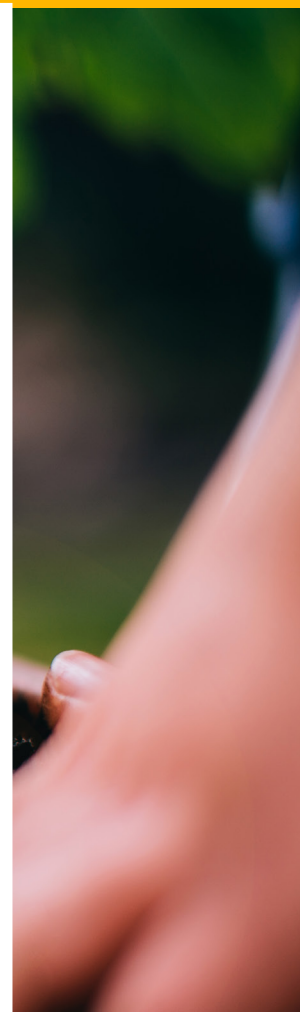


Accounting for Green Loans

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Introduction

The market for green loans is growing rapidly and developing countries including Indonesia are catching up with this type of financing to raise capital for eligible green projects. Green loans enable borrowers to exclusively obtain funds for their projects while making substantial contributions to environmental objectives.

From the perspective of accounting, typical green loans (or ‘sustainability-linked loans’) are debt instruments where the interest rate is linked to certain environmental, social and governance (“ESG”) metrics – that is, loans where the cash flows under the contract vary depending on an ESG metric or measure. For example, these measures might relate to compliance with emissions standards, energy efficiency metrics, or even a combination of different green measures.

The green loans generally give incentives to the borrowers to contribute to the development of green projects whilst minimising their negative impact on the environment. With regard to this objective, the interest rate on the loan is adjusted periodically to reflect changes in the borrower’s performance relative to certain green measures or targets.

Since the structure and features of green loans are becoming more complex, a lot of questions have emerged regarding the accounting and reporting for this instrument given that there is no specific accounting standard that covers solely green loans. However, the requirements of certain standards under IFRS and PSAK may be relevant in assessing the accounting implications.

This practical guide is designed to help financial reporters understand how green loans will affect their financial statements from classification, recognition, measurement and disclosure.

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1. Background

The most common question is what makes a 'green loan' different from a 'loan'? A plain-vanilla 'loan' usually have three basic financial and legal features:

1. It is a financial instrument that usually prescribes a specific purpose for which the funds advanced may be utilised;
2. It has a specific term where there is a schedule or timing according to which the funds are to be repaid; and
3. It attributes a financial cost through interest charged, whether fixed, variable, or a combination of both. We might also encounter various structures with more onerous and/or complex terms and conditions.

A green loan is mostly structured in accordance with the four core components under the 'Green Loan Principles', published in 2018 by the Loan Market Association ("LMA"). The LMA is the authoritative voice of the syndicated loan market in Europe, the Middle East and Africa ("EMEA"). It actively works together with lenders, law firms, borrowers and regulators to educate the market about the benefits of syndicated loan products and to remove barriers to entry for new participants, as well as promoting growth and innovation in the sustainable and green lending markets. The publication from the LMA was supplemented by a Guidance Note issued in May 2020. The Green Loan Principles ("GLPs") provide a high-level framework of market standards and guidelines, providing a consistent methodology for use across the green loan market, whilst allowing the market to retain flexibility as it evolves. The GLPs are non-mandatory recommended guidelines, but are considered by most participants in the green market on a deal-by-deal basis and depending on the driving characteristics of each transaction.

The four core components of the GLPs are:

1. Use of proceeds: designated green projects should provide clear

environmental benefits, which will be assessed, measured and reported by the borrower.

2. Process for project evaluation and selection: the borrower of a green loan should clearly communicate how it intends to assess and select projects that will receive loan proceeds. In addition, the borrower should explain how it will manage the environmental and social risk of eligible projects.
3. Management of proceeds: the proceeds of a green loan should be credited to a dedicated account or tracked by the borrower to maintain transparency and promote the integrity of the product.
4. Reporting: the principles recommend the use of qualitative performance indicators and, where feasible, quantitative performance measures (for example, metrics on energy capacity, electricity generation, greenhouse gas emissions reduced/avoided, etc.).

The accounting implications from green loans affect both the lender's and the borrower's financial statements. In assessing the accounting implications, it is always important that entities ensure consistency with the non-financial information disclosed; for example, when assessing whether a feature is de-minimis or non-genuine, it should be asked whether this is consistent with the non-financial information disclosed in the financial statements.

PSAK 71 does not contain any special requirements for sustainable or 'green' financial instruments. Therefore, the accounting for all financial instruments, regardless of whether they contain a 'green' component or not, should follow the requirements under PSAK 71 regarding classification, initial recognition and subsequent measurement.

In our experience, the terms of green loans can vary widely and a lot of judgment can be involved in assessing the accounting for these instruments under the requirements of PSAK 71 "Financial Instruments".

2. Lender's accounting considerations

2.1. General overview

The big question for the lender is how to present the green loans in the statement of financial position. To answer this question, the lender should start with assessing the classification of the green loan upon initial recognition, which later will determine its subsequent measurement.

In determining the classification, PSAK 71 requires the lender to go through the business model criterion and the characteristics of contractual cash flow.

Business model criterion

The lender must determine whether the green loans are held within a business model whose objective is 'hold to collect', 'hold to collect and sell' or 'hold to sell'. The business model assessment should be carried out at a level that reflects how a group of financial assets are managed together to achieve a certain business objective, instead of the lender's intentions toward an individual instrument (or on an instrument-by-instrument basis).

Contractual cash flow characteristics

Meanwhile, the characteristics of contractual cash flow must be assessed individually for each instrument when the business model is either 'hold to collect' or 'hold to collect and sell'. The lender must assess whether the cash flows in the green loan are based solely on payments of principal and interest - commonly referred to as the 'SPPI test'. The SPPI test is important because it determines whether the loan can be measured at amortised cost or fair value through other comprehensive income ("FVOCI") or must be carried at fair value through profit or loss ("FVTPL"). If it does not pass the SPPI test, the loan would have to be measured at fair value through profit or loss.

In order to determine whether a green loan satisfies the SPPI test, the lender should carefully assess the contractual terms that determine the variability in the cash flows resulting from green measures. As part of this assessment, there are some considerations that should be made.

Interaction between the business model criterion and the SPPI test

If the financial asset passes the SPPI test, the lender will classify the instrument either as a financial asset measured at amortised cost or FVOCI. The classification will depend on the business model used. If it does not pass the SPPI test, the instrument must be classified as FVTPL, regardless of the business model.

2.2. Classification

Credit risk considerations

A loan might pass the SPPI test where the variation in the interest rate reflects a change in the instrument's credit risk and where the change in the interest rate is commensurate with the change in the credit risk of that instrument. In particular:

- a. The loan might be SPPI-compliant if the change in the interest rate reflects changes either in the probability of the default of the loan or in the loss given default, since both are relevant factors in determining what is an appropriate consideration for credit risk under PSAK 71. For example, everything else being equal, the consideration for credit risk would be less for a collateralised loan than for an uncollateralised loan.
- b. The magnitude of the change in the interest rate must be commensurate with the change in the credit risk of the instrument, and the formula should not introduce leverage. Leverage with a factor of less than 1 (i.e. so that the resulting amount is less than or equal to the result if a factor of 1 were used) is not considered to introduce leverage and hence could be SPPI-compliant, assuming that the green measure(s) reflect changes in the credit risk of the instrument.
- c. If the interest rate could vary in more than one way, each variation needs to be commensurate with the associated change in the credit risk of the instrument.

When assessing whether a contractual variation of cash flows based on green measures reflects a change in the credit risk of the instrument, the following factors are likely to be relevant:

Factors	Accounting Considerations
Nature of the asset	<p>A collateralised loan that finances a particular asset whose value is affected by green measures in cases where there is a security interest in that asset is more likely to be SPPI-compliant. This is because the value of the collateral might be favorably affected as a result of the entity meeting or outperforming certain targets for green measures, leading to a lower loss given default and therefore a lower level of credit risk for the instrument.</p> <p>In contrast, an unsecured loan is less likely to have a relationship between credit risk and green measures via the loss given default, and so the green variability will likely need to be analysed in terms of the probability of default to assess whether or not the loan is SPPI-compliant.</p> <p><i>Example:</i> <i>A loan is given to an investor to fund a waste management facility designed to increase the energy efficiency of its operations. The loan is also being collateralised by way of a security interest in the facility. The waste management generates income. The waste management procedures include a series of performance measures that, if met, will ensure that the process is on track to deliver the intended reduction in energy consumption during the operation of the facility. The interest rate on the loan increases if the project is not delivered in accordance with the agreed performance measures.</i></p> <p><i>Failure to meet the performance measures and deliver the intended reduction in energy consumption will very likely reduce the value of the facilities and hence adversely impact the probability of default and the loss given default of the loan.</i></p> <p><i>Because a failure to meet the performance measures reflects an increase in the credit risk of the loan, subject to consideration of all other relevant factors, the loan might pass SPPI, provided that it can be demonstrated that the magnitude of the change in interest rate is commensurate with the change in credit risk.</i></p>
Nature of the borrower	<p>Where the business of a borrower has relatively insignificant or very little direct exposure to green measures (e.g. an asset manager), targets for green measures may be less likely to reflect a change in the credit risk of the instrument.</p> <p>For a borrower whose business has direct exposure to green measures, such as a power-generating business with statutory CO₂ limits, a variation in the interest rate dependent on CO₂ emissions may be more likely to reflect changes in the credit risk of the instrument.</p> <p><i>Example:</i> <i>A loan is advanced to a power-generating business that operates a single power plant. The interest rate on the loan increases if CO₂ emissions from the power plant exceed a predefined threshold. If CO₂ levels exceed certain statutory limits, the quantity of power produced by the plant will need to be reduced, and in more extreme situations the plant could be required to shut down due to statutory emissions regulations.</i></p>

Factors	Accounting Considerations
	<p><i>Exceeding the CO2 emissions predefined in the loan will:</i></p> <ul style="list-style-type: none"> • <i>increase the risk of the borrower's income from the plant reducing, and so increase the probability of default, given the likelihood that the borrower cannot repay the loan; and</i> • <i>reduce the value of the power plant and therefore increase the loss given default of the loan.</i> <p><i>Because exceeding the predefined CO2 emissions threshold reflects an increase in the credit risk of the loan, subject to consideration of all other relevant factors, the loan might pass SPPI, provided that it can be demonstrated that the magnitude of the change in the interest rate is commensurate with the change in the credit risk.</i></p>
Specificity of the green measures	<p>If cash flows vary as a function of a broad basket of borrower-specific green measures that incorporates elements such as tax transparency, water usage and labor standards, it may be less likely that the resulting green variability reflects a change in the credit risk of the instrument.</p> <p>If cash flow dependency is based on a narrow green measure, it may be more likely that the resulting green variability reflects a change in the credit risk of the instrument.</p> <p><i>Example:</i> <i>A loan is advanced to a financial technology company. Since the company is a digital service company, hence most of its employees are working remotely and the company does not occupy spacious physical or landed working spaces. The interest rate on the loan decreases if the company's waste disposal falls below a predefined threshold.</i></p> <p><i>It is assessed that, given the very low amount of waste disposed by the company and the nature of its business, a change in its waste disposal does not reflect a change in the credit risk of the loan.</i></p> <p><i>Because an improvement in waste disposal does not reflect a decrease in the credit risk of the loan, the loan fails SPPI.</i></p>
Amount of the resulting interest rate change	<p>It is important to understand the commercial rationale for including green variability in the loan when making the assessment as to whether or not the variation in the interest rate reflects a change in the credit risk of the instrument. The lender also needs to obtain appropriate evidence to demonstrate that the magnitude of the change in the interest rate driven by green variability is commensurate with the change in credit risk.</p> <p>International Accounting Standards Board ("IASB") has a view that the assessment of interest should focus on what the lender is being compensated for instead of how much the lender receives, given that, for example, different lenders may price the credit risk element differently. Therefore, where the green variable(s) reflect changes in the credit risk of the instrument, the green variability clause can be judged to meet SPPI without quantifying an exact amount. Examples of situations where the green variable(s) would not reflect changes in the credit risk of the instrument include the following:</p>

Factors	Accounting Considerations
	<ul style="list-style-type: none"> The timing of the resulting interest rate change does not reflect changes in the credit risk of the instrument. For example: the targets for the green measures do not take appropriate account of the borrower's historic and expected future progress against the green measures, or will only impact the borrower's credit risk beyond the maturity of the loan; or The amount of the resulting interest rate change does not reflect changes in the credit risk of the instrument. For example: an increase in interest includes a penalty amount unrelated to any increased credit risk. <p><i>Example:</i> A loan is advanced to a company that operates vessels and ferries that currently use petrol and diesel. The interest rate on the loan decreases if the company's CO2 emissions fall below a predefined threshold. The interest rate on the loan increases if the company's CO2 emissions do not fall to a second predefined threshold.</p> <p><i>It is assessed that the amount of increased interest if emissions remain above the second predefined threshold includes a penalty amount unrelated to any increased credit risk.</i></p> <p><i>As the amount of the resulting interest rate change does not reflect changes in the credit risk of the instrument, the loan fails SPPI.</i></p>

Other considerations

Other considerations that may need to be made when assessing the cash flow characteristics of the green loans include the following:

- If the impact of a cash flow can only ever be de minimis or is not genuine, the feature should be disregarded when assessing SPPI. However, it is important that the economic rationale for including the clause in the first place is carefully considered. It is also important to consider whether such clauses are consistently portrayed in other aspects of the lender's reporting.
- Some loans might be referred to as 'green' loans because the borrower operates in an environmentally friendly sector such as the wind farm sector, but they may not include any green variability in the determination of the interest rate. These loans are sometimes referred to as having a 'greenium' (green premium) associated with them. The SPPI assessment for such loans shall refer to other considerations outside this guidance because the interest rate does not vary based on performance relative to green measures.



2.3 Measurement

Fair value

Under PSAK 71, the lender can, at initial recognition, irrevocably designate a financial asset that is measured at amortised cost or FVOCI to be measured at FVTPL for the purpose of eliminating or significantly reducing a measurement or recognition inconsistency (usually referred to as ‘an accounting mismatch’) that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases.

Nonetheless, the measurement shall be determined under the hierarchy of PSAK 68 “Fair Value Measurement”.

The main challenge is how to link one or more of the ESG factors that will form part of the inputs and assumptions that affects the measurement at fair value, especially when the instrument is not traded in an active market.

Fair value measurements using observable inputs might already appropriately reflect market participant views of any climate change inputs (this may be the case, for example, for the quoted equity price of an entity in the extractives or agriculture industry). However, valuation models for items not traded in an active market should be reviewed to ensure that they adequately represent market participant assumptions for the particular item being valued.

Impairment – expected credit loss (ECL) model

Climate change might affect the assumptions used by the lenders to estimate ECL. It can also affect the risk ratings of the borrowers or group of borrowers and their probability of default (“PD”). It can also result in loans to move between stages. The climate-related risks may increase the borrower’s credit risk and the likelihood that they might not be able to meet their debt obligations (e.g. late payment, breach of covenant, etc). Even the collateral asset related to the secured loans might become inaccessible or uninsurable and this would affect the asset’s value.

Here are some best practices worth noting when considering the impact of ECL:

- physical risk (for example, destruction or temporary disruption of physical assets from increased incidence of severe weather events) and transition risk (advancement or displacement as a result of moving to a ‘greener’ and more sustainable economy);
- duration of loan – loans with longer term exposures are likely to be more affected than short-term ones;
- do not focus on one model or one guidance for all - different portfolios will have different risk exposures depending on duration, industry, geography etc;
- beware of double counting risks when making assumptions or inputs in the model or calculation; and
- consider other arrangements such as insurance, guarantees, government subsidies and other sources of recoveries.

If a sector of industry is impacted by climate-related risk and the entity cannot determine which borrowers in the sector will be impacted, a collective assessment should be performed to ensure that the risk is factored in. If such risk is not incorporated into the ECL model, an overlay or post-model adjustment (“PMA”) might be needed. The entity can also disaggregate a homogeneous group into subgroups if there are different impacts from climate-related risk on the members of the group.

The entity might also need to consider using multiple economic scenarios (“MES”) to account for different climate change scenarios. More scenarios also needed to capture climate change risk and the implications for forecast economic scenarios.

Since changes in credit risk due to climate change usually will impact periods beyond 12 months, the assessment of whether there has been a significant increase in credit risk for only a 12-month PD might no longer be appropriate, in which case the entity should recognise the ECL over the remaining lifetime of the financial asset.

If the risk is not yet reflected in lifetime PDs but is captured for staging purposes by qualitative indicators, it might still be acceptable to continue using the 12-month PD for staging. However, there might be a view that the PD used in the ECL calculation is understated.

3. Borrower's accounting

3.1 General overview

From the perspective of the borrower, the first assessment should start with analysis on whether the contract of the green loan should be classified as a debt or equity or compound instrument under the criteria of PSAK 50 "Financial Instruments: Presentation". The classification and measurement will then follow the general requirements of PSAK 71 in accordance with the classification.

From the borrower's perspective, the green variability features in the green loans may create complex accounting implications because they may consist of embedded derivatives and there might be a question as to whether the embedded derivatives should be accounted for separately from the loan.

The borrower by default accounts a debt instrument as a financial liability measured at amortised cost. When a debt instrument is measured at amortised cost and has an

embedded derivative, the first analysis that should be performed is the determination of whether such embedded derivative should be separately accounted for.

Similar to the financial assets, upon initial recognition, the borrower can irrevocably designate a financial liability that is measured at amortised cost to be measured at FVTPL for the purpose of eliminating or significantly reducing a measurement or recognition inconsistency (usually referred to as 'an accounting mismatch') that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases.

When the financial liability is classified as FVTPL, the embedded derivative does not need to be separately accounted for. However, the embedded derivative will still form part of the fair value measurement of the whole instrument.

3.2 Assessment of embedded derivative

The borrower (or the issuer) shall assess whether the green variability meets the definition of a derivative set out in PSAK 71. There are three criteria of a derivative under PSAK 71.



Criteria	Accounting Considerations
a) Its value changes in response to the change in a specified interest rate, financial instrument price, commodity price, exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to one of the parties to the contract (also referred to as an 'underlying')	<p>If the sustainability-linked measure is a non-financial variable specific to the issuing entity or the holder, there is no embedded derivative because the green variability is a separate stand-alone instrument that would not meet the definition of a derivative.</p> <p>Although other specific facts and circumstances would need to be assessed, the following are a few examples of non-financial variables related to sustainability-linked measures that are specific to a party to the contract, and hence would not give rise to a derivative under PSAK 71:</p> <ul style="list-style-type: none"> • the borrower's CO2 emissions over a defined period, • the borrower's compliance with emissions and waste regulation standards, or with energy consumption standards.
b) It requires no initial investment	It usually requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
c) It will be settled at a future date	Most of the green loans will be settled at a future date.

If the sustainability-linked feature meets the definition of a derivative, consideration will need to be given on whether it should be accounted for separately as a derivative.

If the measure is not specific to the issuing entity or the holder (this also can be linked to the assessment on whether the sustainability-linked factor has a direct impact on the borrower's credit risk), the economic characteristics and risks of the sustainability-linked feature would not be expected to be closely related to the economic characteristics and risks of the host contract. In this case, the sustainability-linked feature would be separately accounted for if all other conditions are met.

3.3 Changes in cash flows due to green variability

The next question is on how the borrower should treat changes in expected cash flows due to the sustainability-linked measure. The changes in cash flows most likely will depend on whether the change reflects movements in the market rates of interest.

Under PSAK 71, the borrower should perform periodic assessment on the estimated cash flows for floating-rate financial liabilities to reflect the movements in the market rates of interest by altering the effective interest rate. If a floating-rate financial liability is recognised initially at an amount equal to the principal receivable or payable on maturity, the re-estimating of the future interest payments normally has an insignificant effect on the carrying amount of the liability. This is because generally the green variability reflects credit risk and the interest rate movement from the sustainability-linked measure is commensurate with the change in credit risk.

If these changes in expected cash flows do not reflect movements in the market rates of interest, the gross carrying amount should be adjusted. The gross carrying amount is recalculated as the present value of the estimated future contractual cash flows that are discounted at the original effective interest rate. Any adjustment should be immediately recognised in profit or loss as income or expense.

4. Disclosures

PSAK 60 “Financial Instruments: Disclosures” requires both lenders and borrowers to disclose information about the nature and extent of risks, and how the company is managing those risks.

Both lenders and borrowers might need to revisit the way they determine and disclose the relevant risks to ensure that climate-related risks are properly disclosed. For example, they might consider making more precise disclosures on the geographic area or segment that is being impacted by the climate-related risk or the intensity of the carbon emissions produced from operations.

Both lenders and borrowers will also need to consider disclosures about market risk impacted by climate-related risk. For example, they will need to consider disclosures on any investments they have in industries highly affected by climate change. A sensitivity analysis of the relevant particular risks should also be disclosed.

From the borrower’s perspective, liquidity risk is expected to be significantly impacted; as the borrower’s climate-related risk exposures become more significant, there is more pressure and restriction on the borrower’s debt covenants. Therefore, disclosures about key covenants might become increasingly material. Reduced access to funding from investors in carbon-intensive industries could also be a risk that needs to be addressed and disclosed.

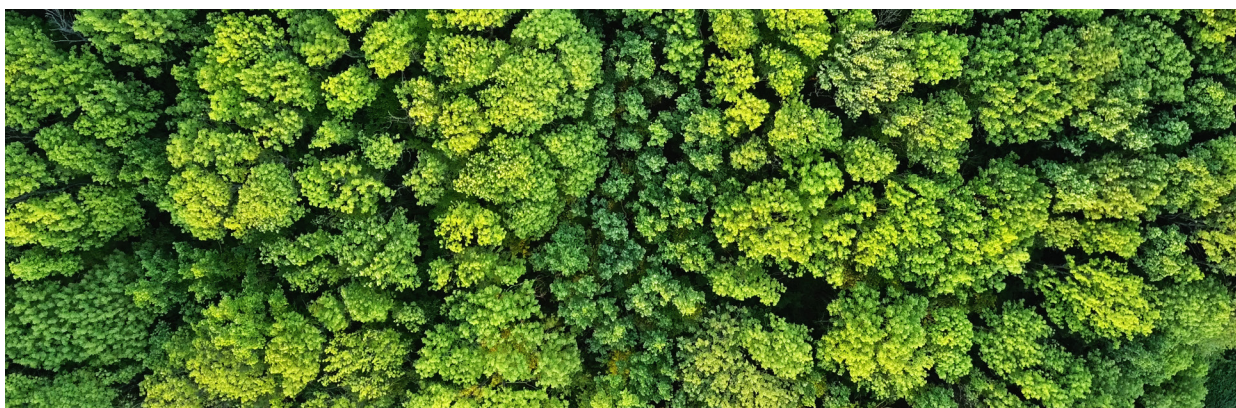
With regard to the requirement of PSAK 1 “Presentation of Financial Statements”, the entity must disclose all the relevant information and assumptions used in its critical judgments and estimates to fulfill the SPPI criterion related to green financing.

The disclosure requirements of PSAK 68 when determining fair value should also be included. The main disclosure is most likely related to how the green-related financial instruments are categorised into the three levels of the fair value hierarchy.

5. Final thoughts

Since there are no specific accounting standards for green loans, the accounting will depend on the structure, features and characteristics of the green loans. Entities should carefully assess and consider all the facts and circumstances of the instruments.

The question of which accounting treatment to use for green loans has been a global topic. Practices continue to evolve, particularly on the lender side in this area. We will continue to monitor this evolving situation and provide relevant and timely insights.



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