

Changes in ESG-Linked Financial Asset Classification and Power Purchase Agreements Use-Own Exemption under IFRS9 in 2024

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Abstract

In recent years, the growing emphasis on sustainability and environmental, social, and governance (ESG) considerations has significantly shaped business practices and financial reporting. As ESG-focused investment strategies become integral to corporate decision-making, the accounting profession has adapted its standards to meet evolving market demands. An article examines two critical amendments to IFRS 9 that reflect the increasing integration of ESG principles into financial reporting. It specifically focuses on the reclassification of ESG-linked financial assets and the revised application of the “own-use” exemption in Power Purchase Agreements (PPAs). These changes align with the broader global trend of incorporating sustainability into financial markets, offering a framework for companies to better reflect ESG goals in their financial statements while fostering greater transparency and accountability.

Keywords: Financial Reporting, Sustainability, ESG-linked financial assets, IFRS 9, Power Purchase Agreements (PPA), IFRS accounting standards

การเปลี่ยนแปลงการจัดประเภทรายการสินทรัพย์ทางการเงิน ที่เชื่อมโยงกับสิ่งแวดล้อม สังคม และการกำกับดูแล และช้อยกเว้น การใช้ไฟฟ้าของตนเองในสัญญาซื้อขายไฟฟ้าภายใต้มาตรฐาน รายงานทางการเงินฉบับที่ 9 ในปี ค.ศ. 2024

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บทคัดย่อ

ในช่วงหลายปีที่ผ่านมา การให้ความสำคัญที่เพิ่มมากขึ้นในการพิจารณาเรื่องความยั่งยืน ไม่ว่าจะเป็นในด้านสิ่งแวดล้อม สังคม และการกำกับดูแล (ESG) ส่งผลกระทบต่ออย่างมากกับวิธีปฏิบัติของธุรกิจและการรายงานทางการเงิน กลยุทธ์การลงทุนที่เน้นด้าน ESG กลายเป็นส่วนสำคัญของการตัดสินใจของกิจการ ซึ่งวิชาชีพบัญชีได้มีการปรับปรุงมาตรฐานเพื่อตอบสนองความต้องการของตลาดที่ก่อตัวขึ้น บทความนี้พิจารณาการแก้ไข 2 เรื่องที่สำคัญในมาตรฐานรายงานทางการเงินฉบับที่ 9 ที่สะท้อนการบูรณาการหลักการของ ESG กับการรายงานทางการเงิน โดยมุ่งเน้นที่ประเด็นที่เพิ่มขึ้นในการจัดประเภทรายการใหม่ของสินทรัพย์ทางการเงินที่เชื่อมโยงกับ ESG และการปรับปรุงการประยุกต์ช้อยกเว้นการนำไฟฟ้าไปใช้เองในสัญญาซื้อขายไฟฟ้า การเปลี่ยนแปลงนี้สอดคล้องกับแนวโน้มระดับสากลที่ขยายตัวขึ้นในการผนวกความยั่งยืนไว้ในตลาดการเงิน ซึ่งทำให้บริษัทต่าง ๆ มีกรอบในการสะท้อนเป้าหมาย ESG ในงบการเงินได้ดีขึ้น และในขณะเดียวกันก็เกื้อกูลความโปร่งใสและการะับผิดชอบให้สูงขึ้น

คำสำคัญ: การรายงานทางการเงิน, ความอย่างยั่งยืน, สินทรัพย์ทางการเงินที่เชื่อมโยง ESG, สัญญาซื้อขายไฟฟ้า, มาตรฐานรายงานทางการเงินระหว่างประเทศ

In recent years, sustainability and environmental, social, and governance (ESG) considerations have increasingly influenced business practices and financial reporting. The shift towards ESG-focused investment strategies is no longer a passing trend but has become a fundamental aspect of corporate decision-making. As a result, the accounting profession has had to adapt its frameworks to better address these evolving market demands. The changes include shaping accounting reporting standards to incorporate ESG-related factors in the capital markets, ensuring that financial reports accurately reflect a firm's business activities. To illustrate these changes, we break down two IFRS 9 updates into two parts and explain how these adjustments support the growing ESG trend.

Part 1: Changes in ESG-Linked Financial Asset Classification under IFRS9 in 2024

As the ESG trend continues to grow, financial instruments such as bonds have evolved to incorporate ESG features. It is unclear whether the newly developed instruments were fully addressed by existing accounting standards framework at the time. In response, the IASB revised and amended IFRS 9, updating the guidelines for the classification of financial assets, particularly in the context of ESG-linked loans. Part I explores the impact of the amendment, its implications for financial asset classification, and its effect on a firm's financial performance and position.

A financial asset is generally viewed as any asset that derives its value from a contractual claim, such as investments in equity or debt instruments. Financial assets are classified based on their contractual cash flows characteristics and how those flows are managed by the entity, which impacts their recognition, elimination, and measurement in financial statements.

The amendment to IFRS 9 addresses the practical challenge of classifying ESG-linked instruments. It is significant because it allows firms to invest in ESG-linked financial products without concern over potential changes in fair value that could impact their profit and loss. This encourages companies to invest in financial products that align with sustainable business practices and to promote global sustainability.

Before the Amendment: Classification of Financial Assets in IFRS 9

Prior to the amendment in 2024, International Financial Reporting Standards, (2024b) mandates that the classification of financial assets under IFRS 9 depended largely on whether the contractual cash flows of a financial asset were consistent with the SPPI (Solely Payments of Principal and Interest) test. The SPPI test determines whether the cash flows associated with a financial asset are consistent with a basic lending arrangement, focusing primarily on time value of money and credit risk as key elements of interest.

Virtually, financial assets that passed the SPPI test were classified as either amortized cost or fair value through other comprehensive income (FVOCI), depending on the entity's business model for managing the asset. Financial assets that did not meet the SPPI test, such as those with exposure

to changes in equity prices or commodity prices or carbon price index, were classified at fair value through profit or loss (FVTPL).

For instance, a loan that was primarily based on repayments of principal and interest, where the interest reflected time value of money and credit risk, would typically pass the SPPI test and be classified according to business model. However, if a financial asset had features such as exposure to equity prices or commodity prices, it would fail the SPPI test and be classified as FVTPL, with the associated gains or losses being recognized immediately in profit or loss.

The Impact of the 2024 Amendment to IFRS9: ESG-linked Financial Asset

According to Narayanasami (2024), the 2024 amendment to IFRS 9 introduces revised guidelines for the classification of financial assets with ESG-linked features. Specifically, the amendment acknowledges the growing importance of sustainability factors in financial products. It clarifies that a financial asset containing an ESG-linked feature, such as an interest rate adjustment based on meeting environmental, social, or governance (ESG) targets, may still pass the SPPI test if the cash flows are primarily for principal and interest, even if the interest rate adjusts in response to achieving (or failing to achieve) an ESG target. In particular, for all contractually possible scenarios, the contractual cash flows would not be significantly different from those of a financial instrument with identical contractual terms but without such an ESG contingent feature. These ESG-linked features can include CO₂ emission reduction targets or commitments to sustainable production and recycling practices, which might affect the interest rate or repayment schedule of a loan depending on whether the borrower meets these environmental goals. Goals related to employee diversity, shareholder representation, or other social and governance targets may also lead to adjustments in the financial asset's terms based on the borrower's achievements in these areas. Some financial products now incorporate changes to the financial asset's terms based on the borrower's ESG score from a rating agency. For example, a lower interest rate might be applied if the borrower improves its ESG rating, incentivizing positive sustainability practices.

The key takeaway from the amendment is that ESG-linked loans can still pass the SPPI test even when a financial asset includes a contingent feature, such as an ESG-related adjustment, it can still meet the criteria for basic lending arrangements, as long as the nature of the contingent event does not directly alter the fundamental lending risks or costs. For example, a loan agreement might stipulate that the interest rate is adjusted if the borrower achieves a specific reduction in carbon emissions. In this case, the financial asset's cash flows would remain focused on principal and interest payments on the outstanding amount, as long as, in all contractually possible scenarios, the contractual cash flows of a financial instrument with an ESG-linked contingent feature would not differ significantly from those of an instrument without such a feature. Importantly, even if the interest rate or timing of the cash flows is modified based on ESG targets, the asset must still primarily reflect payments of principal and interest to comply with the SPPI test.

Example: Sustainability-Linked Loan

Information: A company enters into a loan agreement with a bank for \$10 million, with a fixed interest rate of 5% per annum and a loan term of 5 years. The loan includes a sustainability-linked feature, where the interest rate will be reduced by 0.5% if the borrower achieves a 25% reduction in carbon emissions over the first three years of the loan term, compared to the emissions level at the time the loan was originated.

Regardless of whether the borrower meets the emissions target, the loan remains a basic lending arrangement, with principal and interest payments as the sole cash flows. The contingent feature, which adjusts the interest rate, does not fundamentally alter the lending risks. Whether or not the borrower meets the sustainability target, the financial asset's cash flows will be limited to principal and interest, with only a minor adjustment to the interest rate. In any contractually possible scenario, the cash flows would not be significantly different from those of the same asset without the contingent feature. The cash flows, whether or not the borrower meets the target, are based on principal and interest, with only a modest variation in the interest rate. This limited adjustment does not substantially change the underlying structure or purpose of the loan. Therefore, the loan passes the SPPI test, as it remains fundamentally a lending arrangement with cash flows primarily consisting of principal and interest payments.

Impact on Firm Financial Performance and Position

Without the amendment to the IFRS 9 standards, firms would be discouraged from investing in ESG-linked asset products, as these would likely be classified under the FVTPL (Fair Value Through Profit or Loss) model. Under the previous standards, this classification would require firms to record any changes in the fair value of financial instruments directly in net profit for the period on the statement of comprehensive income for the reporting period. This introduces volatility in the firm's profit and disrupts the primary objective of holding debt instruments, which is typically to collect principal and interest. If certain features of the financial instrument failed to pass the SPPI test, the classification under FVTPL would cause the financial product to unexpectedly affect a firm's profit volatility, making it more difficult for companies to manage financial bottom line strategically and commensurate with sustainability goals.

The amendment to IFRS 9 addressed practical challenges by allowing ESG-linked features to be classified more accurately, offering several key benefits to firms. For financial assets with ESG-linked investors, the amendment enhances transparency by enabling companies to align their asset classifications with their ESG goals, providing stakeholders with clearer insights into their commitment to sustainability and yet their core, strategic focused bottom line. This can help attract ESG-focused investors and improve access to capital. Additionally, the amendment to financial reporting standards regarding ESG-linked features incentivizes investors to support sustainable products, fostering long-term value creation in capital markets. For financial assets with ESG-linked borrowers, the amendment

to IFRS 9 can benefit companies by potentially lowering borrowing costs for those that meet ESG targets, while those that fail to do so may face higher financial costs. This creates a direct incentive for companies to integrate ESG considerations into their business strategies. Finally, companies offering ESG-linked financial products can differentiate themselves in a competitive market, appealing to the growing number of investors who prioritize sustainability. This could positively impact their reputation and shareholder value over time.

The 2024 amendment to IFRS 9 related to ESG-linked financial asset classification marks an important milestone in the integration of ESG factors into financial reporting. By allowing for the classification of ESG-linked loans within the existing framework for financial assets, this change reflects the increasing role of sustainability in the global financial system. The shift enables companies to align their financial instruments with sustainability goals, thus fostering long-term value creation while promoting transparency and responsible business practices. As the world continues to prioritize environmental, social, and governance factors, it is likely that further refinements will be made to accounting standards to better reflect the intersection of financial information and sustainability. The amendment to IFRS 9 is an important step in this direction, providing a clear framework for companies to incorporate ESG factors into their financial reporting, without losing sight of their financial obligations and goals.

Part 2: Changes in Power Purchase Agreement (PPA) under IFRS9 in 2024

In June 2023, the IFRS Interpretations Committee (IFRIC) reviewed challenges related to the application of IFRS 9 to Power Purchase Agreements (PPAs) for renewable energy. These agreements, particularly for renewable electricity, raised issues due to the inability to store energy, requiring it to be consumed or sold promptly. The IFRIC concluded that IFRS 9 lacked sufficient guidance on how to account for such contracts. The challenge led to a recommendation for the IASB to address the application of the ‘own-use’ exemption in IFRS 9 for such agreements,

In December 2024, International Financial Reporting Standards (n.d) issued amendments to both IFRS 9 and IFRS 7 regarding contracts related to renewable electricity. Set to take effect in January 2026, these amendments provide clearer accounting treatment for both physical and virtual PPAs, particularly when dealing with nature-dependent electricity. The revisions to IFRS 9 introduce new criteria for renewable electricity contracts, including considerations under the “own-use” exemption and allowing hedge accounting for certain renewable electricity agreements. Moreover, new disclosure requirements are implemented to improve transparency regarding the impact of PPA contracts on a company’s financial statements reporting.

A Power Purchase Agreement (PPA) is a contract between a power producer and a buyer for the purchase of electricity generated from a specific source, such as renewable energy facilities. The PPA defines the terms, conditions, pricing, and duration of the electricity sale. A Physical PPA refers to agreements in which the electricity generated is delivered directly to the buyer, involving tangible

energy transactions through the grid. Under IFRS 9, a Physical PPA is considered a derivative only if it does not qualify for the “own-use” exemption.

A Virtual Power Purchase Agreement (vPPA) under IFRS 9 refers to a financial contract between a renewable energy project developer and a power buyer. Unlike traditional PPA, vPPA does not involve the physical delivery of energy; instead, the buyer agrees to purchase the financial equivalent of the energy produced by the renewable project, without receiving the actual electricity. As a financial instrument, vPPA is treated as derivatives under IFRS 9, as its value is linked to market fluctuations in energy prices. The main accounting challenge is determining how to recognize and measure these contracts, given their reliance on market dynamics.

The emerging of vPPA significantly impacts capital markets by introducing a new asset class in renewable energy financing. By entering into these agreements, corporations can hedge their exposure to energy price volatility while simultaneously promoting sustainability goals. For energy developers, vPPA can provide a revenue stream to secure project financing, attracting investors focused on the environmental, social, and governance (ESG) components of their projects. ESG-related activity can increase liquidity and improve access to financing, particularly for green projects. Investors are also able to gain exposure to renewable energy markets without the need to directly own or operate energy infrastructure, thereby diversifying their investment options.

The growing importance of vPPA is crucial to the global shift toward a low-carbon economy. As businesses and governments increasingly prioritize sustainability and carbon reduction, vPPA offers a mechanism to support the adoption of renewable energy while managing associated financial risks. Proper accounting under IFRS 9 is essential for accurately reporting the financial impact of these agreements, ensuring transparency, and preventing potential misstatements of financial performance. Moreover, the rise of Virtual PPA influences the capital market's appetite for renewable projects, shaping the overall flow of investment into green energy sectors and ensuring that renewable projects receive the necessary financial backing to scale.

The Amendments for the Own-use Exemption related to Nature-dependent Electricity Contract under IFRS9.

Prior to the amendment, PwC (2024) mentioned that the “own-use” exemption under IFRS 9 refers to an exemption that allows entities to bypass the classification of certain contracts as financial derivatives. Specifically, if an entity enters into a contract to buy or sell a non-financial item such as electricity for the entity own consumption. The exemption allows an entity own-use” contract not to be measured at fair value through profit or loss (FVTPL). To qualify for the exemption in the case of PPAs, IFRS 9 mandates that companies evaluate whether a contract pertains to the receipt of electricity in accordance with their anticipated purchase or consumption needs – for example, the buyer intends to use the amount purchased and subsequently does so. If the own-use exemption is not applicable, Power Purchase Agreements (PPAs) are treated as derivatives, valued at fair value

through profit or loss (FVTPL). Given that PPAs are typically long-term contracts, accounting for them at FVTPL can lead to considerable fluctuations in the income statement over multiple reporting periods.

The challenge in case of PPAs market arises from to the unique characteristics of electricity, including its inability to be stored, and its market structure – If a company is unable to use the purchased electricity within a short time frame, it is required to sell the electricity back to the market within a specified period. While these sales occur due to market conditions and not with the intention of profiting from short-term price changes, it remains uncertain whether the company can still apply the own-use exemption under the prior guidelines, due to a mismatch between the amount bought and the amount actually used.

The IFRS 9 amendments introduced in 2024 provide greater clarity, allowing companies to apply the own-use exemption to PPAs if the company has been, and continue to be, a net purchaser of electricity throughout the duration of the contract. These amendments are applied retrospectively, based on the facts and circumstances at the start of the reporting period in which the changes are initially applied, without the need to restate prior periods.

The Amendments for Hedge Accounting on PPAs under IFRS9

PPAs and Virtual PPAs that do not qualify the own-use exemption are treated for as derivatives and measured at FVTPL. By applying hedge accounting, companies can mitigate the volatility in profit or loss by reflecting how these PPAs act as a hedge for future electricity purchases or sales.

For hedge accounting to be applied under IFRS 9, there must be a clear economic offset between the changes in the value of the hedging instruments and the hedged transactions. However, both buyers and sellers of PPAs face challenges in applying cash flow hedge accounting due to the variable nominal volume of the forecasted electricity contract. This variable volume, unlike traditional fixed-volume contracts, makes it difficult to meet the qualifications for hedge accounting.

As stated in KPMG (2024), recent amendments to IFRS 9 now allow companies to designate the variable nominal volume of forecasted renewable electricity sales or purchases as the hedged item, instead of a fixed volume based on P90¹ estimates. This flexibility aligns the volume with the nature-dependent electricity expected to be delivered by the generating facility referenced in the hedging instrument. This change enables an economic offset between the hedging instrument and the hedged transaction, making it possible for companies to apply hedge accounting.

The amendments are applied prospectively to new hedging relationships that are designated on or after the initial application date. Additionally, the amendments permit companies to discontinue

¹ P90 estimate indicates the expected volume of production to be exceed with 90 percent probability. As outlined in IFRS 9, the “highly probable” requirement for forecasted transactions is generally interpreted in practice to refer to the P90 volumes.

an existing hedging relationship if the same hedging instrument is designated in a new hedging relationship under the updated guidelines.

The Disclosure Requirements for Hedge Accounting on PPAs under IFRS9

International Financial Reporting Standards (2024a) provided a guideline in IFRS 9 that outlines specific disclosure requirements for both Physical and Virtual PPAs. For Physical PPAs classified as own-use contracts, companies must provide details about the contract's features that expose them to electricity volume fluctuations and the risk of oversupply. The companies must also provide estimates of future cash flows from unrecognized contractual commitments to buy electricity, broken down into appropriate time bands. Additionally, companies must disclose qualitative information on how they assess whether a PPA may become onerous and provide details on the costs and proceeds linked to the purchase and sale of electricity, such as total purchase costs, unused electricity, and proceeds from excess electricity sales. For PPAs that are part of a cash flow hedge accounting relationship, further disaggregation by risk category is necessary.

In contrast, Virtual PPAs which are financial contracts involving settlement based on market price differences without physical energy delivery, have different disclosure requirements under the new IFRS 9 amendments, which becoming effective January 2026. Since Virtual PPAs are treated as financial instruments, companies must disclose the terms and conditions of these contracts, including disaggregated information by risk category, such as price and volume risk. They must also report the amount of the hedged item effectively hedged, the impact of the Virtual PPAs on profit or loss, and their fair value, especially if accounted for at fair value through profit or loss (FVTPL). Furthermore, companies should provide information on exposure to market risks, such as price fluctuations in electricity, and disclose any cash flow commitments related to the financial settlement of the virtual PPAs, particularly for future periods.

Overall, the PPAs amendments under IFRS 9 in 2024 addressed issues related to hedge accounting and the reporting of contracts referencing nature-dependent electricity. The amendments now allow companies to designate a variable nominal volume of forecasted electricity transactions as the hedged item, facilitating an economic offset between the hedging instrument and the hedged transaction. The IASB also added detailed disclosure requirements for contracts that qualify for the 'own-use' exemption, including information on the variability of electricity volume, commitments to buy electricity, and the impact on financial performance. The new guidance aims to help companies better reflect the financial impact of these contracts, particularly as the demand for renewable energy grows in response to the global push for sustainability.

The 2024 amendments to IFRS 9 address issues related to hedge accounting and the reporting of contracts involving nature-dependent electricity. The amendments now allow companies to designate a variable nominal volume of forecasted electricity transactions as the hedged item, facilitating an economic offset between the hedging instrument and the hedged transaction. The IASB has also

introduced detailed disclosure requirements for contracts that qualify for the ‘own-use’ exemption, including information on electricity volume variability and commitments to buy electricity. The updated guidance aims to provide companies with a better information related to these contracts, particularly in light of the growing demand for renewable energy driven by the global push for sustainability.

Overall Implications for Financial Reporting and Empirical Support

The changes to IFRS 9 in 2024 aim to reduce earnings volatility by moving away from classifying ESG-linked financial assets and PPA-related contracts as fair value through profit or loss (FVTPL), instead recognizing them as long-term in nature when certain conditions are met. The key objective of the IASB is to provide an alternative approach or exemption that avoids recognizing these items in the profit or loss section of the statement of comprehensive income. The underlying rationale is that recording these long-term instruments in profit or loss could significantly distort the financial statements and potentially mislead users, particularly investors, resulting in inaccurate firm performance evaluation and hence, firm valuations.

In the accounting literature, reducing earnings volatility has been shown to enhance the predictability of a firm’s future earnings, thereby benefiting investors by providing more reliable information for valuation and decision-making. Dichev and Tang (2009) demonstrate that firms with smoother earnings exhibit higher earnings persistence and greater predictive power regarding future performance. Greater predictability reduces the uncertainty investors face, which in turn lowers perceived risk and potentially reduces the cost of capital. When earnings are less volatile, investors can more confidently forecast future cash flows, improving investment efficiency and facilitating better portfolio management. Thus, earnings predictability—strengthened by lower volatility—is a key characteristic of high-quality financial reporting that supports investor decision-making.

Similarly, earnings predictability plays a crucial role in shaping investor perceptions and market behavior, particularly through its influence on stock price volatility. Sadka (2007) provides compelling evidence that more predictable earnings are associated with reduced stock price volatility, as they decrease the uncertainty surrounding a firm’s future performance. Stable and forecastable earnings allow investors to make more informed assessments of firm value, leading to more efficient and less reactive pricing in capital markets. This stability not only enhances investor confidence but also supports long-term investment strategies by minimizing exposure to unforeseen financial shocks. Consequently, enhanced earnings predictability, facilitated by reduced volatility, contributes to a more stable investment environment and improved capital allocation.

Overall, reducing earnings volatility benefits stakeholders by enabling better forecasting of financial performance. Therefore, amending accounting standards to reduce volatility ultimately serves the interests of stakeholders. As evidenced by empirical research, lower volatility clearly benefits users of financial statements. Actually, the change is not merely an "alternative" measurement approach,

as suggested earlier; rather, it is a necessary adjustment aligned with the economic substance of the contracts. Most ESG-linked financial assets and PPA-related contracts are long-term in nature and should not be classified as short-term profit and loss instruments in the statement of comprehensive income. The 2024 amendments reflect a shift in accounting standards, aligning financial reporting with the long-term realities of these financial instruments.

Conclusion

In conclusion, the amendments to IFRS 9 in 2024 mark a significant evolution in how financial assets and Power Purchase Agreements (PPAs), that are linked to sustainability, are classified and reported. These changes reflect the growing importance of ESG considerations in financial markets and aim to enhance transparency and alignment between financial reporting and corporate sustainability goals. By providing clearer guidelines for the classification of ESG-linked loans, Physical PPAs, and Virtual PPAs, the amendments allow companies to more accurately reflect their genuine financial positions, reduce profit volatility, and attract ESG-focused investments. Furthermore, the updates to hedge accounting and the ‘own-use’ exemption address unique challenges in renewable energy markets, offering flexibility and clearer disclosures for nature-dependent electricity contracts. As sustainability continues to drive corporate and financial decisions, these changes to IFRS 9 will play a crucial role in facilitating the global transition to a low-carbon economy while ensuring companies can meet both their financial and environmental obligations.

Reference

- Dichev, I. D., & Tang, V. W. (2009). Earnings volatility and earnings predictability. *Journal of Accounting and Economics*, 47(1–2), 160–181. <https://doi.org/10.1016/j.jacceco.2008.09.005>
- International Financial Reporting Standards. (2024a). *IASB updates accounting standards for nature-dependent electricity contracts*. IFRS. <https://www.ifrs.org/news-and-events/news/2024/12/iasb-updates-accounting-standards-nature-dependent-electricity-contracts/>
- International Financial Reporting Standards. (2024b). IFRS 9 Financial Instruments. *IFRS*. Retrieved April 13, 2025, from <https://www.ifrs.org/issued-standards/list-of-standards/ifrs-9-financial-instruments/>
- KPMG. (2024). *IFRS contracts for renewable electricity*. KPMG. <https://kpmg.com/be/en/home/insights/2024/05/ifrs-contracts-for-renewable-electricity.html>
- Narayanasami, M. (2024). Classification of financial assets. *KPMG*. Retrieved April 13, 2025, from <https://kpmg.com/xx/en/our-insights/ifrg/2024/pir-review-ifrs9-classification-measurement.html>
- PwC. (2024). *New own-use and hedging guidance*. PwC. https://viewpoint.pwc.com/dt/gx/en/pwc/in_briefs/in_briefs_INT/in_briefs_INT/new-own-use-and-hedging-guidance.html
- Sadka, G. (2007). Understanding stock price volatility: The role of earnings. *Journal of Accounting Research*, 45(1), 199–228. <https://doi.org/10.1111/j.1475-679X.2006.00230.x>