Guidance on the carbon tax under the Harmonisation of Tax Regulations Law

Financial reporting considerations

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Introduction

In recent years, there is a growing focus on carbon and emissions. A variety of schemes are being introduced around the world. Some schemes are introducing taxes or royalties. Other schemes involve the granting of an asset by the government or regulator in the form of an allowance, with a liability incurred where emissions are in excess of that allowance but an option to purchase additional allowances to offset this.

On 29 October 2021, the government announced Undang-Undang No.7 Tahun 2021 tentang Harmonisasi Peraturan Perpajakan ("Harmonisation of Tax Regulation" or the "HPP Law"). One of the clauses introduces the carbon tax scheme in Indonesia.

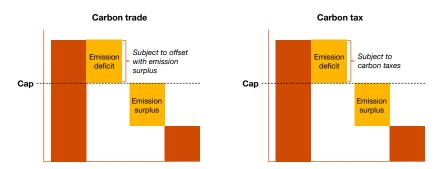
This practical guide is designed to help financial reporters in understanding and implementing the carbon tax scheme in Indonesia under the HPP Law, including the financial reporting implication.

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1. Background

There are two possible schemes applied around the world, such as a "Cap and Trade" and a "Carbon Tax" basis. Under the "Cap and Trade" scheme, the government would grant an allowance or certain emission rights to emit CO₂e pollutants up to a specified level (a carbon limit/cap), with a liability incurred where emissions are in excess of that allowance to purchase additional allowances to offset this by participating in trading and offsetting carbon emission. Under the "Carbon Tax" scheme, the Company is required to pay the carbon tax for any carbon emissions according to the applicable rules.



The HPP Law introduces the Carbon Tax provision in Indonesia which is to be effective from 1 April 2022.

According to HPP Law, the Carbon Tax is to be imposed on "carbon emissions" which have a negative impact on the environment. The "carbon emissions" that are subject to Carbon Tax may be added to/expanded through the issuance of a Government Regulation ("GR") (after being agreed with Parliament in the context of the Annual State Budget proposal). This may lead to a question on whether the scope of the Carbon Tax could then be revisited every year. The Carbon Tax subject is individuals or companies purchasing goods containing carbon or carrying-out activities which result in a certain level of carbon emissions within a certain period are the parties subject to the Carbon Tax. The HPP Law broadly stipulates that a Carbon Tax subject can be either a carbon purchaser or a carbon emitter with clarity to be provided in a GR (subject to agreement by the parliament). The elucidation already determines the first tax subjects to be power plant companies (i.e. carbon emitters). The elucidation also emphasises that the imposition of this tax shall be prioritised towards corporate tax subjects (instead of individuals).

1.1 Tax rate and taxable event

The rate of Carbon Tax shall at least be the carbon price in the domestic carbon market per kg CO₂e. However, based on the HPP Law, the above rate shall not be less than IDR 30/kg CO₂e. This base rate can also be revisited through the issuance of a Minister of Finance ("MoF") Regulation (after consultation with Parliament). This appears to mean that, once the carbon market in Indonesia is established, the Carbon Tax rate will follow the market price but with an IDR 30/kg CO₂e floor (being the current minimum price). The Carbon Tax is due:

- a. upon the purchase of goods containing carbon;
- b. at end of each calendar year (i.e. December) during which the carbon emitting activity is carried out; or
- c. per other timing as determined by a GR.

1.2 Implementation milestone

The imposition of Carbon Tax will be carried out gradually with the following milestones:

Pre-April 2022

- Law No. 7/2021;
- Presidential Regulation No. 98/2021;
- Developing technicality of carbon tax and carbon market:
- Piloting carbon trading in power sector average price of Rp30k per tCO₂e.

April 2022-2024

- Application of CO₂e cap on coal power plants;
- Imposition of carbon tax scheme limited to coal power sector generation.

2025 onwards

· Implementation of full carbon trading and expansion of carbon tax scheme for all sectors in stages.

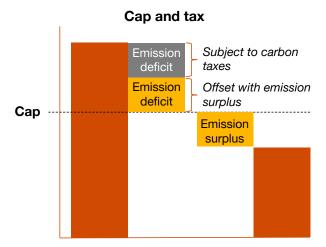
1.3 Carbon "Offset"

Taxpayers who participate in trading and offsetting carbon emissions, as well as other mechanisms in accordance with laws and regulations in the environmental sector, can be granted:

- a Carbon Tax reduction; and/or
- other benefits for the fulfilment of Carbon Tax obligations.

This appears to follow the international approach whereby trading or an offset will be allowed to lower a Carbon Tax obligation. On the other hand any trading/offset mechanism may alternatively increase a Carbon Tax obligation (i.e. via an increased Carbon Tax rate based on demand). This "carrot and stick" mechanism appears aimed at helping Indonesia to meet its commitments under the Paris Agreement with regard to climate change.

1.4 Carbon Tax Scheme in Indonesia



Based on the cap and tax scheme above, it appears that the Indonesian government would implement a hybrid model of cap and trade/carbon offset and cap and tax. The government would grant certain companies with a carbon limit/cap. The emission rights or carbon allowances are given by the government to the emitter for a defined compliance period. For any excess of carbon limit/cap the Company may either participate in trading and offsetting carbon emission trading or pay the carbon tax according to the applicable rules.

2. Accounting implications

Carbon taxes

The carbon taxes in nature are a fine/penalty/royalty paid by the Company for any remaining excess of carbon limit/cap after trading and offsetting carbon emission. As such, the provision of carbon taxes is recognised under PSAK 57 Provisions, Contingent Liabilities and Contingent Assets.

Carbon emission rights/allowances

As for the carbon emission rights/allowances or carbon limit/cap, neither Indonesia Accounting Standard nor International Financial Reporting Standard has addressed specifically on how carbon emission rights/allowances should be accounted for in the financial statements. This lack of standardisation makes it hard for businesses to present themselves to the market, and for the market to understand the financial consequences of emissions and the related credits on companies' balance sheets.

The lack of uniform, generally accepted principles for carbon emission rights/allowances accounting means that companies have to select from a diverse array of possibilities (Refer to Table 1.1 on the next page). There is no clear direction on the best options or comparability with their peers.

In the absence of the standardised accounting for carbon, there is diversity in practice in implementing the accounting for carbon emission rights/allowances. The acceptable accounting models for the carbon emission rights/allowances are summarised in the table 1.1 as below.

Table 1.1 Acceptable accounting models for the carbon emission rights / allowances:

	'Full market value'	'Cost of settlement' approach			
	approach (IFRIC 3*)	'Initial market value'	'Nominal amount'		
Granted and purchase	Granted and purchased allowances (asset)				
When to recognise	Recognise when able t	o exercise control.			
How to measure	Measure initially at fair value at the date of initial recognition.		Measure initially and subsequently at cost. For granted allowances, this is usually nil. Purchased allowances are subsequently subject to impairment review.		
	Measure subsequently based on either the amount initially recognised (cost model) or the revalued amount (revaluation model).	Measure subsequently based on either the amount initially recognised (cost model) or the revalued amount (revaluation model).			

	'Full market value'	'Cost of settlement' approach		
	approach (IFRIC 3*)	'Initial market value'	'Nominal amount'	
Government grant (liab	oility)			
When to recognise	Recognise at the same time as allowances.			
How to measure	Measure initially based on the fair value of the allowances at the date of initial recognition. Amortise over the compliance period on a systematic and rational basis.	Measure initially based on the fair value of the allowances at the date of initial recognition. Amortise over the compliance period on a systematic and rational basis.	Measure initially and subsequently at a nominal amount (usually nil).	
Emissions obligations	(liability)			
When to recognise	Recognise when the lia	ability is incurred.		
How to measure	Remeasure the liability based on the fair value of allowances at each period end (or a value based on a forward rate—see paragraphs below), whether they are to be settled using the allowances on hand or purchased from the market. Cap and Tax measurement Any excess of carbon limit/cap after trading and offsetting carbon emission is measured using the rate in accordance with the effective carbon taxes regulation, whichever is higher between the market value at period end and the defined rate in the	Remeasure the liability at each period end. The liability to be settled using allowances on hand is measured at the carrying amount of those allowances. Cap and Tax measurement Any excess of carbon limit/cap after trading and offsetting carbon emission is measured using the rate in accordance with the effective carbon taxes regulation, whichever is higher between the market value at period end and the defined rate in the regulation.	Remeasure the liability at each period end. The liability to be settled using allowances on hand is measured at the carrying amount of those allowances, which is usually nil. Cap and Tax measurement Any excess of carbon limit/cap after trading and offsetting carbon emission is measured using the rate in accordance with the effective carbon taxes regulation, whichever is higher between the market value at period end and the defined rate in the regulation.	

*) IFRIC 3 "Emission Rights" was withdrawn in 2005, however the guidance is still valid as one of the options to account for the emission rights.

2.1 Intangible assets

Emission rights held will permit the Company to emit pollutants up to a specified level. The emission rights are given by the government to the emitter for a defined compliance period. The purchase of emission rights can result in recognition of an asset if separately acquired. This is because a purchased allowance is a tradable instrument that is controlled by the entity and from which future economic benefit is expected to flow to the Company. The benefit will flow either through sale of the allowance or its use to settle the Company's obligation to remit allowances equal to its emissions.

The allowances recognised are not amortised if the residual value is at least equal to carrying value. The cost of allowances is recognised in the income statement in line with the profile of the emissions produced.

The entity may choose to apply the revaluation model in PSAK 19 for the subsequent measurement of the emissions allowances. The revaluation model requires that the carrying amount of the allowances is restated to fair value at each balance sheet date, with changes to fair value recognised directly in equity except for impairment, which is recognised in the income statement.

2.2 Government grants

When the government grants certain companies with certain emission rights to emit CO₂e pollutants up to a specified level (a carbon limit/cap), then the grants may be accounted for under the scope of PSAK 61 Government grants. When a government grant takes the form of a transfer of a non-monetary asset, it is typical to assess the fair value of the non-monetary asset and to account for both grant and asset at that fair value. PSAK 61 also allows an alternative accounting treatment, which is to record both grant and asset at a nominal amount (i.e. nil).

Government grants related to assets, including non-monetary grants at fair value, should be presented in the balance sheet by either setting up the grant as deferred income or by deducting the grant in arriving at the asset's carrying amount. In both cases, this will result in the grant income being recognised in the same period in which the asset is depreciated. In applying this accounting treatment, the grant income is recognised in profit or loss in the same period as the expenditure relating to the asset.

Furthermore, PSAK 61 offers some flexibility with regards to where grant income is presented in the income statement. Grants related to income are sometimes presented as a credit in the income statement, either separately or under a general heading such as 'other income.' Alternatively, they are deducted in reporting the related expense.

2.3 Impairment

The emission allowances with definite life are subject to amortisation up to its residual value and should be tested for impairment where there are indicators of impairment, in accordance with the requirements of PSAK 48. However, the emission allowance with indefinite life shall not be amortised but subject to annual impairment testing.

2.4 Provision

A provision is recognised for the obligation to deliver allowances or pay a fine (due to the excess of carbon limit/cap) to the extent that CO₂e pollutants have been emitted because an obligation is created by the emission of the CO₂e. The provision is commonly measured at the cost of the certificates acquired, including those acquired for nil cost (for example, under government grants) or the contracted purchase price for planned purchases of certificates. The allowances reduce the provision where they are used to satisfy the entity's obligations through delivery to the government at the end of the scheme year. However, the carrying amount of the allowances cannot reduce the liability balance until the allowances are delivered.

2.5 Market rate and forward rate

Where an entity records some or all of its emissions obligations at fair value, it should ordinarily calculate its provision using the market price at the balance sheet date of the relevant allowances that it will need to purchase. However, to the extent that the entity has entered into a forward contract to buy allowances at a fixed price on a future date, it is permissible to provide at the forward contracted rate (rather than the market rate), including carbon tax rate for the excess if the entity is required to pay carbon tax at the reporting period end. Because this is the best estimate of the amount that the entity expects to pay to settle its obligation. This would be acceptable provided the entity meets the 'own-use exemption' in PSAK 71 with respect to its emission allowance forward contracts. Using the forward rate is not appropriate where the entity trades in these emission allowances. Once the entity commences trading, these instruments fall outside the 'own-use exemption' in paragraph 2.5 of PSAK 71.

The accounting policy chosen for emissions obligations, which should be consistently applied, will depend on the overall accounting model that is being used for emissions (including allowances).

Entities should make clear in their accounting policy note which approach is applied.

2.6 Illustrative impact on financial statements

Example:

To illustrate the impact on the financial statements of these three accounting approaches, consider the following scenario:

- Companies A, B and C participate in a carbon tax scheme for emissions rights.
- All companies have financial year ends of 31 December 20X1.
- Each company receives 10,000 granted allowances on 1 January 20X1, with indefinite lives.
- Each company has emitted 5,500 tonnes of carbon dioxide from 1 January 20X1 30 June 20X1
- The market price of an allowance (equivalent to one tonne of carbon dioxide) at 1 January 20X1 is C20, giving a fair value of C200,000 (C=currency).
- The market price of an allowance (equivalent to one tonne of carbon dioxide) at 30 June 20X1 is C22.
- The market price of an allowance (equivalent to one tonne of carbon dioxide) at 31 December 20X1 is C25.
- Each company requires 12,500 allowances to cover its obligation for the 20X1 compliance year to be settled in February 20X2.
- The carbon tax rate at 31 December 20X1 is C30 per allowance.

Accounting policies adopted:

- Company A has adopted the 'full market value' approach, subsequently applying the revaluation model (IFRIC 3*).
- Company B has adopted the alternative approach 1 ('initial market value'), subsequently applying the cost model.
- Company C has adopted the alternative approach 2 ('nominal amount').

Accounting entries from January - December 20X1

No.	Dr./Cr.	FSLI	'Full market value'	'Initial market value'	'Nominal amount'
			Company A	Company B	Company C
	Accounting enti	ries on the first day	y of the year.		
	Companies A and B records on receiving the allowance free of charge from the government.				
1.	Dr.	Intangible assets (Allowances)	200,000	200,000	No entries
	Cr.	Deferred income (Government grants)	(200,000)	(200,000)	No entries
	At the end of the first six months.				
	Companies A a	nd B records the a	mortisation porti	ion of deferred in	come to date.
	Dr.	Deferred income (Government grants)	110,000	110,000	No entries
	Cr.	Income	(110,000)	(110,000)	No entries
	Company A records the increase in fair value of the allowances held (from C20 to C22 per tonne) to date.				
2.	Dr.	Intangible assets (Allowances)	20,000	No entries	No entries
	Cr.	Other comprehensive income	(20,000)	No entries	No entries
Companies A and B records the liability for emission 5,500 tonnes emitted x C22, for Company B: 5,500				•	
	Dr.	Emission costs	121,000	110,000	No entries
	Cr.	Liability	(121,000)	(110,000)	No entries

No.	Dr./Cr.	FSLI	'Full market value'	'Initial market value'	'Nominal amount'
			Company A	Company B	Company C
	At the end of the year.				
	Companies A a	nd B records the r	emaining portion	of deferred inco	me.
	Dr.	Deferred income (Government grants)	90,000	90,000	No entries
	Cr.	Income	(90,000)	(90,000)	No entries
2	Company A records the increase in fair value of the allowances held (from C22 to C25 per tonne) to date.				
3.	Dr.	Intangible assets (Allowances)	30,000	No entries	No entries
	Cr.	Other comprehensive income	(30,000)	No entries	No entries
Companies A, B and C records the liability for emission to date.					
	Dr.	Emission costs	204,000	165,000	75,000
	Cr.	Liability	(204,000)	(165,000)	(75,000)

Summary Income Statement and Balance Sheet FY20X1

	'Full market value'	'Initial market value'	'Nominal amount'
	Company A	Company B	Company C
Income statement			
Release of deferred income	200,000 ⁱ	200,000 ⁱ	0
Emission costs ^{a)}	(-325,000) ⁱⁱ	(-275,000)iv	(-75,000) ^v
Net income (loss)	(-125,000)	(-75,000)	(-75,000)
Other comprehensive income (loss)	50,000	n/a	n/a
Balance sheet			
Intangible assets ^{b)}	250,000 ⁱⁱⁱ	200,000 ⁱ	0
Liability ^{b)}	(-325,000) ⁱⁱ	(-275,000)iv	(-75,000) ^v
Net assets (liabilities)	(-75,000)	(-75,000)	(-75,000)
Current year result	(-125,000)	(-75,000)	(-75,000)
Revaluation reserve	50,000	n/a	n/a
Total equity	(-75,000)	(-75,000)	(-75,000)

a) There is no specific standard which regulates the presentation of the emission costs, whether it should be included in "cost of sales" or "administrative expenses" depends on the nature of the costs.

- b) The intangible assets and the liability may be offset each other only when the Company has obtained the rights to do so based on the effective regulation.
- 10,000 allowances received measured at fair value at grant date C20 per allowance $(10,000 \times C20 = C200,000).$
- 12,500 obligation measured at fair value at period of C25 per allowance, and liability related to excess emission at period end $[(10,000 \times C25) + (2,500 \times C30) = C325,000]$.
- iii. 10,000 allowances received measured at the fair value at period end of C25 per allowance $(10,000 \times C25 = C250,000).$
- iv. Liability based on allowances held measured at carrying amount, and liability related to excess emission fair value at period end $[(10,000 \times C20) + (2,500 \times C30) = C275,000]$.
- v. 75,000 shortfall in obligation measured based on applicable carbon tax rate of C30 per allowance, since the carbon tax rate is higher than the current market price allowance of $C25 (2,500 \times C30 = C75,000).$

It is important to note that each entity, producing the same level of emissions and holding the same number of allowances, will ultimately be required to make up the same shortfall in allowances. For Company A, the decision to value the entire obligation at the prevailing market price of allowances means that there is a mismatch in the timing of recognition, with the following year recognising a credit to the income statement of C50,000 as the liability is settled. This highlights the volatility in earnings that can arise with the use of this method.

Further differences in results could arise when considering when the shortfall is recognised under the cost of settlement approach. This is because the measurement of the obligation for which allowances are held will depend on whether the carrying amount of allowances is allocated to the obligation on a FIFO or on a weighted average basis. This is a particular issue where a balance sheet date is not the end of a compliance period—for example, at an interim balance sheet date (in which the financial year is the same as the compliance period) or at a financial year end (in which the financial year is not the same as the compliance period).

3. Interaction between income tax expense and current carbon tax scheme

Carbon taxes that are calculated by applying a tax rate to volume or a measure of carbon emission do not fall within the scope of PSAK 46 and are not income taxes. These taxes are most often described as emission costs/carbon tax/royalties. Although some schemes may be categorised as income taxes and fall within the scope of PSAK 46, determining whether a carbon tax represents an income tax can require judgment.

Currently, there is no specific regulation which regulates the deductibility of carbon taxes or emission costs. As such, it is expected that the carbon tax will follow the general tax rules (i.e: income generated from selling carbon allowances to be treated as taxable income. However, from the buyer perspective, the deductibility of carbon taxes for corporate income tax calculation may depend on the nature of the purchase of carbon allowances). Carbon allowance or expense outside the scope of PSAK 46 do not give raise to deferred tax liabilities.

4. Final thoughts

In the absence of a formal position adopted by DSAK-IAI or IASB, there is no standardised accounting on how the emission allowance is accounted for and presented in the financial statements. Currently, there are three acceptable accounting models which were applied in the global practice that the Company may consider. There is also a taxation matter that needs to be considered regarding the deductibility of the carbon allowances and its related income or expense.

The carbon tax is an area which still grows in Indonesia. There will be several implementing guidance and rules issued by the government in the years ahead which might impact the accounting for the carbon tax. We will continue to monitor this evolving situation and provide relevant and timely insight.

Authors, contributors, and reviewers

Djohan Pinnarwan

Partner

djohan.pinnarwan@pwc.com

Raisa Lestari Manager

raisa.lestari@pwc.com

Irfan Sulaiman

Manager

irfan.sulaiman@pwc.com

For professional accounting advice, please contact:

Jumadi Anggana

Partner

jumadi.anggana@pwc.com

Djohan Pinnarwan

Partner

djohan.pinnarwan@pwc.com

Irwan Lau

Partner

irwan.lau@pwc.com

Andri Effendi

Director

andri.effendi@pwc.com

Ponco Widagdo

Director

ponco.widagdo@pwc.com

Elina Mihardja

Senior Manager

elina.mihardja@pwc.com

Arryu Amin Senior Manager

arryu.amin@pwc.com

For other assurance services, please contact your PwC audit team.

PwC Indonesia

Jl. Jend. Sudirman Kav. 29-31 Jakarta 12920 - INDONESIA

Telp: +62 21 5099 2901 / 3119 2901 Fax: +62 21 5290 5555 / 5290 5050

Email: id_contactus@pwc.com

Pakuwon Center

Tunjungan Plaza 5, 22nd Floor, Unit 05 Jl. Embong Malang No. 1, 3 & 5 Surabaya 60261 - INDONESIA Telp: +62 31 9924 5759

www.pwc.com/id



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@PwC_Indonesia

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