

Green Bond and Sustainability Bond After COVID-19 in ASEAN

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Abstract. Green bonds and sustainability bonds are two instruments for sustainable financing. During the COVID-19 period, it is interesting to see companies issuing these two instruments because, apart from the company's survival, they also maintain environmental and social sustainability. Therefore, the research used a descriptive and qualitative method to explain the two instruments issued by the company during the COVID-19 pandemic. The results obtained were an increase in the value of bonds in Malaysia and Thailand after the first year of COVID-19.

Keywords: Green bond, Sustainability bond, Covid-19

1 Introduction

Sustainability is a concept that seeks to unite or synergize several elements, including those from humanity, the environment/nature, and the economy. So, by realizing the concept of sustainability, it is hoped that it will be able to minimize losses for all life on earth so as to create harmonious relationships and bring benefits between these several elements. In other words, sustainability is a concept that reflects the long-term and comprehensive sustainability and existence of life (Sudana, 2016; Utama, Sukoharsono, & Baridwan, 2018). Historically, the concept of sustainability originated with John Elkington, who introduced the 3P concept of profit, people, and planet. This 3P is known as the "triple bottom line." Over time, the triple bottom line developed into a quadruple bottom line and then a quintuple bottom line, until it was finally translated into several elements that are now known as sustainability development goals (SDGs).

Even though it has developed into several elements, the essence is still the same, namely maintaining a balance of life among the three elements, namely humanity, the environment, and the economy (see Fauzi, Svensson, & Rahman, 2010; Stenzel, 2010; Jackson, Boswell, & Davis, 2011; Ekwueme, Egbunike, & Onyali, 2013; Felisia & Limijaya, 2014; Hammer & Pivo, 2016; Siswanti, Salim, Sukoharsono, & Aisjah, 2017). These three elements must be carried out by companies, both government-owned companies and private companies. Then, what if they do

not carry out these three elements? Then it will have an impact on their image, which in turn can result in a decrease in the value of the company. Of course, this is something they should avoid. Many studies have examined its correlation with company value, including that conducted by Dzikir, Syahnur, & Tenriwaru (2020).

Speaking of companies, many have been affected by the COVID-19 virus. This condition does not only occur for companies in Indonesia but also occurs for several companies in other countries. This is reinforced by the statement expressed by Zerbib (2019) dan Liu (2022), they said that the spread of CO 19 has disrupted global economic and financial stability. So, what is interesting here for the authors is their efforts to maintain the company's sustainability while also maintaining environmental and social sustainability.

One of the sustainability efforts undertaken by the company is the issuance of green bonds and sustainability bonds. Green and sustainability bonds are two of the financial instruments used in sustainable financing. The difference is that green bonds are for environmentally sound financing, while sustainability bonds are used for financing as a whole, in the sense that they concern humanity as well as the environment. Which of the two is better? Both are equally good because they all have a noble purpose. Therefore, it is interesting to see the development of green bonds and sustainability bonds after the outbreak of COVID-19.

2 Methods

This paper uses descriptive analysis as its approach. This descriptive analysis aims to provide an objective description of a situation. Sugiyono (2014) stated that the descriptive method was used to describe or illustrate the collected data without intending to make general conclusions or generalizations.

3 Result and Discussions

The data obtained from several companies in Malaysia and Thailand that issue green bonds is as follows:

3.1 Green Bond and Sustainability Bond di Malaysia

Table 1. Data of Green Bond and Sustainability Bond in Malaysia

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
1	PNB Merdeka Ventures Sdn Bhd	Malaysia	MYR	65.00	28 June 2019	7

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
			MYR	70.00	28 June 2019	8
			MYR	90.00	28 June 2019	9
			MYR	220.00	28 June 2019	13
			MYR	100.00	27 Dec 2019	10
			MYR	105.00	27 Dec 2019	11
			MYR	120.00	27 Dec 2019	12
			MYR	110.00	27 Dec 2019	13
			MYR	200.00	25 June 2021	3.5
			MYR	230.00	25 June 2021	11.5
2	Sustainability Bond – CIMB Bank Berhad	Malaysia	USD	680.00	9 Oct 2019	5
3	Sustainability Bond – Edra Solar Sdn. Bhd.	Malaysia	MYR	10.00	11 Oct 2019	1
			MYR	20.00	11 Oct 2019	3
			MYR	30.00	11 Oct 2019	5
			MYR	30.00	11 Oct 2019	7
			MYR	35.00	11 Oct 2019	10

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
			MYR	35.00	11 Oct 2019	12
			MYR	35.00	11 Oct 2019	15
			MYR	50.00	11 Oct 2019	18
4	Leader Energy Sdn. Bhd.	Malaysia	MYR	5.00	16 July 2020	1
			MYR	10.00	16 July 2020	2
			MYR	15.00	16 July 2020	3
			MYR	15.00	16 July 2020	4
			MYR	15.00	16 July 2020	5
			MYR	15.00	16 July 2020	6
			MYR	15.00	16 July 2020	7
			MYR	15.00	16 July 2020	8
			MYR	15.00	16 July 2020	9
			MYR	15.00	16 July 2020	10
			MYR	15.00	16 July 2020	11
			MYR	15.00	16 July 2020	12

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
			MYR	15.00	16 July 2020	13
			MYR	15.00	16 July 2020	14
			MYR	15.00	16 July 2020	15
			MYR	15.00	16 July 2020	16
			MYR	15.00	16 July 2020	17
			MYR	20.00	16 July 2020	18
5	Sustainability Bond – Cagamas Berhad	Malaysia	MYR	100.00	26 Oct 2020	3
			MYR	35.00	27 Oct 2020	1
			MYR	20.00	27 Oct 2020	2
			MYR	45.00	27 Oct 2020	2.5
6	Sustainability Bond-Sime Darby Property Berhad	Malaysia	MYR	150.00	3 Dec 2020	5
7	Sustainability Bond-Malaysia Wakala Sukuk Berhad	Malaysia	USD	800	28 Apr 2021	10
			USD	500	28 Apr 2021	30
8	Solar Management (Seremban) Sdn. Bhd.	Malaysia	MYR	5.00	21 Oct 2020	1
			MYR	10.00	21 Oct 2020	2

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
			MYR	10.00	21 Oct 2020	3
			MYR	10.00	21 Oct 2020	4
			MYR	10.00	21 Oct 2020	5
			MYR	15.00	21 Oct 2020	6
			MYR	15.00	21 Oct 2020	7
			MYR	15.00	21 Oct 2020	8
			MYR	15.00	21 Oct 2020	9
			MYR	15.00	21 Oct 2020	10
			MYR	15.00	21 Oct 2020	11
			MYR	15.00	21 Oct 2020	12
			MYR	15.00	21 Oct 2020	13
			MYR	15.00	21 Oct 2020	14
			MYR	15.00	21 Oct 2020	15
			MYR	20.00	21 Oct 2020	16
			MYR	20.00	21 Oct 2020	17

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
			MYR	20.00	21 Oct 2020	18
9	Renikola Solar Sdn. Bhd.	Malaysia	MYR	5.00	11 May 2021	1
			MYR	20.00	11 May 2021	2
			MYR	20.00	11 May 2021	3
			MYR	20.00	11 May 2021	4
			MYR	20.00	11 May 2021	5
			MYR	20.00	11 May 2021	6
			MYR	25.00	11 May 2021	7
			MYR	25.00	11 May 2021	8
			MYR	25.00	11 May 2021	9
			MYR	25.00	11 May 2021	10
			MYR	25.00	11 May 2021	11
			MYR	25.00	11 May 2021	12
			MYR	25.00	11 May 2021	13
			MYR	25.00	11 May 2021	14

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
			MYR	30.00	11 May 2021	15
			MYR	30.00	11 May 2021	16
			MYR	25.00	11 May 2021	17
10	Sustainability Bond- Small Medium Enterprise Development Bank Malaysia Berhad	Malaysia	MYR	500.00	2 Aug 2021	5
11	Sustainability Bond- Agrote Business (M) Sdn Bhd	Malaysia	MYR	200.00	5 Aug 2021	5
12	Sustainability Bond- Cagamas Berhad	Malaysia	MYR	200.00	5 Aug 2021	3
13	Sustainability Bond- Cagamas Berhad	Malaysia	MYR	100.00	5 Aug 2021	3
14	Hanwha Q Cells Malaysia Sdn. Bhd.	Malaysia	MYR	150.00	1 Sept 2021	3
15	Sustainability Bond- Bank Pembangunan Malaysia Berhad	Malaysia	MYR	450.00	25 Oct 2021	7
16	Sustainability Bond- Cagamas Berhad	Malaysia	MYR	300.00	29 Oct 2021	2
17	Sustainability Bond- Cagamas Berhad	Malaysia	MYR	30.00	24 Nov 2021	1
			MYR	20.00	24 Nov 2021	2
			MYR	50.00	24 Nov 2021	2.5

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
18	Sustainability Bond- Pengurusan Air Selangor Sdn Bhd.	Malaysia	MYR	255.00	29 Oct 2021	15
			MYR	175.00	29 Oct 2021	20
19	Sustainability Bond- CIMB Group Holdings Berhad	Malaysia	MYR	100.00	29 Dec 2021	10
20	Sustainability Bond- CIMB Bank Berhad	Malaysia	MYR	100.00	29 Dec 2021	10
21	Cenergi SEA Berhad	Malaysia	MYR	85.00	23 Dec 2021	5
			MYR	125.00	23 Dec 2021	7

(Sources: Asean Capital Market Forum, 2022)

The data above was taken from 2018 to 2022. The results show that the 19 issuers issued bond instruments in the form of green bonds and sustainability bonds. Of the 19 issuers, it can be seen that 13 issuers issued sustainability bonds; the remaining 6 issued green bonds.

The data above is data on the issuance of green bonds and sustainability bonds for financing per project. Therefore, there are several company names that appear several times in the table. As for the projects financed by the issuance of green bonds, some of them are: (1) green buildings or environmentally friendly development; (2) renewable energy, or the use of energy sources that can be filled again or recovered by natural processes; (3) biogas projects, solar projects, and energy efficiency projects.

On the other hand, projects financed by the issuance of sustainability bonds include (1) waste water management, infrastructure development, renewable energy, energy efficiency, job creation, environmentally friendly transportation, pollution prevention and control, terrestrial and aquatic biodiversity conservation, (2) Projects for social and agricultural issues; (3) Financing in accordance with Sharia principles for affordable housing; (4) Projects to respond to climate change and prevent damage to the climate; (5) Health; (6) Education; (7) Training; (8) Management of living natural resources and sustainable land use.

Then, what is the impact of COVID-19 on the issuance of green bonds and sustainability bonds? The graph below compares the period before and after the COVID-19 pandemic.

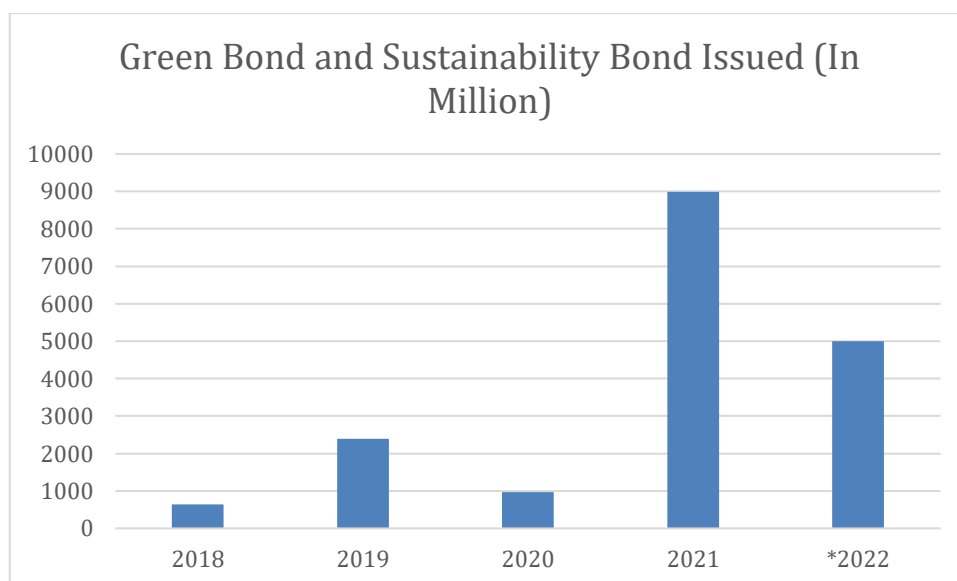


Fig. 1. Green Bond dan *Sustainability Bond* (In Million) di Malaysia

From the figure, it is clear that during the early days of the pandemic, namely in 2020, the number of green bond issuances decreased compared to the previous year. The green bond instrument in 2020 is RM 670 million, while in 2019 it is RM 1,487 million. However, in the following year, 2021, the issuance of green bonds nearly doubled, reaching RM 1,180 million. Meanwhile, although the calculation is still up to June 2022, the issuance of this green bond in 2022 has reached a value of RM 900 million. In 2021, the biggest contributor will be the sustainability bonds issued by Malaysia Wakala Sukuk Berhad, reaching RM 5,326.75 million. The issuance of the bonds is used, among other things, for funding health, education, training, and the opening of employment opportunities through MSMEs.

3.2 Green and Sustainability Bond in Thailand

Table 2. Data of Green and Sustainability Bond in Thailand

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
1	Kasikornbank Public Company Listed	Thailand	USD	100.00	30 Oct 2018	5
2		Thailand	THB	1500.00	20 Dec 2018	5

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
	B. Grimm Power Public Company Limited		THB	3500.00	20 Dec 2018	7
3	BTS Group Hodlings Public Company Limited	Thailand	THB	1000.00	24 May 2019	2
			THB	1300.00	24 May 2019	3
			THB	3000.00	24 May 2019	5
			THB	2700.00	24 May 2019	7
			THB	5000.00	24 May 2019	10
			THB	500.00	6 Nov 2020	2
			THB	4000.00	6 Nov 2020	3
			THB	1500.00	6 Nov 2020	5
			THB	2000.00	6 Nov 2020	7
			THB	600.00	6 Nov 2020	10
4	Energy Absolute Public Company Limited	Thailand	THB	1000.00	11 Jul 2019	3
			THB	2000.00	11 Jul 2019	10
			THB	500.00	15 Aug 2019	3
			THB	1500.00	15 Aug 2019	5

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
			THB	2000.00	15 Aug 2019	10
			THB	3000.00	16 Oct 2019	7
5	PTT Public Company Limited	Thailand	THB	2000.00	24 July 2020	3
6	Global Power Synergy Public Company Limited	Thailand	THB	1500.00	7 Aug 2020	5
			THB	1000.00	7 Aug 2020	10
			THB	2500.00	7 Aug 2020	5
7	Bank for Agriculture and Agricultural Cooperatives	Thailand	THB	4500.00	19 Aug 2020	5
			THB	1500.00	19 Aug 2020	10
8	Sustainability Bond- Ministry of Finance (on behalf of Kingdom of Thailand)	Thailand	THB	10000.00	19 Aug 2020	15
			THB	20000.00	20 Aug 2020	15
			THB	20000.00	24 Aug 2020	15
			THB	15000.00	22 Jan 2021	15
			THB	20000.00	19 Mar 2021	15
			THB	15000.00	23 Apr 2021	15
			THB	12000.00	14 Jul 2021	15

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
			THB	15000.00	15 Sep 2021	15
			THB	20000.00	20 Oct 2021	15
			THB	10000.00	24 Nov 2021	15
9	Sustainability Bond-National Housing Authority	Thailand	THB	2100.00	23 Sept 2021	6
10	RATCH Group Public Company Limited	Thailand	THB	1000.00	4 Nov 2020	3
			THB	1500.00	4 Nov 2020	5
			THB	1500.00	4 Nov 2020	10
			THB	400.00	4 Nov 2020	15
11	Sustainability Bond-Bangkok Expressway and Metro Public Company Limited	Thailand	THB	2000.00	28 Apr 2021	3
			THB	2000.00	28 Apr 2021	5
			THB	1000.00	28 Apr 2021	7
			THB	1000.00	28 Apr 2021	10
12	B. Grimm Power Public Company Limited	Thailand	THB	3000.00	6 July 2021	5
13	Sustainability Bond – Kasikornbank Public Company Limited	Thailand	EUR	155.00	26 Aug 2021	0.5

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
14	BCPG Public Company Limited	Thailand	THB	2000.00	15 Sept 2021	3
			THB	1000.00	15 Sept 2021	5
			THB	1000.00	15 Sept 2021	7
			THB	4000.00	15 Sept 2021	10
			THB	4000.00	15 Sept 2021	12
15	SPCG Public Company Limited	Thailand	THB	1500.00	1 Oct 2021	3
16	Bangkok Mass Transit System Public Company Limited	Thailand	THB	2000.00	8 Nov 2021	3
			THB	1500.00	8 Nov 2021	5
			THB	2500.00	8 Nov 2021	7
			THB	4200.00	8 Nov 2021	10
17	B. Grimm Power Public Company Limited	Thailand	THB	300.00	11 May 2022	3
				3000.00	11 May 2022	5
18	IRPC Public Company Limited	Thailand	THB	750.00	20 May 2022	7
19	WHA Utilities and Power Public Company Limited	Thailand	THB	1800.00	1 Jun 2022	3
20		Thailand	THB	1000.00	10 Jun 2022	3

No	Name of Issuer	Country of Issuance	Currency	Amount Issued (Million)	Issue Date	Tenure (Years)
	Global Power Synergy Public Company Limited	Thailand	THB	3000.00	10 Jun 2022	5
			THB	1000.00	10 Jun 2022	8
			THB	3000.00	10 Jun 2022	10
			THB	4000.00	10 Jun 2022	15
21	Central Pattana Public Company Limited	Thailand	THB	1000.00	17 June 2022	3

(Sources: Asean Capital Market Forum, 2022)

The data above shows the issuance of green bonds and sustainability bonds from 2018 to 2022. From the data, there are 21 issuing companies. In addition, data on the issuance of green bonds and sustainability bonds for financing per project. Therefore, there are several company names that appear several times in the table.

Green bonds issued by several companies, among others, are used for (1) social and environmental projects; (2) renewable energy; (3) environmentally friendly transportation; (4) environmentally friendly technology; and (5) energy efficiency. (6) Pollution prevention and control; (7) reforestation. While companies that issue sustainability bonds are used for a variety of purposes, including (1) environmental housing financing; (2) job openings; (3) social; and (4) health. Then, what is the impact of COVID-19 on the issuance of green bonds and sustainability bonds? The graph below compares the period before and after the COVID-19 pandemic.

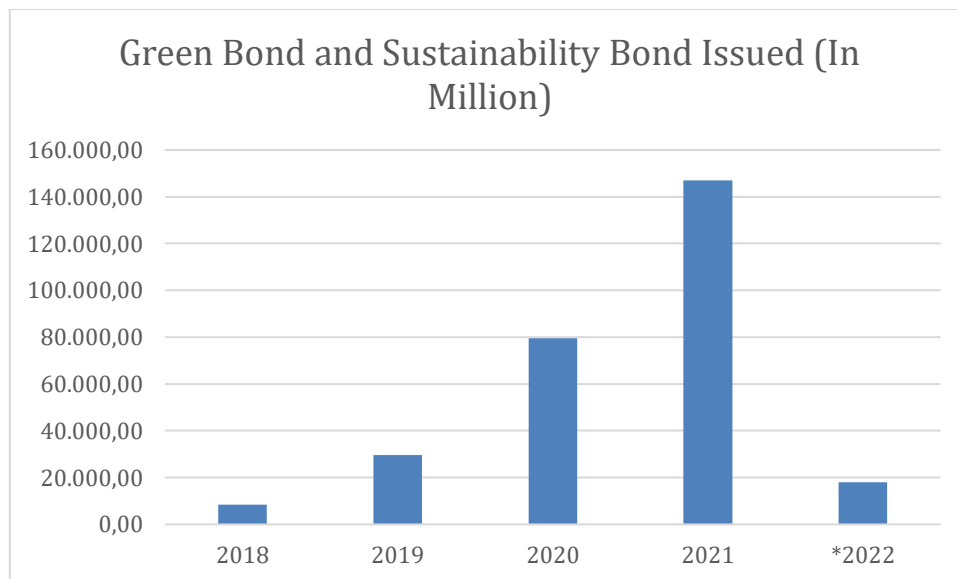


Fig. 2. Green and *Sustainability Bond* (In Million) In Thailand

Before COVID-19, there was an increase of THB 21,368 million from 2018 to 2019. In these two years, there has been no issuance of sustainability bonds, so the values shown on the charts in those years are all green bond instruments. The same thing also happened in 2022. From the data sources obtained until June 2022, there had not been any issuance of sustainability bonds. Therefore, the value in 2022 looks very small, namely only THB 17,950 million, compared to the previous two years. In 2020, the issuance of these bond instruments reached THB 79,600 million, while in 2021 it was THB 146,955 million. In 2020 and 2021, it will have great value because in those years, not only did they issue green bonds, but there were also companies that issued sustainability bonds.

One of the reasons why in 2022, even though it is still June 2022, the calculation's value is very small compared to the previous two years, is the high inflation in Thailand. In the first quarter of 2022, inflation will be around 4.8%. This is the largest inflation rate among the five major countries in ASEAN. High inflation rates can cause bonds to fall. (Kewal, 2012; Ichsan, Syamni, & Nurlala, 2013; Mardiaty, 2018)

4 Conclusion

Green bonds and sustainability bonds are types of bond instruments. The two instruments are essentially a collaborative effort to maintain life's continuity or sustainability. In Malaysia and Thailand, if we look at the two instruments after the outbreak of COVID-19, the value of their bonds has both increased from 2020 to 2021. In 2022, even though the value of the bonds has decreased, it cannot be said that the issuance of bonds in 2022 will be smaller than the previous

year. This is because calculations are still ongoing until June 2022. Thus, the possibility of issuing bonds beyond 2021 is still very likely to occur.

Green bonds and sustainability bonds must be a concern for many parties. By pushing these two instruments, the missions contained in the sustainability development goals (SDGs) can slowly be realized, so that shared prosperity is realized for all life on this earth.

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