



SRI-Linked Sukuk: An Enabler for the Transition to Low-Carbon Activities

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Abstract

In achieving a low-carbon economy, the Securities Commission Malaysia (SC) is facilitating companies, particularly the high-emitting greenhouse gas industry moving towards low-carbon activities with the issuance of the SRI-linked Sukuk Framework (SRILSF). This paper will analyse the SRILSF, explore the features of the SRI-linked sukuk and innovation by the issuer in selecting the Key Performance Indicators (KPIs) and Sustainable Performance Targets (SPTs) and finally, an observation of the issuance toward the institutional investors with sustainable portfolio. This paper adopted content analysis to study the characteristics, and core components of the SRILSF. Additionally, a comparative study was performed to exhibit different requirements between SRILSF with SRI Sukuk Framework and International Capital Market Association (ICMA)'s Sustainability-Linked Bond Principles (SLBP). Finally, this paper will provide an analytical review of available sustainability-linked sukuk issued in Malaysia, focusing on the core component of the sukuk. The paper acknowledges that ICMA's SLBP is a voluntary adoption of the issuing process, while SRILSF is a Framework issued by a capital market regulator where one need complies to make an issuance, and non-compliance will result in a breach of such Framework. This paper also acknowledges there are different requirements set for the appointment of an external reviewer for post-issuance, and the credential requirements of the external reviewers set ICMA's SLBP and SRILSF. The issuance of SC's SRILSF is an important milestone in sustainable regulatory development of Malaysian capital market as it provides opportunities for Malaysian' capital market issuers that seek to transition or commit to sustainable objective. The issuance of SRI-linked sukuk will attract more sustainable-focused investor, specifically institutional investors with sustainable portfolios.

Keywords: Sustainability, SRI sukuk, SRI-linked sukuk, Sustainability-linked sukuk, Sustainability-linked bond

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1. Introduction

1.1. Background

Climate change issue has become the most crucial agenda that need to be addressed both at local and international level involving various actors' participation such as government, intergovernmental, non-governmental organisations (NGOs), private sectors and even an individual citizen to play their part to combat this issue. There are over 3,000 international agreements related to environmental between governments and international organizations ([International Environmental Agreements \(IEA\) Database Project, 2022](#)). The most prominent is Paris Agreement (2015) whereby signatories countries to submit climate action plans to reduce the Greenhouse gas emissions (GHG) in 2020 and new target set for zero-carbon solution by 2030 ([United Nations Climate Change, 2022](#)). United Nations Sustainable Development Goals (UN SDGs) is another important agreement with several goals focusing on climate change, affordable and clean energy, and sustainable cities and communities (see more at UN SDGs). Malaysia being a signatory party both to the Paris Agreement and UN SDGs had strategic plan to combat the climate change issue begun in 2009 with the introduction of The National Climate Change Policy ([Economic Planning Unit, 2011](#)) and aim for a carbon-

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neutral nation by 2050 (Economic Planning Unit, 2019)¹. In line with the nation's objective, the Securities Commission Malaysia (SC), a regulator for the capital market segment in Malaysia had in 2014 launched the Sustainable and Responsible Investment (SRI) Sukuk Framework to facilitate the sustainable and responsible investment (Securities Commission Malaysia, 2014), followed by SRI Roadmap in 2019 with recommendations to assist the development of SRI (Securities Commission Malaysia, 2019) and on June 30, 2022, the SC launched the SRI-linked Sukuk Framework (SRILSF) to enable companies with sustainability concerns to raise financing to tackle climate change or social agenda (Securities Commission Malaysia, 2022f). Issuance of sustainability-linked bond and sukuk is relatively new as world witness the first Sustainability-linked Bond (SLB) launched in 2019 by Enel SpA with an issuance amounting to USD1.5 billion (Norton Rose Fulbright, 2020) and in 2020, Etihad Airways issued the world's first Sustainability-linked Sukuk (SLS) worth USD600 million (Ravindirane and Jan, 2020). There is rapid growth for the sustainable-linked bond/sukuk segment according to (Climate Bonds Initiative, 2022) as for first quarter of 2022, 11.9% (USD24 billion) increased of total issuance from first quarter of 2021. Since its introduction, the corporate had led the issuance of SLBs until Chile became the first country to issue the world's first sovereign SLB worth US\$2 billion with aim to reduce Chile's carbon emissions and to increase its use of renewable energy (BNP Paribas, 2022). The growth of sustainability-linked bond/sukuk is a positive trend, as study indicates an increased interest of institutional investors to incorporate sustainable issues in their investment decisions (Kordsachia et al., 2021) and sustainability-linked bond/sukuk is here to facilitate companies that wish to transition and to tackle the climate issue.

1.2. Objective

The primary objective of this paper is to explore the feature of the SRILSF by the SC and to perform comparative studies between the Framework with SRI Sukuk Framework as well as Sustainability-linked Bond Principles (SLBP) by the International Capital Market Association (ICMA). In addition, this paper will also explore the feature and core components of SLSs issued in Malaysia by Yinson Holdings Berhad and Cenviro Sdn Bhd issued under SLBP of ICMA. Although sustainability-linked bond/sukuk is relatively new in the market, there are numbers of studies conducted on the sustainability-linked bond, however there is non-existence of study performed on SRI-linked sukuk since the issuance of the SRILSF in June 2022 and Malaysia has yet to witness the first SRI-linked sukuk issued under the SRILSF. Hence this paper is premier contribution to the SRI-linked sukuk literature and Islamic capital market study in Malaysia and may serve as reference to the potential SRI-linked sukuk issuers, regulators, and sustainable institutional investors and academician. This paper will be presented in the following orders: Part 2: Research Methodology, Part 3: Literature reviews related to sustainability-linked bond/sukuk, Part 4: Features of SRI-linked sukuk framework followed by comparative study of the Framework with SRI Sukuk Framework and ICMA's SLBP, Part 5: Case study on SLSs issued in Malaysia, Part 6: Observation and conclusion.

2. Methodology

This paper employs the most important research technique in social science i.e., content analysis (Krippendorff, 1989) as its roots from social research (Bengtsson, 2016). Content analysis according to Given (2008) is method of classifying qualitative data into groups of related concepts, patterns, themes, or relationship. This method of analysis narrows the numbers of data to be collected, categorised, and identify data into groups and try make sense of it (Silverman, 2014). For this paper, data collected from available documents, newspaper, peer-reviewed journals, frameworks, guidelines, and principles are categorised under the following themes: sustainability, sustainable investment, sustainability-linked bond, sustainability-linked sukuk, SRI sukuk and SRI-linked sukuk. In addition, this paper also adopted comparative method to study themes mentioned earlier.

¹ Assigned task to identify options and strategies to achieve a low-carbon economy

3. Literature Review

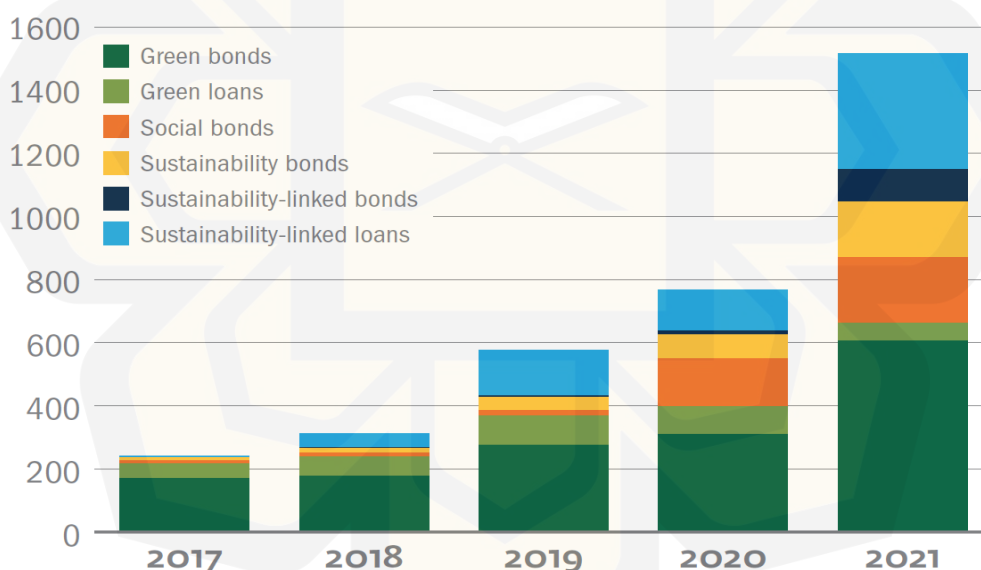
3.1. Concept of sustainability-linked sukuk

Literature on SRI-linked sukuk is practically non-existent since the issuance of the SRI-linked Sukuk Framework. Due to similarities of its core components to sustainability-linked bond/sukuk (SLB/S), this paper will gather relevant literatures on SLB/S. International Capital Market Association (ICMA)(2020) in their Sustainability-linked bond Principles (SLBP) defines SLBs as:

“any type of bond instrument for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined Sustainability/ ESG objectives.”

Indeed, green bonds is the most popular sustainable related fixed-income instrument (Flammer, 2021), however, SLB/S provide an alternative fixed income instruments available for the market players as more companies moving toward ‘sustainable activities’ and to tackle the climate change. According to Dey et al. (2020) SLB/S is a product innovation as its creation is a concept where debt instruments is linked to sustainability performance. This innovative fixed income instruments that integrate sustainability target has become latest phenomenal to facilitate companies to enhance their sustainable performance, compare with other “sustainable fixed income instruments”. Although in principle, SLBs issuance concern on environment, social and governance targets, however in reality, nearly all SLBs issuances are linked to environment targets (Berrada et al., 2022). Survey conducted in 2020 among investment managers indicates that SLBs are viewed as most suitable investment approaches that focused on climate change, with 88% respondents considering or already invested in SLBs (Naxitis Investment Management, 2021).

Figure 1: Sustainable debt annual issuance, 2013–2021 (\$ billion)



Source: De La Orden and De Calonje (2022)

Unlike green bonds that focuses on the utilisation towards green project, SLBs does not specify the use-of-proceeds of the bond, however the focus is on the issuer’s performance on the pre-determined sustainable indicator (Giráldez & Fontana, 2021). Hence, SLBs is also known as the KPI bonds (Ramirez et al., 2022) and SLBs tenure is commonly between 5 years to 12 years (Vulturius et al., 2022). Since its novel introduction into the securities market in 2019, there had been few studies conducted on SLBs such a study by Kolbel and Lambillon (2022) found that under the SLBs issuances, the issuers benefit from lesser cost of principal, as investors pay for the sustainability enhancement. According to De La Orden & De Calonje (2022), SLB investors pool’s is commonly substantial with large spread that come with highly demand pricing mechanisms that is however straightforward and easy to track. In term of most active and supportive regulation on SLB, European Union (EU) is considered as a forerunner in promoting sustainable activities as parts of the financial

system (Alexandraki, 2021). Study conducted by Ramirez et al. (2022) found the existence of premium to investors in SLBs issuance under the EU.

3.2. ICMA Sustainability-linked bond principles

ICMA is an association based in Zurich with long standing history and had since 1963 been promoting the development of international capital and securities markets with its member via the issuance of market practices and regulatory policies (ICMA, 2022). As off 15 December 2022, there are 647 members globally registered with ICMA including three Malaysian local financial institutions i.e., CIMB Bank Berhad, Malayan Banking Berhad and RHB Bank Berhad. ICMA is committed via its mission in promoting robust cross-border securities market to support a viable economic development. To date, ICMA has issued Principles, Guidelines and Handbook related to sustainable finance *inter alia* Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines, Sustainability-Linked Bond Principles (SLBP), Climate Transition Finance Handbook and Guidance Handbook which are supported by international market initiatives (ICMA, 2022). SLBP introduced in June 2020 is a voluntary process guideline to all types of issuers and any type of financial capital market instruments. The Principles provides recommendations on structure features, disclosure and reporting that incorporate environment, social and governance (ESG) outcomes (ICMA, 2020). The issuer of SLBs are binds to a predefined, measurable, and verifiable sustainable objective via Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs) (Berrada et al., 2022). In summary, ICMA's SLBP consist of 5 main core components i.e. (i) *Selection of Key Performance Indicators (KPIs)*; (ii) *Calibration of Sustainability Performance Targets (SPTs)*; (iii) *Bond characteristics*; (iv) *Reporting*; and (v) *Verification*. Will be elaborated more in Section 4.2 (ii) of this paper.

3.3. Sustainable-focused institutional investors

Integration of ESG issues as part of investment decision by institutional investor globally are expected to increase (US SIF, 2018). There had been calls from giant institutional investors such as Blackrock to focus on climate change indicating strong investment appetite on sustainable portfolio (Giráldez and Fontana, 2021). Sustainable investors signatories to the United Nations Principles for Responsible Investment (PRI) are majority to institutional investors (Kordsachia et al., 2021) and there is evidence demonstrating institutional investors that join the PRI display greater ESG footprints (Gibson et al., 2020). This is validated by a survey conducted by Morgan Stanley (2020) indicated that 95% of asset owner integrating or plan to integrate sustainable portfolio in all or part of their investments focusing more on environmental issues *inter alia* climate change. Voluntary commitment adhering to the investment principles requires the institutional investors to draw a plan to incorporate sustainability agenda as part of its investment decision on annual basis for public's views (Kordsachia et al., 2021). Study by Brandon et al. (2021) indicates that institutional investors are in favour for the sustainability portfolios as there is increasing trend of institutional investors interests on stocks with high-ranking sustainability scores. According to Velte (2022), study showed that participations of sustainable institutional investors lead to the increased of ESG outputs with highest participations from pension funds, mutual funds and hedge funds. In Malaysia, institutional investors are urged to hold a minimum of 5 percent of their assets under the sustainable portfolio ("*Prime Minister's Keynote Address at Invest Malaysia,*" 2015) and to date² there are 14 signatories parties from Malaysia that signed up as members to the PRI namely the Employee Providence Funds (EPF), Khazanah Nasional Berhad (Khazanah) and Kumpulan Wang Amanah Diperbadankan (KWAP) representing institutional investors (UN PRI, 2022).

4. Sri-Linked Sukuk Framework

4.1 Sustainable environment of Malaysian Islamic capital market

The SC, a statutory body responsible *inter alia* to regulate and develop the Malaysian Islamic capital market by issuing and enforcing regulations to ensure good, effective, and fit behaviour of all market participants (Securities Commission Malaysia, 2022a). To support the growth and development of Malaysian Islamic capital market, the SC had been active in issuing Framework and Guidelines in particularly on sustainable agenda (Razali et al., 2022). The following diagram exhibits summary of sustainable growth milestones of the SC:

² As of 13 February 2023

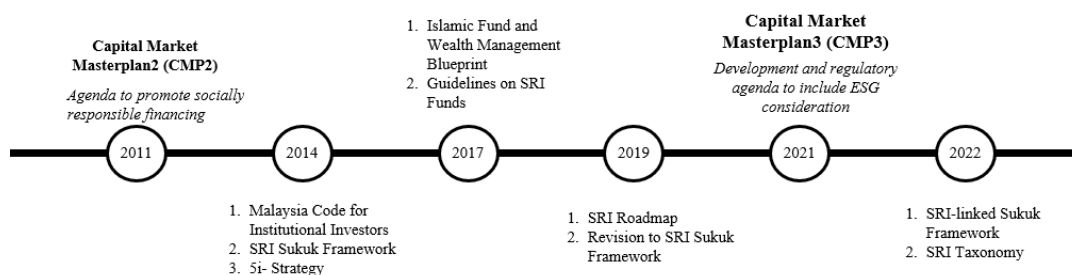


Diagram 1: Sustainable growth agenda by the SC

Source: Authors' own

Malaysia had been forefront for sustainable sukuk issuance with the world's first SRI Sukuk by Khazanah Nasional Berhad (Khazanah) worth RM1 billion Sukuk Programme in 2015 (Khazanah Nasional Berhad, 2015). Since the issuance of Ihsan Sukuk by Khazanah, numerous SRI sukuk issuances in Malaysia and as of June 2022, RM8.8 billion SRI sukuk issued in Malaysia under the SRI Sukuk Framework (Securities Commission Malaysia, 2022e). The SRI sukuk issuance in Malaysia had financed various green, social and sustainable projects such as Sukuk Ihsan that aimed to improve quality education (Khazanah Nasional Berhad, 2015), Cagamas Bhd sukuk issuance to fund the purchase of eligible Islamic financing for affordable housing (TheStar, 2021), Tadau Energy Sdn Bhd green sukuk issuance to finance a 50MWac solar project in Kudat, Sabah (Tadau Energy Sdn Bhd, 2017) and up to RM2 billion SRI sukuk programme by PNB Merdeka Ventures Sdn Berhad utilised to finance the green Merdeka PNB118 tower (Malaysian Sustainable Finance Initiative, 2022).

Since the issuance of Guidelines of SRI Funds in 2017 (Securities Commission Malaysia, 2017), there have been 34 SRI funds launched as at 2021, with a total of net asset value of RM5.07 billion (Securities Commission Malaysia, 2022b). As at 20 November 2022, there are 22 SRI fund with Islamic fund status issued in Malaysia such as BIMB ESG Sukuk Fund, Makmur myWakaf Fund and MIDF Amanah ESG Mustadamah Fund (Securities Commission Malaysia, 2022d). To continuously support the development of SRI in Malaysia, the SC had in 2018 established the Green SRI Sukuk Grant Scheme which was later renamed to SRI Sukuk and Bond Grant Scheme when the grant was expanded to all eligible projects under the SRI Sukuk Framework (Securities Commission Malaysia, 2021). With the issuance of SRILSF on 30 June 2022 (Securities Commission Malaysia, 2022f) the SC had announced on 23 August 2022 that the SRI Sukuk and Bond Grant Scheme will be expanded to issuances of SRI-linked sukuk (Securities Commission Malaysia, 2022g). The eligible issuer may claim up to 90% of the cost incurred in appointing the independent reviewers for the sustainable sukuk. As of June 2022, 15 issuers involved in various sustainable projects such as renewable energy had benefitted the Grant (Capital Market Malaysia, 2022). In addition to the Grant, sustainable sukuk issuer that benefit the Grant are also entitle for income tax exemption for five years from year 2021 to year 2025 (Capital Market Malaysia, 2022).

4.2 Features and key component of SRI-linked Sukuk framework

This subsection will provide (i) analytical review of the SRILSF and comparison study between (ii) SRILSF and SRI Sukuk Framework and (iii) SRILSF and ICMA's SLBP. In respect of compliance and development of SRI Sukuk Framework, there had been many studies conducted (see, Noordin et al., 2018; Rabiah et al., 2019; Wahab and Mohamed-Naim, 2019). As for ICMA's SLBP, there had also been numerous studies conducted despite its introduction in 2020.

(i) SRI-linked Sukuk framework

The key features of SRILSF lies on its core component under Paragraph 9.07 (see Table 1 below). SRI-linked sukuk is defined based on its characteristics either financially or its structure that meets its sustainable targets. Selection of Key Performance Indicators (KPIs) by the issuer is pivotal in achieving the sustainability targets³.

³ Paragraph 9.09, Chapter 9 of SRI-linked Sukuk Framework

The selected KPIs by the issuer must *inter alia*⁴, (i) be an important element to issuer's sustainable and corporate policy, (ii) focus on environment, social or governance (ESG) related issuer in issuer's business and (iii) able to be controlled by the issuer. In addition, Sustainable Performance Targets (SPTs) set by the issuer is as important as selection of KPIs that can be measured to be improved over a pre-set period. The selected SPT should be *inter alia* ambitious but practical, in line with issuer's sustainable, corporate and ESG strategy and pre-set or simultaneously set with the issuance of the SRI-linked sukuk.⁵

(ii) SRI Sukuk framework and SRI-linked Sukuk framework

SRI sukuk and SRI-linked sukuk differs in terms of its definition. SRI sukuk according to SRI Sukuk Framework is sukuk where the proceed is used to fund activities or projects in relation to Eligible SRI projects⁶, while SRI-linked sukuk is defined as sukuk where the financial or structure characters of the sukuk or both rely on or meets the predefined sustainable targets⁷. In other words, key characteristic of SRI sukuk issuance must tie to the Eligible SRI projects as defined under SRI Sukuk Framework while SRI-linked sukuk is not tied to any SRI projects but rely on its end goal of sustainability targets. By shifting the focus to achieving the KPIs under SRI-linked sukuk, rather than on specific parameters as in the case of SRI sukuk, it will allow for wider sustainable strategies to the issuer. Hence, SRI-linked sukuk is seen as alternative instrument that provides for flexibility in capital raising instead of being limited to eligible project under the SRI sukuk issuance. Table 1 below represent summary of key differences for SRI Sukuk Framework and SRI-linked Sukuk Framework.

Table 1: Key differences of SRI Sukuk Framework and SRI-linked Sukuk Framework

Criteria	SRI Sukuk Framework Relates to:	SRI-linked Sukuk Framework
Eligible projects	<ul style="list-style-type: none"> a) environment and natural resources; b) energy conservation; c) renewable energy; d) Reducing GHG emission; e) social or f) Improving the quality of life 	Not applicable
Core components	<ul style="list-style-type: none"> a) Utilisation of proceeds; b) Process for project evaluation and selection; c) Management of proceeds; and d) Reporting. 	<ul style="list-style-type: none"> a) SRI-linked sukuk characteristics; b) Selection of Key Performance Indicators (KPIs); c) Calibration of Sustainability Performance Targets (SPTs); d) External review; and e) Reporting.
Utilisation of proceeds	Eligible SRI projects above	General utilisation of proceeds
External review	Issuer may appoint external reviewer to assess and provide report of the Eligible SRI project	Pre-issuance: appointment of external reviewer Post-issuance: appointment of independent verifier
Reporting	Annual reporting relating to Eligible SRI projects, utilisation of proceeds and unutilised amount.	Annual publication of selected KPIs, progress of SPTs, any changes to the issuer's sustainability, business and ESG strategy that may impact the KPIs and SPTs.
Disclosure requirements	Disclosure related to: <ul style="list-style-type: none"> a) SRI objectives; b) utilisation of Eligible SRI projects; c) impact objectives from the Eligible SRI projects; d) evaluation processes of Eligible SRI projects; 	Disclosure relating to: <ul style="list-style-type: none"> a) rationale and selection process of KPIs, sukuk structure or financial characteristics; b) plan to achieve the SPTs; c) motivation and timeline for the outlined SPTs; d) baseline of selected KPIs;

⁴ Paragraph 9.10, Chapter 9 of SRI-linked Sukuk Framework

⁵ Paragraph 9.12 and Guidance to Paragraph 9.12, Chapter 9 of SRI-linked Sukuk Framework

⁶ Paragraph 7.02, Chapter 7 of SRI Sukuk Framework

⁷ Paragraph 9.02, Chapter 9 of SRI Sukuk Framework

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|--|--|
| e) criteria used to identify and manage material environmental or social risks related to Eligible SRI projects; | e) recalculations or pro-forma adjustments of baselines will take place; |
| f) management of proceeds; and | f) fallback mechanisms in case the SPTs cannot be calculated, and |
| g) compliance with ESG standards | g) any other factor may affect the achievement of the SPTs. |

Source: Authors' own

(iii) *SRI-linked Sukuk Framework (SRILSF) and ICMA's Sustainability-Linked Bond Principles (SLBP)* The features and requirements of SRILSF mirrored ICMA's SLBP with certain variations. Definitions of SRI-linked sukuk and sustainability-linked bond is similar in principle as any sukuk, or bond can be categorised as SRI-linked sukuk or sustainability-linked bond if the issuer is able to achieve the predefined sustainability objective. However, to be characterized as SRI-linked sukuk, the sukuk must comply with all requirements under the SRILSF, hence entitled to adopt or use the title of SRI-linked sukuk.⁸ Both SRILSF and ICMA's SLBP shared similar core components with different terms used for sukuk and bonds, although ICMA's SLBP doesn't distinguish sukuk or bond in its principles as it maybe be voluntary adopted by issuer (see Table 2). Besides that, an obvious different requirement for the utilisation of proceeds under SRILSF must be for Shari'ah-compliant purposes. In addition, given the complexity of the SRI-linked sukuk, the SC is silent on combination of SRILSF with another available Framework and under SRILSF, an external reviewer must be appointed for both pre and post issuances, while it is only recommended for pre-issuance and necessary to appoint external reviewer for post-issuance under ICMA's SLBP. Table 2 below represent summary of key different requirements between SRILSF and ICMA's SLBP.

Table 2: Key requirements between SRI-linked Sukuk Framework and ICMA's SLBP

Criteria	SRI-linked Sukuk Framework	ICMA's SLBP
Eligible issuer	Corporation as defined under the Capital Markets and Services Act 2007	All types of issuers and any type of financial capital market instruments
Use of proceed	General purposes which are Shari'ah-compliant	General purpose
Combination of Principles	Silent. Issuer may combine with another Framework	Issuer may choose to combine SLBP with Green Bond or Social Bond Principles
	Selected KPIs but be intended to be uses as sustainability targets by the Issuer.	Issuer's sustainability performance is measured using sustainability KPIs that can be external or internal.
Selection of KPIs	<ol style="list-style-type: none"> relevant, core and material to the issuer's overall business, and of high strategic significance to the issuer's current and/or future operations. measurable or quantifiable on a consistent methodological basis; externally verifiable; and able to be benchmarked as much as possible using an external reference or definition to facilitate the assessment of the SPT's level of ambition 	<ol style="list-style-type: none"> relevant, core and material to the issuer's overall business, and of high strategic significance to the issuer's current and/ or future operations; measurable or quantifiable on a consistent methodological basis; externally verifiable; and able to be benchmarked, i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT's level of ambition.
Calibration of SPTs	<ol style="list-style-type: none"> Silent on good faith At issuer's discretion, notwithstanding it must be ambitious and realistic 	<ol style="list-style-type: none"> Issuer setting the SPTs in good faith SPTs should be ambitious
External reviewers	<ol style="list-style-type: none"> Pre-issuance: A must for issuer to appoint Second Party Opinion 	<ol style="list-style-type: none"> Pre-issuance: Recommended for issuer to appoint Second Party Opinion

⁸ Paragraph 9.03, Chapter 9 of SRI-linked Sukuk Framework

	2. Post-issuance: A must for issuer to appoint an independent verifier	2. Post-issuance: Necessary for issuer to appoint external reviewers to assess
Credential of External Reviewers	Silent	Encourage external reviewers to make available their qualification and related skill/knowledge and able to clearly demonstrate the review(s)
Reporting	Relevant information must be published designated website	Related bond documentation may be disclosed in documents for example in <i>framework, investor presentation, external review or on issuers' website or annual sustainability or annual reports</i>

Source: Authors' own

In addition to the differences highlight above, we observed that issuers of SRI-linked sukuk are eligible to apply up to 90% of the external review costs⁹ incurred under the SRI Sukuk and Bond Grant Scheme (the Grant Scheme) by the SC ([Securities Commission Malaysia, 2022g](#)). Expansion of the Grant Scheme to SRI-linked sukuk is to encourage issuance of sukuk under the SRILSF in Malaysia.

5. Case Study

In the absence of official regulation that regulate sustainability-linked sukuk issuances, the market voluntary adopted the SLBP by ICMA. In Malaysia, prior to the issuance of SRILSF, two Sustainability-linked Sukuk and two Sustainability-linked Bond¹⁰ have been issued with total issuance of USD1.45 billion under ICMA's SLBP ([Securities Commission Malaysia, 2022e](#)). This subsection will provide analytical review on alignment of Yinson Holdings Berhad (Yinson) and Cenviro Sdn Bhd (Cenviro) Sustainability-linked Sukuk with ICMA's SLBP. This review is done by extracting the core components of the two earlier mentioned Sustainability-linked Sukuk from its Framework and Second Party Opinion Report.

5.1 Corporate and Sukuk structure

Yinson, founded in 1983 as transportation and logistics company in Johor Bahru, and in 2019, diversified its portfolio into renewable energy ([Yinson Holdings Berhad, 2022](#)). On December 7, 2021, Yinson issued Malaysia's first sustainability-linked sukuk with issuance price of RM1 billion under Sukuk Wakalah structure. Cenviro stands for "*Clean Environment*" ([Cenviro Sdn Bhd, 2022a](#)) a waste management company owned by Khazanah Nasional Berhad ([Kareem, 2022](#)). Cenviro via its subsidiary Kualiti Alam, manages Malaysia's one and only integrated high-risk waste management centre in Negeri Sembilan with services such as incineration plant and a centre for clinical waste treatment ([Cenviro Sdn Bhd, 2022b](#)). Cenviro on 16 March 2022 issued its first sustainability-linked sukuk worth RM54.6 million from as Sukuk Wakalah Programme up to RM500 million. The two tranches worth RM26.29 million and RM28.31 million was for a tenor of eight years and 12 years respectively from 20 years Sukuk programme ([Kareem, 2022](#)). Table 3 represents summary information of Yinson and Cenviro's sustainability-linked sukuk:

Table 3: Summary information of Yinson Holdings Berhad and Cenviro Sdn Bhd's sustainability-linked sukuk

Item(s)	Yinson Holding Berhad	Cenviro Sdn Bhd
Issue date	7 December 2021	17 March 2022 (first issue date)
Shari'ah principle	Sukuk Wakalah	Sukuk Wakalah
Issuance size	RM1 billion	RM54.6 million
Tenure	5 years	8 years and 12 years
Principal adviser	HSBC Amanah Malaysia Berhad	RHB Investment Bank Berhad
Utilisation of Proceed	To finance company's future infrastructure projects	To finance: 1. Principal expenditure of Kualiti Alam waste management center

⁹ Maximum RM300,000 per issuance

¹⁰ Hap Seng Management Sdn Bhd and Sunway REIT

Source: Author's own

5.2 Selection of Key Performance Indicators

Since utilisation of proceed of sustainability-linked sukuk can be used for general purposes, its coupon mechanism is linked to KPIs and SPTs and in the event the issuer failed to achieve the set KPI, a step-up payment will be imposed upon the issuer (Berrada et al., 2022). Hence, selection of KPI is important to avoid any penalty imposition and it must be relevant, core and material to the issuer's overall business and externally verified (ICMA, 2020).

Yinson had selected to focus on 3 KPIs under its sustainability-linked sukuk issuance i.e. (i) to increase its renewable energy from 300 GWh in year 2021 to 22,400GWh in year 2025; (ii) to lower its carbon amount from its vessel operations from 16.3kg in year 2021 to 8.0kg in year 2050; and (iii) to reduce carbon for Yinson Group overall power generation consumption from 279.1kg in year 2021 to 23kg in year 2050 (Yinson Holdings Berhad, 2021). Yinson's KPIs selection summarised in Table 4.

Table 4: Yinson Holdings Berhad KPIs selection

KPIs	(Baseline) 2021	2025	2030	2050
1.Renewable energy generation of Yinson controlled plants (GWh)	300	1,700	5,600	22,400
2.Carbon intensity (kg CO ₂ e*/boe**)	16.3	16.2	11.4	8.0
3.Carbon intensity (kg CO ₂ e/MWh***)	279.1	192.5	136.7	23

* Carbon dioxide equivalent; ** A barrel of oil equivalent; *** Megawatt-hour

Source: Yinson Holdings Berhad Sustainability-linked Sukuk Framework (Yinson Holdings Berhad, 2021)

Cenviro on the other hand opted to focus only one KPI i.e., to reduce the greenhouse gas (GHG) emissions intensity (tCO₂e/mt) in line with its 5-Year GHG Reduction Roadmap developed in 2020. Cenviro expected to increase the volume of waste treatment from 5% to 20% within 5 years and had identified 6 categories of GHG emissions (RAM Sustainability, 2022) summaries in Table 5.

Table 5: Cenviro Sdn Bhd's categories of GHG emissions

Category	1	2	3	4	5	6
Description	Direct GHG emission & removals	Indirect GHG emissions from imported energy	Indirect GHG emissions from transportation	Indirect GHG emissions from products used by organisation	Indirect GHG emissions associated with the use of organisation's products	Indirect GHG emissions from other sources

Source: RAM Sustainability (2022)

5.3 Sustainability Performance Targets (SPTs)

SPTs set by the issuers according to ICMA (2020) should be ambitious, that correspond to KPIs and be beyond a "Business as Usual" course of issuer, comparable to a benchmark or with external reference, in line with issuers sustainability or ESG policy and defined at set timeline, before or at time of issuance. In Yinson's sustainability-linked sukuk, all 3 selected SPTs are aligned with ICMA's requirements that tied to 3 focused KPIs earlier (Yinson Holdings Berhad, 2021), summarized in Table 6. Cenviro's sustainability-linked sukuk SPTs selection is more straightforward, where Cenviro aims to reduce GHG emission by year 2025 from year

2020 (baseline) (RAM Sustainability, 2022). Cenviro had identified 3 priority areas to achieve the SPTs summarised in Table 7.

Table 6: Yinson Holding Berhad's Strategy to achieve SPTs

KPI	SPT	Observation Dates	Alignment with Strategic Plan
1	Renewable energy generation of Yinson controlled plants (GWh)*	Baseline (2021) – 300 GWh	To increase Yinson's Renewable Generation Capacity
		<ul style="list-style-type: none"> January 31st 2025 – 1,700 GWh 	
		<ul style="list-style-type: none"> January 31st 2030 – 5,600 GWh January 31st 2050 – 22,400 GWh 	
2	Reduce Scope 1 CO ₂ e/boe-intensity by 30% by 2030	Baseline (2021) – 16.3	To be carbon neutral by 2030 and to reach net zero by 2050, steepening the carbon intensity reduction curve
		<ul style="list-style-type: none"> January 31st 2025 – 16.2 January 31st 2030 – 11.4 January 31st 2050 – 8.0 	
		Baseline (2021) 279.1	
3	Year Absolute carbon intensity (kg CO ₂ e/MWh)	Baseline (2021) 279.1	To increase and expand its generation of renewable energy
		<ul style="list-style-type: none"> January 31st 2025 – 192.5 January 31st 2030 – 136.7 January 31st 2050 – 23.0 	

*Electricity generation

Source: Yinson Holding Berhad (2021)

Table 7: Cenviro Sdn Bhd's Strategy to achieve SPTs

Area(s)	Target	Strategy(ies)
Electricity (EEPs)	Efficiency Projects 25% reduction in emissions from the use of electricity through	To install high efficiency motors and move towards use of inverters and LED lights
Transport (TEAs)	Efficiency Actions 10% reduction in emissions from fossil fuel used in waste transport	To optimise the journey, freight, and scheduled waste allotment
Material Efficiency Actions (MEAs)	10% reduction in emissions from chemical use through the reduction/replacement of CO ₂	To avoid any leakages of substance used for refrigeration

Source: RAM Sustainability (2022)

5.4 Reporting

The fourth core component is on reporting where ICMA's SLBP stipulated that related bond documentation may be disclosed in documents for example in framework, investor presentation, external review or on issuers' website or annual sustainability or annual reports. The published report should display performance of selected KPIs against the SPTs. This core component is important as it provide transparency for its investors. For Yinson's sustainability-linked sukuk documents i.e., the Framework and Second Party Opinion Report are available Yinson's¹¹ website for investors and public access, while for Cenviro, the Second Party Opinion Report is available at appointed Second Party Opinion's website¹². Hence both sustainability-linked sukuk issuances met ICMA's SLBP reporting component.

5.5 Verification

Under ICMA, issuer is recommended to appoint independent and external qualified reviewer to review the performance of selected KPIs against the SPTs. In selecting the qualified reviewer, ICMA went further by providing list of external reviewers that voluntary will align with the Guidelines for External Reviews with an objective to encourage best practice (International Capital Market Association, 2022b). The publicly available

¹¹ <https://yinson.irplc.com/investor-relations/pdf/sustainability-linked-financing-framework.pdf> (Accessed on 18 Sept 2022)

¹² <https://www.ram.com.my/pressrelease/?prviewid=5948> (Accessed on 18 Sept 2022)

report by external reviewers should be published annually until the final SPT is reached. As highlighted in Sub-para 5.1 above, ISS ESG was appointed as Second Party Opinion provider by Yinson while RAM Sustainability acted as independent reviewer for Cenviro's sustainability-linked sukuk issuance.

From the case study above, we observed that prior to the issuance of SRILSF, there is a demand from the industry for the issuance of sustainability-linked sukuk. The issuance of SRILSF is timely as we foresee more sustainable-linked sukuk will be issued in Malaysia under Malaysian's very own SRILSF.

6. Observation and Conclusion

The issuance of SRI-linked sukuk creates investment opportunities for sustainable focused investors as fixed income investments are the main and most significant financial asset against stocks as bonds are capital protected and guarantees fixed payments over time (Siegel, 2021). Bonds is considered as the most suitable investment for long-term investors seeking for stable income (Bonds et al., 1998). Institutional investors depict a main source of long-term investment due to their long-term liabilities nature (OECD, 2014). Additionally, study conducted by Kaminker and Stewart (2012) found that long-term investors are interested in climate change investment that have a long term positive economic development. Hence, with their long-term investment policy, institutional investors will be seeking investments that most suitable to their investment policy. In 2005, Khazanah, Permodalan Nasional Bhd (PNB), EPF, Lembaga Tabung Angkatan Tentera (LTAT) and Lembaga Tabung Haji (TH) and Minister of Finance (Incorporated) (MOF) are categorised as Government-Investment Linked Companies (Putrajaya Committee, 2022). However, with the introduction of PERKUKUH initiative, Khazanah, KWAP, Kumpulan Wang Amanah Negara (KWAN) and MOF are categorised as sovereign wealth funds, while EPF, PNB, TH and LTAT are under institutional investors category (The News Strait Times, 2021). For this paper's purposes, all the mentioned entities earlier will be referred to as institutional investors. As mentioned in Part 2.3 of this paper, EPF, Khazanah and KWAP are signatories to the PRI representing institutional investors from Malaysia (UN PRI, 2022) and since becoming signatories to the PRI, Khazanah (Khazanah Nasional Berhad, 2020), KWAP (KWAP, 2021) and EPF (EPF, 2020) had come up with strategic initiatives and steps moving their investments towards sustainable investments. With the issuance of SRILSF that integrates Shari'ah and SRI, it will not only facilitate product innovation (Securities Commission Malaysia, 2022c), but will also provide more sustainable investment opportunities for sustainable-focused investors, hence expanding the overall growth sustainable investment in Malaysia.

Capital market regulator play a vital role to facilitate sustainable financing to address the climate change issues. Introduction of SRILSF marks an important milestone for the capital market landscape in Malaysia as it widens the range SRI products in Malaysian capital market. It will also attract more sustainable-focused investors especially the sustainable-focus institutional investors. From issuer's perspective, it provides flexibility as issuers are able to utilise the sukuk proceeds for general purposes but at the same time entice more company especially the high-emitting industry to set their ESG goal and to transition into low-carbon or net zero economy. From the comparison discussion above, this study took note that ICMA's SLBP is a voluntary adoption of the issuing process while SRILSF is a Framework issued by a capital market regulator where one must comply in order to make issuance and non-compliance will result in breach of such Framework. In addition, we find that SRILSF is stricter from ICMA's SLBP, as SRILSF requires mandatory review by independent external reviewer post issuance while it's only a recommendation under ICMA's SLBP. On the other hand, SRILSF is silent on criteria of appointed external reviewer while issuer under ICMA's SLBP is recommended to follow the Guidelines for External Reviews. Malaysia has yet to witness the first SRI-linked sukuk issuance under the SRILSF and we hope this paper will shed some lights and guidance for issuers to issue SRI-linked sukuk and future study to be conducted on SRI-linked sukuk issued under the SRILSF.

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