



Applying IFRS

Energy Transition: lease considerations in respect of power purchase agreements

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What you need to know

- ▶ The use of Power Purchase Agreements (PPA) in the supply of renewable energy is on the rise.
- ▶ Typically, the customer in a renewable wind and solar PPA does not have the right to control the underlying equipment and, therefore, such an arrangement does not contain a lease.
- ▶ In some cases, the determination of whether a PPA represents a lease will require detailed analysis and, potentially, the involvement of several different business functions.
- ▶ Even when the underlying wind and solar energy generation equipment does not meet the definition of a lease, other assets associated with a PPA may meet the definition of a lease (e.g., underlying land, battery storage facilities).

Applying IFRS to the Energy Transition

Introduction to publication series

There is little dispute that change is needed to the way in which energy is produced and consumed in order to protect the globe for generations to come. According to the International Energy Agency (IEA)¹, for net zero targets to be met by 2050, renewable sources will have to generate almost 90% of all electricity by 2050, up from 29% in 2020.

Although there is no single definition, 'Energy Transition' refers to the energy sector's shift from the use of fossil fuels – including oil, natural gas and coal – to renewable energy sources such as wind and solar.

As energy suppliers and global policy makers embark on and accelerate efforts in respect of the Energy Transition, new business models will be formed and grow in popularity. Such business models bring specific, and, in some cases, new accounting complexities and considerations.

EY's '*Applying IFRS to the Energy Transition*' publication series seeks to explore the accounting implications of emerging business models and arrangements related to the Energy Transition. Each publication will focus on a particular topic and explore the potential associated accounting implications.

Power Purchase Agreements: IFRS 16 lease considerations

For Net Zero targets to be met, significant investment in the supply of solar and wind renewable energy will be required, resulting in an increased use of associated contractual arrangements including renewable PPAs. Although PPAs can be used for the supply of any type of energy, the use of PPAs in the supply of renewable energy is becoming more common.

This publication is the first in EY's '*Applying IFRS to the Energy Transition*' publication series and focuses solely on the assessment of whether solar and wind energy PPAs contain a lease in accordance with IFRS 16. In most cases, other accounting standards, including IFRS 9 *Financial Instruments* and IAS 38 *Intangible Assets*, also require consideration when accounting for PPAs.

¹ [IEA's Net Zero by 2050: A Roadmap for the Global Energy Sector, May 2021.](#)

Overview of Power Purchase Agreements

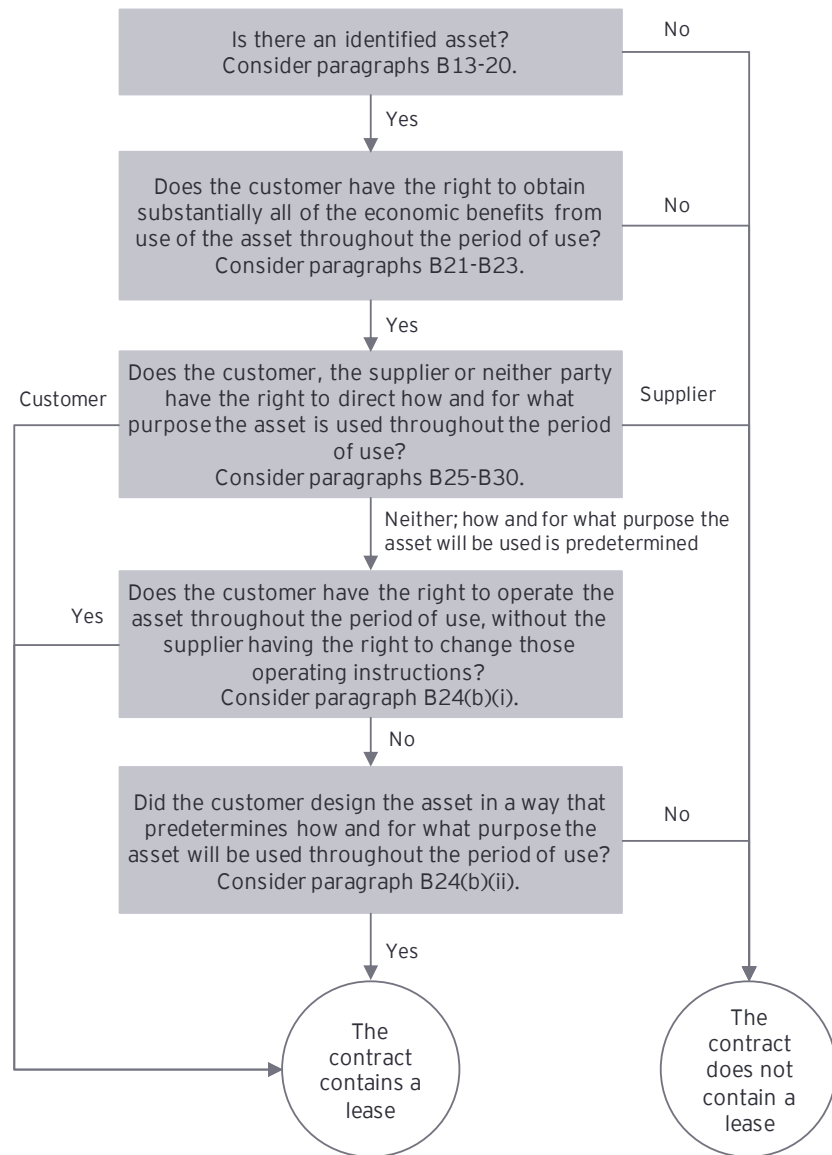
A PPA is an agreement between a power generator (supplier) and a purchaser (customer) for the sale and supply of energy.

Whilst PPAs come in multiple forms, most can be categorised as either physical or virtual arrangements. A physical PPA involves the transfer of power from a supplier to customer, either: i) directly through a direct power line; or ii) through an intermediary (e.g., the grid). Alternatively, under a virtual PPA, energy is not contractually transferred between the supplier and the customer. The most common form of a virtual PPA is the use of a contract for differences (CfD), whereby the supplier and customer enter into an agreement under which the price per unit of energy paid by the customer is fixed, with the difference between the spot price for renewable energy and the fixed price stipulated in the CfD paid to, or received from, the supplier. In this scenario, the physical energy produced from a wind or solar asset is sold to any number of customers via a grid and a customer may procure its energy needs from another supplier participating in the grid. Under such arrangements, the parties to the CfD do not contract directly in respect of the supply of energy from the asset.

Overview of lease considerations

In accordance with IFRS 16, arrangements that convey the right to control the use of an identified asset for a period of time in exchange for consideration meet the definition of a lease, even if the arrangement does not take the legal form of a lease.

The flow chart below highlights the accounting considerations in determining whether a PPA represents a lease under IFRS 16.



Identified asset

Identified asset

An arrangement only contains a lease if there is an identified asset. Under IFRS 16, an identified asset can be either implicitly (for example, the supplier has no other facility that could be used to fulfil the PPA obligations) or explicitly specified in a contract (for example, the PPA specifies a particular wind or solar farm that will be used to satisfy the obligations).

A capacity portion of an asset is an identified asset if it is physically distinct (for example, where a PPA specifies particular wind turbines within a wind farm). A capacity or other portion of an asset that is not physically distinct (for example, a percentage of the output of a wind farm) is not an identified asset unless it represents substantially all of the capacity of the asset and thereby provides the customer with the right to obtain substantially all of the economic benefits from use of the asset. Note that the term “substantially all” is not defined in IFRS 16. However, in practice, entities generally apply the term consistently with its application in the previous leases standard, in the context of lease classification.

Under a physical PPA, a supplier often does not have substantive substitution rights given the cost associated with using an alternative source, even if available.

Substantive substitution rights

Even if an asset is specified, a customer does not have the right to use an identified asset if, at inception of the contract, a supplier has the substantive right to substitute the asset throughout the period of use.

A supplier's right to substitute an asset is substantive only when both of the following conditions are met:

- ▶ The supplier has the practical ability to substitute alternative assets throughout the period of use (i.e., the customer cannot prevent the supplier from substituting an asset and alternative assets are readily available to the supplier or could be sourced by the supplier within a reasonable period of time). For example, if the supplier could fulfil its obligations under the PPA with electricity from a number of different solar or wind farms.
- ▶ The supplier would benefit economically from the exercise of its right to substitute the asset (i.e., the economic benefits associated with substituting the asset are expected to exceed the costs associated with substituting the asset).

Rights to substantially all economic benefits

To control the use of an identified asset, a customer is required to have the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use. Economic benefits include the asset's primary outputs (for example, power) and any by-products (for example, renewable energy certificates (RECs) that are generated through the use of the asset), including potential cash flows derived from these items. A purchaser can obtain economic benefits either directly or indirectly (for example, by subleasing the asset).

In June 2021, the IFRS Interpretations Committee considered the potential for a PPA in a 'gross pool' electricity market to contain a lease. A gross pool electricity market is one whereby all purchases and sales of electricity are contracted directly with and cleared through a market operator. In a gross pool market, there is no bilateral contractual arrangement between an energy producer (generator) and the customer of the energy (e.g., a retailer). Instead, all transactions are contracted and settled at spot prices with the market operator. In a gross pool electricity market, a generator and the customer of the energy are unable to contract directly in respect of the sale and purchase of electricity. Instead, in a gross pool market, a PPA is akin to a CfD which has the effect of fixing the price of electricity procured or sold under a separate third-party contract.

The IFRS Interpretations Committee tentatively concluded that where the electricity a customer consumes in a gross pool market cannot be contractually linked to the electricity that any specific supplier supplies, the PPA provides the customer with neither the right to obtain electricity from the identified asset (e.g., windfarm) nor the obligation to purchase any particular amount of electricity either from the identified asset or the grid. The IFRS Interpretations Committee's Tentative Agenda Decision is currently open for comment. After considering the feedback received, the Tentative Agenda Decision will be finalised by the IFRS Interpretations Committee and ratified by the IASB.

As part of their assessment, the IFRS Interpretations Committee considered whether it was appropriate to combine contracts when applying IFRS 16. Unless the requirements to combine contracts in paragraph B2 of IFRS 16 are met (i.e., they are entered into at or near the same time **with the same counterparty** or related parties of the counterparty), there is no basis for combining and considering two contracts as a single contract.

Further, the customer's exposure to price risk (i.e., the difference between the market spot price and the fixed price defined in the PPA) in respect of all the electricity the identified asset supplies is not an economic benefit arising from the use of such asset.

How we see it

- ▶ The IFRS Interpretations Committee's Tentative Agenda Decision indicates that, without a contract between a seller and a buyer in respect of the physical transfer of electricity that provides the customer with the right to obtain the electricity from an identified asset, it is not possible to have a lease.
- ▶ Under a PPA for renewable energy, the customer does not control the underlying asset when it does not have the right to: direct the use of the underlying asset; and obtain substantially all of the economic output of an identified asset throughout the period of use as defined in the PPA.
- ▶ In contrast, where a customer contracts directly with the supplier to take delivery of electricity (via the grid or otherwise), there is potential for the customer to have the right to obtain substantially all of the economic benefits from use of the identified asset and, therefore, the potential for the PPA to contain a lease.

Right to direct the use of the asset

Direct the use of the asset

A customer has the right to direct the use of an identified asset where it has the right to direct how and for what purpose the asset is used throughout the period of use.

When evaluating whether a purchaser has the right to direct how and for what purpose the asset is used throughout the period of use, the focus is on whether the customer has the decision-making rights that will most affect the economic benefits that will be derived from the use of the asset. The decision-making rights that are most relevant are likely to depend on the nature of the asset and the terms of the contract.

It is important to note that assessment of decision-making rights is focused on those that occur across the period of use. There may be some decisions that are predetermined in the contract. These decisions are only relevant if neither the supplier nor the customer makes any decisions about how and for what purpose the asset is used throughout the period of use.

IFRS 16 provides the following examples of decision-making rights that grant the right to direct how and for what purpose an asset is used:

- ▶ The right to change the type of output that is produced by the asset. With respect to generating assets, the type of output produced is normally predetermined by the nature of the asset, as it is designed and constructed to produce a specific type of electricity.
- ▶ The right to change when the output is produced (for example, deciding when to produce power from a generating asset).
- ▶ The right to change where the output is produced (for example, deciding where a wind or solar farm is located). This is normally predetermined by where the generating asset is constructed.
- ▶ The right to change whether the output is produced and the quantity of that output (for example, deciding whether to produce energy from a generating asset and how much energy to produce from that generating asset).

IFRS 16 specifies that the maintenance and operation of the asset are examples of decision-making rights that do not grant the right to change how and for what purpose an asset is used. Although the decisions about maintaining and operating the asset are often essential to the efficient use of that asset, the right to make those decisions, in and of itself, does not result in the right to change how and for what purpose the asset is used throughout the period of use. Operation of the asset is only relevant where all other decisions are predetermined.

Predetermined decisions

In some cases, the decisions that relate to how and for what purpose the asset is used throughout the period of use is predetermined. This could be the case when the most relevant decisions about how and for what purpose an asset is used are predetermined by contractual restrictions on the use of the asset (for example, the decisions about the use of the asset are agreed to by the customer and the supplier during the negotiation of the contract, and those decisions cannot be changed). This could also be the case when the most relevant decisions about how and for what purpose an asset is used are, in effect, predetermined by the design of the asset. For example:

- ▶ Type of output produced by the asset - the output of a solar or wind farm is the generation of electricity and, potentially, associated RECs. This cannot change throughout the period of use.
- ▶ When the output is produced - given the nature of a wind or solar farm, there are often no relevant decisions as to the time when the output is produced as this is determined by when the sun shines or wind blows.
- ▶ Where the output is produced - given the nature of a wind or solar farm, where the asset is used is not likely to change throughout the period of use and is predetermined in most contracts, given the fixed nature of the facilities.
- ▶ Whether the output is produced and the quantity of the output - if, under the terms of a PPA, a customer has the right to substantially all of the economic output produced, if and when it is produced, it is unlikely that the customer will decide whether to produce energy from the solar or wind farm and how much energy will be produced from that asset. However, if the customer has the right to issue instructions (sometimes referred to as dispatch rights) throughout the period of use as to how much energy it wants and when, then it may have the right to make the relevant decisions throughout the period of use. Whether or not a decision represents a relevant decision will, however, require judgement and consideration of the specifics of each arrangement.

In the Basis for Conclusions on IFRS 16 (paragraph BC121), the IASB indicated that it would expect decisions about how and for what purpose an asset is used to be predetermined in relatively few cases. However, contracts involving renewable solar or wind equipment (e.g., physical PPAs) are an example of arrangements where all relevant key decisions are often predetermined. This is because once constructed, the relevant decisions about how and for what purpose the asset is used are often predetermined. In such cases, the solar and wind energy producing equipment is designed solely to produce energy and the PPA may require the customer to purchase all energy produced (i.e., the customer has no right to make the relevant decisions about the use of the equipment).

Where all of the relevant decisions about how and for what purposes an identified asset is used are predetermined, a customer is deemed to have the right to direct the use of an identified asset throughout the period of use when the customer either:

- ▶ Has the right to operate the asset, or direct others to operate the asset in the manner it determines, throughout the period of use without the supplier having the right to change those operating instructions; or
- ▶ 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 Example 9 in IFRS 16's implementation guidance for examples of the evaluation of whether a customer designed the asset in a way that predetermines how and for what purpose the asset will be used throughout the period of use. This includes the example of a solar farm where the customer's involvement in design and engineering is considered to predetermine the decisions about whether, when and how much electricity will be produced (i.e., in example 9A, the customer designed the solar farm before it was constructed as it hired experts in solar energy to assist in determining the location of the farm and the engineering of the equipment to be used such that the supplier is only responsible for building the solar farm to the customer's specifications). Similar considerations would apply to wind farms. In practice, the nature and extent of involvement a customer has in the design of an asset varies, for example, a customer could have designed the asset if it makes the relevant decisions such as location, capacity, suppliers and constructors. It is, therefore, important to understand the precise nature and extent of the customer's involvement in the design of an asset in assessing whether the requirements of IFRS 16 are met.

How we see it

- ▶ Given the nature of a wind or solar energy generating equipment, it is often the case that all relevant decisions are predetermined.
- ▶ Where all other decisions are predetermined and a customer has the right to operate an asset or has designed relevant aspects of the asset such that it predetermined how and for what purpose the asset will be used, the customer would be considered to have the right to direct the use of an asset.
- ▶ However, in practice, examples of this are limited on the basis that customers generally do not operate such equipment and do not have significant expertise in the design and construction of a solar or wind energy generating asset.

Illustrative examples

Scenario A

A renewable energy generator enters into a PPA with the owner of a factory in a remote location, under which:

- ▶ The generator designed and built a wind farm in close proximity of the factory. Power from the wind farm is provided directly to the factory. The generator has no nearby assets it could provide energy from, should it wish.
- ▶ The factory has the right to receive substantially all of the economic benefits from the wind farm.
- ▶ The factory is able to determine if and when energy is produced from the asset (i.e., it has dispatch rights enabling it to turn off some or all turbines in order to manage the volume of energy produced in order to meet its needs).

Conclusion

In this scenario, the arrangement contains a lease. The wind farm represents an identified asset and the generator does not have substantive substitution rights. Also, the customer has: the rights to substantially all of the economic benefits of the assets; and the right to direct the use of the asset.

Scenario B

As with scenario A, but there are no decisions made as to when and how much energy is produced.

Conclusion

In this scenario, the relevant decisions are predetermined. Whether the PPA contains a lease will depend on whether the customer operates the asset or designed the identified asset in a way that determined how and for what purpose the asset would be used throughout the period of use.

Scenario C

As with scenario A, but the wind farm supplies a number of different factories that are in close proximity. The customer in question has a right to a maximum of 20% of the energy produced by the wind farm.

Conclusion

In this scenario, there is no identified asset. Therefore, the arrangement does not contain a lease.

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