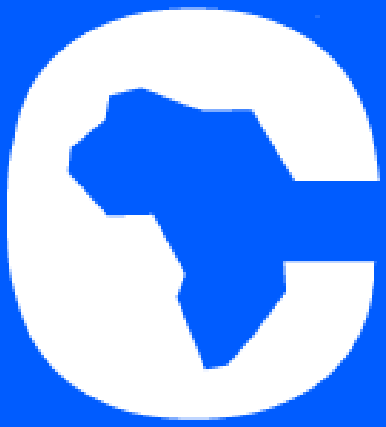

FINANCING GUIDELINES AND BUSINESS MODELS FOR CAPTIVE SOLAR PV PROJECTS

Tool 1

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Supported by:

Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety

based on a decision of the German Bundestag

IKI INTERNATIONAL CLIMATE INITIATIVE

Frankfurt School
FS-UNEP Collaborating Centre
for Climate & Sustainable Energy Finance

UN environment programme

INTRODUCTION

This tool is published under the project titled "Clean Captive Installations for Industrial Clients in Sub-Saharan Africa".

The Project

The project aims to demonstrate the economic and financial viability of clean captive energy installations for industries and to enhance their adoption in the region and beyond to the entire continent. Captive installations refer to the energy generation technologies installed by industrial or commercial organizations on their sites. Those installations are deemed captive as the electricity produced is generated for the industrial plant's own use and sometimes for neighbouring communities. Clean captive installations refer to those installations powered by renewable sources of energy such as solar or industrial waste. Captive power plants can operate off-grid or can be connected to the grid to feed in excess generation.

Renewable energy captive installations alleviate the pressure to generate electricity from national grids and reduce industrial clients' needs to rely on private supplementary fossil-fuelled generators, which are expensive to run. These clean captive installations are frequently referred to as the second generation of renewable energy business models, as they do not rely on national governments' incentivizing policies to enhance the deployment of clean energy technologies.

The "Clean Captive Installations for industrial Clients in Sub-Sahara Africa" project will strengthen the ability of the region to move towards low carbon-emitting development strategies. It also contributes to several Sustainable Development Goals, including Climate Action (SDG 13), Responsible Consumption and Production (SDG 12), Affordable and Clean Energy (SDG 7) and Industry, Innovation and Infrastructure (SDG 9). The project will raise awareness among industry players, financiers and governments, and will support the dissemination of clean modern energy technology through business models tailored to the national contexts and beyond throughout Sub-Saharan Africa.

This project is part of the International Climate Initiative (IKI) of Germany. The Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN) supports this initiative based on a decision adopted by the German Bundestag.

The implementing team of the project comprises the United Nations Environment Programme (UNEP) in partnership with its collaborating centre at Frankfurt School of Finance & Management (Frankfurt School). The project's activities fall under three components:

- Component 1: Clean Captive Installation Accelerator
- Component 2: Policy and capacity building
- Component 3: Knowledge hub

The Tool

This tool falls under Component 1. Under this component, four main tools are provided as follows:

- Tool 1: "Financing guidelines and business models for solar PV Captive Systems"
- Tool 2: "Metrics for assessing financial viability of renewable energy Projects/Cost Benefit Analysis of renewable energy programmes"
- Tool 3: "User Manual for the preliminary financial model to assess the viability of solar PV captive systems for businesses"
- Tool 4: "Best Available Technology (BAT) for solar PV captive systems"

This tool provides an introductory guideline to support off-takers, solar developers, EPCs and investors involved in the commercial and industrial business sector to understand the various financing options for captive solar PV electricity generation projects available in the market and to support them in choosing the optimum solution for their needs. These financing options are focused mainly on projects that typically have an installed capacity of up to 1MWp. This tool first considers various financing structures from the perspective of the commercial and industrial business (off-taker) and subsequently includes considerations from the perspective of the project developers and financiers.

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For more information

For more information about this document or on the *Clean Captive Installations for Industrial Clients in Sub-Sahara Africa* project, visit: www.captiverenewables-aftrica.org
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1. FINANCING CONSIDERATIONS FOR POWER CONSUMING BUSINESSES

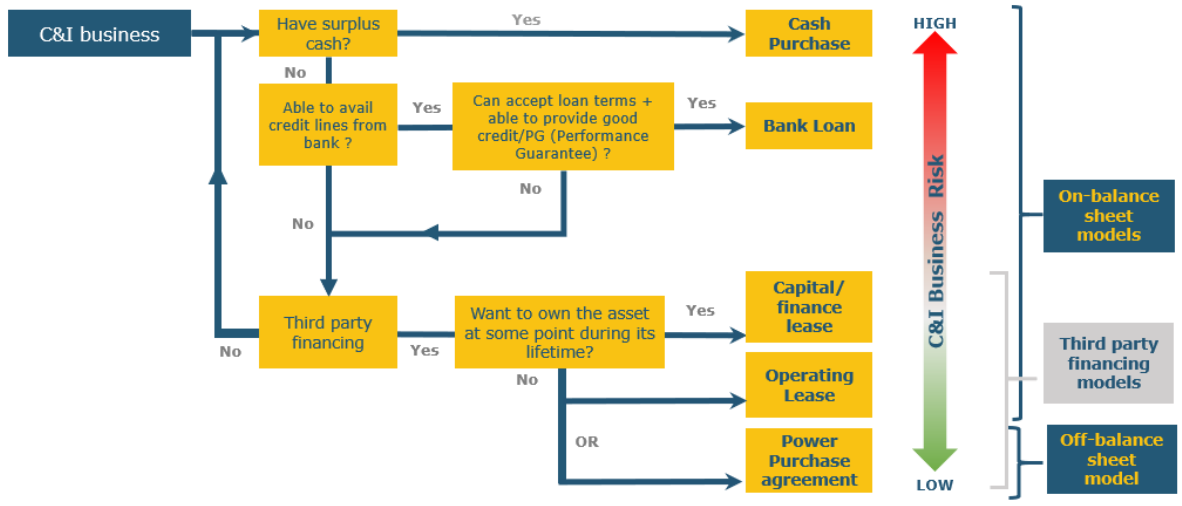
When choosing the most suitable financing structure, power consuming businesses should look into several variables including:

- Who initiates the project, i.e. is an energy service company approaching the C&I business with a project proposal or is the C&I business actively looking for an installer?
- The financial means for funding the captive solar PV project by either the C&I business and/or the project developer; this further helps determine the business model;
- The transaction size – which is very relevant for both ownership and 3rd party financing models.

There are a number of alternative financing structures as will be seen in the following sections. The various parties involved (lenders, tax equity investors[1], lessors, etc.) add additional complexities and provide interesting opportunities to the application of these financing structures/tools.

Illustrated below is a finance map for solar projects that guides a C&I business interested in considering captive solar PV project for their energy consumption needs. The finance map below discusses the best course of financing solutions available based on needs and constraints.

***FIGURE 1** Simplified finance map for captive solar PV projects.*



When looking at possible balance sheet solutions for financing captive solar PV projects, from the C&I power consumer viewpoint, there are two main financing structures available, namely "on-balance sheet structure" and "off-balance sheet structure".

On-balance sheet structures are of two types. One is the "ownership model", and the other is the

[1] *Tax equity investors: under this structure, a tax investor (defined as an investor from the company that owns the project assets) receives loan from the financial institute in exchange for the tax benefits*

"lease model" type. Conversely, off-balance sheet structure, refers to the "PPA model".

Leases and PPA are also considered third party financing models, since both models do not require the C&I power consuming business to finance the asset as the energy supplier (i.e. a third party) will finance and (may also) own the asset.

Captive solar PV system involves the following parties: the energy consuming business (off-taker), the solar PV system provider/developer, and the financier/bank. Definitions of each party are expressed as follows:

- Off-taker in this case can be known as electricity consumer, firm or business (industrial or commercial), borrowers, or lessee when the system is provided under a lease agreement;
- The solar PV system provider/ developer is referred to as an Engineering, Procurement and Construction (EPC) company/ an Energy Service Company (ESCO), or the lessor when the system is provided under a lease agreement;
- Banks or financiers who provide required financing either to the power consumer or to the system developer.

Two financing structures (business models) will be discussed below: (i) On-balance sheet structure; and (ii) Third party financing structures.

The next sections give more details on the different models available. For ease of understanding, only the ownership model will be considered as "on-balance sheet" model. Lease and PPA will be considered as "third party financing" model.

2. OWNERSHIP MODEL (ON-BALANCE SHEET STRUCTURE)

2.1. Description

In this model, the C&I business will be able to finance the captive solar PV project with their own equity. However, the C&I business is most likely to approach their bank for debt financing. The most important (and interlinked) determinants for debt financing are the creditworthiness of the business and whether it fulfills the lending criteria that the bank stipulates (e.g. in terms of collateral).

Smaller businesses, i.e. SMEs, often have difficulties in accessing debt finance. Their creditworthiness is (perceived as) not sufficient and/or collateral does not provide adequate cover in order to secure loans from banks. Additionally, existing unencumbered assets may be inadequate to provide collateral. Typically, banks look at cash flows resulting from the clean captive project, i.e. cost savings that arise due to lower electricity costs offsetting the loan repayment. However, the elevation of the loan is subject to the applicability of their creditworthiness and adequate collateral. For these reasons, it is frequently challenging for smaller businesses to install captive generation capacity on their own.

In comparison, larger companies and corporates tend to have established credit history, more stable revenue base and controlled costs. Though the latter characteristic proves to be challenging for the uptake of captive generation for larger businesses and SMEs alike, it seems logical to reduce operational expenses, i.e. electricity costs, by installing own capacity. However, the project will freeze-in capital (debt and/or equity) and will not be available for the company's core business. Since the clean captive investment is usually benchmarked against other types of investments, it loses against investments into core business activities that are easier to understand and plan from the company's perspective. If other types of investments seem less worrisome and/or promise to deliver more benefits (increasing revenues or reducing costs), then prudent management would favour such investments. It is usually the case when credit lines are almost exhausted, and equity is rather limited that investments need to be prioritized diligently.

However, management should be aware of the significant positive impacts of investing in clean captive installations projects on enhancing the operational expenses of the businesses such as energy costs savings and security/reliability of power supply. In most Sub-Saharan African countries, the tariff for energy generation from captive solar PV systems is less than the grid tariffs (e.g. it is estimated in Kenya that the tariff from solar PV system is 18% less than the industrial grid tariff and 13% less than the commercial grid tariff)(BNEF, 2019). This will have a significant impact on reducing the operational expenses of any C&I business and will reduce the dependency of these businesses on diesel generators resulting in significant fuel savings. Additionally, the security/reliability of the power supply from solar PV systems reduces the losses incurred by the businesses due to the interruptions on the production lines or the daily operations and the respective equipment damages.

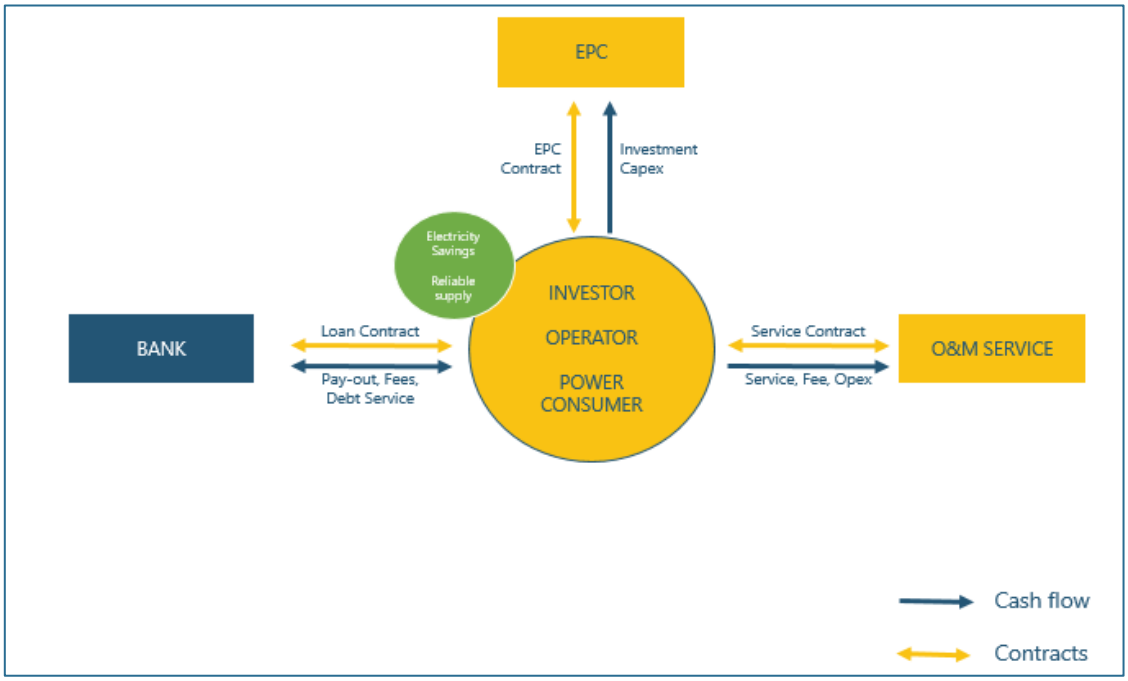
In summary, a C&I business could choose to purchase the asset outright if:

- They have the necessary cash to meet repayment requirements;
- They are unlikely to relocate premises at least during the lifetime of the PV system – c. 25 years;
- They would like to own the solar PV system on their balance sheet, for example to benefit from a tax incentive such as the Investment Deduction Allowance (IDA) in Kenya;
- They choose to use a suitable combination of loan financing and upfront equity investment, provided the off-taker is credit worthy to avail competitive bank financing. The debt to equity ratio will have a good impact on the investment and will result in an acceptable IRR

to the shareholders

- They want to generate enough savings to break-even in a few years, and also be able to generate green energy and have future energy savings (subject to solar irradiation at the location and if the asset is properly maintained and operated).

***FIGURE 2** Ownership model.*[2]



2.2. Accounting Considerations

Under the ownership model, the asset is purchased up-front with either equity or debt or a combination of equity and debt by the C&I business/power consumer. Furthermore, depending on the internal expertise available, the asset's O&M may either be taken care of internally, or may be outsourced to an external contractor.

From the perspective of the C&I business/power consumer, the following is recorded on the respective financial statements:

Balance sheet - the asset is recognised with a corresponding debit of cash and/or debt liability. Likewise, the O&M service contract is recognized as a liability.

Income statement - depreciation expense is recorded by the C&I business, and corresponding interest expense (in case of debt purchase) is recorded. Corresponding tax benefits can be claimed by the owner of the asset.

[2] *Illustrated figure is of a basic ownership model and assumes that the off-taker who is also the solar system asset owner will generate enough electricity for own-consumption. However, solar PV systems are usually used in combination with a back-up genset or battery storage or grid electricity during times when solar cannot produce required electricity. Hence this basic model assumes no other power flow apart from the energy generated by the solar system.*

2.3. Suitable financing instruments (not mutually exclusive)

Financing instruments available and suitable for the ownership model are:

- Self-financing: business's equity;
- Debt-financing: bank loans;
- Credit guarantees (to provide guaranteed mechanisms against credit risks, encourage market interest in the firm's credit status).[3]

2.4. Advantages, Drawbacks and Risks

3. THIRD PARTY FINANCING STRUCTURE

3.1. Description

Third party financing promises a solution for businesses who want to benefit from captive solar PV generation systems but do not want to bear high technical or financial risks themselves and cannot afford high up-front investments. The developer/operator[4] develops, finances and monitors the project, and businesses that are considered to be the power consumers/off-takers, engage in either a leasing or PPA agreement with the developer/operator.

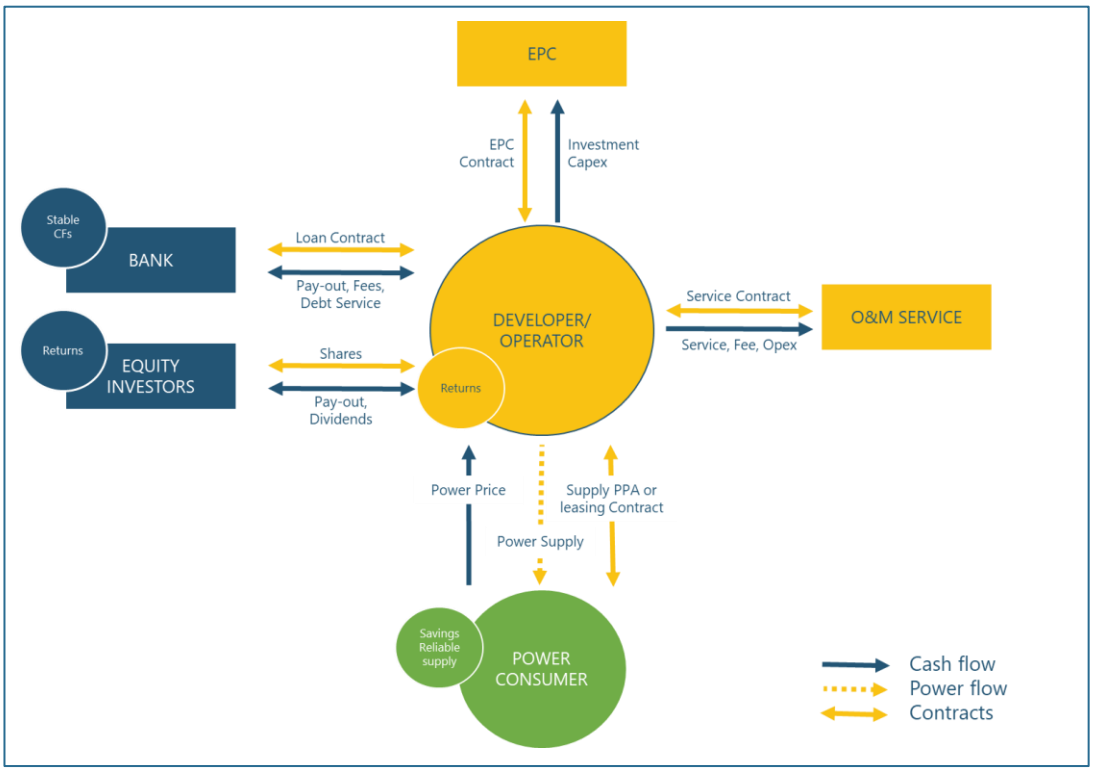
In this structure, the developer/operator acquires the financing needed for the project from a

[3] *Credit guarantees can either be provided by a public or private authority. In emerging economies, this is usually provided by public sector from policy initiatives. Under this mechanism, the lender can recover the value of the loan or part of the loan depending on the value of the guaranteed amount, in case of default of the borrower. A fee is usually paid by the lender or borrower or both to obtain such guarantees*

[4] *Energy service company (ESCO) could provide the same services provided by developer/operator. However, ESCOs provide additional services as well such as energy audits, co-financing, providing staff training etc. Additionally, ESCOs receive compensation based on the actual energy cost savings generated (USA Department of Energy , n.d.)*

financial institute (normally commercial banks) and/or equity investors. The developer/operator installs and operates the solar PV system and enters into a PPA or leasing contract with the off-taker (power consumers) who pays per the contract for the power consumed.

***FIGURE 4** Third party financing model (leasing or PPA models).*



Such a structure is very similar to a project finance approach. For the off-taker/power consumer, third party financing differs from ownership model as power consumers do not have to handle the upfront costs or bear the technical and financial risks.

For a bank to provide loans to the developer/operator, a key determinant of the developer's assessment of financial viability is the future cash flows generated by the project. However, banks would still need to consider the creditworthiness of the power consumer company when providing loans to the developer/operator for installing the solar PV system. This scrutiny is necessary in order to ensure power consumers' ability in paying the monthly dues thereby ensuring the overall viability of the project.

As the structure tends to be more complex and underlying contractual relationships play a critical role, this approach adds costs. The due diligence on developers/ operators has to be very thorough and involves aspects that go beyond financing (technical and legal). Every transaction requires bespoke fine-tuning. These transaction costs have to be factored into the financing costs.

However, transaction costs do not depend on the transaction volume. The same steps need to be followed when assessing smaller-scale projects or larger deals. Instead, the complexity of the structure determines transaction costs. Accordingly, transaction costs account for a higher share of smaller projects' total investment and might be prohibitive particularly for smaller systems. That is why developers/operators– and energy service companies – prefer larger projects as it's more feasible and more profitable to recover these upfront costs.

There is however significant potential in the third-party financing models despite the transaction costs. At the moment, these costs might be prohibitive particularly for smaller ticket sizes. The scale of the problem can be reduced in order to provide benefits to the market for clean captive projects. To some extent, documents and structures can be standardized thereby minimizing the costs for individual deals. Transactions however require bespoke fine-tuning. These costs need to be factored into the project development. In order to mobilize the potential of unserved sectors, a certain degree of support can be justified in order to help create an early track record.

In summary, a C&I business could choose third party financing if:

- The power consumer (off-taker) is a small or medium or large-sized firm and does not have sufficient cash for an outright purchase of the asset or prefers a 3rd party financing arrangement due to other reasons;
- There is no internal expertise within the firm;
- The power consumer wants to bear minimum financial and technical risk.
- The power consumer doesn't intend to relocate for the duration of the contract

3.2. Leasing Model

The solar PV lease can be structured contractually either as a capital/finance lease (with an option to own the asset at the end of the lease lifetime) or an operating lease (no option to own asset at end of lease lifetime). With the introduction of IFRS16[5], the difference between a capital/finance lease and operating lease, from the point of view of accounting, is no longer applicable (to the lessee) as the assets are recognised on the balance sheet of the lessee in both cases.

In the case of a lease (both capital and operating), the contract is related to the output produced by the system, and not to the asset itself. The off-taker has no right of access to the plant or decision-making rights, and the EPC/developer owns and operates the system, and designs and builds the system with no involvement from the customer. Typically, the lease payments are fixed amounts, irrespective of the quantity of electricity consumed (WBCSD, 2018).

3.3. Accounting considerations (Leasing Model)

Under the leasing model, it is necessary to look into the International Financial Reporting Standards. (IFRS). IFRS16 came into effect from 1 January 2019. IFRS16 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. IFRS 16 will result in a more faithful representation of a company's assets and liabilities and greater transparency about the company's financial leverage and capital employed. The change to lease accounting does not affect a (lessee) company's economic position or commitments to pay cash, which are typically already considered by lenders.

Based on newly implemented IFRS16 rule, there are two perspectives to consider under the lease model, i.e. the lessee and the lessor:

- Lessee accounting has changed substantially. There is little change for lessors.
- According to IFRS16, a customer (lessee) leasing assets should recognise assets and

[5] *International Financial Reporting Standards, which applies to all 54 African countries.*

liabilities arising from those leases. IFRS16 eliminates the classification of leases as either operating leases or finance leases for a lessee. Instead all leases are treated in a similar way to finance leases applying IAS 17[6].

- IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.

Summary of the most important line item within the financial statements that are impacted due to IFRS16 from both - the lessee and lessor's perspective, is expressed in detail in the Annex.

3.4. PPA Model

In the case of a PPA, the contract is related to the rights attached to the asset, i.e. the benefits flowing from the asset are additional. Here the off-taker is involved in designing the solar PV system, and the EPC/developer is responsible for building and operating the system as per customer specifications.

In a PPA contract, the off-taker pays only for the units of electricity consumed and might be charged additionally to cover certain fixed costs such as the provision of a meter, the connection to the supply and costs for site upgrades such as repairs on rooftops required for the proper installations of solar panels on these rooftops.

Under the PPA agreement the power price could be fixed for the duration of the agreement or it may be subjected to an annual increase between 2%-5%. In both cases, the PPA usually offers a lower power price compared to that offered by the utility and the expected future tariff increase. The power consumer is also relieved from the high upfront costs as the developer/operator is responsible for the financing of the system.

3.5. Accounting considerations (PPA Model)

Unlike leases, PPAs are considered as an off-balance sheet financing structure and accordingly the assets are not recorded on the balance sheet of the off-taker and operating expenses are not reflected in the income statements. As a result, depreciation can't be accounted for. Under IFRS 16, the distinction between PPAs and leases is based on whether the arrangement confers control. A lease is identified if the contract enables an entity to "control the use of an identified asset, by directing its use and obtaining substantially all the economic benefit from its use for a period of time."(WBCSD, 2018). Whereas for PPA, as per IFRS 16 clarification, will not be classified as lease if the contract does not cover any right on direct control for usage of the asset (e.g. when and whether the energy is produced and how much).

3.6. Third party financing suitable financing instruments (not mutually exclusive)

Financing instruments available and suitable for third party financing are:

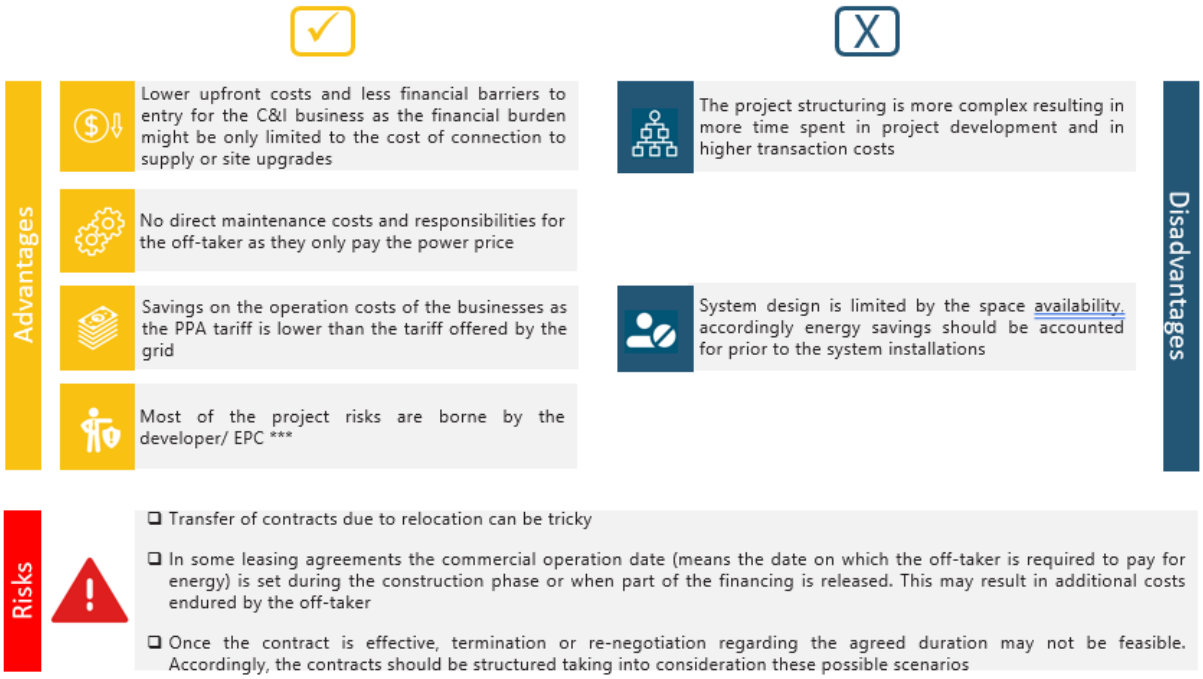
- *Self-financing*: firm's profit to pay monthly rent (in case of leasing) or electricity costs (in case of PPA).
- Gearing dependent on individual transaction:

[6] *IAS17 prescribes lessee and lessor accounting policies for the two types of leases – capital/finance and operating lease. Although IFRS16 supersedes IAS17, IFRS16 substantially carries forward the lessor accounting requirements in IAS17*

- *Equity-financing*: equity from the company and/or from the developer and/or from an investor;
- *Debt-financing*: bank loans or loans provided by other lenders (some project developers offer financing alongside their development services).

- *Credit guarantees* (to provide guaranteed mechanisms against credit risks, encourage market interest in the firm's credit status).

3.7. Third party financing advantages, drawbacks and risks



**** Risks may be but not limited to performance risks (due to the renewable sources intermittency, absence of proper technical resource assessment) and commercial risks (such as costs overrun, foreign exchange fluctuations, inflation, liability claims etc.) and country risks (such as regulations and polices changes)*

4. CONSIDERATIONS FOR SOLAR PV SYSTEM FINANCIERS

So far, this document has presented the financing options available from the C&I business point of view. This section presents further financing considerations from a financier's point of view beyond the individual transactions that might occasionally decrease transaction costs and/or reduce risks.

Bundling and portfolio approach

Bundling means that two or more projects are structured together so that they can be financed as one. This can be done by the business, the project developer or one of the involved financiers. As the investment volume increases when bundling, it might be large enough to offset some of the transaction costs. This works in cases where the individual projects are basically the same – or very similar – with regards to the structure and associated risks. Further, projects have to have at least a comparable timeline. It is important to note that bundling is not effective when underlying projects still need to be assessed individually and when their respective structures are not similar to each other. Due to these constraints, bundling is not a common approach to financing clean captive projects, yet an option to consider. Bundling always requires a thorough consideration and weighting whether transaction costs can actually be lowered and/or whether complexity increases. There are certainly structures that support the bundling approach, however these have not had a large uptake in the market for clean captive installations yet. For instance, bundling might be an option for a corporate that wants to install captive solar PV on several of its subsidiaries with the same project developer that would use the same technology.

In cases where financing vehicles/institutions or aggregators (such as banks or ESCOs/developers) have a number of projects already, investors could consider a portfolio approach to engage. This can be done by investing into the company holding the assets directly, i.e. providing debt or equity to the financing vehicle/institution that would use the funds to realize further projects – in turn either applying the direct ownership or third-party financing model. In this case, the investor evaluates the risks of the financing vehicle/institution. For instance, banks might have a portfolio of solar PV projects already and seek to obtain refinancing for that. Further, ESCOs or funds might have a portfolio of realized projects already.

Another option is that a portfolio of projects from a bank, ESCO, fund or portfolio company is securitized. Obligations, arising e.g. out of debt, lease or PPA contracts related to captive solar PV projects, are being pooled in order to create marketable securities. Thereby, such an illiquid group of assets can be transformed enabling other financiers to purchase these securities. Basically, the portfolio is being monetized as the related cash flows are being sold availing cash for further business. However, this option is complex and not commonly applied in this sector.

5. CONCLUSION

As explained in previous sections, certain key elements such as costs, risk, leverage and scale, need to be considered when choosing a financing model for a solar PV system for a business' own use. Each of the financing models – direct ownership, PPA and leasing - have their own advantages and drawbacks. Ultimately, the optimal solar project financing and operating structure should be the one that results in the lowest financing costs to a C&I business/project developer (depending on whoever is bearing the responsibility of financing the project).

Generally, however, one can observe a large number of businesses that cannot – or do not want to – realize captive generation projects applying the ownership structure. There is therefore a large, unserved potential pool of C&I customers. Third party financing could certainly be an option to realize (part) of this potential. In order to do so, experience is required, and costs need to be

streamlined as much as possible. The objective should be to develop replicable models so that lessons can be learned, and transaction costs shared across more than one project.

The table below lists out various criteria that will help the C&I business decide on the type of financing structure that is most suitable to their situation. Please note that the below table is a generalisation on what would be the best financing structure for a C&I business consumer. In reality, much of the decision-making process would depend on the price, financing options, duration and type of contract options that are available to the C&I business owner.

***TABLE 1** Guideline for choosing the financing structures based on checklist criteria for a C&I business that is considering installing a solar PV captive system*

		THIRD PARTY FINANCING	
CHECKLIST CRITERIA FOR C&I BUSINESS	**ON-BALANCE SHEET**	**ON-BALANCE SHEET**	**OFF-BALANCE SHEET**
	OWNERSHIP MODEL	**LEASE**	**PPA**
I have surplus cash	●	●	●
I want ownership of asset	●	●	Ø
I cannot / do not want to take a bank loan, not so much surplus cash, but can pay small amounts at regular intervals	Ø	●	●
I cannot / do not want to take a bank loan, not so much surplus cash, but have high credit score and can offer collaterals	Ø	●	●
I can avail competitive financing (low interest rates and long tenors)	●	●	●
I don't want to bear Operation & Maintenance (O&M) responsibility	This depends on each contract. Usually, O&M responsibility is negotiated into the leasing and PPA contract, while it will need to be added to the contract in case of the ownership model		
I want to bear the minimum risk	Ø	●	●

● Ideal	● Possible	Ø Impossible

REFERENCES

BNEF (2019), *Solar for Businesses in Sub-Saharan Africa*, Bloomberg New Energy Finance, London.

IASB (2016), *Effect Analysis – International Financing Reporting Standards – Leases, International Accounting Standard Board*, http://docs.wbcsd.org/2018/01/IFRS_accounting_outline_for_PPA.pdf

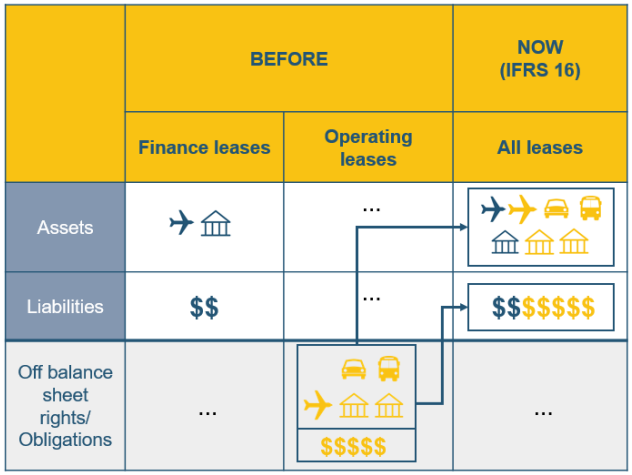
WBCSD (2018), *IFRS Accounting Outline for Power Purchase Agreements*, World Business Council for Sustainable Development, http://docs.wbcsd.org/2018/01/IFRS_accounting_outline_for_PPA.pdf

6. ANNEX: ACCOUNTING CONSIDERATIONS ON IFRS 16

Treatment of leases from the perspective of a lessee: According to IFRS16, a customer (lessee) leasing assets should recognise assets and liabilities arising from those leases. **IFRS16 eliminates the classification of leases as either operating leases or finance leases for a lessee**. Instead all leases are treated in a similar way to finance leases applying IAS 17 (IASB, 2016)

Changes in balance sheet of lessee

Leases are 'capitalised' by recognising the present value of the lease payments and showing them either as lease assets (right-of-use assets) or together with property, plant and equipment. If lease payments are made over time, a company also recognises a financial liability representing its obligation to make future lease payments.

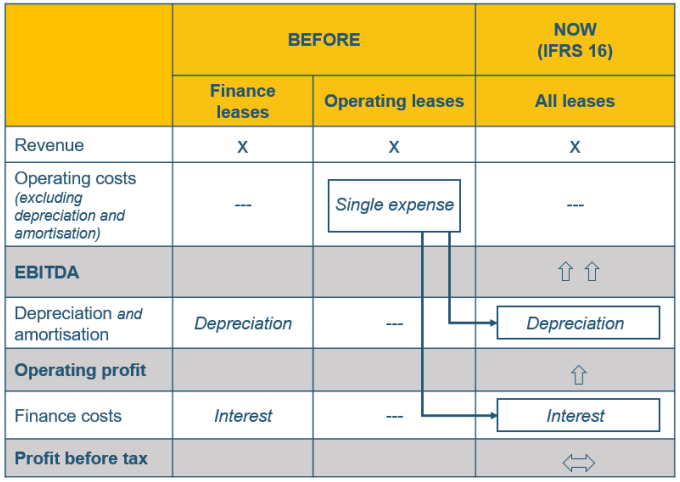


Exemptions

IFRS16 does not require a lessee to recognise assets and liabilities for (a) short-term leases (i.e. leases of 12 months or less) and (b) leases of low-value assets (for example, a lease of a personal computer)

Changes in income statement of lessee

IFRS 16 replaces the straight-line operating lease expense for those leases applying IAS 17 with a depreciation charge for the lease asset (included within operating costs) and an interest expense on the lease liability (included within finance costs). This change aligns the lease expense treatment for all leases. Although the depreciation charge is typically even, the interest expense reduces over the life of the lease as lease payments are made. This results in a reducing total expense as an individual lease matures.

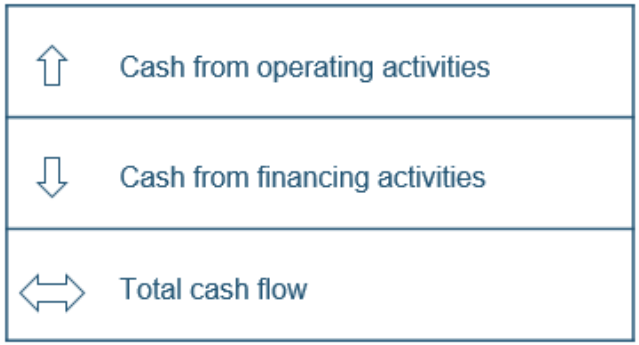


Exemptions

Many smaller unlisted companies may not be directly affected by IFRS 16 on the grounds that (a) the IFRS for SMEs has not been changed by IFRS 16 and (b) a limited number of smaller unlisted companies are required to apply full IFRS. IFRS for SME accounting can be found

Effects on cash flow statement

IFRS 16 is expected to reduce operating cash outflows, with a corresponding increase in financing cash outflows, compared to the amounts reported applying IAS 17. This is because, applying IAS 17, companies presented cash outflows on former off-balance sheet leases as operating activities. In contrast, applying IFRS 16, principal repayments on all lease liabilities are included within financing activities. Interest can also be included within financing activities applying IFRS.



Changes in accounting requirements do not cause a difference in the amount of cash transferred between the parties to a lease. However, IFRS 16 is expected to have an effect on the presentation of cash flows related to former off-balance sheet leases.

Effects on tax

Because differences between the accounting applying IFRS 16 and tax accounting are often expected to arise for a lease, there is likely to be an effect on the amount of tax recognised by a C&I business (lessee). The effect will depend on the tax rates and the tax treatment for leases in each jurisdiction.

Finance lease

Under IFRS 16, there is no change in the tax consequences of the treatment of finance lease. And so, lessee is allowed to claim capital allowances in respect of a leased property as well as deduct the interest expense incurred on lease payments.

Operating lease

The **lessee is not entitled to claim capital allowances** since the lessor claims allowances in respect of the leased asset.

The **interest expense** in the income statement **is tax deductible**.

The **depreciation charged** for the right of use asset **is not a tax-deductible expense**.

For the tax deductibility of the capital component of the periodic lease payment on the balance sheet, the respective tax authority should be engaged in order to form a view.

Treatment of leases from the perspective of a lessor (IASB, 2016)

IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17. Accordingly, a **lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently**.

Effects on tax

Finance lease

The tax consequences for lessors remain un-changed, i.e. they claim capital allowances and lease rental income remains taxable.

Operating lease

The lessor is allowed to claim capital allowances in respect of the leased property.

The lease rental income received from the lessee formed part of its taxable income.

For more information

Visit the project website
www.captiverenewables-africa.org

ABOUT THE UNITED NATIONS ENVIRONMENT PROGRAMME

The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment. Our mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

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