevent or mitigate the interruptions or impairment of service.

f. For a German entity, is it possible to enter into a leasing/rental agreement without the need to register a local subsidiary?

It is not mandatory for a foreign company wishing to transact in Uganda to register or incorporate a company in Uganda. However, if a foreign company wishes to establish a place of business in Uganda, that foreign company must register or incorporate a subsidiary.

Under the Companies Act, 2012, a foreign company which establishes a place of business within Uganda is obligated to register with the Uganda Registration Services Bureau (URSB) within 30 days after the establishment of the place of business.

A 'place of business' is not defined under the Companies Act. The courts have interpreted the carrying on of a business to connote regular business activities, routine and continuous involvement in an activity undertaken for the purpose of making profit. A single act or business transaction is not sufficient.

Please see Section 2.5 below for guidance when an RE developer wishes to establish a local subsidiary.

2.3.3 Considerations in all cases

For both TPO contract structures, the following will be evaluated in addition to the above:

- a. How are energy, environmental and social impact assessment (ESIA), construction, operation, net-metering or feed-in tariff (FiT) (if any) licensing requirements applied in a TPO context?
 - The regulations and licensing requirements with respect to energy, ESIA, construction, operation and net metering discussed in Section 2 apply in a similar manner to the TPO model, except that the applicant would be the RE developer.
- b. Which currencies can be used in the selected countries to pay for services (including the provision of electricity as laid down in a PPA)? Is an indexation of contract currency to hard currency permitted? Are different contract currencies allowed if the contract is entered into between a German entity and a local offtaker?

There are no currency restrictions in Uganda. The choice of currency is a matter of contract.

The indexation of contract currency to hard currency is permitted. It is permissible to have different contract currencies if the contract is entered into between a German entity and a local offtaker. c. Evaluation and listing of financial guarantees and warranties to be taken into account within the framework of negotiations with industrial clients (long-term lease for the installation of photovoltaic units on roofs and on the ground).

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There is currently no regulation on these matters. Parties would handle such aspects as a matter of contract.

d. Assessment of legal possibilities of repossession during a contract in case of offtaker default (considering payments already made by the offtaker and resulting 'ownership' definition).

It is possible to repossess property depending on the type of contract entered into between the parties. Repossession can be made part of the agreement, but it should take into consideration when property in the goods passes. If property in the goods has passed, the developer would only be entitled to sue for the amount due from the offtaker.

2.4 Local content regulations

2.4.1 Local content regulation

Are there any local content regulations to be adhered to in terms of use of equipment, installation and operation or ownership of a subsidiary?

There are currently no local content regulations to be adhered to in terms of use of equipment, installation and operation or ownership of a subsidiary.

The Parliament of Uganda passed the National Local Content Bill in September 2022. The bill is intended to foster the promotion of local content in all sectors but the oil, gas and petroleum sector. However, the bill is currently awaiting Presidential Assent and is not yet in force.

Once passed into law, this Act will apply to a local content entity, defined to include an entity carrying out a licensable activity under the National Electricity Act, 1999. This Act will apply to the holder of the generation licence under the C&I delivery model. A local content entity is required to:

 a. give preference to goods which are manufactured in Uganda and services which are provided by Ugandan entities;

- b. reserve contracts for goods or services listed in the Schedule to this Act to be exclusively procured from Uganda and supplied by a Ugandan entity or citizen. These goods and services include professional services, business services (including advertising and marketing), communication services, construction and related engineering services, environmental services, financial services, health-related and social services and transport services;
- c. give preference to goods and services that are readily available on the Ugandan market and must exclusively grant contracts for procuring such goods and services to Ugandan entities;
- d. must not employ non-citizens unless it has been certified by the Minister that suitably qualified Ugandans are not available or are incapable of performing the particular type of work; and
- e. give preference to Ugandan citizens in the recruitment of employees.

2.4.2 Responsibility of licence holders

If local content regulations exist for installation and operation, is it sufficient for subcontractors to comply with such regulations or does it have to be the contractual counterpart itself?

The National Local Content Bill requires preference to be given to the employment of Ugandan citizens. The obligation falls upon the licensee. Accordingly, it would be the responsibility of the licence holder to ensure compliance with the local content obligation.

2.4.3 Responsibility of third parties

If a TPO contract is directly entered into between a German entity and a local offtaker, what would be the scope of applicabilition of such a local content regulation?

The obligation to comply with the requirements of the National Local Content Bill fall upon a licensee. In a TPO contract, it would fall upon the RE developer to observe the local content requirements. 2 Regulation and licensing 37

2.5 Establishment of a local subsidiary

2.5.1 Type of company

The ideal legal form for the establishment of a local subsidiary is a private company with limited liability by shares.

The Companies Act, 2012 requires a private limited liability company (not being a single member company) to have a minimum of two shareholders. There are no local shareholding requirements.

There is no minimum share capital prescribed by law. A foreign investor (defined in Section 2.5.3) requires a minimum of USD 250,000 in planned investment in order to obtain an investment licence from the Uganda Investment Authority (UIA).

The table summarises the steps involved in incorporating a company in Uganda:

TABLE 10. Establishment of a company in Uganda

1. Application procedure	(I) Reserving a name with the Uganda Registration Services Bureau (URSB).
	(II) Completing and filing the following documents with the URSB:
	(a) Companies Registration Form (S.18);
	(b) Memorandum and Articles of Association;
	(c) Particulars of Directors and Secretaries (Form 20);
	 (d) Notice of Situation of Registered Office and Postal Address (Form 18);
	(e) Return of Allotment (Form 10); and
	(f) Statement of Nominal Capital (A1).
	The forms can be obtained from the URSB website - Business Registration Forms (ursb.go.ug).
2. Timing	Once the required documents have been lodged with the URSB and subject to payment of the necessary fees and taxes, it takes a maximum of one week to complete the incorporation of a company.
3. Fees	Stamp duty: 0.5% of the nominal share capital
	Registration fees: 1% of the nominal share capital
	Other official fees: No more than USD 100

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2.5.2 Local content regulations regarding ownership/operation of the subsidiary

There are no local shareholding requirements in the electricity sector.

2.5.3 Existence and applicability of (foreign) investment protection regulations and requirements for foreign investment

The Investment Code Act, 2019 (ICA) governs foreign investment in Uganda. The ICA defines a foreign investor as a natural person who is not a citizen of an Easter African Community (EAC) Partner State; a company incorporated under the laws of any country other than that of an EAC Partner State; a company incorporated under the laws of Uganda in which the majority of the shares are held by a person who is not a citizen of an EAC Partner State; or a partnership in which the controlling interest is owned by a person who is not a citizen of an EAC Partner State, and holding an investment licence issued under the ICA.

The ICA requires a foreign investor to register with the Uganda Investment Authority (UIA). For further details on the registration requirement, please refer to Table 11. A foreign investor is required to satisfy the minimum capital requirement of USD 250,000 in order to obtain an investment licence from the UIA.

TABLE 11. Application for an investment licence

1. Application procedure	The application process is set out in the ICA.
	An applicant must submit the following information in order to support its application for an investment licence:
	(I) a certificate of registration of the business;
	(II) business plan, which should include detailed information on the type of investment, action plan, date of commencement of operations, detailed information on any financing and assets to be sourced from outside Uganda, land requirements for the investment, the location of the investment, utilities required for the investment, a market survey, details of the projected technology and knowledge transfer;
	(III) an environmental impact assessment certificate;
	(IV) the projected number of employees; and
	(V) a licence granted by the business sector in which the investor intends to operate.
2. Timing	An investment licence is issued within two days of submission and verification of the required documentation.

2.5.4 Investment protection

The Investment Code protects the registered business enterprise of an investor from compulsory acquisition in accordance with the Constitution of the Republic of Uganda. The Constitution provides that no person will be compulsorily deprived of property except when the acquisition is necessary for public use or public interest and the acquisition of property is made under a law which provides for payment of fair and adequate compensation prior to the acquisition, and a right of access to a court of law by any person who has an interest or right over the property.

The Investment Code provides that when a registered business enterprise of an investor has been compulsorily acquired, prompt payment of fair and adequate compensation must be made prior to taking possession of the property, and the investor will have a right of access to a court of law in respect of any matter arising out from the taking of possession of the property.

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2.6 Transfer of funds offshore

2.6.1 Regulation and best-practice standard

The transfer of investment and repayment of investment funds or hardware between the subsidiary and the German entity would be regulated by the Companies Act, 2012 and the Contracts Act, 2010.

Funds may be invested by the German entity into the subsidiary either as equity or debt. Once the operations of the subsidiary are profitable, the subsidiary can pay its German parent a dividend. Under the Companies Act, a company can only pay dividends to shareholders out of profits available for that purpose. A company's profits available for the payment of a dividend or other distribution are its accumulated, realised profits, so far as not previously utilised by distribution or capitalisation, less its accumulated, realised losses, and so far as not previously written off in a reduction or the reorganisation of capital.

The German parent would also be entitled to a return of any surplus assets on liquidation of the subsidiary.

The investment of the German parent into its subsidiary may be made through a shareholder loan. The relationship would be governed by a shareholder loan agreement, which would stipulate the agreed terms of the loan and the repayment terms. Repayments of the loan would be made by the subsidiary in accordance with the loan agreement.

2.6.2 Transfer of funds out of the country

Uganda is a fully liberalised economy and there are no foreign exchange control restrictions or restrictions on the repatriation of profits. The Foreign Exchange Act, 2004 (FEA) governs the transfer of funds out of Uganda. The FEA has no exchange control restrictions. Funds, interest, loan repayments, dividends and payments of insurance premiums and for services rendered may be made outside of the country through a local bank without restriction.

The Anti-Money Laundering Act, 2013 also governs the transfer of funds out of Uganda. It requires transactions involving domestic or foreign currency exceeding UGX 20,000,000 to be recorded for the purpose of monitoring complex, unusual or large transactions which could be illegal.

2.6.3 Currency conversion

The Ugandan Shilling can be converted into USD or EUR every day on an unlimited scale.

3

Accounting and financial reporting

3.1 The questions

The specific questions that are to be evaluated by the analysis in this Part III are summarised below:

1. Which contract characteristics lead to a lease either being classified as an operating or finance lease (for instance, considering contract lifetime, accumulated payments vs asset value, ownership transfer clauses/options, termination payments, etc.)?

The classification of either an operating or finance lease has to be determined from two perspectives, i.e. lessor or lessee.

A lessee applies a single accounting model under which it recognises all leases as on-balance sheet items unless it chooses to apply the recognition exemptions. For a lessee there is no split between finance and operating leases (*IFRS 16.22*).

Refer to Section 3.7 for details of lessee accounting considerations.

A lessor classifies each lease as either a finance lease or an operating lease based on the extent to which the lease transfers the risks and rewards incidental to ownership of an underlying asset (*IFRS 16.61, B53*).

Refer to Section 3.8 of this report for details of the classification considerations as a lessor.

2. What accounting treatment do operating and finance leases undergo for both the offtaker and the RE service provider during and (in case ownership is being transferred) after the contract period?

Generally, the offtaker (OT) follows the lessee accounting principles, whereas the RE service provider follows the lessor accounting principles. Section 3.7.1 details the accounting considerations for a lessee and Section 3.8.1 details the accounting considerations for a lessor.

3. For the offtaker, which components of the payments are to be classified as operating, depreciation or interest expenses? How is each of them to be discounted to determine the present-value lease liability? What is the most appropriate method to account for down/final payments and fair values?

In the application of lessee accounting, at initial recognition, the OT recognises a right of use of the underlying asset and a liability which represents its obligation to make payments. The lease liability is determined by discounting the future lease rentals over the lease term and the expected payments at the end of the lease using a discount rate implicit in the lease or incremental borrowing rate if the discount rate implicit in the lease cannot be readily determined.

The right-of-use asset is determined as a summation of the lease liability, initial direct costs, prepaid lease payments, estimated costs to dismantle, remove or restore the asset less any lease incentives received.

After initial measurement, the right-of-use asset is depreciated over the period of the lease term.

Refer to Section 3.9 for details of how the lease term is determined. The carrying amount of the lease liability is increased to reflect interest on the lease liability and reduced to reflect the lease payments made.

Refer to Section 3.7.1 for details of the accounting considerations for a lessee.

4. For the RE service provider, can depreciation and any tax incentives be claimed and, if so, how?

An RE service provider may classify the lease as either an operating or finance lease. The different classifications have different tax implications.

An RE service provider (lessor) whose lease meets the criteria of an operating lease would be treated as the asset owner. For accounting purposes, the asset is depreciated using an entity's elected method over the useful life of the asset.

For tax purposes, the asset qualifies for certain capital allowances depending on the rates provided under each class of assets.

An RE service provider (lessor) whose lease meets the criteria of a finance lease derecognises the asset and recognises a finance lease receivable at an amount equal to its net investment in the lease, which comprises the present value of the lease payment and any unguaranteed residual value accruing to the lessor. Over the lease term, the lessor accrues interest income on the net investment and the receipts under the lease are allocated between reducing the net investment and recognising finance income, to produce a constant rate of return on the net investment.

For tax purposes, the receipts under the leases (which include an interest income component) are taxable as part of the lessor's business income. No capital allowances are applicable since the asset is not on the statement of financial position.

Refer to Section 4 for details of the tax implications and Section 3.8 for the accounting considerations.

5. How may accounting treatment change over the contract lifetime (e.g. if majority of asset value has been paid by OT)?

The lease classification for a lessor (RE service provider) is confirmed on the inception date and only reassessed if there is a lease modification. Changes in estimates or circumstances do not give rise to a new classification for accounting purposes. However, if a contract includes terms and conditions to adjust

lease payments for particular changes occurring under which circumstances is a PPA to be classified as a lease agreement, to be differentiated between an operating/finance lease, if applicable? How are contract characteristics to be considered: for instance, optional or mandatory transfer of ownership at the end of the contract period; transfers at price, at fair value, above fair value or below fair value; termination payments, take-or-pay vs consumption-based PPA; FiT revenue to remain with RE service provider; structured payments vs capacity charges vs energy charges (or as a combination); and responsibility and/ or approval rights for O&M on the inception date and the commencement date, then, for the purpose of classifying the lease, the effect of any such changes is deemed to have taken place on the inception date.

Refer to Section 3.10 for details on lease modifications.

6. Under which circumstances is a PPA to be classified as a lease agreement? (to be differentiated between an operating/finance lease, if applicable) – contract characteristics to for instance be considered are: (Optional/Mandatory) transfer of ownership at the end of contract period at (price at fair value, above fair value, below fair value), Termination payments, Take-or-Pay vs consumption-based PPA, FiT revenue to remain with RE service provider), structured payments vs capacity charges vs energy charges (or as a combination),

responsibility and/or approval rights for O&M?

The PPA does not provide guidance on whether or not to account for the PPA as a lease agreement. There are specific conditions that need to be met for a lease agreement to qualify for accounting under IFRS 16. Some of the conditions include whether there is an identifiable asset, the customer (lessee) obtains substantially all the economic benefits and the party who has the right to direct the use of the asset.

Refer to Section 3.5, Section 3.6 and Section 3.7 for a more detailed analysis.

The existence of conditions in the lease agreement which may include optional/mandatory transfer of ownership at the end of the contract period at a price below or above or at fair value determines the initial classification as a finance lease or operating lease for a lessor (RE developer). This does not have an impact on lessee accounting since the lessee (OT) applies a single lease accounting model.

Refer to Section 3.7.1 and Section 3.8.1 for a more detailed analysis of the application of the different lease accounting models.

Considerations relating to termination payments, take-or-pay vs consumption-based PPA, FiT revenue remaining with the RE service provider, structured payments vs capacity charges vs energy charges (or as a combination) and responsibility and/or approval

rights for O&M are inputs used in the measurement criteria of the right-of-use asset and lease liability on the part of a lessee (OT).

Refer to Section 3.5, Section 3.6, Section 3.7 and Section 3.8 for a more detailed analysis and consideration.

7. Even if not considered a lease, which contract structures potentially impact classification as derivates and financial instruments (e.g. as per IFRS 9)?

There are circumstances where a lease agreement does not give rise to the application of lease accounting, especially if certain conditions under the lease agreement have not been met.

Refer to the decision tree in Section 3.4.1 for a detailed analysis.

In this case, alternative accounting standards to IFRS 16 are applied. These may include, but are not limited to, IFRS 9 Financial Instruments, IFRS 15 Revenue from Contracts with Customers and IAS 16 Property, Plant and Equipment, depending on the nature and complexity of the transaction (KPMG, 2022).

Under IFRS, derivatives embedded in a lease that are not considered closely related to the lease host have to be separated and accounted for under IFRS 9. For example, if an entity has a lease agreement with variable lease payments adjusted for twice the change in the Consumer Price Index (CPI), then the feature needs to be separated and accounted for under IFRS 9 because it is considered. An inflation-indexed embedded derivative in a lease contract may be considered closely related to the lease and the whole payment accounted for under IFRS 16 if:

- the index relates to inflation in the entity's economic environment (e.g. the CPI of the country in which the leased asset is operated); and
- the feature is not leveraged.

An embedded purchase option for a leased asset included in a lease contract is not separated because such an option is accounted for as part of the lease (*IFRS 16.BC81*).

The detailed application of these alternative accounting standards has not been covered in this study.

3.2 The relevant accounting framework

Uganda as a jurisdiction has adopted the International Financial Reporting Standards (IFRS) as the accounting framework. The most relevant standard for our discussion is IFRS 16 *Leases*. The application details are discussed in the following paragraphs.

The detailed responses are captured in the following sections, where the relevant accounting standard, IFRS 16, is discussed in detail. As we perform a detailed analysis of the application of IFRS 16, the RE service provider is referred to as the lessor and the OT the lessee in our analysis. The examples included in our analysis are hypothetical and intended to relate to the C&I projects.

3.3 Key definitions

In this Part III, the following key terms and concepts are used:

Lease

A contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration.

Finance lease

A lease that transfers substantially all the risks and rewards incidental to ownership of an underlying asset.

Fixed payments

Payments made by a lessee to a lessor for the right to use an underlying asset during the lease term, excluding variable lease payments.

Gross investment in the lease

The sum of:

- (a) the lease payments receivable by a lessor under a finance lease; and
- (b) any unguaranteed residual value accruing to the lessor.

Commencement date of the lease

The date on which a lessor makes an underlying asset available for use by a lessee.

Inception date of the lease (inception date)

The earlier of the date of a lease agreement and the date of commitment by the parties to the principal terms and conditions of the lease.

Economic life

Either the period over which an asset is expected to be economically usable by one or more users or the number of production or similar units expected to be obtained from an asset by one or more users

Effective date of the modification

The date when both parties agree to a lease modification.

Fair value

For the purpose of applying the lessor accounting requirements, the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Fixed payments

Payments made by a lessee to a lessor for the right to use an underlying asset during the lease term, excluding variable lease payments.

Lease term

The non-cancellable period for which a lessee has the right to use an underlying asset, together with both:

- (a) periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and
- (b) periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option.

Lessee's incremental borrowing rate

The rate of interest that a lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

3.4 IFRS 16 leases

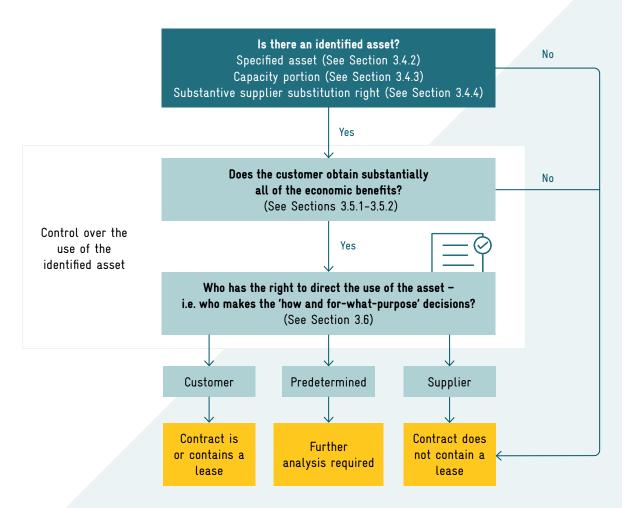
IFRS 16 defines a lease as a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration. If a contract contains a lease, then it will generally be an on-balance sheet item for the lessee (IFRS 16.A, B9).

The key factors to consider when applying the lease definition are as follows:

Both customer and supplier need to make this assessment at inception of a contract and will revisit it only if the terms and conditions of the contract change² (*IFRS 16.9,11*).

A lessee can elect not to apply the lease accounting model to short-term leases and leases of low-value items. *See Section 3.7.6 (IFRS 16.5)*.

FIGURE 5. Key factors to consider when applying the lease definition

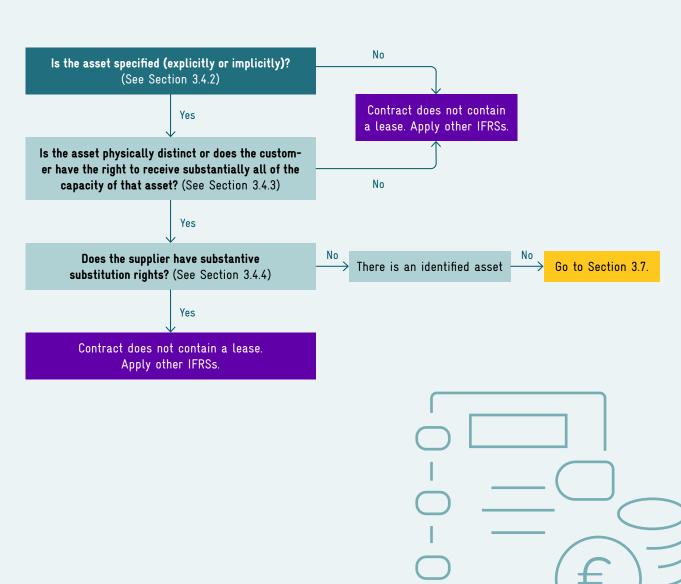


² As the customer and supplier are subject to the same assessment, we also refer to them interchangeably as a 'company'.

3.4.1 Identified asset

Determining whether a supplier's substitution rights are substantive is key to assessing whether an identified asset exists (*IFRS 16.B13-B20*). For a lease to exist, there has to be an identified asset, determined as follows:

FIGURE 6. Determination of an identifiable asset



3.4.2 Specified asset

In many cases, the asset that is the subject of the lease will be explicitly specified in a contract (e.g. by a serial number or a specified floor of a building). However, an identified asset can be one that is implicitly specified when it is made available for use by the customer (*IFRS 16.B13, BC111*).

What does 'implicitly specified' mean?

An asset is implicitly specified if the facts and circumstances indicate that the supplier can fulfil its obligations only by using a specific asset.

This may be the case if the supplier has only one asset that can fulfil the contract. For example, a power plant may be an implicitly specified asset in a power purchase agreement if the customer's facility is in a remote location with no access to the grid, such that the supplier cannot buy the required energy in the market or generate it from alternative power plants.

In other cases, an asset may be implicitly specified if the supplier owns a number of assets with the required functionality, but only one of those assets can realistically be supplied to the customer within the contracted timeframe – i.e. the supplier does not have a substantive right to substitute an alternative asset to fulfil the contract. *See Section 3.4.4.* For example, a supplier may have an assembly of photovoltaic panels but only one set of panels that are in the required geographic area and not already being used by other customers.

Does the asset need to be specified at contract inception? (IFRS 16.B13, BC111)

No. The key test is whether the asset is specified at the time when it is made available to the customer.

In many cases, the contract will specify the asset at inception. For example, a contract to use real estate will typically specify the relevant floor of the building at the time the contract is signed.

However, an asset may not be specified until a later date. For example, a supplier may enter into a binding contract to supply photovoltaic panels to a customer at an offshore oilfield in six months.

On the date of signing the contract, the

supplier has an assembly of panels of a similar specification that could be used to fulfil the contract. All of the panels are at a similar distance from the offshore oilfield. However, once a given set of panels is transported to the offshore oilfield, only those panels can be used to fulfil the contract. In this case, although the contract does not initially specify the panels that will be used to fulfil the contract, it is clear at contract inception that the contract *will* depend on the use of specific panels. The individual panels are specified when they are made available to the customer.

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3.4.3 Capacity portions

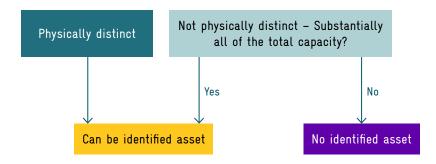
In many cases, the asset subject to the contract will be the entire underlying asset and therefore easy to identify (e.g. a building or a piece of equipment). However, a portion of an asset's capacity can be an identified asset if:

- it is physically distinct (e.g. a floor of a building, a specific strand of a fibre- optic cable, specific set of solar panels or a distinct segment of a pipeline); or
- it is not physically distinct, but the customer has the right to receive substantially all of the capacity of the asset (e.g. a capacity portion of a solar panel that is not physically distinct but represents substantially all of the capacity of the panel).

(IFRS 16.B20)

The IASB concluded that a customer is unlikely to have the right to control the use of a capacity portion of a larger asset if that portion is not physically distinct (e.g. if it is a 20% capacity portion of a solar panel). This is because decisions about its use are typically made at larger-asset level. Consequently, the IASB concluded that broadening the definition to include capacity portions of a larger asset would increase complexity for little benefit. Companies would be forced to consider all contracts for goods or services in which a customer obtains some capacity from an asset as possible leases, only to then (possibly) conclude that they are not leases as the customer does not have the relevant decision-making rights over the asset's use and does not have the right to obtain substantially all of the economic benefits (IFRS 16.BC116).

FIGURE 7. Capacity portions



Example 1 - Capacity portion is not an identified asset



Customer D enters into an arrangement with Supplier E for the right to use the renewable energy generated from its solar power plant located in a particular location. There are no specific solar panels allocated to D. At inception of the contract, D has usage rights that permit it to use up to 60% of the capacity of the power plant throughout the term of the contract. E can use the other 40% of the capacity as it sees fit.

E has no substitution rights. However, the arrangement allows E to supply power to other customers

Solar power plant

Power available to other customers

60%

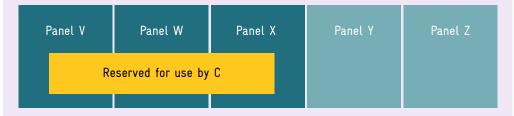
Power available to other customers

In this scenario, there is no identified asset. This is because D only has rights to 60% of the capacity of the solar plant and that capacity portion is neither physically distinct from the remainder of the plant nor meets the 'substantially all' criteria.

Customer C (offtaker) enters into an arrangement with Supplier S (renewable energy provider) for the right to consume power generated from specific panels.

Within the solar power plant, panels V,

W and X are contractually allocated to C for its exclusive use. S has no substitution rights. Panels V, W and X represent 60% of the plant's total generation capacity.



Warehouse

In this scenario, there is an identified asset even though C is using only 60% of the plant's total generation capacity. This is because:

- the panels are explicitly specified in the contract;
- the panels are physically distinct from the other panels within the plant; and
- S has no substitution rights.

Does 'substantially all' of the capacity of an asset mean 90%?

Not necessarily. The standard does not define 'substantially all' in the context of the definition of a lease.

IFRS 16, like IAS 17 *Leases*, uses the same phrase in one of the criteria used by the lessor to determine lease classification: whether the present value of the lease payments (including the residual value guaranteed by the lessee or a third party) equals or exceeds substantially all of the fair value of the asset. US generally accepted account-

ing principles (GAAP) allow the use of a threshold of 90% for 'substantially all'.

In our view, although the 90% threshold may provide a useful reference point, it does not represent a bright-line or automatic cut-off point under IFRS.

For the purpose of applying the lease definition, a company should develop an interpretation of 'substantially all' and apply it on a consistent basis.

In some situations, there is a difference between an asset's nominal capacity and the capacity expected to be used by customers.

For example, Customer O enters into a 30-year contract with Supplier B to supply renewable energy. B builds and operates a new solar plant to supply O with power. O decides upon the capacity of power to be consumed. B anticipates that O will need additional capacity in the future, and decides to build a solar plant with excess capacity – i.e. on the commencement date, O uses only 70% of the plant's nominal capacity. The plant is located in a remote area where the probability of another customer using the excess capacity is low.

Determining an asset's capacity for testing whether the customer has the right to receive substantially all of the capacity of the asset may involve judgement and requires consideration of all facts and circumstances – e.g. considering the reason for the unused excess capacity. In this example, the assessment should be made based on the capacity expected to be used by O and other parties - i.e. 70%. This is consistent with assessing whether the customer has a right to obtain substantially all of the economic benefits of using the asset throughout the period of use. See Section 3.6. Consequently, in this example O uses all of the expected capacity and the plant therefore qualifies as an identified asset.

Should a customer's 'right of first refusal' over capacity be considered when assessing whether a portion represents 'substantially all' of the capacity of an asset?

Generally, yes.

In some contracts, a supplier commits to making all of the capacity of an asset available to a customer but may sell unused capacity to third parties, if the customer agrees. In these cases, the customer has the right to use substantially all of the capacity of the asset such that there is an identified asset.

For example, Customer O enters into a 10-year contract with Supplier B for 70% of the capacity of the solar plant. O decides upon the quantities of power consumption. B operates and maintains the power plant. O pays a fixed capacity charge per month and a variable amount for each quantity of power consumed. O has the

right of first refusal on the additional 30% of capacity.

In this situation, O is entitled to substantially all of the capacity of the plant, given that it uses 70% of the capacity and has the right of first refusal for the other 30%. Therefore, the plant is an identified asset.

However, a 'right of first refusal' would not be considered when the right is not substantive. For example, in the case above, if the amount that O would be required to pay to use the additional 30% of capacity was so high that there was no realistic commercial possibility that O would ever purchase that additional capacity, then the plant would not be an identified asset.

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3.4.4 Substantive supplier substitution rights

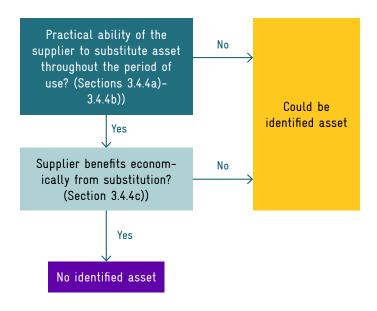
Even if an asset is specified in a contract, a customer does not control the use of an identified asset if the supplier has a *substantive right to substitute* the asset for an alternative asset *throughout the period of use* (*IFRS 16.B14-B19*).

A supplier's substitution right is 'substantive' if the supplier:

- has the practical ability to substitute the asset throughout the period of use; and
- would benefit economically from exercising its right to substitute the asset.



FIGURE 8. Substantive supplier substitution rights



A company assesses whether substitution rights are substantive at inception of the contract. At that time, the company considers all of the facts and circumstances, but not future events that are unlikely to occur. For example, it excludes the following future events:

- an agreement by a future customer to pay an above-market rate for use of the asset:
- the introduction of new technology that is not substantially developed at inception of the contract;
- a substantial difference between the customer's use of the asset, or the performance of the asset, and the use or performance considered likely at inception of the contract; or
- a substantial difference between the market price of the asset during the period of use and the market price considered likely at inception of the contract.

(IFRS 16.B16)

A supplier's right or obligation to substitute the asset for repairs and maintenance because the asset is not working properly – i.e. a 'warranty-type' obligation or because a technical upgrade becomes available – is not a substantive substitution right (*IFRS 16.B18*).

Substitution rights are likely to be a key area of focus in applying the lease definition. This is because some element of substitution is often permitted in leases of fleets of vehicles, or portfolios of photocopiers and similar equipment. However, if the underlying asset is with the customer, then the costs of substitution will probably exceed the benefits, such that the substitution rights are not substantive.

The assessment of substitution rights is aligned with the overall approach of assessing whether the supplier or customer controls the use of the underlying asset. The presence of a substantive substitution

right indicates that the supplier (and not the customer) controls the use of the underlying asset, such that there is no lease.

The focus on substitution rights that are 'substantive' also reflects concerns in such a way that companies may seek to structure arrangements to avoid lease accounting by including substitution rights in contracts – e.g. substitution rights that the supplier has no practical ability to exercise.

As a result, there is an 'anti-avoidance' flavour to some of the guidance on substitution rights. In most cases, demonstrating that a substitution right is substantive will be a great hurdle.

What should a customer do if it cannot assess whether a substitution right is substantive? (IFRS 16.B19)

If a customer does not have sufficient information to assess whether a substitution right is substantive, then the customer should assume that it is not substantive.

Many of the factors that influence whether a substitution right is substantive are specific to the supplier – e.g. whether the supplier has access to alternative assets,

the costs involved in substitution, etc. The customer may not have access to this information.

The IASB believes that when a substitution right is substantive, this will often be clear to the customer. In other cases, the IASB does not expect the customer to exert undue effort in making the assessment.

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a. Practical ability to substitute

A supplier has the practical ability to substitute alternative assets when the customer cannot prevent it from substituting the asset and the supplier has alternative assets either readily available or available within a reasonable period of time (*IFRS 16.B14(a*)).

Example 3 - Practical ability to substitute

Customer L enters into a five-year contract with a renewable energy provider (Supplier M) to supply a specified capacity of power for his coffee farm. M uses solar panels of a particular specification that are stored on its premises and has a large pool of similar panels that can be used to fulfil the requirements of the contract.

In this case, because the solar panels are stored on M's premises, it has a large pool of similar panels and substitution costs are minimal, M has the practical ability to substitute the assets – i.e. the solar panels are not implicitly specified.

b. Period of use

The 'period of use' is the total period of time that an asset is used to fulfil a contract with a customer (including any non-consecutive periods of time) (*IFRS 16.A*).

A supplier does not have the practical ability to substitute the asset throughout the period of use (and there is therefore no substantive substitution right) if, for example:

- the substitution right applies only to a part of the period of use or on or after a specific date (Example 4, Scenarios 1 and 2); or
- the substitution right applies only on the occurrence of a particular event (Example 4, Scenario 3).

(IFRS 16.B15)

Example 4 - Supplier's substitution right does not apply throughout the period of use (IFRS 16.B14-B15)

Scenario 1

Customer S enters into a contract with Supplier T for the right to use its solar panels to generate renewable energy for five years. T has the right to substitute the asset at any time after three years from commencement of the contract (i.e. no substitution right for the first three years).

As the supplier's substitution right does not apply throughout the period of use, it is not substantive.

Scenario 2

The contract is the same as above except that it gives T the right to substitute the

identified asset on a single date, three years into the lease, but not at any other time.

The substitution right is not substantive because it does not apply throughout the period of use.

Scenario 3

The contract is as above but T has a right to substitute on the occurrence of a particular event.

The substitution right is not substantive because it does not apply throughout the period of use but only on the occurrence of a particular event.

What if the customer has the right to use the underlying asset for 'non-consecutive periods'?

An arrangement to use an identified asset will meet the definition of a lease if it contains intermittent periods during which the customer does not have the right to control the use of the asset.

For example, Company V has the exclusive right to use a specific solar system for the months of September to May each year (during V's sunny season when power generation capacity is high); the contract runs for 10 years. From June to August, the owner of the solar system stores the energy using batteries and sells it to other consumers.

In this situation, the period of use consists of 90 non-consecutive months. This is because V can use the solar system for nine months each year over the 10-year contract. Use of the same solar system by the owner during the remaining months of the year does not prevent the contract from being a lease (provided that the other aspects of the definition are met).

This part of the definition of a lease prevents companies from avoiding lease accounting by including in the contract term periods during which the customer cannot make the decisions concerning how and for what purpose the asset is used, and/or obtain substantially all of the economic benefits of using the identified asset.

If the supplier can exercise a substitution right on or after a given date, does the lease then end on this date?

No, the lease does not end on the date on, or from which, the supplier can exercise a substitution right. The lease term is instead determined in the usual way and may extend beyond this date.

For example, in Scenarios 1 and 2 in Example 4 above, assuming that the other

elements of the lease definition are met, on the commencement date it should not be assumed that the lease ends after three years. In the absence of additional information, the lease term, as assessed at contract inception, would be five years – i.e. the period for which the customer (lessee) has the right to use the asset.

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a. Economic benefits of substitution

A supplier would benefit economically from the exercise of its right to substitute the asset when the economic benefits associated with substituting the asset are expected to exceed the related costs (*IFRS 16.B14(b)*).

The costs associated with substitution are generally higher if the asset is not located on the supplier's premises – i.e. when it is on the customer's premises or elsewhere. In this situation, the costs are more likely to exceed the benefits associated with substituting the asset (*IFRS 16.B17*).

Example 5 - Supplier substitution right. Evaluation of economic benefits

would earn more rental income by substituting equivalent solar panels for the original solar panels. S would incur costs both to transport and install the equivalent solar panels at C's location, and to remove and transport the original solar panels to

Supplier S is required to provide equivalent solar panels if those originally delivered cease to operate properly. S may also substitute equivalent solar panels at any time during the period of use at its expense and without C's approval.

Customer C enters into a three-year lease

for solar panels. The contract provides C

solar system during the three-year term

capabilities).

with the right to determine how to use the

(subject to the limitations of its design and

S has other equivalent solar panels readily available. However, it is unlikely that S

not substantive because the economic benefits of substituting the original solar panels for equivalent solar panels would not exceed the costs of the substitution. Therefore, there is an identified asset.

storage or to another customer's location.

In this example, S's substitution right is

Example 6 - Substitution right is substantive

Building on Example 3, Supplier M has the practical ability to substitute the solar panels that are stored on its premises when they are not being used to generate power. Costs associated with substituting the solar panels are minimal for M.

Relevant experience demonstrates that:

 M benefits economically from being able to deploy alternative assets as necessary to fulfil customer needs; and • the conditions that make substitution economically beneficial (e.g. the nature and mix of different customer needs for M's assets) are likely to continue throughout the period of use.

As M has the practical ability to substitute the solar panels and their substitution is economically beneficial throughout the period of use, M's substitution rights are substantive, and the arrangement does not contain a lease.

Example 7 - Lighting as a service. No practical ability to substitute and no economic benefits

Customer L enters into an eight-year

Contract with Supplier K that requires

K to install a solar system and lighting

Port and install so it

contract with Supplier K that requires K to install a solar system and lighting equipment in L's stores. The solar system and lighting equipment are designed and selected by K, subject to L's approval. K has an option to upgrade the solar system and lighting equipment for future technological advancements and an obligation to replace any damaged or defective equipment.

However, the solar system and lighting equipment are large and costly to transport and install, so it is not economically feasible or practicable for K to substitute alternative assets once the equipment is installed (i.e. the costs of substitution would exceed the benefits).

Fulfilment of the arrangement is dependent on the use of identified assets and the substitution rights are not substantive.

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Example 8 - Alternative scenarios involving substitution rights

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The following three scenarios relate to a contract to use a vessel for five years:

- Renewable Energy Developer S has a substitution right and many identical solar panels (Scenario 1);
- Renewable Energy Developer S has a substitution right and the solar panels are significantly customised (Scenario 2); and
- Customer C is unable to determine whether Renewable Energy Developer S's substitution rights are substantive (Scenario 3).

Scenario 1

Customer C enters into a five-year contract with Renewable Energy Developer S to provide a solar system. The maintenance of the system is managed and paid for by S. S may substitute the solar system

without C's consent throughout the term of the contract. The following facts are also relevant:

- S has many identical solar panels that are maintained in a close and accessible location and S could easily substitute other solar panels for those specified in the contract at a nominal cost;
- S would benefit economically from substituting the solar panels because substitution allows it to make the most effective use of its portfolio of solar panels to meet regularly changing circumstances, which are likely to continue throughout the period of use.

In this scenario, the solar panels are not an identified asset because S's substitution right is substantive. Accordingly, the contract does not contain a lease.

Scenario 2

Changing the facts in Scenario 1, although S has the right to substitute the solar panels without C's consent throughout the period of use, there are no other similarly customised solar panels in S's portfolio or those readily available from other suppliers.

In this scenario, the substitution right is not substantive because similarly customised solar panels are not readily available – i.e. S does not have the practical ability to substitute the panels.

Note: In Scenario 2, even if S could customise alternative solar panels in its portfolio within a reasonable period of time, the cost of customising and providing a similar alternative vessel would probably exceed the economic benefits that would be realised from substitution – i.e.

although S would not obtain additional payments from C for the substitution, S would incur potentially significant costs to customise alternative solar panels for C's needs. In this case, S's substitution right would still not be substantive because it would not benefit economically from the exercise of its substitution right.

Scenario 3

Changing the facts in Scenario 2, C is unable to determine whether the substitution right is substantive. In particular, C is unable to determine whether similarly customised solar panels are readily available, or whether the economic benefits that would result from substitution would exceed the expected costs of making the substitution.

In this scenario, C presumes that the substitution right is not substantive, and that there is therefore an identified asset.

How do you evaluate whether the supplier would benefit economically from exercising its substitution rights? (IFRS 16.B19, BC115)

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Judgement will be required to evaluate when the economic benefits associated with substituting the asset are expected to exceed the costs associated with doing so.

Examples of factors to consider include:

- the availability of other assets to fulfil the contract;
- the alternative use of the asset and additional benefits for the supplier;
- the costs that would be incurred to substitute the asset (e.g. costs of relocation, disruption of activity during a period of time); and

• the feasibility of substituting the asset (because of size, remote location, etc.).

As the analysis is performed from the supplier's perspective, it is more difficult for the customer to determine whether the supplier's substitution right is substantive. As noted in Example 8, Scenario 3, if a customer cannot readily determine whether a supplier has a substantive substitution right, then the customer should presume that any substitution right is not substantive.



3.5 Economic benefits

Identifying the economic benefits of using the asset and evaluating whether the customer has the right to obtain substantially all of them throughout the period of use are not always straightforward.

3.5.1 Economic benefits of using the asset

The economic benefits of using an asset include its primary output, by-products and other economic benefits of using the asset that could be realised from a commercial transaction with a third party (e.g. sub-leasing the asset) (*IFRS 16.B21*).

These economic benefits need to fall within the defined scope of a lessee's right to use an asset – e.g. if a contract limits the use of a vehicle to only one particular territory during the period of use, then a company considers only the economic benefits of using the vehicle within that territory, and not beyond it (*IFRS 16.B22*).

Example 9 - Lease of a solar system with maximum permitted capacity (IFRS 16.B22)

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Company C leases a solar system that it can use only up to a maximum of 300 kWp during the three-year period. When assessing whether it has the right to obtain

substantially all of the economic benefits of using the solar system, C considers only the economic benefits for the permitted usage capacity.

Example 10 - Solar farm. Primary products and by-products (IFRS 16.IE2.Ex9)

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Utility Company C enters into a 20-year contract with Power Company D to purchase all of the electricity produced by a new solar farm. D owns the solar farm and will receive tax credits (please see Section 4.1 below on the specific tax allowances available in Uganda) relating to the construction and ownership of the solar farm, and C will receive renewable energy credits that accrue from use of the solar farm.

C has the right to obtain substantially all of the economic benefits of using the solar farm over the 20-year period because it obtains:

- the electricity produced by the farm over the lease term – i.e. the primary product from use of the asset; and
- the renewable energy credits i.e. the by-product from use of the asset.

Although D receives economic benefits from the solar farm in the form of tax credits, these economic benefits relate to ownership of the solar farm.

The tax credits do not relate to the use of the solar farm and are therefore not considered in this assessment.

Are tax credits and similar items 'economic benefits' for the purposes of applying the lease definition? (IFRS 16.BC118)

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It depends on whether the benefits arise from ownership or use of the asset.

A lease conveys a right to use the underlying asset. Accordingly, the IASB concluded that the benefits derived from ownership of the asset (e.g. income tax credits) are excluded when considering whether a customer has the right to obtain substantially all of the economic benefits of using the identified asset throughout the period of use.

Conversely, benefits such as renewable energy credits received from use of the asset

are more akin to a by-product and so will be included in the analysis of economic benefits.

The standard is more specific in this area than current guidance and has the potential to reduce diversity in assessing whether an arrangement contains a lease. However, given the variety of arrangements seen in practice, and the complex structures sometimes used to allocate specific forms of benefits to different parties, judgemental issues may still remain.

3.5.2 'Substantially all'

Evaluating whether a customer has the right to obtain substantially all of the economic benefits of using an asset throughout the period of use is straightforward in many situations, generally because in a lease the customer frequently has exclusive use of the asset.

However, in some situations a contract may provide a party other than the customer with the right to more than a minor amount of the economic benefits of using the same asset. In evaluating whether the customer has the right to obtain substantially all of the economic benefits of using an asset, a company considers the complete population of economic benefits that can be derived from the asset within the scope of the customer's right of use.

Example 11 - Selling of excess capacity (IFRS 16.B21)

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Customer C enters into a contract to use a solar plant. As C does not need all of the capacity produced by the power plant, it sells 25% of the production. C receives substantially all of the economic benefits through its own use and selling the excess power (other benefits).

Example 12 - Sharing of the economic benefits (IFRS 16.B22)



Customer G enters into a two-year contract to use a solar system. G shares access and use of the solar system with another party. Both parties have the right to use the solar system at any point in time, sub-

ject to a certain capacity per day and the other party not using it at the same time. G does not receive substantially all of the economic benefits because it shares the use of the asset with another party.

Does 'substantially all' mean 90%?

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Not necessarily. See the discussion of the 'substantially all' threshold in Section 3.5.2.

Can a customer obtain substantially all of the benefits of use even if lease payments are variable? (IFRS 16.B23)

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Yes. The existence of variable lease payments derived from use of an asset – e.g. a percentage of sales from use of a solar power system as a lessee – does not prevent a customer from having the right to obtain substantially all of the economic benefits of using the asset. In these cases, although the customer passes on certain benefits to the supplier, the customer receives substantially all of the gross benefits.

For example, Customer D enters into a contract to use a solar power system. The rent payments include a fixed amount per month plus 20% of the revenue generated

from the power sales. D receives substantially all of the economic benefits: the gross proceeds accrue to D. Sharing a part of the revenues generated from the solar system (or, generally, usage-based rentals) does not prevent a contract from being a lease.

The standard is explicit on this point, to reduce the risk of companies seeking to avoid lease accounting by introducing variable payments into an arrangement that would otherwise be a lease.

Does the significance of the lease payments affect the conclusion as to whether a lease exists?

Generally, no. The economic benefits that a customer derives from use of the asset (e.g. the cash flows from selling power in a leased solar system) are generally separate from its lease payments. The significance of the lease payments, fixed or variable, to the right to use the asset, compared with the economic benefits to be derived from the use of that asset (e.g. high-sales revenue), should generally not affect the conclusion as to whether a lease exists.

What if the supplier absorbs all of the variability in net operating profits and receives most of the economic benefits of using the asset?

Profit-sharing arrangements generally do not prevent the customer from obtaining all of the economic benefits of using an identified asset throughout the period of its use. However, when the customer obtains a fixed rate of return and the supplier receives or absorbs all of the variability in net operating profits, it is not clear whether a contract contains a lease, particularly if the supplier also receives most of the economic benefits of using the asset.

For example, a supplier may receive most of the cash flow from use of the asset in a business such as a solar power plant operation. In this situation, careful consideration should be given to the substance of the contract, including the nature of the arrangement between the parties, when determining whether the customer has the right to obtain substantially all of the economic benefits of using the identified asset. Customer and supplier should assess whether the nature of the arrangement is such that the customer is, in effect, an agent of the supplier, rather than the principal in the operation that is using the asset. If the customer is an agent of the supplier, then there is no lease between the supplier and customer.

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3.6 Right to direct the use

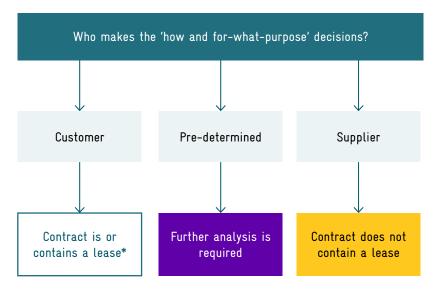
It is the right to direct the use of an identified asset that differentiates a lessee from a customer in a typical supply or service contract.

3.6.1 Overview

A customer has the right to direct the use of an identified asset in either of the following situations:

- the customer has the right to direct how and for what purpose the asset is used throughout the period of use. *See Section 3.6.3*; or
- the relevant decisions concerning how and for what purpose the asset is used are predetermined and:
 - the customer has the right to operate the asset (or to direct others to operate the asset in a manner determined by it) throughout the period of use, without the supplier having the right to change those operating instructions; or
 - the customer designed the asset (or specific aspects of the asset) in a way that predetermines how and for what purpose the asset will be used throughout the period of use.
 See Section 3.6.4.

FIGURE 9. Right to direct the use



*If other criteria are met.

(IFRS 16.B24)

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How are decision-making rights evaluated?

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The standard effectively requires a threefold classification of decision-making rights into how and for-what-purpose decisions, operating decisions and protective rights. These categories feature in the analysis in different ways.

- How and for-what-purpose (or relevant) decisions: unless they are predetermined, the allocation of these decisions to the supplier or customer determines whether the arrangement contains a lease. See Section 3.6.2 and Section 3.6.3.
- Operating decisions: these are ignored, unless the how and for-what-purpose decisions are predetermined, in which case there is a lease if the customer makes the operating decisions, and the other criteria are met. See Section 3.6.4.

• **Protective rights:** these typically define the scope of the customer's right to use an asset but do not, in isolation, preclude a conclusion that there is a lease. However, when protective rights are too restrictive for the customer to have any substantive decision-making authority over the use of the asset, this could indicate that the how and forwhat-purpose decisions are predetermined. *See Section 3.6.5.*

It follows that assessing the categories into which decisions fall is likely to be a key area of judgement in practice. The first step is to identify what the how and for-what-purpose decisions are. *See Section* 3.6.2.

3.6.2 How and for-what-purpose decisions

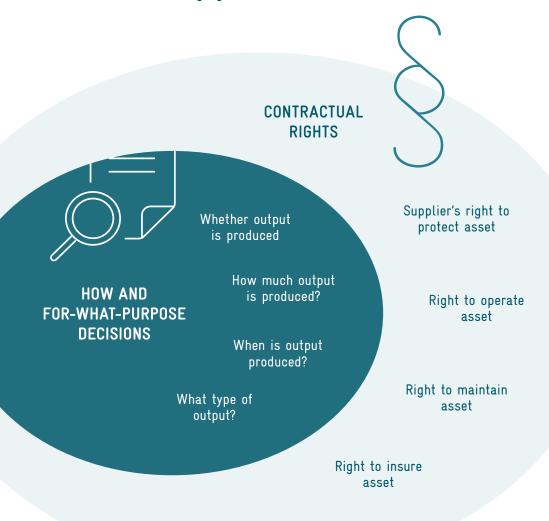
A company considers the decision-making rights that are most *relevant* to changing how and for what purpose the asset is used – 'relevant' in the sense that they affect the economic benefits derived from use (*IFRS* 16.B24-B27, B30).

Examples of relevant decisions that, depending on the circumstances, grant the right to change how and for what purpose the asset is used include the following:

- What: rights to change the type of output that
 is produced by the asset (e.g. deciding whether to
 use a shipping container to transport goods or for
 storage);
- When: rights to change when the output is produced (e.g. deciding when a power plant will be used);
- Where: rights to change where the output is produced (e.g. deciding on the destination of a truck or a ship);
- Whether and how much: rights to change whether the output is produced, and the quantity of that output (e.g. deciding whether to produce energy from a power plant and how much energy).

Examples of decision-making rights that do not grant the right to change how and for what purpose the asset is used include rights to operate an asset or rights to maintain an asset.

FIGURE 10. Decision-making rights



Is a decision to take output that has already been produced a how and for-what-purpose decision?

No. The right to take output that has already been produced only determines what happens to that output, not whether and how much output is produced in the first place.

For example, Customer M enters into a 20-year contract with Supplier S, a solar developer, to install, operate and maintain a solar plant on M's facility. The solar plant has been designed by S to fulfil M's energy demand. M has the right to purchase any energy produced and S has the obligation to sell the energy to M whenever M wants to purchase it. Energy that is not pur-

chased by M is sold back to the grid – i.e. M has no obligation to purchase energy.

In this example, M's decision as to whether to purchase the electricity from the solar plant affects only to whom the existing output is directed (to M or the grid); M's decision does not affect when, where, whether or how much energy is produced. Therefore, it is not a how and for-what-purpose decision.

It is possible that all of the relevant decisions concerning how and for what purpose the asset is used are predetermined. See Example 16 in Section 3.6.4.

3.6.3 Determining who makes the how and for-what-purpose decisions

A customer has the right to direct how and for what purpose the asset is used if, in the scope of its rights of use defined in the contract, it can change how and for what purpose the asset is used throughout the period of use. See Section 3.6.2. (IFRS 16.A, B25, B29).

In assessing whether a customer has the right to direct the use of an asset, a company considers only the rights to make decisions about the asset's use during the period of use. Decisions that are predetermined before the period of use – i.e. commencement date – are not considered.

The standard defines the period of use as 'The total period of time that an asset is used to fulfil a contract with a customer (including any non-consecutive periods of time).' See Section 3.4.4(b).

Example 13 – Lighting. Customer makes the how and for-what-purpose decisions (IFRS 16.IE2.Ex6)

Q

Customer L enters into an eight-year contract with Supplier K that requires K to install specific solar power lighting solution in L's stores. The equipment used to install the solar power lighting solution is designed and selected by K, subject to L's approval. To optimise its usage, K provides services under which it monitors the equipment remotely and performs maintenance on the equipment as needed. However, L specifies the hours of operation and the level of brightness, which impact the amount of consideration that

it pays, which is based on usage. In this example, L directs the use of the assets because it directs how and for what purpose the assets are used by specifying:

- the hours of operation (when, whether and how much output is produced);
 and
- the level of brightness (how much output is produced).

It can also direct K to change these specifications within a reasonable variance.

Example 14 - Rooftop solar systems. Customer makes the how and for-what-purpose decisions

Customer O enters into a 10-year contract with Supplier S to install three rooftop solar systems in a defined area. The solar systems to be used by S are explicitly specified in the contract; S has no substitution rights. S is responsible for manning the solar systems, maintenance and safety.

Compensation is based on a daily operation rate. In the case of bad weather or adverse conditions, S can suspend the operations. Without S's consent, O cannot change the allocation of the solar systems – i.e. O cannot sub-lease the solar systems or change the defined area on its own.

O can make the following decisions:

- select the places for installations;
- set the exact timing of the usage; and
- stop the operations, even if the initial expected term has not been reached.

In this example, O can change the how and for-what-purpose decisions related to the usage of the solar systems throughout the period of use and therefore directs the use of the solar systems. S's right to suspend work in the case of bad weather or adverse conditions is a protective right. This is discussed further in Section 3.6.5.

How is an arrangement analysed when the customer and the supplier each make some of the how and for-what-purpose decisions? (IFRS 16.IE2.Ex4)

The customer does not have to make all of the how and for-what-purpose decisions in order to have a lease – they can be split between the parties. Judgement is required to assess the individual significance of the different how and for-what-purpose decisions – i.e. their impact on the economic benefits.

If some decisions are of greater significance than others, then the party that makes the more significant decisions generally directs the right to use the asset.

For example, Customer T enters into a contract with Renewable Energy Developer L to install a rooftop solar system for his shopping centre which houses a number of retail shops for a five-year period. The solar system serves many customers who are connected to the system. The contract

requires retail stores to use the power to operate their well-known store brands to sell their goods. T can make reasonable changes to the opening hours of the shopping centre. The retail stores decide on the mix of goods sold from the unit, their pricing and the quantity of inventory held.

In this example, there are a number of how and for-what-purpose decisions that are not predetermined. T can make reasonable changes to the opening hours. However, by deciding upon the mix of goods, their pricing and available quantities, the retail stores make the decisions that will have a more significant impact on the economic benefits derived from the unit. Therefore, it is the retail stores that direct the right to use the unit.

3.6.4 How and for-what-purpose decisions are predetermined

The decisions about how and for what purpose the asset is used can be predetermined in a number of ways. They could, for example, be agreed between the customer and the supplier in negotiating the contract, with neither party being able to change them after the commencement date, or they could, in effect, be predetermined by the design of the asset (*IFRS 16.B24, B28-B29, BC121-BC122*).

A customer has the right to direct the use of an identified asset when all relevant decisions are predetermined and either:

- the customer has the right to operate the asset (or to direct others to operate the asset in a manner determined by it) throughout the period of use, without the supplier having the right to change those operating instructions; or
- the customer designed the asset (or specific aspects of the asset) in a way that predetermines how and for what purpose it will be used throughout the period of use.

In either of these two cases, the customer controls the rights of use that extend beyond the rights of a customer in a typical supply or service contract (i.e. the customer has rights that extend beyond solely ordering and receiving output from the asset). This is important because the ability to specify the output in a contract before the period of use is not sufficient to direct the use.

The IASB noted that it would expect situations in which all how and for-what-purpose decisions are predetermined to be rare (*IFRS 16.BC121*).

Example 15 - Solar system. Customer hires the operations and maintenance manager



Customer T enters into a four-year contract with Supplier S, a renewable energy power developer, to install a rooftop solar system. The solar system to be used is explicitly specified in the contract and cannot be substituted. T's operations will utilise substantially all of the capacity of the solar system. The contract specifies the capacity to be generated. T hires the manager in charge of operations and maintenance of the system; the rest of the operations and maintenance staff are provided by S.

In this example, all of the decisions concerning how and for what purpose the

asset is used are predetermined because the contract specifies when and where the solar system is installed, as well as the generation capacity. The solar system was not designed by T, but T operates the solar system because the operations and maintenance manager is hired by T. Although the solar system cannot be operated without the rest of the operations and maintenance staff (which is provided by S), it is usually the operations and maintenance manager who makes the (major) operational decisions and gives instructions. In this scenario, the presumption is that T operates the solar system and consequently has the right to direct its use.

Q

Customer T enters into a four-year contract with Supplier S, a renewable energy power developer, to install a rooftop solar system. The solar system to be used is explicitly specified in the contract and cannot be substituted. T's operations will utilise substantially all of the capacity of the solar system. The contract specifies the capacity to be generated. T hires the manager in charge of operations and maintenance of the system; the rest of the operations and maintenance staff are provided by S.

In this example, all of the decisions about how and for what purpose the asset is used are predetermined because the contract specifies when and where the solar system is installed, as well as the generation capacity. The solar system was not designed by T, but T operates the solar system because the operations and maintenance manager is hired by T. Although the solar system cannot be operated without the rest of the operations and maintenance staff (provided by S), it is usually the operations and maintenance manager who makes the (major) operational decisions and gives instructions. In this scenario, the presumption is that T operates the solar system and consequently has the right to direct its use.

Example 16 - Solar plant. Customer designed the asset (IFRS 16.IE2.Ex9A)

• when, whether and how much energy is produced is influenced by the sunlight and the design of the solar plant.

Customer M enters into a 20-year contract with Energy Supplier S to install, operate and maintain a solar plant for M's energy supply. M designed the solar plant before it was constructed – M hired experts in solar energy to assist in determining the location of the plant and the engineering of the equipment to be used. M has the exclusive right to receive and the obligation to take any energy produced.

In this example, the nature of the solar plant is such that all of the decisions concerning how and for what purpose the asset is used are predetermined because:

• the type of output (i.e. energy) and the production location are predetermined in the agreement; and

As M designed the solar plant and thereby predetermined any decisions concerning how and for what purpose it is used, M is considered to have the right to direct the use. Although regular maintenance of the solar plant may increase the efficiency of the solar panels, it does not give the supplier the right to direct how and for what purpose the solar plant is used. In practice, solar panels may be one rare example where all how and for-what-purpose decisions are predetermined.

Q

What happens if only some of the how and for-what-purpose decisions are predetermined? (IFRS 16.B29)

?

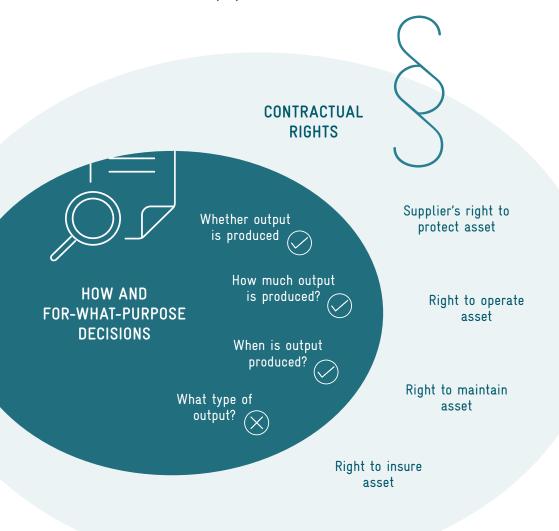
If some but not all of the relevant decisions concerning how and for what purpose the asset is used are predetermined, then the assessment includes only those relevant decisions that are not predetermined – see Section 3.6.4.

For example, Customer O who owned a coffee factory enters into a contract with Renewable Energy Developer P to obtain exclusive use of P's solar power plant

for a period of 30 years. In this case, the decisions concerning what is generated (i.e. solar energy) and where it is transmitted (coffee factory) are predetermined.

Therefore, the analysis will focus on determining whether the supplier or the customer has the right to make the relevant decisions that are not predetermined – i.e. whether, when and how much solar energy is transmitted to the coffee factory.

FIGURE 11. How and for-what-purpose decisions



Does the customer need relevant expertise in order to support a conclusion that the 'customer designed the asset'?

No. Example 16 illustrates the involvement of an external specialist by the customer in determining the location of the solar farm and the engineering of the equipment to be used.

In some cases, a customer's (or its specialist's) decision about the location of the asset and the engineering of the equipment could be sufficient to conclude that the customer designed specific aspects of the asset when the location is key to the asset's performance (e.g. for solar or wind farms). However, judgement applies, and the individual facts and circumstances need to be considered.

3.6.5 Supplier's protective rights

A contract may include certain terms and conditions designed to protect the supplier's interest in the identified asset or other assets, to protect its personnel or to ensure the supplier's compliance with laws or regulations. Such protective rights typically define the scope of the customer's right to use an asset but do not, in isolation, prevent the customer from having the right to direct the use of the asset within that scope (*IFRS 16.B30*).

For example, a contract may:

- specify the maximum amount of use of an asset or limit where or when the customer can use the asset;
- require a customer to follow particular operating practices; or
- require a customer to inform the supplier of changes in how an asset will be used.

Example 17 - Scope of right of use (IFRS 16.IE2.Ex7)

Q

Customer L enters into a 20-year contract with Supplier M, renewable energy producer, for the installation of a solar system. The contract details the specifications for the solar system. It also contains contractual and legal restrictions on how to use the solar system. Subject to these restrictions, L determines the utilisation of the power generated by the solar system. M is responsible for operating the solar system using its own staff.

The restrictions on how to use the solar system define the scope of L's right to use

the solar system. Within the scope of its right of use, L determines the utilisation of the power generated by the solar system throughout the 20-year period of use because it decides upon the utilisation of the power generated by the solar system. L has the right to change these decisions throughout the period of use.

The contractual and legal restrictions on how to use the solar system are protective rights and do not prevent L from having the right to direct the use of the solar system.

3.7 Lessee accounting

The key objective of IFRS 16 is to ensure that lessees recognise assets and liabilities for their major leases.

3.7.1 Lessee accounting model

A lessee applies a single lease accounting model under which it recognises all leases as on-balance sheet items, unless it elects to apply the recognition exemption. *See Section 3.7.6.* A lessee recognises a right-of-use asset representing its obligation to make payments (*IFRS 16.22*).

(IFRS 16.4, 49)

FIGURE 12. Balance sheet and profit-or-loss lease components

BALANCE SHEET

Asset

= Right of use of underlying asset

Liability

= Obligation to make lease payments

PROFIT OR LOSS

Lease expense Depreciation

+

Interest

= Front-loaded total lease expense



Source: KPMG, 2021

Is IFRS 16 a pre-tax accounting model?

Yes. IFRS 16 continues to address lessee (and lessor) accounting on a pre-tax basis, even if tax considerations are often a major factor when a company is assessing whether to lease or buy an asset, and when a lessor is pricing a lease contract.

The income tax accounting for lease contracts falls within the scope of IAS

12 *Income Taxes*. The complexities in accounting for income taxes by lessees of on-balance sheet leases include, for example, how to apply the initial recognition exemption. The International Accounting Standards Board (the Board) is expected to issue an amendment to IAS 12 addressing this issue.

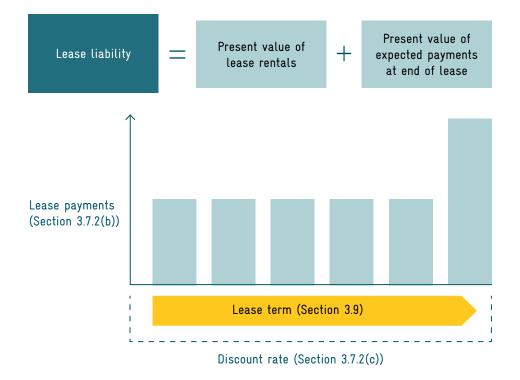
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3.7.2 Initial measurement of the lease liability

a. Overview

A lessee initially measures the lease liability at the present value of the future lease payments (*IFRS* 16.26).

FIGURE 13. Components of the lease liability (a)



When does a lessee first measure the lease liability? (IFRS 16.A)

A lessee initially measures the lease liability on the commencement date of the lease. This is the date on which a lessor makes an underlying asset available for use by a lessee.

The commencement date should be distinguished from the inception date of a lease,

which is the earlier of the date of the lease agreement and the date of commitment by the parties to the principal terms and conditions of the lease. A company assesses whether a contract is, or contains, a lease on the inception date.

Are lease liabilities financial liabilities? (IFRS 9.2.1(b))

?

Yes, lease liabilities are financial liabilities measured in accordance with IFRS 16 – not IFRS 9 *Financial Instruments*. However, they are subject to the derecognition requirements of IFRS 9.

This represents a considerable simplification compared with financial instruments accounting in some cases. For example, common features of lease agreements – e.g. renewal and purchase options – are not accounted for separately, nor do they have the potential to result in the liability being measured at fair value.

a. Lease payments

A lessee includes the following payments relating to the use of the underlying asset in the measurement of the lease liability:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- variable lease payments dependent on an index or a rate;
- amounts expected to be payable by the lessee under residual value guarantees;
- the exercise price of a purchase option that the lessee is reasonably certain to exercise; and
- payments for terminating the lease if the lease term reflects early termination.

(IFRS 16.27)

In-substance fixed payments are payments that are structured as variable lease payments, but that – in substance – are unavoidable. Examples include:

 payments that have to be made only if an event occurs that has no genuine possibility of not occurring;

- there is more than one set of payments that a lessee could make, but only one of those sets of payments is realistic; and
- there are multiple sets of payments that a lessee could realistically make, but it has to make at least one set of payments.

(IFRS 16.B42)

Variable lease payments dependent on an index or rate are initially measured using the index or rate as at the commencement date of the lease. Such payments include payments linked to a consumer price index (CPI), payments linked to a benchmark interest rate (such as Interbank Offered Rates (IBOR)) or payments that vary to reflect changes in market rental rates (IFRS 16.27-28, BC166).

Variable lease payments that are highly probable to occur are not in-substance fixed payments if they are based on performance or use of the underlying asset and are therefore avoidable.

If a lessee provides a residual value guarantee, then it includes in the lease payments the amount that it expects to pay under that guarantee. An unguaranteed residual value is always excluded from the determination of the lease payments by the lessee (IFRS 16.27(c), A).

Lessees determine whether it is reasonably certain that they will exercise a purchase option considering all relevant facts and circumstances that create an economic incentive to do so. This is similar to the approach for assessing whether a lessee expects to exercise a renewal option. *See Section 3.9.4 (IFRS 16.27, 37).*

Example 18 - In-substance fixed payments. Minimum lease payment (IFRS 16.27, 38(b), B42)

Utility Company A enters into a 20-year power purchase agreement with Company B to purchase electricity produced by a new solar farm. A and B assess that the contract contains a lease. The lease payments depend on the number of units utilised on the farm per day - i.e. B has to pay USD 0.1 kWh of use. The expected usage per hour is 300 kWp. If the usage is less than 250 kWp, then W must pay USD 25.

This lease contains in-substance fixed payments of USD 25 per hour, which are included in the initial measurement of the lease liability. The additional USD 5 that B expects to pay per year relates to variable payments dependent on usage and, therefore, is not included in the initial measurement of the lease liability but is expensed as the 'over-use' occurs.



Utility Company C enters into a 20-year contract with Power Company D to purchase electricity produced by a new solar farm. C and D assess that the contract contains a lease. There are no minimum purchase requirements, and no fixed payments that C is required to make to D. However, C is required to purchase all of the electricity produced by the solar plant at a price of USD 10 per unit.

C notes that it is highly probable that the solar plant will generate at least some electricity each year. However, the whole payment that C makes to D varies with the amount of electricity produced by the solar farm – i.e. the payments are fully variable. Therefore, C concludes that there are no in-substance fixed lease payments in this contract. C recognises the payments to D in profit or loss when they are incurred.

Example 20 - Variable payments dependent on an index (IFRS 16.28)

Utility Company E enters into a 20-year contract with Power Company F to purchase electricity produced by a new solar farm. C and D assess that the contract contains a lease. The lease payments depend on the capacity of the solar system with a capacity of 200 kWp, i.e. B has to pay USD 0.1 kWh for the capacity of the solar system. The initial payment is USD 0.1/kWh. Payments are made at the end of each year. The rates will be increased each year by the change in the CPI over the preceding 12 months.

This is an example of a variable lease payment dependent on an index. The initial measurement of the lease liability is based on the value of the CPI on lease commencement - i.e. a charge of USD 0.1 kWh. If, during the first year of the lease, the CPI increases from 100 to 105 (i.e. the rate of inflation over the preceding 12 months is 5%), then at the end of the first year the lease liability is recalculated assuming future annual rate of USD 0.105 (i.e. USD 0.1 X 105 / 100).

Example 21 - Residual value guarantees (IFRS 16.27(c))

Lessee Z (offtaker) has entered into a lease contract with Lessor L (renewable energy provider) to lease a solar system. The lease term is 25 years. In addition, Z and L agree on a residual value guarantee – if the fair value of the solar system at the end of the lease term is below USD 5,000, then Z will pay to L an amount equal to the difference between USD 5.000 and the fair value of the solar system.

On commencement of the lease, if Z expects the fair value at the end of the lease term to be USD 4.000, then it includes USD 1,000 in the lease payments in respect of the residual value guarantee when calculating the lease liability.

The initial measurement of the lease liability includes variable lease payments dependent on an index or rate – e.g. the CPI or a market interest rate – and payments that appear to be variable but are in-substance fixed payments.

Variable lease payments dependent on sales or usage of the underlying asset are excluded from the lease liability. Instead, these payments are recognised in profit or loss during the period in which the performance or use occurs. This has a number of important consequences:

• A lessee's apparent indebtedness depends on the mix of fixed and variable payments within its lease portfolio. For example, suppose that Company X leases its solar system with fixed

lease payments. Company Y leases a similar solar system on similar terms but with a mix of fixed lease payments and lease payments dependent on usage. X recognises higher lease liabilities than Y – even if the total expected lease payments for X and Y are the same.

• Some power purchase agreements that are leases may result in a lease liability of zero for the lessee. For example, if a lessee enters into an agreement to purchase all of the electricity produced by a solar farm and the lease payments all depend on the amount of electricity produced, then the lessee's lease liability is zero.

How does the lessee decide whether to include in the lease liability amounts payable on exercise of renewal, purchase or termination options? (IFRS 16.18-19, 27(d)-(e), 70(d)-(e), A, B37-B40)

The lessee determines whether it is reasonably certain to exercise an option to extend the lease or to purchase the underlying asset, or not to exercise an option to terminate the lease early. This assessment is made by considering all relevant facts and circumstances that create an economic incentive to exercise an option or not to do so (see Section 3.9.4).

Each party determines the lease payments in a manner consistent with this assessment as follows.

• Renewal option: if it is determined that the lessee is reasonably certain to exercise a renewal option, then the

lease payments include the relevant payments for the period covered by the renewal option.

- Termination option: if it is determined that the lessee is not reasonably certain not to terminate the lease early, then the lease payments include the termination penalty.
- Purchase option: if it is determined that the lessee is reasonably certain to exercise an option to purchase an underlying asset, then the lease payments include the exercise price of the purchase option.

What are lease incentives and how are they accounted for by lessees? (IFRS 16.A, 27(a))

?

Lease incentives are payments made by a lessor to a lessee associated with a lease, or the reimbursement or assumption by a lessor of the costs of a lessee.

Payments made by the lessor to the lessee are not lease incentives when they are associated with other obligations of the lessee to transfer distinct goods or services to the lessor.

Examples of lease incentives provided by lessors include up-front cash payments

to the lessee or the assumption of costs of the lessee, such as leasehold improvements, relocation costs and costs associated with a pre-existing lease commitment. Alternatively, initial periods of the lease term may be agreed to be rent-free or at a reduced rent.

Irrespective of its form, a lease incentive is part of the lease payments – i.e. the net consideration for the lease.



a. Discount rate

On the commencement date, a lessee measures the lease liability at the present value of the lease payments using the interest rate implicit in the lease if this can be readily determined. This is the rate that causes the present value of the lease payments and the unguaranteed residual value to equal the sum of the fair value of the underlying asset and any initial direct costs of the lessor (*IFRS 16.26. A*).

If the lessee cannot readily determine the interest rate implicit in the lease, then the lessee uses its incremental borrowing rate. This is the rate that a lessee would have to pay on the commencement date of the lease for a loan of a similar term, and with similar security, to obtain an asset of similar value to the right-of-use asset in a similar economic environment.

FIGURE 14. Rate implicit in the lease (c) Lease payments Fair value underlying asset Unguaranteed residual value Initial direct costs Rate implicit in the lease

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Is the rate implicit in the lease readily determinable for a lease?

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In most circumstances, a lessee is not able to determine the rate implicit in the lease. There is no separate definition of the interest rate implicit in the lease for the lessee. The lack of information available to the lessee (e.g. the lessor's initial direct costs, the initial fair value of the underlying asset and the lessor's expectations of the residual

value of the asset at the end of the lease) typically makes it difficult for the lessee to determine the interest rate implicit in the lease. Therefore, it is likely to be difficult for lessees to readily determine the interest rate implicit in most leases. As a result, lessees often use their incremental borrowing rate.

Should a lessee's incremental borrowing rate reflect the interest rate in a loan with both a similar maturity to the lease and a similar payment profile to the lease payments? (IFRS 16.A, BC162)

In some cases, a lessee seeking to determine its incremental borrowing rate may have readily observable evidence of the interest rate on a loan with the same term but a payment profile different from the lease. The question arises as to whether a lessee's incremental borrowing rate is required to reflect the interest rate in a loan with both a similar maturity to the lease and a similar payment profile to the lease payments.

The IFRS Interpretations Committee discussed this matter and noted that the

definition of a lessee's incremental borrowing rate requires the lessee to determine its incremental borrowing rate for a particular lease considering the terms and conditions of the lease. The Committee observed that it would be consistent with the Board's objective in developing the definition of incremental borrowing rate for a lessee to refer, as a starting point, to a readily observable rate for a loan with a similar payment profile to that of the lease, although IFRS 16 does not explicitly require this.

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3.7.3 Initial measurement of the right-of-use asset

On the commencement date, a lessee measures the right-of-use asset at a cost that includes the following.

(IFRS 16.23-24)

FIGURE 15. Components of the right-of-use asset



* IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

A lessee's 'initial direct costs' are the incremental costs of obtaining a lease that would otherwise not have been incurred. This definition is similar to the definition of the incremental costs of obtaining a contract under IFRS 15 *Revenue from Contracts with Customers*. That is, the focus is on costs that are

contingent on actually obtaining the lease. Costs that are directly attributable to seeking to obtain a lease but are incurred irrespective of whether the lease is actually obtained are not initial direct costs (*IFRS* 16.A).

TYPICAL INITIAL DIRECT COSTS OF A LESSEE			
Include	Exclude		
 Commissions Legal fees* Costs that are incremental and directly attributable to negotiating lease terms and conditions* Costs of arranging collateral Payments made by a potential lessee to existing tenants to obtain the lease 	 General overheads (e.g. costs incurred by a sales and marketing team or a purchasing team) Costs of investment appraisals, feasibility studies, due diligence, etc. that are incurred regardless of whether the lease is entered into Costs to obtain offers for potential leases 		
* If they are contingent on obtaining the lease			

3.7.4 Subsequent measurement of the lease liability

a. Measurement basis

After initial recognition, a lessee measures the lease liability by:

- increasing the carrying amount to reflect interest on the lease liability;
- reducing the carrying amount to reflect the lease payments made; and
- remeasuring the carrying amount to reflect:
- any reassessment (see Section 3.7.2(b)) or lease modifications (see Section 3.10); and
- revised in-substance fixed lease payments (see Section 3.7.2(b).

(IFRS 16.A)

Interest on the lease liability in each period during the lease term is the amount that produces a constant periodic rate of interest on the remaining balance of the lease liability. The 'periodic rate of interest' is the discount rate used in the initial measurement of the lease liability (see Section 3.7.2(c)) or, if appropriate, the revised discount rate (Section 3.7.2(b) and Section 3.10) (IFRS 16.37).

Lessees cannot choose to measure lease liabilities subsequently at fair value. (IFRS 16.BC183)

Example 22 - Lease liability. Subsequent measurement

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Lessee X has entered into a contract with Lessor L to lease a solar system for seven years. The annual lease payments are USD 450, payable at the end of each year. X estimates that the incremental borrowing rate is 5.04% and uses it to measure the lease liability. The initial recognition of the obligation to make lease payments is USD 2,600.

X performs the following calculations at the end of Year 1.

Initial recognition of lease liability	USD 2,600
Payment	(USD 450)
Repayment of interest	(USD 131) ¹
Repayment of principal (USD 319)	(USD 319) ²
Carrying amount of liability at end of Year 1	USD 2,281 ³

¹ Calculated as USD 2,600 x 5.04 %.

² Calculated as USD 450 - USD 131.

³ Calculated as USD 2,600 - USD 319.

a. Remeasurement of the lease liability

After the commencement date, a lessee remeasures the lease liability to reflect changes in the lease payments. This occurs when the lessee reassesses whether it is reasonably certain to exercise an option to extend the lease or to purchase the underlying asset, or not to exercise an option to terminate the lease early. In addition, the lessee revises the lease term and remeasures the lease liability when there is a change in the non-cancellable period of a lease. *See Section 3.9.2 for a detailed discussion (IFRS 16.39)*.

The following table indicates which discount rate to use for the remeasurement.

(IFRS 16.36(c), 40-43, B42(a)(ii))

FIGURE 16. Lease liability remeasurement

Lessee remeasures lease liability using lease repayments and...

AN UNCHANGED DISCOUNT RATE WHEN:

- the amount expected to be payable under the residual value guaranteed changes;
- future lease payments change to reflect market rates (e.g. based on a market rent review) or a change in an index or rate* used to determine the lease payment; or
- the variability of payments is resolved so that they become in-substance fixed payments.

A REVISED DISCOUNT RATE WHEN:

- future lease payments change as a result of a change in floating interest rates;
- · the lease term changes; or
- the assessment of the exercise of a purchase option changes.

* Other than changes in floating interest rates

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Example 23 - Lease liability. Change in variable payments linked to an index

Q

Lessee Y enters into a lease for a five-year term with Lessor L for a farm solar system, commencing on 1 January. Y pays USD 155 per year, in arrears. Y's incremental borrowing rate is 5.9%. Additionally, the lease contract states that lease payments for each year will increase on the basis of the increase in the CPI for the preceding year. On the commencement date, the

CPI for the previous year is 120 and the lease liability is USD 655 based on annual payments of USD 155 discounted at 5.9% to the commencement date.

Assume that initial direct costs are zero and there are no lease incentives, prepayments or restoration costs. Y records the following entries for Year 1.

	Debit (USD)	Credit (USD)
Right-of-use asset	655	
Lease liability (To recognise lease on commencement date)		655
Depreciation	131	
Right-of-use asset		131
Interest expense (USD 655 x 5.9 %)	39	
Lease liability (USD 155 - 39)	116	
Cash (payment for Year 1) (To recognise payment and expenses for Year 1)		155

At the end of Year 1, the CPI increases to 125. Y calculates the revised payments for Year 2 and beyond adjusted for the change in CPI as USD 161 (USD 155 x 125 / 120). As the lease payments are variable payments dependent on an index, Y adjusts the lease liability to reflect the change. The adjustment is calculated as the difference between the original lease payments (USD

155) and the reassessed payment (USD 161) over the remaining four-year lease term, discounted at the original discount rate of 5.9% (USD 21).

Remeasurements of variable lease payments dependent on an index and relate to future periods are reflected in the carrying amount of the right-of-use asset. Y records the following entry.

	Debit (USD)	Credit (USD)
Right-of-use asset	21	
Lease liability (To recognise remeasurement)		21

3.7.5 Subsequent measurement of the right-of-use asset

a. Measurement basis

Generally, a lessee measures right-of-use assets at cost less accumulated depreciation (see Section 3.7.5(b)) and accumulated impairment losses (see Section 3.7.5(c)) (IFRS 16.29-39).

The lessee adjusts the carrying amount of the right-of-use asset for the remeasurement of the lease liability – e.g. when there is a change in CPI. If the carrying amount of the right-of-use asset has already been reduced to zero and there is a further reduction in the measurement of the lease liability, then the lessee recognises any remaining amount of the remeasurement in profit or loss (*IFRS 16.30(b), 38(b), 39*).

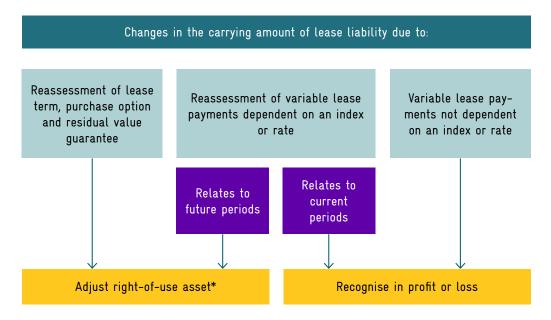
A lessee applies alternative measurement bases in two circumstances:

• if the right-of-use asset meets the definition of investment property, then the lessee measures the right-of-use asset in accordance with its accounting policy for all of its investment property, which may be at fair value; and

 if a lessee applies the revaluation model to a class of property, plant and equipment, then it may elect to apply the revaluation model to all right-ofuse assets that belong to the same class. (IFRS 16.34-35, IAS 40.2)

The following diagram summarises the impact of changes in the carrying amount of the lease liability on the right-of-use asset (*IFRS 16.38-39*).

FIGURE 17. Changes in the carrying amount of lease liability (a)



* If the carrying amount of the right-of-use asset is reduced to zero, then any further reductions are recognised in profit or loss.

a. Depreciation of the right-of-use asset

A lessee depreciates right-of-use assets in accordance with the requirements of IAS 16 *Property, Plant and Equipment* – i.e. the depreciation method reflects the pattern in which the future economic benefits of the right-of-use asset are consumed. This will usually result in a straight-line depreciation charge (*IFRS* 16.31, *IAS* 16.60).

Depreciation starts on the commencement date of the lease. The period over which the asset is depreciated is determined as follows:

- if ownership of the underlying asset is transferred to the lessee, or the lessee is reasonably certain to exercise a purchase option, then the depreciation period runs to the end of the useful life of the underlying asset; otherwise
- the depreciation period runs to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

(IFRS 16.32)

Example 24 - Right-of-use assets. Depreciation period

Q

Lessee X enters into a non-cancellable, non-renewable 10-year lease with Lessor L for a solar system that will be used in X's manufacturing process. The useful life of the underlying machine is 20 years and ownership remains with L.

Ownership does not transfer to X; therefore, X depreciates the right-of-use asset from the commencement date over a period of 10 years (i.e. the end of the lease term).

Does IAS 16 component accounting apply to the depreciation of leases?

?

Yes. IFRS 16 states that a lessee applies the depreciation requirements of IAS 16 and therefore identifies separate components for the purposes of depreciation. This can be a key practical consideration for lessees that lease big-ticket items under operating

leases and adopt a component approach to maintenance accounting – e.g. major maintenance checks in some solar system leases.

Source: KMPG (2023), based on: IFRS 16.31, IAS 16.43

a. Impairment of the right-of-use asset

A lessee applies IAS 36 Impairment of Assets to determine whether a right-ofuse asset is impaired and to account for any impairment. Following recognition of an impairment loss, the future depreciation charges for the right-of-use asset are adjusted to reflect the revised carrying amount (IFRS 16.33, IAS 36.63).

Example 25 - Impairment of the right-of-use asset

Q

Lessee Y leases a solar system for its manufacturing process over a non-cancellable 10-year period. The initial carrying amount of the right-of-use asset is USD 1,000, which is subsequently measured at cost and depreciated on a straight-line basis over a period of 10 years – i.e. the depreciation charge per year amounts to USD 100. At the end of Year 5, the cash-generating unit that includes the right-of-use asset is impaired. An impairment charge of USD

200 is allocated to the right-of-use asset.

Immediately before the impairment, the carrying amount of the right-of-use asset is USD 500.

Following the impairment, the carrying amount is reduced to USD 300 and the future depreciation charges are reduced to USD 60 (USD 300 / 5) per year.

Source: Authors' own illustration, KMPG (2023)

3.7.6 Recognition exemptions for lessees

A lessee can elect not to apply the lessee accounting model to:

- leases with a lease term of 12 months or less that do not contain a purchase option i.e. short-term leases (see Section 3.7.6(a)); and
- leases for which the underlying asset is of low value when it is new even if the effect is material in aggregate (see Section 3.7.6(b)).

(IFRS 16.5, A)

If a lessee elects to apply either of these recognition exemptions, then it recognises the related lease payments as an expense on either a straight-line basis over the lease term or another systematic basis if that basis is more representative of the pattern of the lessee's benefit (*IFRS 16.6*).

a. Short-term leases

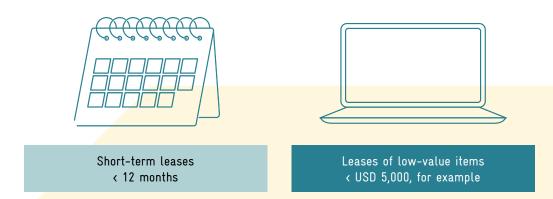
The election for short-term leases is made by class of underlying asset. A 'class of underlying asset' is a grouping of underlying assets of a similar nature and use in the lessee's operations. When electing the short-term lease exemption for a particular class of underlying asset, only underlying assets from leases that meet the definition of a short-term lease are considered (*IFRS 16.8*).

The 'lease term' is determined in a manner consistent with that for all other leases (see Section 3.9). Consequently, the short-term lease exemption may be applied to renewable and cancellable leases (e.g. month-to-month, evergreen leases) if the lessee is not reasonably certain to renew (or to continue, in the case of a termination option) the lease beyond 12 months (IFRS 16.A).

b. Low-value items

A lessee is permitted not to apply the recognition and measurement requirements to leases of assets that, when they are new, are of low value. This exemption, unlike the short-term lease exemption, can be applied on a lease-by-lease basis (*IFRS 16.5(b), 8, B3-B8*).

FIGURE 18. Short-term and low-value leases



Example 26 - Recognition exemption. Short-term lease (IFRS 16.18, B34-B35, B37)

Q

Lessee L manufactures toys. L enters into a 10-year lease of a non-specialised solar system to be used in the manufacturing process of racing cars. It expects to use this solar system until it completes the development and testing of an improved specialised solar system. The current solar system can be easily replaced and the cost to install it in L's manufacturing facility is not significant. L, but not the lessor, has the right to terminate the lease without penalty on each anniversary of the lease commencement date.

The non-cancellable period is one year. *Section 3.9.2*. In addition, as the solar system is not specialised, it can easily be replaced and the cost to install the system in L's manufacturing facility is not significant. L determines that it is not reasonably certain to continue the lease after the first year. *Section 3.9.4*. As a result, the lease term is also one year, and the lease qualifies for the short-term lease exemption.

What happens if the lessee applies the short-term lease exemption and there are changes to the lease term? (IFRS 16.7)

previously determined that

If a lessee elects to apply the short-term lease recognition exemption and there are any changes to the lease term – e.g. the lessee exercises an option that it had

previously determined that it was not reasonably certain to exercise – or the lease is modified, then the lessee accounts for the lease as a new lease.

A lessee does not apply the low-value exemption to a lease of an individual asset in either of the following scenarios:

- if the underlying asset is highly dependent on, or highly interrelated with, other assets; or
- if the lessee cannot benefit from the underlying asset on its own or together with other readily available resources, irrespective of the value of that underlying asset.

(IFRS 16.B5)

The low-value exemption also does not apply to a head lease for an asset that is sub-leased or that is expected to be sub-leased. When a lessee neither enters into a sub-lease immediately nor expects to do so later, it may elect to apply the exemption (*IFRS* 16.87).

IFRS 16 does not specify a threshold for the low-value exemption, but the basis for conclusions states that the Board 'had in mind' assets with a value of approximately USD 5,000 or less when they are new, such as small solar equipment (IFRS 16.B6, B8, BC98-BC104).

Example 27 - Recognition exemption. Low-value items (IFRS 16.IE3)

Q

Lessee B is in the pharmaceutical manufacturing and distribution industry and leases the following:

- real estate, both office building and warehouse:
- inexpensive office furniture;
- company cars, both for sales personnel and for senior management and of varying quality, specification and value;
- trucks and vans used for delivery;
- a solar system used as an alternative power source; and
- inexpensive IT equipment e.g. laptops.

B determines that the leases of inexpensive office furniture and laptops qualify for the recognition exemption on the basis that the underlying assets, when they are new, are individually of low value. Although the low-value exemption can be applied on a lease-by-lease basis, B elects to apply the exemption to all of these leases. In contrast, B applies the recognition and measurement requirements of IFRS 16 to its leases of real estate, solar systems, company cars, trucks and vans.

What happens if the exemption is applied and the underlying asset is subsequently sub-leased? (IFRS 16.7, B7)

If a lessee sub-leases, or expects to sublease, an asset, then the head lease does not qualify as a lease of a low-value item. When a lessee neither enters into a sublease immediately nor expects to do so later, it may elect to apply the exemption.

However, if a lessee initially elects to use the low-value exemption – because it expects not to sub-lease the asset – but subsequently does enter into a sublease,

then the lease would no longer qualify for the exemption. It appears that on the date of the change, the lessee should consider the lease to be a new lease. In these cases, the lessee also considers whether the reason for the change in intention provides evidence of whether other leases of low-value items do or do not qualify for the exemption.

3.8 Lessor accounting

Lessors classify leases as finance or operating leases.

3.8.1 Lessor accounting model

The lessor follows a dual accounting approach to lease accounting. The accounting is based on whether significant risks and rewards incidental to ownership of an underlying asset are transferred to the lessee, in which case the lease is classified as a finance lease (*IFRS 16.B53, BC289*).

Are the lessee and lessor accounting models consistent?

?

No. The lack of consistency between the lessee and lessor accounting models can be seen in Example 11 below:

- the lessee applies the right-of-use model and recognises a right-of-use asset and a liability for its obligation to make lease payments; whereas
- the lessor continues to recognise the underlying asset and does not recognise a financial asset for its right to receive lease payments.

There are also more detailed differences. For example, lessees and lessors use the same guidance on determining the lease term and assessing whether renewal and purchase options are reasonably certain to be exercised, and termination options not reasonably certain to be exercised. However, unlike lessees, lessors do not reassess their initial assessments of the lease term and whether renewal and purchase options are reasonably certain

to be exercised, and termination options not reasonably certain to be exercised. *See Section 3.9.3*.

Other differences are more subtle. For example, although the definition of lease payments is similar for lessors and lessees (see Section 3.7.2(b)), the difference is the amount of residual value guarantee included in the lease payments.

- The lessor includes the full amount (regardless of the likelihood that payment will be due) of any residual value guarantees provided to the lessor by the lessee, a party related to the lessee or a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee.
- The lessee includes only any amounts expected to be payable to the lessor under a residual value guarantee.

3.8.2 Lease classification

A lessor classifies a lease as either a finance lease or an operating lease, as follows:

- leases that transfer substantially all of the risks and rewards incidental to ownership of the underlying asset are finance leases; and
- all other leases are operating leases.

(IFRS 16.61-62, B53)

Generally, the presence of the following indicators, either individually or in combination, leads to a lease being classified as a finance lease (*IFRS 16.63*):

- transfer of ownership to the lessee either during or at the end of the lease term (*IFRS 16.63(a)*);
- existence of a purchase option that is reasonably certain to be exercised (*IFRS 16.63(b)*);
- the lease term is for a major part of the economic life of the underlying asset (*IFRS 16.63(c)*);
- the present value of the lease payments amounts to substantially all of the fair value of the underlying asset at inception of the lease (*IFRS 16.63(d*)); and
- the underlying asset is specialised (IFRS 16.63(e)).

The following are additional indicators that a contract may be a finance lease (*IFRS 16.64*):

- the lessee can cancel the lease, but the lessor's losses associated with the cancellation are borne by the lessee;
- gains or losses from the fluctuation in the fair value of the residual fall to the lessee – e.g. in the form of a rent rebate equalling most of the sales proceeds at the end of the lease; or
- the lessee can extend the lease at a rent that is substantially lower than the market rent.

Lease classification is made on the inception date and is reassessed only if there is a lease modification. Changes in estimates (e.g. changes in estimates of the economic life or of the residual value of the underlying asset) or changes in circumstances (e.g. default by the lessee) do not give rise to a new classification of a lease for accounting purposes (*IFRS 16.66*).

However, if the contract includes terms and conditions to adjust the lease payments for particular changes occurring between the inception date and the commencement date, then, for the purpose of classifying the lease, the effect of any such changes is deemed to have taken place on the inception date (*IFRS 16.B54*).

Example 28 - Lease classification

Lessor L enters into a non-cancellable lease contract with Company X, under which X leases a solar system for five years. The economic life of the equipment is estimated to be 15 years and legal title will remain with L. The lease contract contains no purchase, renewal or early termination options. The fair value of the equipment is USD 100,000 and the present value of the

In assessing the classification of the lease, L notes that:

lease payments amounts to USD 50,000.

- the lease does not transfer ownership of the solar system to X;
- X has no option to purchase the solar system;
- the lease term is for one third of the

economic life of the solar system, which is less than a major part of the economic life:

- the present value of the lease payments amounts to 50% of the fair value of the equipment, which is less than substantially all of the fair value; and
- the solar system is not specialised.

L notes that there are no indicators that the lease is a finance lease and that, based on an overall evaluation of the arrangement, the lease does not transfer substantially all of the risks and rewards incidental to ownership of the solar system to X.

Therefore, L classifies the lease as an operating lease.

Are there special rules on the classification of leases of land? (IFRS 16.B55, BCZ241-BCZ244)

No. The classification of a lease of land is assessed based on general classification guidance. A key consideration is that land normally has an indefinite economic life. However, the fact that the lease term is normally shorter than the economic life of the land does not necessarily mean that a lease of land is always an operating lease; the other classification requirements are also considered.

For example, in a 99-year lease of land with fixed lease payments, the significant risks and rewards associated with the land are transferred to the lessee during the lease term, and on lease commencement the present value of the residual value of the land would be negligible. It follows that a long lease term may indicate that a lease of land is a finance lease.

There is no bright-line threshold for the lease term above which a lease of land would always be classified as a finance lease and classification assessment can require the use of significant judgement in some cases.

Yes, in some cases. Generally, the classification of a lease is determined at inception of the lease and is not revised unless the lease agreement is modified. However, the classification is updated for certain changes between the inception date and commencement date that are deemed to have taken place on the inception date.

A significant amount of time may pass between the inception date and the commencement date – e.g. when parties commit to leasing an underlying asset that is yet to be built. A lease contract may also include terms and conditions to adjust the lease payments for changes that occur between the inception date and the commencement date – e.g. a change in the lessor's cost of the underlying asset or a change in the lessor's cost of financing the lease.

In such cases, the calculation of the present value of lease payments used in

determining the classification of the lease covers all lease payments made from commencement of the lease term. However, if the lease payments are adjusted for contractual changes such as changes in the construction or acquisition costs of the underlying asset, general price levels or the lessor's costs of financing the lease between the inception and commencement dates, then the effect of these changes is deemed to have taken place at inception for the purpose of classifying the lease.

It appears that, for classification purposes, the lease payments should also be updated for changes between the inception and commencement dates in:

- the non-cancellable period of the lease;
- lease payments dependent on an index or a rate; and
- variable payments that become in-substance fixed.

These changes are akin to contractual changes between the inception and commencement dates and the effect of these changes should therefore be deemed to have taken place at inception for the purpose of classifying the lease. Consequently, a lessor should also update the rate implicit in the lease and its estimate of the unguaranteed residual value for such contractual changes for classification purposes.

However, for measurement purposes it appears that a lessor should update the lease payments, the rate implicit in the lease and the unguaranteed residual value for all changes between the inception and commencement date. This is because a lessor measures the net investment in a finance lease and the amount of operating lease income to be recognised on the commencement date.

3.8.3 Operating lease model

The lessor classifies a lease that is not a finance lease as an operating lease (*IFRS 16.81*).

If, before lease commencement, a lessor recognises an asset in its statement of financial position and leases that asset to a lessee under an operating lease, then the lessor does not derecognise the asset on lease commencement. Generally, future contractual rental payments from the lessee are recognised as receivables over the lease term as the payments become receivable.

Generally, lease income from operating leases is recognised by the lessor on a straight-line basis from the commencement date and over the lease term. It may be possible for the lessor to recognise lease income using another systematic basis if that is more representative of the time pattern in which the benefit of using the underlying asset is diminished. Similarly, increases (or reductions) in rental payments over a period of time, other than variable lease payments, are reflected in the determination of the lease income, which is recognised on a straight-line basis (*IFRS 16.81, 83*).

The initial direct costs incurred by the lessor in arranging an operating lease are added to the carrying amount of the underlying asset and cannot be

immediately recognised as an expense. These initial direct costs are recognised as an expense on the same basis as the lease income. This will not necessarily be consistent with the basis upon which the underlying asset is depreciated (*IFRS 16.83*).

Incentives granted to the lessee in negotiating a new or renewed operating lease are recognised as an integral part of the lease payments relating to the use of the underlying asset. They are recognised as a reduction of rental income over the lease term using the same recognition basis as that used for the lease income (IFRS 16.81.A).

The lessor depreciates the underlying asset over the asset's useful life in a manner that is consistent with the depreciation policy that it applies to similar owned assets (*IFRS 16.84*).

A lessor applies IAS 36 to determine whether an underlying asset subject to an operating lease is impaired and to account for any impairment loss identified. In addition, the lessor applies the impairment and derecognition requirements of IFRS 9 to operating lease receivables (IFRS 16.85, 9.2.1(b)(i)).

Should a lessor continue to recognise operating lease income on a straight-line basis if the lessee reduces actual usage of the underlying asset? (IFRS 16.81)

!

Generally, yes.

In most leases, the benefit conveyed by the lessor to the lessee is the right to use the underlying asset over the lease term. For this reason, operating lease income from leases is typically recognised by the lessor on a straight-line basis from the commencement date and over the lease term.

IFRS 16 states that it is possible to recognise operating lease income using another systematic basis if that is more representative of the time pattern in which the benefit of the underlying property is diminished. However, it is rare that a basis other than straight-line is suitable within the context of a lease. For example, in a solar system lease, a retailer that leases a solar system from a renewable energy developer may expect its sales to vary seasonally and may project year-on-year

increases/decreases in sales. However, the benefit that the retailer receives under the lease is the right to use the solar system. Therefore, if the lease payments are fixed then the developer would recognise operating lease income on a straight-line basis in this fact pattern.

One question arises as to whether this approach remains appropriate if the sales significantly reduce and/or the government imposes restrictions that impact production.

In the absence of a change in the lease agreement, the retailer's benefit under the lease agreement remains the right to use the solar system. As long as the developer continues to convey the right to use the system to the retailer, the developer will typically continue to recognise operating lease income on a straight-line basis.

3.8.4 Finance lease model

On commencement, the lessor derecognises the underlying asset and recognises a finance lease receivable at an amount equal to its net investment in the lease, which comprises the present value of the lease payments and any unguaranteed residual value accruing to the lessor. The present value is calculated by discounting the lease payments and any unguaranteed residual value, at the interest rate implicit in the lease (see Section 3.7.2(c)). Initial direct costs are included in the measurement of the finance lease receivable because the interest rate implicit in the lease takes initial direct costs incurred into consideration (*IFRS* 16.67-69, A).

The lessor deducts any lease incentive payable from the lease payments included in the measurement of the net investment in the lease (*IFRS 16.70(a*)).

The lessor recognises the difference between the carrying amount of the underlying asset and the finance lease receivable in profit or loss when recognising the finance lease receivable. This gain or loss is presented in profit or loss in the same line item as that in which the lessor presents gains or losses from sales of similar assets.

Over the lease term, the lessor accrues interest income on the net investment. The receipts under the lease are allocated between reducing the net investment and recognising finance income, to produce a constant rate of return on the net investment (*IFRS* 16.75-76).

A lessor applies the derecognition and impairment requirements of IFRS 9 to the net investment in the lease. A lessor recognises any loss allowance on the finance lease receivable, applying IFRS 9. A lessor regularly reviews estimated unguaranteed residual values used in computing the gross investment in the lease. If there is a reduction in the estimated unguaranteed residual value, then the lessor revises the income allocation over the lease term without changing the discount rate and immediately recognises any reduction in respect of amounts accrued (IFRS 16.77).



3.9 Lease term

The lease term is a critical estimate. For lessees, the lease term affects the size of the lease liability. For lessors, it may impact the lease classification.

3.9.1 Overview

The lease term is the non-cancellable period of the lease, together with:

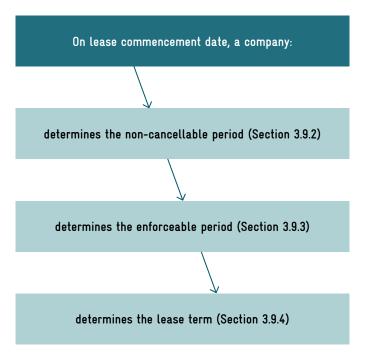
- optional renewable periods if the lessee is reasonably certain to extend; and
- periods after an optional termination date if the lessee is reasonably certain not to terminate early.

(IFRS 16.18)

Termination options held only by the lessor are not considered when determining the lease term (*IFRS* 16.835).

To determine the lease term, a company first determines the length of the noncancellable period of a lease and the period for which the contract is enforceable. It can then determine – between those two limits – the length of the lease term. In lease contracts that have no options, the non-cancellable period, the period for which the contract is enforceable and the lease term will all be the same.

FIGURE 19. Lease term determination



3.9.2 The non-cancellable period

The 'non-cancellable period' is the period during which the lessee cannot terminate the contract. The lease term cannot be shorter than the non-cancellable period (*IFRS 16.B35, BC127-BC128*).

If a lessor can cancel the lease, does this affect the non-cancellable period? (IFRS 16.B35, BC128)

No. If only the lessor has the right to terminate a lease, then the non-cancellable period of the lease includes the period covered by the lessor's option to terminate the lease. In this situation, the lessee has an unconditional obligation to pay for the right to use the asset for the period of the lease, unless and until the lessor decides to terminate the lease.

Any non-cancellable period or notice period in a lease meets the definition of a contract and is part of the lease term.

3.9.3 The enforceable period

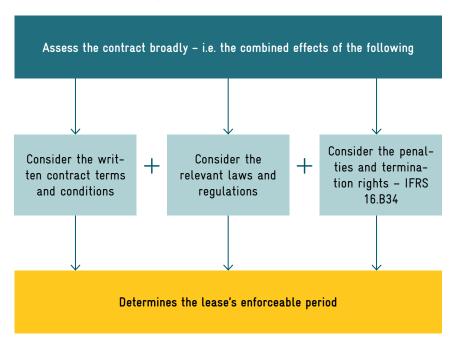
The 'enforceable period' is the period for which enforceable rights and obligations exist between the lessee and lessor. This is the maximum potential length of the lease term (*IFRS 16.B34, BC127*).

To determine the enforceable period of the lease, a company applies the definition of a contract. For this purpose, the contract comprises the written agreement and applicable laws and regulations in the local jurisdiction that stipulate and govern the parties' rights and obligations. Enforceability is a matter of law in the relevant jurisdiction and each contract will need to be evaluated based on its terms and conditions. This includes considering the guidance on enforceability in paragraph B34 of IFRS 16, including the role of penalties in assessing the enforceable period (*IFRS 16.2, B34, BC127*).

The key steps in determining the enforceable period are as follows.

Renewal and termination options are considered in the assessment of the lease term if they are enforceable (*IFRS 16.B34, BC127*).

FIGURE 20. Enforceable period



A lease is no longer enforceable beyond the point at which both the lessee and the lessor have the unilateral right to terminate the lease without permission from the other party, and with no more than an insignificant penalty (*IFRS 16.34*, *BC127*, *IU 11-19*).

Consequently, a contract is enforceable beyond the date on which it can be terminated if:

- both parties have the right to terminate but one party, or both, would incur a penalty on termination that is more than insignificant; or
- only one party has the right to terminate the lease without the permission of the other party.

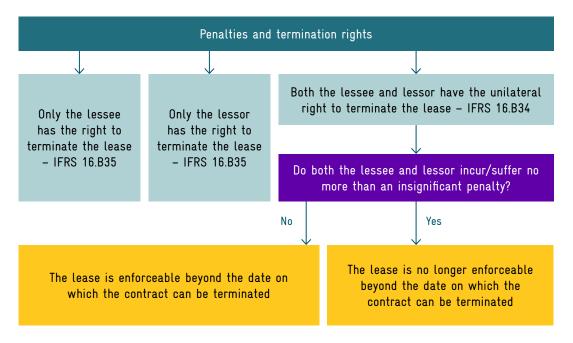
A lease is no longer 'enforceable' when both the lessee and lessor have the right to terminate it without agreement from the other party with no more than an insignificant penalty. If only the lessee has the right to terminate a lease, then that right is considered to be an option available to the lessee to terminate the lease that a company considers when determining the lease term. Termination options held by the lessor only are not considered when determining the lease term because, in this situation, the lessee has an unconditional obligation to pay for the right to use the asset for the period of the lease, unless the lessor decides to terminate the lease (*IFRS 16.B34-B35*, *BC127, IU 11-19*).

The following summarises the impact of penalties and termination rights on the determination of the enforceable period.

IFRS 16 does not define the term 'penalty'. Therefore, questions have arisen in practice about whether a company considers the broader economics of the contract or only contractual termination payments

when applying paragraph B34 of the standard. The IFRS Interpretations Committee discussed this issue and noted that when determining the effect of termination rights under paragraph B34, a company considers the broader economics of the contract and not only contractual termination payments (*IFRS* 16.B34, *IU* 11-19).

FIGURE 21. Impact of penalties and termination rights on the determination of the enforceable period



Scenario 1

Lessee B leases solar panels from Lessor C under the following terms:

- the written contract is for a stated maximum term of five years;
- B and C each have the unilateral right to terminate the lease at the end of Year 2 with no more than an insignificant penalty; and
- relevant laws and regulations that govern the transaction do not stipulate any other rights and obligations of the parties in addition to those in the written contract.

On lease commencement, the enforceable period is two years, regardless of how likely it is that both parties will decide to extend the lease beyond the end of Year 2.

Scenario 2

Lessee D leases solar panels from Lessor E under the following terms:

- the written contract is for a stated maximum term of five years;
- after Year 1, D and E each have the unilateral right to terminate the lease, but a one-month notice period is required i.e. the lease terminates one month after the termination notice is given. Notice cannot be given before the end of Year 1. If the lease is terminated in this way, then neither party will suffer a more-than-insignificant penalty;
- relevant laws and regulations that govern the transaction do not stipulate any other rights and obligations of the parties in addition to those in the written contract.

On lease commencement, the enforceable period is 13 months.

What is the enforceable period when both the lessee and lessor have termination rights, but only one party would suffer a more than insignificant penalty? (IFRS 16.834-835, BC127, IU 11-19)

The existence of a penalty affects the enforceable period in different ways, depending on which party would suffer a more than insignificant penalty.

In the following scenarios, relevant laws and regulations that govern the transaction do not stipulate any other rights and obligations of the parties in addition to those in the written contract.

Scenario 1 - Both parties have termination rights without the permission of the other, but only the lessor's right gives rise to a more than insignificant penalty

In this case, the enforceable period ends when the lessor's exercise of its termination option no longer gives rise to a more than insignificant penalty – i.e. when both the lessee and the lessor have the unilateral right to terminate the lease with no more than an insignificant penalty.

In contrast, if the lessor's termination right will no longer result in a more than insignificant penalty before the lessee's termination option becomes exercisable, then the lessor's termination option is disregarded for accounting purposes until the lessee's termination option becomes exercisable. When the lessee's termination option becomes exercisable, both the lessee and the lessor have the unilateral right to terminate the lease with no more than an insignificant penalty, and the enforceable period does not extend beyond that point.

Scenario 2 - Both parties have termination rights without the permission of the other, but only the lessee's right gives rise to a more than insignificant penalty

In this case, the enforceable period ends when the lessee's exercise of its termination option no longer gives rise to a more than insignificant penalty.

3.9.4 The reasonably certain threshold

IFRS 16 does not define 'reasonably certain' and there is no bright line when making the assessment. When determining the lease term, a company considers all relevant facts and circumstances that create an economic incentive for the lessee to exercise an option to renew or purchase, or not to exercise an option to terminate early. When assessing whether a lessee is reasonably certain to exercise an option to extend or purchase, or not to exercise an option to terminate early, the economic reasons underlying the lessee's past practice regarding the period over which it has typically used particular types of assets (whether leased or owned) may provide useful information (IFRS 16.19, B37, B40, BC157).

IFRS 16 provides examples of factors to consider when assessing whether it is 'reasonably certain' that a lessee would exercise an option to renew or not exercise an option to terminate the lease. The assessment of the degree of certainty is based on the facts and circumstances on commencement of the lease, rather than on the lessee's intentions. The following table provides examples of factors that create an economic incentive to exercise or not to exercise options to renew or terminate early (*IFRS 16.B37-B40*).

FIGURE 22. Factors that create an economic incentive to exercise or not to exercise options to renew or terminate early

Example of relevant facts and circumstances

CONTRACTUAL/MARKET

- Level of rentals in any secondary period compared with market rates
- · Contingent payments
- Renewal and purchase options
- Costs relating to the termination of the lease and the signing of a new replacement lease
- Costs to return the underlying asset

ASSET

- Nature of item (specialised)
- Location
- Availability of suitable alternatives
- Existence of significant leasehold improvements

To determine the lease term, X considers the following factors:

X has the option to extend the lease by

another four years at the same rent.

• market rentals for comparable solar supplies in the same area are expected to increase by 10% over the eight-year enforceable period. On commencement of the lease, rentals under the contract reflect current market rates;

• X intends to run the factory in the same area for at least 10 years;

- the location of the factory is ideal for relationships with suppliers and customers:
- X undertakes non-removable significant leasehold improvements to facilitate efficient functioning with an estimated useful life of eight years.

X concludes that it has a significant economic incentive to extend the lease and is therefore reasonably certain to exercise its four-year extension option. Consequently, X determines that the lease term is eight years.

Example 31 - Lessee renewal option. Not reasonably certain to renew

• Y does not expect to be able to use solar power in its manufacturing process for other types of aircraft without significant modifications;

• the total remaining economic life of the solar plant is about 25 years.

Y notes that the terms for the optional renewal provide no economic incentive and the cost to install is insignificant. Y has no incentive to make significant modifications to the factory after the initial 10-year period to install stronger rooftop panels with stronger batteries. Y does not expect to have a business purpose for using the solar power after the non-cancellable lease period.

Y therefore concludes that it is not reasonably certain to exercise its renewal options. Consequently, the lease term consists of the 10-year non-cancellable period only.

Lessee Y enters into a lease for a supply of solar power for its factory from a nearby solar plant that provides solar power to the neighbouring community. Specific identifiable solar panels have been dedicated to provide solar power to Y to guarantee supply. The non-cancellable period is 10 years. Y has the option to extend the lease after the initial 10-year period for optional periods of 12 months each at market rents.

To determine the lease term, Y considers the following factors:

- the solar power is expected to be used in manufacturing parts for a type of aircraft that Y expects will remain popular with customers until the development and testing of an improved model which efficiently needs hydroelectricity for production is completed in approximately 10 years;
- the cost to install the solar connections at Y's manufacturing facility is not significant;

Does the existence of non-removable significant leasehold improvement impact the lease term? (IFRS 16.B37, IU 11-19)

Yes. The IFRS Interpretations Committee considered the interaction between the determination of the lease term and the useful life of non-removable significant leasehold improvements.

The Committee noted that a company considers all relevant facts and circumstances that create an economic incentive for the lessee when assessing whether it is reasonably certain to extend (or not to terminate) a lease. This includes significant leasehold improvements (made or planned to be made) over the term of the contract that are expected to be of significant economic benefit when the option to extend (or terminate) becomes exercisable.

Can lessees and lessors reach different conclusions about whether it is reasonably certain that an option will be exercised?

Yes. Lessees and lessors may reach different conclusions about lease terms because of information asymmetry and the judgemental nature of the assessment. The assessment of reasonably certain is based on judgements (e.g. on the importance of an underlying asset to the lessee) and estimates (e.g. of the fair value of the underlying asset in the future). Lessees

and lessors may reach different conclusions about whether the lessee is reasonably certain to exercise an option to renew, or not to exercise an option to terminate early.

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3.9.5 Renewable and cancellable leases

In some cases, a lease contract may continue indefinitely until either party gives notice to terminate it (i.e. cancellable lease), or may renew indefinitely unless it is terminated by either party (i.e. renewable lease). For example,. evergreen leases are leases that automatically renew on a day-to-day, week-to-week or monthto-month basis – i.e. they are cancellable leases. One question arises on how to determine the non-cancellable and enforceable period of such leases. The IFRS Interpretations Committee discussed this issue and noted that in doing so, a company considers the broader economics of the contract and not only contractual termination payments. If only one party has the right to terminate the lease without permission from the other party and with no more than an insignificant penalty, then the contract is enforceable beyond the date on which the contract can be terminated by that party (IFRS 16.B34, IU 11-19).

If a company concludes that the contract is enforceable beyond the notice period of a cancellable lease (or the initial period of a renewable lease), then it applies the reasonably certain threshold assessment to determine the lease term (see Section 3.9.4) (IFRS 16.19, B37-B40, IU 11-19).

A penalty may expire or, over a period of time, the effect of a penalty that is initially more than insignificant may become insignificant. For example, a termination penalty that is more than insignificant if it is incurred after only one year of a lease may be insignificant if it is incurred after four or five years when considered in the context of the broader economics of the contract.



Lessee L enters into a five-year lease to buy solar power from Lessor M for use in the warehouse. L designs and sells furniture internationally online and is testing the use of the warehouse as a showroom. The cost to fit the solar panels is not significant. If the showroom is unsuccessful, then L does not plan to use the space as a warehouse.

Under the lease agreement, L and M each have the right to terminate the lease without a contractual penalty on each anniversary of the lease commencement date.

In applying the broad definition of penalty, L considers the following:

- the leasehold improvements are minor.
 Therefore, L's loss of economic value if the contract is terminated before the end of their economic life is not significant;
- the cost to dismantle the leasehold improvements is not significant;
- the cost to restore the warehouse to its original condition is not significant;

the potential impact of early termination on customer relationships is low.
 L mostly interacts with its customers through its website, with a small number expected to visit the showroom in person.

Based on its analysis of the facts and circumstances, L determines that it can terminate the lease with no more than an insignificant penalty after one year. Assuming that M can also terminate with no more than an insignificant penalty after one year, the lease term consists of the oneyear non-cancellable period because there are no enforceable rights and obligations beyond this point. This is because - after both parties' termination rights become exercisable – neither party has enforceable rights (i.e. L to use the solar or M to receive lease payments) or obligations (i.e. L to make lease payments or M to permit continued supply of solar power to the warehouse).

Example 33 - No stated terms (IFRS 16.B37, B39)

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Lessor R leases solar equipment to Lessee E. There is no stated duration for the lease in the contract. E can terminate the lease at any time by returning the underlying asset to R's location. For each day that the asset remains in E's possession, E will pay a fixed fee to R for the right to use that asset.

The non-cancellable period of the lease is one day because E could elect to return the asset to R's location before the start of Day 2. If E has an ongoing need to use an

asset similar to the underlying asset in its business, then the costs to E of terminating the lease (e.g. returning the underlying asset to R's location) and entering into a new lease (e.g. identifying another asset, entering into a different contract and training employees to use a different asset) may provide a compelling economic reason for E to continue to use the same asset for a period that is longer than the non-cancellable period – i.e. the lease term may be more than one day.

Does the assessment of reasonably certain differ for evergreen leases? (IFRS 16.A, B37, B39)

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No. For evergreen leases, once the enforceable period is established, the lease term is determined in the same manner as it is determined for all other leases. This involves considering whether the lessee is reasonably certain to exercise one or more of the renewal options. The assessment is based on all relevant facts and circumstances that create an economic incentive for the lessee to exercise the option to renew.

Determining whether a lessee is reasonably certain to exercise a renewal option in an evergreen lease may involve significant judgement. In general, the shorter the non-cancellable period of a

lease, the more likely a lessee is to exercise an option to extend the lease or not to exercise an option to terminate the lease. This is because the costs associated with obtaining a replacement asset are likely to be proportionately higher for a shorter non-cancellable period.

For example, if a lessee leases solar equipment on a monthly basis and expects to need ,substantially similar equipment for the next 18-24 months, then there may be a significant economic incentive to renew the lease rather than continually searching for similar equipment throughout the period.

3.9.6 Changes in the lease term

After the commencement date, a lessee reassesses whether it is reasonably certain to exercise an option to extend the lease or to purchase the underlying asset, or not to exercise an option to terminate the lease early. The lessee consequently revises the lease term. The lessee does this when there has been a significant event or a significant change in circumstances that:

- is within its control; and
- affects whether it is reasonably certain to exercise those options.

(IFRS 16.20, 36(c), 40)

IFRS 16 provides the following examples of significant events or changes in circumstances:

- significant leasehold improvements that the lessee did not anticipate on the commencement date, if it expects them to be of significant economic benefit when the option to extend or terminate the lease, or to purchase the underlying asset, becomes exercisable;
- a significant modification to, or customisation of, the underlying asset that was not anticipated on the commencement date;
- the inception of a sub-lease of the underlying asset for a period beyond the end of the previously determined lease term; and

a business decision of the lessee that is directly related to exercising, or not exercising, an option

 e.g. a decision to extend the lease of a complementary asset, to dispose of an alternative asset or to dispose of a business unit within which the right-of-use asset is used.

(IFRS 16.B41)

If a lessee reassesses the lease term due to changes in its assessment of whether it is reasonably certain to exercise a renewal option, then it remeasures its lease liability using a revised discount rate. The lessee adjusts the carrying amount of the right-of-use asset for the remeasurement of the lease liability. If the carrying amount of the right-of-use asset is reduced to zero, then any further reductions are recognised in profit or loss.

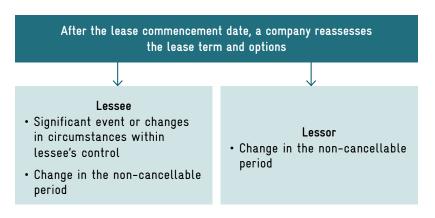
In addition, both the lessee and the lessor revise the lease term when there is a change in the non-cancellable period of a lease. For example, the non-cancellable period of a lease will change if:

- the lessee exercises an option that was not previously included in the company's determination of the lease term;
- the lessee does not exercise an option previously included in the company's determination of the lease term;

- an event occurs that contractually obliges the lessee to exercise an option not previously included in the company's determination of the lease term; or
- an event occurs that contractually prohibits the lessee from exercising an option previously included in the company's determination of the lease term.

For example, a lessee and a lessor determined on commencement that the lease term was the non-cancellable period of five years, considering that it was not reasonably certain that the lessee would exercise a renewal option for an additional five years. However, if at the end of Year 4 the lessee exercises the renewal option for the additional five years by providing formal notification to the lessor, then the lessee and the lessor revise the remaining lease term to six years to reflect the new non-cancellable period (*IFRS 16.21*).

FIGURE 23. Reassessment of the lease term and options



Source: KPMG, 2021

When there is a change in the lease term, a lessee remeasures its lease liability using a revised discount rate and, generally, makes a corresponding adjustment to the right-of-use asset (*IFRS 16.40*).

IFRS 16 is silent on how a lessor accounts for the remeasurement of the net investment in the lease when it revises the lease term. It appears that the lessor should choose an accounting policy, to be applied consistently, to remeasure the net investment in the lease by applying the guidance in:

- IFRS 9 on accounting for a change in expected cash flows; or
- IFRS 16 on remeasurement of a lease liability by the lessee.

(IFRS 16.21)

Example 34 - Lessee renewal option. Reassessing whether it is reasonably certain to be exercised (IFRS 16.B37(b))

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Lessee W leases a rooftop solar panel from Lessor L.

The lease has a non-cancellable term of five years, and W can renew the lease for a further five years – i.e. the lease has a potential maximum term of 10 years.

Initial assessment on commencement

On lease commencement, W assesses that it is not reasonably certain to exercise the renewal option and therefore determines that the lease term is five years.

Subsequent reassessment of certainty that the option will be exercised

During Year 3, W undergoes significant increases in the capacity of the solar panels and the space occupied by the solar panels. Based on its experience at other stores, W

believes that these materials have a useful life of 10 years once they are installed; they cannot be repurposed to other stores because they would be damaged during the removal process.

W notes that it was its decision to install the leasehold improvements and the improvements are evidence that it has an economic incentive to renew the lease. W updates its overall assessment and notes that it is now reasonably certain to extend the lease.

Accordingly, W reassesses the lease term and determines that the remaining lease term is seven years. W remeasures the lease liability using a revised discount rate and makes an equal adjustment to the right-of-use asset.

Example 35 - Date of the change in the non-cancellable period (IFRS 16.21)

Lessee L leases a rooftop solar panel from Lessor R. The lease is non-cancellable for 10 years and includes a five-year renewal option. L is required to notify R if it intends to exercise the renewal option by the end of Year 9. On lease commencement, R concludes that L is not reasonably certain to exercise the renewal option and, therefore, the lease term is 10 years.

The retail location where the solar panels are installed performs better than expected for reasons not anticipated on lease commencement. In Year 7, L decides that

it will exercise the renewal option. However, L decides not to notify R until it is required to do so – i.e. at the end of Year 9.

In this case, the better-than-expected trading performance is a market-based factor, which does not, in isolation, trigger a reassessment of the lease term. Therefore, both R and L reassess the lease term only when L formally notifies R that it will renew the lease – i.e. at the end of Year 9. This is the date when there is a change in the non-cancellable period.

What are the major impacts for lessees of reassessing the lease term and remeasuring the lease liability?

Companies need to reassess key judgements – e.g. the lease term – and consider the need to remeasure lease balances each time they report. Significant judgement is needed when determining whether there is a change in relevant factors or a change in the lessee's economic incentive to exercise or not to exercise renewal or termination options. Additionally, it may be difficult for a company to ignore changes in market-based factors (e.g. market rates) when performing a reassessment of the lease term.

A lessee's reassessment of key judgements may, in some cases, have a significant impact on the lease amounts recognised in the statement of financial position and the statement of profit or loss and other comprehensive income.

Remeasurements during the lease term provide more up-to-date information to users of financial statements. However, they create volatility in reported assets and liabilities, which may impact the ability to accurately predict and forecast future financial performance. Additional resources need to be focused on lease accounting, not only on lease commencement, but also on each reporting date.

Is a lessor allowed to reassess the lease term when the lessee reassesses whether it is reasonably certain to exercise an option? (IFRS 16.20-21)

No. Unlike a lessee, it appears that a lessor should revise the lease term only when there is a change in the non-cancellable period of the lease, as described in paragraph 21 of IFRS 16. In contrast, paragraph 20 requires reassessment in additional circumstances, but this applies only to lessees.

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3.10 Lease Modifications

IFRS 16 provides detailed guidance on accounting for lease modifications for both the lessee and the lessor.

3.10.1 Definition

A lease modification is a change in the scope of a lease, or the consideration for a lease, that was not part of its original terms and conditions. Common examples are:

- increasing the scope of the lease by adding the right to use one or more underlying assets or extending the contractual term;
- reducing the scope of the lease by removing the right to use one or more underlying assets or shortening the contractual lease term; and
- changing the consideration in the lease by increasing or decreasing the lease payments.

(IFRS 16.A)

Changes resulting from renegotiations of the contract are lease modifications. Adjusting the lease payments (cash flows) via contractual rent adjustment mechanisms and reassessing whether a lessee is reasonably certain to exercise (or not to exercise) an option included in the contract are not lease modifications because these are part of the original terms and conditions (see Section 3.10.1) (IFRS 16.18-20, 39-40(a)-(d)).

IFRS 16 distinguishes between lease modifications that represent, in substance, the creation of a new lease that is separate from the original lease and those that represent, in substance, a change in the scope of, or consideration paid for, the existing lease (IFRS 16.BC202).

Lease modifications that are not accounted for as separate leases are accounted for on the effective date of the lease modification. This is the date on which both parties agree to the lease modification and is usually the date on which the modified contract is signed (*IFRS 16.A*).

What is the difference between remeasurement of lease assets and liabilities and lease modifications? (IFRS 16.BC201)

There is a difference between scenarios that result in the remeasurement of existing lease assets and lease liabilities due to:

- reassessment of estimates used in lease accounting; and
- lease modifications. See Section 3.10.

After the commencement date, lease reassessments take place, for example, when there are changes in the lease payments (cash flows) based on contractual clauses included in the original contract. *Accounting for remeasurement is addressed in Section 3.10.1.*

Changes resulting from renegotiations and changes to the terms of the original contract are lease modifications. *Accounting for a lessee lease modification is addressed in Section 3.10.2.*

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What are the accounting implications for the lessee and the lessor if a lessee fails to make rental payments when they are due? (IFRS 16.A, 38, 76, 81, 9.3.3.1)

If the lessee fails to pay amounts due under the lease contract with no agreement with the lessor, then this is not a lease modification. However, there may be other accounting implications, as follows.

Lessee

The lessee continues to recognise the lease liability and assesses whether it is liable for additional interest or penalties for late payment under the lease contract.

Lessor

The lessor continues to account for the lease under its original terms and conditions unless and until the lessor agrees to modify the contract.

However, if the lessee fails to pay amounts due under the lease contract, or the lessor is otherwise concerned that the lessee may be unable to pay amounts falling due in future periods, then there are a range of other issues that the lessor needs to consider.

For **operating leases**, these issues include, but are not limited to, the following:

- income recognition: operating lease income reflects the rental payments to which the lessor is entitled under the enforceable terms and conditions of the lease. In addition, the lessor will need to assess whether it remains appropriate to recognise income from non-lease components e.g. maintenance income under IFRS 15;
- carrying amount of the underlying asset: lessors will need to ensure that the underlying asset is appropriately measured. For investment property measured at fair value, this will include ensuring that the fair value reflects current market participant expectations about in-place leases and residual values. For other underlying assets, this will include considering whether there is a trigger for impairment testing;

• lease receivables: operating lease receivables are subject to impairment testing under IFRS 9.

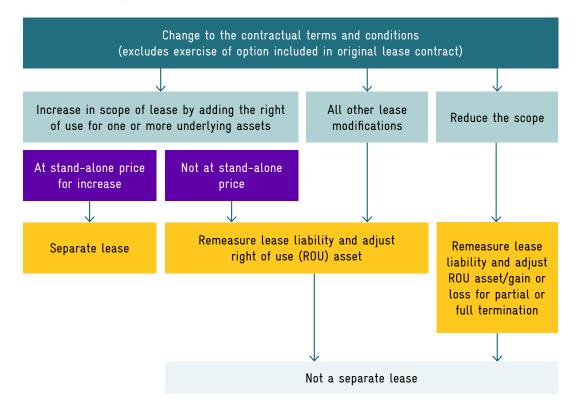
In a **finance lease**, although the lessor will continue to account for the lease under its original terms and conditions, the carrying amount of the net investment in the lease and related interest income may be impacted. The lessor applies IFRS 9's impairment requirements to the net investment in the lease and regularly reviews the estimated, unguaranteed residual values used in computing the gross investment in the lease. The lessor applies IFRS 16 to recognise reductions in the unguaranteed residual value of the underlying asset.

3.10.2 Lessee modification accounting

a. Lessee modifications – General

The following diagram summarises the accounting for lease modifications by a lessee (IFRS 16.44-46).

FIGURE 24. Change to the contractual terms and conditions (a)



a. Separate lease

A lessee accounts for a lease modification as a separate lease if both of the following conditions exist:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the lease increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

In this case, the lessee accounts for the separate lease in the same way as any new lease and makes no adjustment to the accounting for the initial lease. The lessee uses a revised discount rate to account for the separate lease. The new rate is determined on the effective date of the modification. The lessee uses the interest rate implicit in the lease if it is readily determinable; otherwise, the lessee uses its incremental borrowing rate (IFRS 16.44).

Lessee Z entered into a lease contract with Lessor L to lease rooftop solar panels for a coffee factory for 10 years. At the beginning of Year 7, Z and L amend the contract to grant Z the right to use additional solar panels installed on the same building for four years. The new solar panels are the same size as the original solar panels and similar in all significant respects.

The lease payments for the new solar panels are commensurate with market rentals for solar panels of that size and nature. However, Z receives a 5% discount for the new solar panels because its existing relationship with L enabled L to forego costs that it would have incurred if the additional solar panels had been leased to a new tenant – e.g. marketing costs, rental agent's commission, costs for undertaking credit checks, etc.

The lease of the additional solar panels was not part of the original terms and conditions of the contract. Therefore, this is a lease modification.

Z accounts for this modification as a separate lease on the effective date of the lease modification because:

- the modification increases the scope of the lease by adding the right to use an additional underlying asset – i.e. additional solar panels; and
- the lease payments for the additional solar panels are commensurate with market rentals for similar equipment, as adjusted for the circumstances of the contract. Even though the lease payment for the new solar panels is 5% below market rents, the discount reflects L's sharing with Z of the benefit of not having to market the equipment or pay a broker's commission and not having to incur other common origination fees.

Z does not modify the accounting for the original office space lease.

b. Not a separate lease

A lessee accounts for a lease modification that is not a separate lease on the effective date of the modification by remeasuring the lease liability. To do so, the lessee discounts the revised lease payments using a revised discount rate determined on that date and:

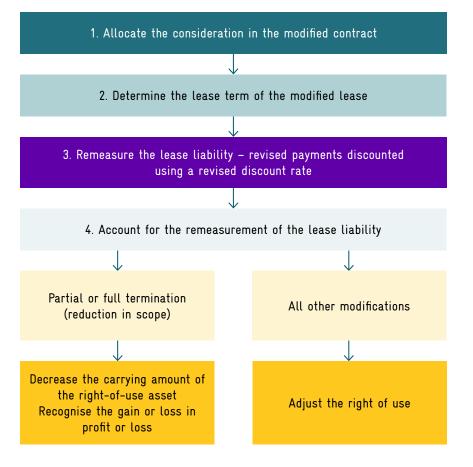
- for lease modifications that reduce the scope of the lease, the lessee decreases the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognises a gain or loss that reflects the proportionate reduction in scope; and
- for all other lease modifications, the lessee makes a corresponding adjustment to the right-of-use asset.

(IFRS 16.45-46)

For a lease modification that is not accounted for as a separate lease, the lessee allocates consideration in the modified contract, determines the lease term and remeasures the lease liability *on the effective date of the modification (IFRS 16.45-46)*.

The following diagram summarises the steps for accounting for a modification that is not a separate lease on the effective date of the modification (*IFRS* 16.45-46).

FIGURE 25. Steps for accounting for a modification that is not a separate lease on the effective date of the modification (c)



Example 37 – Lease modification. Not a separate lease. Increase in lease term (IFRS 16.45-46, A, Ex16)

lease term. This is a lease modification that increases the lease term only – i.e. it does not grant X the right to use an additional underlying asset. Therefore, it does not

result in a separate lease.

The annual lease payments remain unchanged and X's incremental borrowing rate on that date is 8%. There are no initial direct costs, lease incentives or other payments between X and Y as a result of the modification. The pre-modification carrying amount of the lease liability and right-of-use asset are USD 278,912 and USD 186,933, respectively.

X remeasures the lease liability at USD 1,130,412¹ and recognises the difference between the carrying amount of the lease liability before the modification and the carrying amount of the modified lease liability of USD 851,500² as an adjustment to the right-of-use asset.

Lessee X enters into a 20-year lease for the supply of solar power to a manufacturing plant with Lessor Y through the installation of rooftop solar panels. The annual lease payments are USD 150,000, payable in arrears. The interest rate implicit in the lease cannot be readily determined and X uses its incremental borrowing rate on commencement of the lease is 5%.

There are no initial direct costs, lease incentives or other payments between X and Y. Accordingly, X initially recognises a lease liability and right-of-use asset of USD 1,869.332.

At the end of year 18 (i.e. two years before the end of the original lease term), X and Y agree to modify the lease by extending the lease term for an additional 10 years – i.e. the lease term will be 30 years in total. As there were no renewal options in the original lease, this is not a reassessment of the

¹ The lease liability after the modification is determined based on:

annual lease payments payable in arrears of USD 150,000;

[·] a remaining lease term of 12 years; and

[·] a revised incremental borrowing rate of 8 %.

² Calculated as USD 1,130,412 - USD 278,912.

Example 38 - Lease modifications. Not a separate lease. Reductions in scope and consideration (IFRS 16.45-46. A, Ex17)

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Lessee E entered into a 10-year lease with Lessor F to install rooftop solar panels on a tea factory up to a maximum of 1,000 kWp. The rental payments are USD 100,000 per annum, payable in arrears. The interest rate implicit in the lease cannot be readily determined and E uses its incremental borrowing rate. The incremental borrowing rate on commencement of the lease is 7%. There are no initial direct costs, lease incentives or costs to restore the leased asset to its original condition. Accordingly, E recorded a rightof-use asset and a lease liability of USD 702,358 on the commencement date.

At the beginning of Year 7, E and F agree to modify the lease by reducing the capacity consumed to 750 kWp (i.e. a reduction of 250 kWp) and the lease payments to USD 75,000 per annum, payable in arrears

for the remaining four years. The incremental borrowing rate on this date is 8%, the pre-modification carrying amount of the right-of-use asset is USD 280,943 and the lease liability is USD 338,721.

On the effective date of the modification – i.e. the beginning of year 7 – E remeasures the lease liability at USD 248,410 based on:

- annual lease payments payable in arrears of USD 75,000;
- a remaining lease term of four years; and
- a revised incremental borrowing rate of 8%.

E accounts separately for the reduction in consumption and change in consideration as follows.

As an initial step, on the effective date of the modification E accounts for the partial termination of the lease – i.e. reduction in consumption by 250 kWp and proportionally reduces the pre-modification carrying amount of the right-of-use asset by USD 70,236¹ and lease liability by USD 84,680². The resulting gain is USD 14,444³.

As a second step, on the effective date of the modification E recognises the difference between the remaining carrying amount of the lease liability determined in Step 1 of USD 254,041 and the modified lease liability of USD 248,410 (i.e. USD 5,631) as an adjustment to the right-of-use asset. This reflects the change in the consideration paid for the lease and the revised discount rate.

¹ Calculated as USD 280,943 x (250 kWp / 1,000 kWp), the remaining carrying amount of the rightof-use asset is USD 210,707

² Calculated as USD 338,721 x (250 kWp / 1,000 kWp), the remaining carrying amount of the lease liability is USD 254,041.

³ Calculated as USD 84,680 - USD 70,236.

3.10.3 Lessor modification accounting

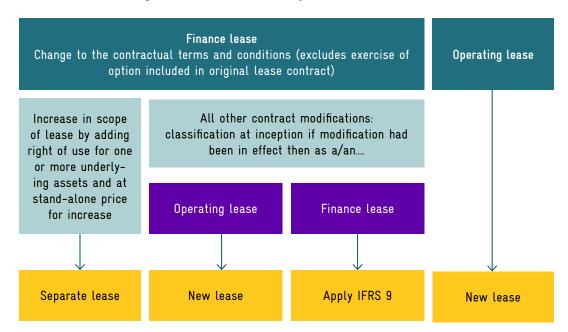
a. Lessor modifications - General

The following diagram summarises the accounting for lease modifications by a lessor (*IFRS 16.1679-80*, 87).

b. Lessor – Modifications to an operating lease

A lessor accounts for a modification to an operating lease as a new lease from the effective date of the modification, considering any prepaid or accrued lease payments relating to the original lease as part of the lease payments for the new lease (*IFRS 16.87*).

FIGURE 26. Accounting for lease modifications by a lessor (a)



Lessor Y enters into a 10-year lease for a rooftop solar panel with Lessee X. Y classifies this lease as an operating lease because it does not transfer substantially all of the risks and rewards incidental to ownership of the solar equipment.

The lease agreement specifies a starting rent of USD 100,000, payable in arrears, and requires the lease payments to be increased by 2% per annum – i.e. USD 1,094,972 for the entire 10-year period. X does not provide any residual value

guarantee. There are no initial direct costs, lease incentives or other payments between X and Y.

The accounting for the lease payments on a straight-line basis is performed by first determining the annual rental income of USD 109,497 (USD 1,094,972 / 10), which takes into account the annual indexation. Therefore, Y accounts for the lease payments over the first half of the lease term (i.e. Years 1-5) as follows:

Date	Lease payment (A) USD	Annual rental income (B) USD	Accrual period closing balance (C)* USD
Year 1	100,000	109,497	9,497
Year 2	102,000	109,497	16,994
Year 3	104,040	109,497	22,451
Year 4	106,121	109,497	25,827
Year 5	108,243	109,497	27,081

^{*} Calculated as previous year's C + (B - A).

At the beginning of Year 6, the solar power market deteriorates, and Y would like to encourage X to commit to using the equipment for longer. Y and X enter into negotiations and agree to:

- extend the original lease of use of the equipment by an additional five years after Year 10: and
- fix the annual payments for the original lease at USD 110,000, payable in arrears, for the remaining 10 years (i.e.

five remaining years of the original lease term plus a five-year extension).

The change in consideration and the extension of the lease term were not part of the original terms and conditions of the lease and are therefore a lease modification. Y accounts for this modification as a new operating lease from the effective date of the modification. This takes into account accrued lease payments relating to the original lease as follows.

Date	Lease payment (A) USD	Annual rental income (B)* USD	Accrual period closing balance (C) USD
Year 6	110,000	107,292	24,373
Year 7	110,000	107,292	21,665
Year 8	110,000	107,292	18,957
Year 9	110,000	107,292	16,249
Year 10	110,000	107,292	13,541
Year 11	110,000	107,292	10,833
Year 12	110,000	107,292	8,125
Year 13	110,000	107,292	5,417
Year 14	110,000	107,292	2,709
Year 15	110,000	107,292	

^{*} Calculated as $((110,000 \times 10) - 27,081) / 10 - i.e.$ (sum of A (lease payments) - (C at end of Year 5)) / 10 (remaining lease term).

a. Lessor – Modifications to a finance lease

A lessor's accounting for a modification to a finance lease depends on whether the modification, in substance, represents the creation of a new lease that is separate to the original lease. Like the lessee (see 3.10.2(b)), the lessor accounts for such a modification as a separate lease. Accounting for a modification to a finance lease that does not result in a separate lease depends on whether the lease classification would have been different had the modified terms been in effect on the inception date (IFRS 16.79-80, BC238-BC239).

Separate lease (IFRS 16.79)

A lessor accounts for a modification to a finance lease as a separate lease if both of the following conditions exist:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the lease increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

The lessor accounts for the separate lease in the same way as any new lease and makes no adjustment to the initial lease.

Not a separate lease

If the modification is not a separate lease, then the lessor accounts for a modification to a finance lease as follows:

- if the lease would have been classified as an operating lease if the modification had been in effect on the inception date, then the lessor:
 - accounts for the lease modification as the termination of the original lease and the creation of a new operating lease from the effective date of the modification; and
 - measures the carrying amount of the underlying asset as the net investment in the original lease immediately before the effective date of the lease modification;
- otherwise, it applies the requirements of IFRS 9.

(IFRS 16.80)

Lessor L enters into a 20-year lease for rooftop solar panels with Lessee M. The lease term approximates the solar equipment's economic life and no other features indicate that the lease does not transfer substantially all of the risks and rewards incidental to ownership. Therefore, L classifies the lease as a finance lease.

M's business has expanded, and M now requires additional solar panels. At the beginning of Year 17, L and M amend the contract to grant M the right to use additional solar panels of the same type for the remaining contractual period – i.e. for four years. The lease payments for the additional solar equipment are 5% higher than those originally, reflecting an increase in their purchase price.

The lease of the additional solar equipment was not part of the original terms and conditions of the contract. Therefore, this is a lease modification. L accounts for this modification as a separate lease on the effective date of the lease modification because:

- the modification increases the scope of the lease by adding the right to use additional underlying assets – i.e. additional solar equipment; and
- the lease payments for the additional solar equipment are commensurate with their stand-alone rentals. Even though the lease payments for the new solar panels are 5% higher than the prices in the original lease, this change reflects the increase in purchase prices.

L does not modify the accounting for the original lease of the old solar panels. L classifies the lease of additional solar panels as an operating lease because the lease term for those additional solar panels is not for a major part of their economic life and no other features indicate that the lease transfers substantially all of the risks and rewards incidental to ownership of the solar panels.

Example 41 - Lease modifications. Not a separate lease. Lease would have been classified as an operating lease (IFRS 16.63-66, 79-80(a), 81, 88)

Q

Changing the facts in Example 40, at the end of Year 2, Lessee M decides to cease one of its activities in two years and therefore needs to terminate the lease for solar panels. At the beginning of Year 3, L and M amend the contract so that it now terminates after Year 4.

Early termination was not part of the original terms and conditions of the lease and is therefore a lease modification.

The modification does not grant M an additional right to use an underlying asset and therefore cannot be accounted for as a separate lease.

L determines that had the modified terms been in effect on the inception date, the lease term would not have been for a major part of the solar panels' economic life. In addition, there are no other indicators that the lease would have transferred substantially all of the risks and rewards incidental to ownership of the lorries. Consequently, the lease would have been classified as an operating lease.

At the beginning of Year 3, L accounts for the modified lease as a new operating lease. Consequently, L:

- derecognises the finance lease receivable and recognises the underlying assets in its statement of financial position according to the nature of the underlying asset i.e. as property, plant and equipment in this case; and
- measures the aggregate carrying amount of the underlying assets as the amount of the net investment in the lease immediately before the effective date of the lease modification.

4

Taxation

The following Table 12 summarises the various taxes to which a RE developer may be subject in Uganda. The following Section 4.1 analyses the tax implications of the different delivery models described above, from both an RE developer and an offtaker perspective. Further details of applicable taxes are provided in the subsequent Section 4.2.

TABLE 12. Summary of relevant taxes

CORPORATE IN	COME TAX
Residents	 Ugandan tax residents (individuals and companies) are subject to corporate income tax at the rate of 30% on their worldwide income.
	 The tax payable by small businesses whose annual turnover/income does not exceed UGX 150 million is calculated with reference to the gross turnover (instead of taxable income).
Non-residents	 Non-residents are subject to Ugandan corporate income tax at the rate of 30% only on their 'Ugandan-sourced income'. In addition, the after-tax 'repatriated income' of a branch is subject to tax at the rate of 15%.
	 'Ugandan-sourced income' includes income derived from carrying on business through a 'branch' in Uganda.
	• A 'branch' includes a place where a person:
	 has, is using or installing substantial equipment or machinery for 90 days or more;
	 is engaged in a construction, assembly or installation project, including supervisory activities for 90 days or more; or
	 is engaged in the furnishing of services through employees or other personnel for more than 90 days in a 12-month period.
Taxable income & deductions	 The taxable/chargeable income of a company is the gross income (excluding exempt income) less any allowable deductions for a year of income.
	 Generally, expenditure and losses incurred in the production of income (in which income is included in gross income) are tax deductible.
	 Start-up costs are deductible over a period of four years at 25% per annum.
	• Tax losses may be carried forward indefinitely, subject to specific requirements.

CORPORATE INCOME TAX Depreciation Assets, including industrial buildings, intangible assets, computers, rates and plant and machinery, automobiles, office furniture and fixtures, may be methods depreciated on a straight-line or declining-balance basis, depending on the type of asset, at rates between 5% and 40%. Please refer to the specific rates per asset category in the annexure. As solar PV equipment is classified as manufacturing equipment, the applicable depreciation rate is 30%. · Accelerated initial investment allowances are available outside of Kampala. Incentives • No specific corporate income tax incentives/exemptions are available to the solar industry. Please refer to the VAT and customs section for exemptions from these taxes available to the industry. Transfer • In terms of Uganda's transfer pricing rules, transactions between associates (related parties) must be entered into on an arm's length pricing basis. An entity is required to prepare a transfer pricing policy which should be available by the time of filing the income tax return. Limitations • The amount of deductible interest in respect of all debts owed by a taxpayer who is a member of a group is limited to 30% of the taxable on deductibilearnings before interest, tax, depreciation and amortisation (EBITDA). ity of interest The restriction does not apply to financial institutions and insurance companies. • A taxpayer whose interest exceeds the limit may carry forward the excess interest for not more than three years. Compliance Any company chargeable to tax is required to furnish an annual income tax return, accompanied by financial statements, not later than requirements six months after the end of that year of income. • Tax is payable in two instalments of provisional tax, on or before the last day of the 6th and 12th months of the year of income.

CAPITAL GAINS TAX

 Capital gains on the disposal of assets are not taxed under a separate regime, but are included in ordinary taxable income and are subject to corporate income tax at the standard rate of 30%.

WITHHOLDING TAXES

	WHT rate		
Payment to	Residents	Non-residents*	
branch profits	N/A	15%	
dividends	0% (if at least 25% voting rights) 15%	15%	
interest	15% 10/20% (govern- ment securities)	15% 10/20% (govern- ment securities)	
royalties	N/A	15%	
management or professional fees	6% (unless listed as exempt entity)	15%	
payments for goods and services by the government, government institutions and any 'designated person'	6%	-	
Ugandan-sourced services contract	-	15%	
Imported goods	6%	-	

* The withholding tax rate may be reduced in terms of a relevant double taxation agreement.

Double taxation agreements (DTAs) entered into by Uganda

- DTAs are in force with Denmark, India, Italy, Mauritius, the Netherlands, Norway, South Africa, the United Kingdom and Zambia.
- There is currently no DTA in force between Germany and Uganda.
- In terms of domestic anti-avoidance provisions, any relief provided for by a DTA is only available to a beneficial owner with full and unrestricted ability to enjoy the income, to determine the income's future use and who has economic substance in the country of residence. The restrictions do not apply to a public listed company.

VALUE ADDED TAX • VAT is generally levied on the supply of goods and services and on Basis of the importation of goods and services in Uganda at the standard rate taxation and of 18%. However, there are exemptions applicable to solar equipment. rate Please see below. Registration · A person whose taxable turnover during any period of three calendar threshold months exceeds or is expected to exceed a quarter of the annual registration threshold of UGX 150 million must register for VAT purposes VAT on · A taxpayer who receives a supply of services from a foreign supplier must account for the VAT due on the supply in terms of a reimported verse-charge mechanism. services • No input credit is allowed in respect of imported services. • Deep cycle batteries, composite lanterns and raw materials for the **Exemptions** manufacture of deep cycle batteries and composite lanterns · Photosensitive semiconductor devices, including photovoltaic devices, whether or not assembled in modules or made in panels, light-emitting diodes, solar water heaters, solar refrigerators and solar cookers • Supply of any goods and services to the contractors and subcontractors of hydroelectric power, solar power, geothermal power or biogas and wind energy projects · An import of goods if the goods are exempt from customs duty under the Fifth Schedule to the East African Community Customs Management Act, 2004 (EACCMA) (with certain exceptions), or would be exempt had they been supplied in Uganda • Import of a service if the service would be exempt had it been sup-

Compliance requirements

 A taxable person must lodge a tax return with the Uganda Revenue Authority (URA) and make payment of the amount of VAT due within 15 days of the end of each month.

· Aid-funded projects also qualify for certain VAT relief measures

plied in Uganda or would be used in the provision of an exempt supply

• Taxpayers are required to issue a fiscal invoice through an electronic fiscal device (EFD) or other specified method.

CUSTOMS DUT	IES			
Basis of taxation	 Customs duties are levied on imported goods pursuant to the EACCMA both on an ad valorem and specific basis. 			
Rates	• The applicable rates are: 0% for basic raw materials and essential commodities; 10% for semi-processed goods; 25% for finished products; and 35% to 100% for 'sensitive items'. However, there are exemptions applicable to solar equipment. Please see below.			
Exemptions	 Goods originating from partner states of the East African Community (EAC) are exempt from customs duties. 			
	Other exemptions include:			
	 compact fluorescent bulbs (energy-saving bulbs) with a power connector cap at one end; 			
 specialised equipment, accessories and spare parts for develop- ment and generation of solar energy, including deep cycle batter ies; and 				
	— imports for donor-funded projects.			
	 Preferential duty rates apply to goods imported under the Common Market for Eastern and Southern African (COMESA) and the South African Development Community (SADC) arrangements or any other approved tariff arrangement. 			
	 To qualify for exemption, the item or part must fall under the exempted items prescribed in the Common External Tariff and a letter of sup- port provided by the Uganda Solar Energy Association and the Fifth Schedule to the East African Community Customs Management Act. A letter from URA confirming that the items are exempt will be required. In addition, a letter of support provided by the Uganda Solar Energy Association may be required. 			
OTHER IMPORT DUTIES				
	 An infrastructure levy is due at a rate of 1.5% of the cost, insurance, and freight (CIF) value of all imported goods which are imported from outside the EAC and are subject to customs duties. 			

Basis of taxation and rates • Stamp duty is levied on a wide range of instruments and documents at rates ranging from 0.5% to 2% or at a flat rate between UGX 10,000 and UGX 100,000, depending on the nature of the instrument. EXCISE DUTIES • Solar equipment and products are not subject to excise duty in Uganda. EMPLOYEES' TAXES • On a similar basis to that of companies, resident individuals are subject to Ugandan income tax on their global income, whereas non-resident individuals are subject to tax only on their Ugandan-sourced income at rates between 0% and 40%. • Employers are required to withhold the relevant tax from payments to employees and to remit the same to the URA on or before the 15th day of the subsequent month. Social security contributions • Both employees and employers must make monthly social security contributions to the National Social Security Fund (NSSF). • The employer contribution rate is 10% of the employee's monthly wage, whereas the employee contribution rate is 5%.	STAMP DUTIES					
Solar equipment and products are not subject to excise duty in Uganda. EMPLOYEES' TAXES On a similar basis to that of companies, resident individuals are subject to Ugandan income tax on their global income, whereas non-resident individuals are subject to tax only on their Ugandan-sourced income at rates between 0% and 40%. Employers are required to withhold the relevant tax from payments to employees and to remit the same to the URA on or before the 15th day of the subsequent month. Social security contributions Both employees and employers must make monthly social security contributions to the National Social Security Fund (NSSF). The employer contribution rate is 10% of the employee's monthly wage, whereas the employee contribution rate is 5%.	taxation and	at rates ranging from 0.5% to 2% or at a flat rate between UGX 10,000				
Uganda. EMPLOYEES' TAXES Income tax On a similar basis to that of companies, resident individuals are subject to Ugandan income tax on their global income, whereas non-resident individuals are subject to tax only on their Ugandan-sourced income at rates between 0% and 40%. Employers are required to withhold the relevant tax from payments to employees and to remit the same to the URA on or before the 15th day of the subsequent month. Social security contributions Both employees and employers must make monthly social security contributions to the National Social Security Fund (NSSF). The employer contribution rate is 10% of the employee's monthly wage, whereas the employee contribution rate is 5%.	EXCISE DUTIES					
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contributions contributions contributions contributions contributions contributions contributions contributions contributions contribution rate is 10% of the employee's monthly wage, whereas the employee contribution rate is 5%.		employees and to remit the same to the URA on or before the 15th day				
The employer contribution rate is 10% of the employee's monthly wage, whereas the employee contribution rate is 5%.	security					
Expatriates may qualify for exemption.	contributions					
		• Expatriates may qualify for exemption.				
• All employees are liable to pay a local service tax to the local municipal council in their area of residence, ranging from UGX 5,000 to UGX 100,000 per year, depending on their monthly net income earned.		ipal council in their area of residence, ranging from UGX 5,000 to UGX				

4.1 <u>Leases - Ugandan tax</u> implications

4.1.1 Finance lease versus operating lease

Section 59(3) of Uganda's Income Tax Act provides that a lease of property is a finance lease if:

- a. the lease term exceeds 75% of the effective life of the leased property;
- b. the lessee has an option to purchase the property for a fixed or determinable price on expiration of the lease; or
- c. the estimated residual value of the property to the lessor on expiration of the lease term is less than 20% of its fair market value on commencement of the lease.

A lease that does not meet the above criteria is classified as an operating lease for tax purposes.

A lessee whose lease meets the criteria of a finance lease would be entitled to certain capital allowances, as specified below:

i. initial allowances/investment deductions

The property, plant and equipment (PPE) would be eligible for an initial allowance deduction when determining the asset owner's taxable income for the year, as specified below: Section 27A(1) of Uganda's Income Tax Act provides that '......a person who places an item of eligible property into service for the first time outside a radius of fifty kilometres from the boundaries of Kampala, during a year of income is allowed a deduction for that year of an amount equal to 50% of the cost base of the property at the time it was placed into service.'

The Income Tax Act defines *eligible property* as: plant and machinery wholly used in the production of income included in gross income, but does not include:

- goods and passenger transport vehicles;
- appliances of a kind ordinarily used for household purposes; or
- office or household furniture, fixtures and fittings.

In addition, Section 27(4) provides that '... a person who places a **new industrial building** in service for the first time during the year of income is allowed a deduction for that year of an amount equal to 20% of the cost base of the building at the time it was placed in service.'

Industrial buildings are defined as buildings wholly or partly used, or held ready for use for manufacturing operations, research and development into improved or new methods of manufacture, mining operations, an approved hotel, approved hospital and approved commercial building.

ii. wear and tear allowance on PPE

The solar plant and machinery will qualify for wear and tear allowances on a reducing-balance basis. Under Section 27(2) of the Income Tax Act, PPE is divided into three separate classes or pools, each with its own annual allowance rate:

- Class 1 40% computer and data processing equipment;
- Class 2 30% plants and machinery used in farming, manufacturing and mining;
- Class 3 20% automobiles; buses, minibuses, goods vehicles, construction and earth-moving equipment, specialised trucks, tractors, trailers and trailer-mounted containers, rail cars, locomotives and equipment; vessels, barges, tugs and similar

water transportation equipment; aircraft; specialised public utility plants, equipment and machinery; office furniture, fixtures and equipment; any depreciable asset not included in another class.

For operating leases, the lessee would, in this instance, be allowed a tax deduction for the lease rental payments made to the lessor.

In turn, the lessor would be allowed to claim capital allowances in respect of the leased property. The lease rental income received from the lessee would then form part of the lessor's taxable income.

In addition, the lessee whose lease qualifies as an operating lease would not be entitled to claim capital allowances. However, the lessee's interest expense in the income statement would be tax deductible. Please note that the depreciation charged for the right-of-use asset would not be a tax-deductible expense.

4.2 Relevant taxes in greater detail

TABLE 13. Relevant taxes in greater detail

	REFERENCE	DETAIL
Corporate incor		DE IME
Tax legislation	ne tax	Income Tax Act, Chapter 340 of the Laws of Uganda (ITA) Tax Procedures Code Act, 2014 (TPA)
Basis of taxation		 Uganda has a residence-based tax system. Residents are subject to tax on their global income, whereas non-residents are subject to tax on their Ugandan-sourced income only.
Definition of resident and non-resident companies		 A company is resident in Uganda if it: is incorporated or formed under the laws of Uganda; has management and control exercised in Uganda at any time during the year of income; or undertakes the majority of its operations in Uganda during the year of income. A company that does not meet the above criteria will be considered a non-resident company.
Taxing of non-resident companies		 Income is sourced from Uganda if it is inter alia derived: by a resident person in carrying on a <u>business</u>, except to the extent that it is attributable to a business carried on by the person through a branch outside Uganda; by a non-resident person in carrying on a business through a <u>branch</u> (as defined below) in Uganda; rom <u>employment income</u> or a fee for the provision of services: derived from employment or services exercised or rendered in Uganda; paid by a resident person, other than as an expenditure of a business carried on by a person outside Uganda through a branch; or

REFERENCE	DETAIL
	 paid by a non-resident person as an expenditure of a business carried on by a person through a branch in Uganda;
	• from the <u>rental of immovable property</u> located in Uganda;
	 from the <u>disposal of an interest in immovable property</u> located in Uganda or from the disposal of a share in a company the property of which principally consists, directly or indirectly, of an interest or interests in such immovable property, where the interest or share is a business asset;
	 from the <u>direct or indirect change of ownership by 50%</u> <u>or more</u> of a person other than an individual, a government, a political subdivision of a government and a listed institution located in Uganda;
	 from the <u>disposal of movable property</u>, other than goods, under an agreement concluded in Uganda for the sale of the property, wherever the property is to be delivered;
	• from a <u>royalty</u> :
	 paid by a resident person, other than as an expend- iture of a business carried on by the person outside Uganda through a branch;
	 paid by a non-resident person as an expenditure of a business carried on by the person through a branch in Uganda; or
	 arising from the disposal of industrial or intellectu- al property used in Uganda;
	• from interest where:
	 the debt obligation giving rise to the interest is secured by immovable property located, or movable property used, in Uganda;
	— the payer is a resident person; or
	 the borrowing relates to a business carried on in Uganda; and
	• a <u>management charge</u> paid by a resident person.

	REFERENCE	DETAIL
Definition of a branch		A 'branch' is defined as a place where a person carries on business and includes a place where a person:
		 carrying on business through an agent, other than a general agent of independent status acting in the ordinary course of business;
		 has, is using or installing substantial equipment or machinery for 90 days or more;
		 is engaged in a construction, assembly or installation project for 90 days or more, including a place where a person is conducting supervisory activities in relation to such project; or
		 is engaged in the furnishing of services through em- ployees or other personnel, but only if activities of that nature continue for the same or a connected project for more than 90 days in a 12-month period.
Taxation of branch profits		The after-tax 'repatriated income' of a branch is subject to tax at the rate of 15%. 'Repatriated income' is calculated according to the formula A + $(B - C)$ - D, where:
		• A is the total cost base of assets, net of liabilities of the branch on commencement of the year of income;
		• B is the net profit of the branch for the year of income;
		• C is the Ugandan tax payable on the chargeable income of the branch for the year of income; and
		• D is the total cost base of assets, net of liabilities of the branch at the end of the year of income.
Corporate income tax rate		 Resident companies and 'branches' of foreign com- panies are subject to corporate income tax at the standard rate of 30%.

	REFERENCE	DETAIL
Small busi- ness tax		Tax payable by small businesses (other than professional services and public entertainment entities) whose annual turnover or income does not exceed UGX 150 million is calculated with reference to the gross turnover generated during a year of income. No deductions are allowed for expenditures and losses incurred in the production of the business income.
Minimum tax		— Uganda does not levy a minimum tax.
Taxable income	Section 15, 17, 18, 19, 20 of the ITA	The taxable (or chargeable) income of a company is the gross income (excluding exempt income) less any allowable deductions for a year of income. Gross income of companies includes the total amount of business income, employment income and property income (including any dividends, interest, rents, royalties and any other payment derived by a person from the provision, use or exploitation of property).
Deductibility of expenses	Section 22 of the ITA	Generally, expenditure and losses incurred in the production of income (in which income is included in gross income) are tax deductible, as is the amount of any loss incurred on the disposal of a business asset, whether or not the asset was on a revenue or capital account. No deduction is allowed in respect of any expenditure or loss of a domestic, private or capital nature or any amount included in the base cost of an asset.
		Deductions of expenses against rental income are capped at 50% of gross rents. Any excess expenditure cannot be carrying forward.

	REFERENCE	DETAIL
Treatment of finance	Section 59 of the ITA	Where a person ('lessor') leases property to another ('lessee') under a finance lease:
leases		a. the lessee is treated as the owner of the property; and
		b. the lessor is treated as having granted a loan to the lessee, in respect of which payments of interest and principal are made to the lessor equal in amount to the rent payable by the lessee.
		The interest component of each payment under the loan is treated as a deductible interest expense incurred by the lessee and as taxable interest income derived by the lessor.
		A lease of property is a finance lease if it meets any of the following conditions:
		 c. the lease term exceeds 75% of the effective life of the leased property;
		d. the lessee has an option to purchase the property for a fixed or determinable price on expiration of the lease; or
		e. the estimated residual value of the property to the lessor on expiration of the lease term is less than 20% of its fair market value on commencement of the lease.
Deduction of start-up costs	Section 30 of the ITA	When expenditure has been incurred in starting up a business to produce income included in gross income or in the initial public offering at the stock market, a deduction is allowed of an amount equal to 25% of the amount of the expenditure in the year of income in which the expenditure was incurred and in the following three years of income in which the business is carried on by the person.

	REFERENCE	DETAIL			
Depreciation rates and methods		 Assets may be depreciated on a straight-line or declining-balance basis, depending on the type of asset. Most fixed assets other than land and but ings are depreciated on a declining-balance bas Assets are depreciated starting with the year in which they are first placed in service. 			
Depreciable assets		 Depreciable assets are classified into the follow- ing three classes, with separate depreciation rates applicable to each category on a declining-balance basis: 			
		Class	Category	Depreciation rate (%)	
	for	1	Computers and data processing equipment	40	
		2	Plants and machinery used in farming, manufacturing and mining	30	
		3	Automobiles; buses, minibuses, goods vehicles, construction and earth-moving equipment, specialised trucks, tractors, trailers and trailer-mounted containers, rail cars, locomotives and equipment; vessels, barges, tugs and similar water transportation equipment; aircraft; specialised public utility plant equipment and machinery; office furniture, fixtures and equipment; any depreciable asset not included in another class	20	
		for an	uction for the depreciation of an asset i initial allowance under Section 27A (s ferred to the next year of income.		

	REFERENCE	DETAIL
Industrial buildings		— Where a company has incurred capital expenditure in any year of income on the construction of an 'industrial building', as defined, and the building is used by a person during the year of income in the production of income included in gross income, the person is allowed a deduction for the depreciation of the building at the rate of 5%.
		A deduction for the depreciation of an industrial building that qualifies for the initial allowance referred to below will be deferred to the next year of income.
		An 'industrial building' is a building which is wholly or partly used by a person in inter alia manufacturing operations, research and development into improved or new methods of manufacture or approved commercial buildings.
Intangible assets		- Where expenditure has been incurred in acquiring an intangible asset with an ascertainable useful life, a deduction will be allowed in each year of that useful life in which the asset is used in the production of income included in gross income. The deduction will be the amount of expenditure incurred divided by the useful life of the asset.
Initial invest- ment allow- ances		 'Eligible items' put into service for the first time outside a radius of 50 km from the boundaries of Kampala (the capital city) are allowed a deduction equal to 50% of the cost base of the item in the first year.
		'Eligible items' are defined as plants and machinery wholly used in the production of income but exclude goods and passenger transport vehicles, appliances of a kind ordinarily used for household purposes and office or household furniture, fixtures and fittings.
		New industrial buildings placed into service for the first time during a year of income are granted an allowable deduction of an initial allowance equal to 20% of the industrial building cost in that year.

	REFERENCE	DETAIL
Other tax incentives		- N/A
Loss carry- forward		Assessed tax losses are carried forward and allowed as a deduction when determining chargeable income in the following year of income.
		Losses on foreign-sourced income cannot be set off against domestic income.
		When, during a year of income, there has been a change of 50% or more in the control (or underlying ownership) of a company compared with its ownership one year previously, the company may not deduct an assessed loss in the year of income or in subsequent years, unless the company, for a period of two years after the change or until the assessed loss has been exhausted if that occurs within two years of the change:
		 continues to carry on the same business after the change as it carried on before the change; and
		 does not engage in any new business or investment after the change, where the primary purpose of the company or the beneficial owners of the company is to utilise the assessed loss so as to reduce the tax payable on the income arising from the new business or investment.

	REFERENCE	DETAIL
Transfer pricing	Statutory Instrument 2011 No. 30	In terms of Uganda's transfer pricing rules, transactions between associates (related parties) must be entered into on an arm's length basis.
	(The Income Tax (Trans- fer Pricing) Regulations 2011)	Two persons are treated as associates of each other when any person acts, or is likely to act, in accordance with the directions, requests, suggestions or wishes of another person, whether or not these are communicated to the first-mentioned person.
		A company is an associate of another person if that person, either alone or together with an associate or associates, controls 50% or more of the voting power in the company, either directly or through one or more interposed companies, partnerships or trusts.
		The Ugandan Transfer Pricing Regulations are applied in a manner consistent with the OECD Transfer Pricing Guidelines. These Regulations apply to all controlled transactions, where a person who is party to a transaction is located in Uganda and is therefore subject to tax in Uganda and the other person who is a party to the transaction is located in or outside Uganda.
		An entity will be required to prepare a transfer pricing policy, which should be available by the time of filing the income tax return (six months after the end of the financial year). Failure to provide the required information pertaining to transfer pricing to Uganda Revenue Authority ('URA') exposes the taxpayer to a penalty of UGX 50 million. In addition, the absence of transfer pricing documentation enables URA to make adjustments to the set transfer prices, and this could result in additional tax and penalties for late payment and underestimation of tax payable.

	REFERENCE	DETAIL
Limitations on deductibil- ity of interest	Section 25 of the ITA	Generally, a deduction is allowed for interest incurred during the year of income in respect of a debt obligation to the extent that the debt obligation has been incurred by the person in the production of income included in gross income.
		However, the amount of deductible interest in respect of all debts owed by a taxpayer who is a member of a group is limited to 30% of the taxable earnings before interest, tax, depreciation and amortisation (EBITDA). The restriction does not apply to financial institutions and insurance companies.
		A taxpayer whose interest exceeds the limit may carry forward the excess interest for not more than three years.
Compliance req	uirements	
Tax year		 A tax year ('year of income') in Uganda generally means the 12 months ending on 30 June.
		A taxpayer may apply in writing to the URA to use a substituted year of income — being a 12-month period other than the normal year of income.

	REFERENCE	DETAIL
Tax returns and assess- ment	Section 92(a) of the ITA	— Any company chargeable to tax is required to furnish an annual income tax return not later than six months after the end of that year of income. An income tax return should be accompanied by finan- cial statements that have been signed off by the person other than an employee of the taxpayer who prepared them for a remuneration.
		Uganda applies a self-assessment system. The URA is deemed to have made an assessment on the chargeable income of the taxpayer and the tax payable on that chargeable income is the tax amount shown in the self-assessed tax return.
		Companies are also required to submit initial provisional and amended provisional income tax returns on or before the last day of the 6th and 12th months of the year of income.
		The amended provisional income tax return should be 90% accurate lest it exposes the company to under-provision penalties at a rate of 20% on the difference between the actual and projected tax payable.
Payment of tax		 Corporate taxpayers are liable to pay two instal- ments of provisional tax, on or before the last day of the 6th and 12th months of the year of income.
		The amount of each instalment is calculated as 50% of the estimated tax payable for the year of income less any tax withheld.
Accounts and records		 Every taxpayer is required to maintain, in English, for a period of at least five years after the end of the tax period, records, including in electronic for- mat, as may be required to determine the taxpayer's tax liability under tax law.

	REFERENCE	DETAIL
Capital gains to	ıx	
Basis of taxation		 Capital gains on the disposal of assets are not taxed under a separate regime, but are included in ordinary taxable income and are subject to corpo- rate income tax at the standard rate.
Rate		- 30%
Withholding tax	(es	
Basis of taxation		 Withholding tax is levied on: non-resident persons who derive inter alia dividends, interest, royalties, rent or management charges from sources in Uganda or income under a Ugandan-sourced services contract; Ugandan residents who receive income in the form of dividends, interest, management and professional fees and payments for certain goods and services as set out below; and Ugandan residents in respect of goods imported into Uganda.

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	REFERENCE	DETAIL		
Dividends,			WHT rate	
interest, royalties and		Payment to	Residents	Non-residents*
fees		branch profits	N/A	15%
		dividends	0% (if at least 25% voting rights) 15%	15%
		interest	15% 20% (govern- ment securities) 10% (govern- ment securities with a maturity period of at least 10 years)	15% 20% (govern- ment securities) 10% (govern- ment securities with a maturity period of at least 10 years
		royalties	N/A	15%
		management or profes- sional fees	6% (unless list- ed as exempt entity)	15%
		payments for goods and services by the gov- ernment, government institutions and any 'designated person'	6%	-
		Ugandan-sourced services contract	-	15%
		Imported goods	6%	-
		* The withholding tax ra relevant double taxation		d in terms of a

	REFERENCE	DETAIL
'Royalty'		A royalty is defined as any payment, including any similar amount, made as consideration for inter alia:
		 the use of, or the right to use, any patent, design, trade- mark or copyright, or any model, pattern, plan, formula or process, or any property or right of a similar nature;
		 the imparting of, or undertaking to impart, any scientific, technical, industrial or commercial knowledge or infor- mation; or
		 the use of, or the right to use, any tangible movable property.
'Ugan- dan-sourced services contract'	Section 85, 121 of the ITA	A 'Ugandan-sourced services contract' is defined as a contract under which the principal purpose of the contract is the performance of services which give rise to income sourced in Uganda and any goods supplied are only incidental to that purpose.
		Any person who enters into an agreement with a non-resident for a Ugandan-sourced services contract is required, within 30 days of the date of entering into such agreement, to notify the URA in writing of:
		• the nature of such agreement;
		• the likely duration of the agreement;
		 the name and postal address of the non-resident person to whom payments under the agreement are to be made; and
		 the total amount estimated to be payable under the agreement to the non-resident person.

REFERENCE	DETAIL
	Ugandan companies are required to deduct 6% withholding tax on payments to other Ugandan entities if:
	 they are paying management or professional fees as defined; or
	 they have been 'designated' by a notice issued by the Minister of Finance that they are required to deduct withholding tax on payments to certain service providers.
	The list of 'designated persons' is updated annually, usually in July, and typically includes established entities with proper accounting systems which can easily be reviewed/audited by the URA to confirm that withholding tax amounts have been deducted and paid appropriately.
	If an entity is added to the list, it will be obliged to deduct 6% withholding tax on all supplies whose aggregate value in a month exceeds UGX 1 million (including the supply of goods and professional services).
	However, if the supplier/service provider qualifies for exemption from withholding tax, no withholding tax is to be deducted from payments to such service provider/supplier (see below).
	Generally, a 6% withholding tax is due in respect of any goods imported.
	In practice, the URA raises an assessment on the importation of goods, setting out all relevant taxes to be paid, including customs duties, withholding tax and the infrastructure levy. These taxes are to be paid on importation at the border post.
	REFERENCE

	REFERENCE	DETAIL
Exemption from the 6% withholding		The URA updates its list of persons exempt from the 6% withholding tax on supplies, services and imports every financial year, which runs from July to June.
tax		Any company can apply for exemption, but this is generally only granted, at the discretion of the URA, to well-established taxpayers with a proper track record (three years) of good compliance with all types of taxes.
		In the case of newly established companies without a three-year track record, the URA will consider: (a) the potential impact of the withholding tax on the cash flows and capital of a project; (b) the structures put in place by the company to ensure tax compliance; and (c) the compliance history during its first few months of operation.
Double tax- ation agree- ments (DTAs) entered into by Uganda		 DTAs are in force with Denmark, India, Italy, Mau- ritius, the Netherlands, Norway, South Africa, the United Kingdom and Zambia.
		There is currently no DTA in force between Germany and Uganda.
Domestic anti-treaty shopping provisions		In terms of domestic anti-avoidance provisions under the ITA, any relief provided for by a DTA is only available to a beneficial owner with full and unrestricted ability to enjoy the income, to determine the income's future use and who has economic substance in the country of residence. The restrictions do not apply to a public listed company.
		The 2022 Income Tax (Amendment) Act broadened the definition of a 'beneficial owner' to include third-party control (customer) and a person who exercises ultimate control over a legal person.

	REFERENCE	DETAIL	
Compliance requirements			
Payment of tax withheld	Section 123 of the ITA	The tax withheld must be paid to the URA within 15 days after the end of the month in which the payment subject to withholding tax was made.	
Accounts and records	Section 15 of the TPA	Every taxpayer is required to maintain, in English, for a period of at least five years after the end of the tax period, records, including in electronic format, as may be required to determine the taxpayer's tax liability under tax law.	
Value added tax	<		
Legislation		Value Added Tax Act, Chapter 349 of the Laws of Uganda (the VAT Act)	
Basis of taxation	Section 4 of the VAT Act	VAT is levied on the supply of goods and services and on the importation of goods and services in Uganda.	
VAT rate		18%	
Registration threshold	Section 7 of the VAT Act	A person whose taxable turnover during any period of three calendar months exceeds or is expected to exceed a quarter of the annual registration threshold of UGX 150 million must register for VAT purposes.	
Time of	Section 11,	A supply of goods or services occurs:	
supply	14, 17 of the VAT Act	 when the goods are applied to own use, on the date on which the goods or services are first applied to own use; 	
		 when the goods or services are supplied by way of a gift, on the date on which ownership of the goods passes or the performance of the service is completed; or 	
		• in any other case, on the earliest of the dates on which:	
		 the goods are delivered or made available, or the performance of the service is completed; 	
		— payment for the goods or services is made; or	
		— a tax invoice is issued.	

	REFERENCE	DETAIL
		An import of goods take place:
		 when customs duty is payable, on the date on which the duty is payable; or
		• in any other case, on the date the goods are brought into Uganda.
VAT on im- ported goods		VAT on imported goods is payable on the date on which the imports are cleared under the customs clearance procedures.
		The vatable value is the total of:
		 the value of the goods for customs duty purposes (cost, insurance and freight (CIF)), packing costs, selling com- mission and royalty or licence fees) and the value of any other services excluded from the customs duty value; and
		 the amount of customs duty, excise tax and any other fiscal charge payable (other than VAT).
VAT on imported services	VAT Regula- tions	The VAT Act does not define 'imported services', but the URA generally considers imported services to be services provided by a person normally resident outside Uganda who is not required to register for VAT in Uganda.
		A taxpayer who receives a supply of services from a foreign supplier must account for the VAT due on the supply in terms of a reverse-charge mechanism, and the taxpayer must account for that VAT on the earliest of the dates on which:
		• performance of the service is completed;
		• payment for the service is made;
		• the invoice is received from the foreign supplier.
		Such VAT is generally not allowed as an input credit and the cost is borne by the person receiving the imported service.

	REFERENCE	DETAIL
Exemptions		
Specified goods and	Section 19(1) and	The following goods and services are exempt from VAT, among others:
services	services paragraphs (sc),(t) and (dda) of the Second Schedule to the VAT Act	 the supply of deep cycle batteries, composite lanterns and raw materials for the manufacture of deep cycle batteries and composite lanterns;
		 the supply of photosensitive semiconductor devices, including photovoltaic devices, whether or not assembled in modules or made in panels, light-emitting diodes, so- lar water heaters, solar refrigerators and solar cookers; and
		 the supply of any goods and services to the contractors and subcontractors of hydroelectric power, solar power, geothermal power or biogas and wind energy projects.
Imported	Section 20	An import of goods is an exempt import if the goods:
goods	of the VAT Act	 are exempt from customs duty under the Fifth Schedule to the East African Community Customs Management Act, 2004, except compact fluorescent bulbs with a power connector cap at the end, and lamps and bulbs made using light-emitting diode (LED) technology for domestic and industrial use; or
		• would be exempt had they been supplied in Uganda.
Imported services	Section 20 of the VAT Act	An import of a service is an exempt import if the service would be exempt had it been supplied in Uganda or would be used in the provision of an exempt supply.

	REFERENCE	DETAIL
projects 24	Section 24(6) of the VAT Act	The VAT payable on a taxable supply provided by a supplier to a contractor executing an 'aid-funded project' is deemed to have been paid by the contractor provided the supply is for use by the contractor solely and exclusively for the aid-funded project.
		Similarly, the VAT payable on a taxable supply made to a government ministry, department or agency by a contractor executing an aid-funded project is deemed to have been paid by that ministry, department or agency if the supply is for use solely and exclusively for the aid-funded project.
		An 'aid-funded project' is defined as a project financed by a foreign government or a development agency through loans, grants and donations.
Input credits	Section 28 of the VAT Act	A taxable person is allowed an input credit for the tax payable in respect of taxable supplies made to and on all imports of goods and services by such person during the tax period if they are:
		• directly related to taxable transactions; and
		• supported by fiscal invoices issued through the Electronic Fiscal Receipting and Invoicing System (EFRIS).
		No input credit is allowed in respect of imported services.
		When a taxpayer makes provides taxable and exempt supplies, only the portion of the VAT input credit corresponding to the percentage of taxable supplies is allowed, depending on the method of apportionment being used by the taxpayer.
		A taxable person can only utilise an input tax credit in respect of expenses incurred within six months from the date of the invoice.

	REFERENCE	DETAIL	
Administration	Administration		
Deferment of VAT on the importation of plants and machinery	The VAT (Deferment of Tax on Plant and Machinery) Regulations, 2013)	An importer of plants and machinery may apply to the URA to defer the payment of tax due in respect of imported plants and machinery to be used in the manufacture of goods or the provision of services. The plants and machinery may not be disposed of during the deferment period without approval by the URA. The period of deferment is 15 days in the case of a person making taxable supplies.	
Electronic invoicing	Section 73A(2) of the TPA Statutory Instrument, 2020 No. 82 The Tax Procedures Code (E-invoicing and E-receipting) Regulations, 2020	Taxpayers are required to issue a fiscal invoice via any of the following methods: • URA web portal; • a system-to-system mechanism; • electronic fiscal devices (EFDs); or • a client app.	
VAT withhold- ing agents	Section 5(2) of the VAT Act The VAT (Designation of Tax Withholding Agents) Notice	Under the VAT withholding provisions, a designated person is required to withhold 6% of the taxable value of the supply when making a payment. The Minister of Finance, Planning and Economic Development issued a notice cited as the Value Added Tax (Designation of Tax Withholding Agents) Notice, 2020 (published in September 2021), listing the designated agents. There is an exemption for compliant taxpayers that is expected to be based on an annual renewal conditional on good VAT compliance behaviour.	

	REFERENCE	DETAIL	
Compliance req	Compliance requirements		
Returns and		For tax purposes, the tax period is a calendar month.	
tax payments		A taxable person must lodge a tax return with the URA and make payment of the amount of VAT due within 15 days of the end of each tax period. The return must show the amount of tax payable for the period, the amount of input tax credit claimed and other matters as may be prescribed.	
		A taxpayer has to register the payment on the electronic system with one of the approved banks, subsequent to which payment can be made with the chosen bank.	
Accounts and records	Section 15 of the TPA	Every taxpayer is required to maintain, in English, for a period of at least five years after the end of the tax period, records, including in electronic format, as may be required to determine the taxpayer's tax liability under tax law.	
Customs duties			
Legislation		 Customs duties are levied on imported goods pursu- ant to the East African Community Customs Man- agement Act, 2004 ('EACCMA'). 	
Basis of taxation		 Duties are both ad valorem and specific, although ad valorem duties predominate in the tariff. 	
Valuation of imported goods		 A 'customs value' must be determined as the basis for the computation of duties on importation, which include customs duty, VAT, withholding tax and infrastructure levy. 	
		The value of an import for ad valorem duty is the cost, insurance and freight (CIF) value.	
		Uganda is a signatory to the World Trade Organisation (WTO) Agreement and the URA uses the valuation method of the WTO's General Agreement on Tariffs and Trade (GATT), i.e. the transaction-value method.	

	REFERENCE	DETAIL
Rates		 The applicable rates are: 0% for basic raw materials and essential commodities; 10% for semi-processed goods; 25% for finished products; and 35% to 100% for sensitive items.
		'Sensitive items' are those produced by an industry that is protected by a particular state, e.g. milk and cream, wheat, maize, rice, cotton and tobacco. Components of a photovoltaic power plant would not typically constitute 'sensitive items'.
Exemptions		
Regional importation		 Subject to the rules of origin, the duty rate for goods originating from partner states of the East African Community ('EAC') is 0% under the customs common market.
		Preferential tariff treatment is also applied to goods imported under the Common Market for Eastern and Southern African (COMESA) and the South African Development Community (SADC) arrangements or any other approved tariff arrangement.
Specialised equipment		 Compact fluorescent bulbs (energy saving bulbs) with power connector cap at one end are exempt from customs duties.
		 Specialised equipment, accessories and spare parts for development and generation of solar energy, including deep cycle batteries, are exempt from customs duties.

	REFERENCE	DETAIL
Temporary imports		Subject to the provision of the required security, import duties are suspended on temporary imports of construction machinery of a specialised nature for use in the construction sector not specifically exempted from customs duties, subject to the provision of required security and the fulfilment of relevant conditions. The security or bond would not be returned and/or customs duties would be applicable if the conditions upon which the suspension was given are not met or if such equipment is sold locally.
Donor-funded projects	Item 10 of the Fifth Schedule to the EAC- CMA	Imports for use in/for donor-funded projects are exempt from customs duties.
Other import du	ıties	
Infrastruc- ture levy	Legal No- tice No. EAC/22/20 14 pub- lished on page 8 of the at- tached EAC Gazette of 20 June 2014	An infrastructure levy is due at a rate of 1.5% of the CIF value of all imported goods which are imported from outside the EAC and are subject to customs duties. Goods exempted under the EACCMA EAC Customs External Tariff are not subject to the levy. The duty is included on the customs assessment statement issued by URA on importation and is payable upon importation.

	REFERENCE	DETAIL
Environmen- tal levies	Finance Acts	 Environmental levies are charged on the importation of: motor vehicles that are eight years or older at the rate of 20% of the value of the vehicle, as determined for customs duty purposes; and used household appliances between UGX 20,000 and UGX
		50,000, depending on the nature of the item.
Stamp duties		
Legislation		The Stamp Duty Act, 2014
Basis of taxation and rates		Stamp duty is levied on a wide range of instruments and documents, including hire purchase agreements, composition deeds, leases, conveyances, transfers, share warrants, gifts and agreements relating to the deposit of title deeds, either ad valorem at rates ranging from 0.5% to 2% or at a flat rate between UGX 10,000 and UGX 100,000, depending on the nature of the instrument.
		Stamp duty at a rate of 0.5% is incurred on company formation and capital-raising, whereas 1.5% is payable on the total value of the transfer of shares in a Ugandan company and immovable property. Stamp duty of UGX 15,000 is charged on letters of credit and the memorandum of association of a company, for example.
Excise duties		
Legislation		Excise Duty Act, 2014
Basis of taxation	Section 2-5 of the Excise Duty Act	Various excise duties are levied on various specified excisable goods manufactured and services rendered in or imported into Uganda, including tobacco and alcohol products, cement, fuel, telecommunication services and mobile money transactions.
		Duty is generally assessed on the normal selling price of the goods and on the ex-factory price for locally manu- factured goods.
		The rates are generally ad valorem and are assessed on a per-litre or per-kilogram basis. The rates vary widely, depending on the product and the unit quantity in which it is sold.

	REFERENCE	DETAIL	
Application		Solar equipment and products are not subject to duty in Uganda.	excise
Exemptions	Schedule 3 to the Excise Duty Act	The goods exempt from excise duty are imported which are exempt from import duty under the Fitule to the EACCMA.	
Employee taxes	; ;		
Income tax			
Basis of taxation		On a similar basis to that of companies, resident uals are subject to Ugandan income tax on their income, whereas non-resident individuals are su tax on their Ugandan-sourced income only.	global
Definition of resident	Section 19(1) of the	An individual is deemed to be resident in Uganda of income if they, inter alia:	for a year
	ITA	• have a permanent home in Uganda;	
		• are present in Uganda:	
		 for a period(s) amounting in aggregate to 183 d more in any 12-month period that commences d during the year of income; or 	
		 during the year of income and in each of the tw ing years of income for periods averaging more days in each such year of income. 	
Personal income tax		The income tax rates applicable to both resident non-resident individuals are:	and
		Annual chargeable income (UGX)	Tax rate
		Up to 2,820,000	0%
		2,820,001 - 4,020,000	10%
		4,020,001 - 4,920,000	20%
		4,920,001 - 120,000,000	30%
		Above 120,000,000	40%

	REFERENCE	DETAIL	
Compliance obl	Compliance obligations		
Withholding of tax by employers	Section 116, 164 of the ITA Statutory Instrument 340-1 (Income Tax (Withhold- ing Tax) Regula- tions)	Every employer is required to withhold the relevant tax from payment of employment income to an employee and to remit the same to the URA on or before the 15th day of the subsequent month.	
Tax returns and payments	Section 111 of the ITA	Individual taxpayers are obliged to file a return within six months of the end of the year of income. However, no income tax return is required if the income of the individual exclusively consists of income derived from a single employer. Individual taxpayers are also required to submit provisional income tax returns by the end of the 6th and 12th months of the year of income. Any provisional tax due should be paid in four instalments on or before the last day of the 3rd, 6th, 9th and 12th months of the year of income. The amount of each instalment of provisional tax for a year of income is calculated according to the following formula: (25% x A) - B In this case: A is the estimated tax payable by the provisional taxpayer for the year of income; and B is the amount of any tax withheld under this Act, prior to the due date for payment of the instalment, from any amounts derived by the taxpayer during the year of income which will be included in the gross income of the taxpayer for that year.	

	REFERENCE	DETAIL
Other employee	taxes & levies	
Social secu- rity contribu- tions		 Both employees and employers must make monthly so- cial security contributions to the National Social Security Fund (NSSF).
		 The employer contribution rate is 10% of the employee's monthly wage, whereas the employee contribution rate is 5%.
		 Subject to the approval of the NSSF, expatriates are not obliged to contribute to NSSF if they are not ordinarily resident in Uganda and are to be employed in Uganda for a continuous period of not more than three years or such longer period as is permitted by the NSSF.
		 However, employers of non-resident expatriate employees are required to contribute 10% of the employee's monthly wage, which is paid into a reserve account and cannot be claimed at the end of the employment period.
Local Service Tax		 All employees in gainful employment are liable to pay a local service tax to the local municipal council in their area of residence, ranging from UGX 5,000 to UGX 100,000 per year, depending on the monthly net income earned by such employee.

Source: Author's own table, ENSafrica Advocates (2023)

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Appendix 1: Update on the new net-metering regulation

Addendum to the guide "Commercial and industrial renewable energy projects in Uganda - Review of regulatory, financial reporting and tax aspects"

After the completion of this study, a new net metering regulation was published by Uganda's Electricity Regulatory Authority (ERA) on July 31st, 2024. The regulations apply to all prosumers (residential, commercial and industrial consumers supplied by a licensed distribution company) who generate electricity on the consumer's side of the meter, using renewable energy source whose capacity does not exceed 0.5 MW. The net metering regulations is entirely based on the reconciliation of net import and export of energy without any claim of monetary compensation by the prosumer. While this study does not analyze these changes in detail, they may have significant implications, in particular for the findings discussed in chapter 2 "Regulation and licensing". Future research should consider the effects of this new regulation on the solar PV sector in Uganda.

1. Application of the net metering regulations

The regulations apply to prosumers and distribution licensees.

- A person applying for distribution license shall include a net metering plan for all customer categories.
- A person intending to put in place a net metering system applies to the distribution licensee.
- A distribution licensee may grant an application for net metering after the prosumer has satisfied the regulations requirements.

2. Eligible technology and customers

- All renewable energy technologies for the generation of electricity qualify for net metering including Solar, Wind, Hydro, Geothermal, Biomass, Biogas, Biofuel, and Fuel cell resources.
- All customer categories (residential, commercial and industrial) supplied by a distribution licensee may enter into a net metering agreement.

3. Generation capacity limits

- The onsite capacity of a generation facility for a prosumer entering into a net metering agreement shall
 - be below 500 kW for all customer category,
 - for all customers be capped to the maximum load demand determined by the licensee over the 12 months periods preceding the application for net metering.
- The aggregate generation capacity of net metered facilities in a licence area of a distribution licensee shall be determined by a distribution licensee, and the maximum aggregate generation capacity of net metering systems shall be 5 % of the system peak demand, subject to review by ERA on annual basis.

^{*} Regulations & Codes - ERA - Electricity Regulatory Authority

4. Application process for net metering

- A person who intends to develop a net metering system shall notify the distribution licensee.
- Upon receipt of the notice, the holder of distribution license shall assess
 - the available line capacities in prosumer's distribution area,
 - the proposed net metering system is within the maximum aggregate generation capacity approved by ERA.
 - The maximum load demand of the prosumer
- Upon confirmation of the assessment, the holder of the distribution licence, issues a no objection to the prosumer to undertake the interconnection feasibility study
- Depending on the outcome of the interconnection feasibility study, the prosumer shall
 - Apply to a distribution licensee using the net metering application form,
 - Pay the requisites fee for net metering,
 - Submit the interconnection feasibility study report to the distribution licensee.

- The distribution licensee shall process the application and notify the applicant within sixty (60) days from the date of receipt of the application.
- The notice from the distribution licensee shall state if the application has been approved or rejected.

5. Net metering agreement

- Where an application is approved, the licensee and the prosumer shall enter into a net metering agreement, a copy of which shall be submitted to ERA within 7 working days for no-objection.
- A net metering agreement shall be valid for a period of not exceeding 10 years, upon expiry may be renewed for further period not exceeding 10 years.

6. Costs, tariffs, compensation, and billing

- The prosumer shall be responsible for all costs associated with the interconnection facilities.
- For energy net-offs, all energy exported to the grid shall be subjected to a 20 % discount

- factor to compensate for distribution system costs related to virtual system storage of energy etc.
- There is no monetary compensation from the distribution licensee to the prosumer for the excess energy exported to the distribution network.
- The energy net-offs, reconciliation procedures, and conditions for rollover of excess generation or net imports shall be done on monthly basis.
- On a monthly basis, the prosumer shall be billed the charges as usual except the charges related to kWh units, the energy part of the bill shall be affected, the fixed charge part and non-energy part of the bill of the customer will not be credited with any net export from the generator of the customer.
- Any unused credits shall be forfeited at the end of the licensee's financial year.

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