Identify the Issuance Problem of Corporate Green Sukuk in Indonesia

Bella Tahya Hania, Endri, Indra
Department of Islamic Economics and Business, Tazkia Islamic University College, Bogor, Indonesia
Email: billahihan@gmail.com

Abstract

Sustainable financing is one of the international issues that has been widely discussed due to the issue of climate change. Green sukuk is one of the sustainable financing instruments that are sharia-compliant. However, companies in Indonesia have not shown interest in issuing corporate green sukuk. Various problems and challenges faced by the company to be able to issue corporate green sukuk. The purpose of this study is to know the problem of issuing corporate green sukuk in Indonesia and the best solutions that can be used. The research method used is Analytic Network Process (ANP). In this study, respondents came from experts of corporate green sukuk problems. Total respondents of this research were 5 peoples who came from academia, company actors and regulators. The results show that the main problem in issuing corporate green sukuk is the lack of understanding from market participants. Meanwhile, in terms of solutions, the incentive provided by the government is the main solution to encourage the issuance of corporate green sukuk.

Keywords: Green Sukuk, Corporate Green Sukuk, Analytic Network Process (ANP), Sustainable Finance

Abstrak


Kata kunci: Green Sukuk, Green Sukuk Korporasi, Analytic Network Process (ANP), Pembiayaan Berkelanjutan
Identify the Issuance Problem of Corporate Green Sukuk in Indonesia

Introduction

Issues related to sustainable financing have been discussed for a long time in Indonesia and also internationally since the issue of climate change emerged, and many countries have not been able to overcome them1. According to Meo and Karim (2021), Sustainable financing is the best strategy to reduce CO2 emissions. Not only the state, companies or corporations can take a role in sustainable financing as a form of responsibility towards the environment. Companies do not only have responsibilities to shareholders, but also to wider parties, who are affected by the company’s activities, such as society and the environment2.

Green sukuk is one of the instruments in Islamic finance which includes sustainable financing instruments, which can be a new breakthrough in overcoming problems related to climate change3. Several studies have shown support for the presence of green sukuk4. There are also many studies that show its potential, especially those are sustainable5. Abubakar (2020) and other

---

1 Sharon M Sumolang, “DisastersRepeatedly, Why Are You Still Ignorant of the Climate Crisis?” (Indonesia, 2021), https://www.instagram.com/p/CSWQxCFhAq0/
researchers show that green sukuk, whose trend seems to be increasing\textsuperscript{6}, has potential in many ways. Both in supporting sustainable development\textsuperscript{7}, providing business growth\textsuperscript{8}, as an instrument for environmental waste management\textsuperscript{9}, renewable energy\textsuperscript{10}, even the main one can be an addition to the state budget which is always in deficit\textsuperscript{11}. Risanti (2020) said that the results of her research showed that green sukuk did play a role in supporting sustainable development\textsuperscript{12}. Several other studies discussing corporate green investment and sustainable financing show that green investment made by companies can provide additional benefits for companies\textsuperscript{13}.

For the company itself, several investment instruments have been launched such as stocks, bonds or sukuk. PT. Indosat, tbk. was the first company in Indonesia to

\begin{figure}
\centering
\includegraphics[width=\textwidth]{sukuk GRAPH.png}
\caption{Sukuk Republik Indonesia.}
\end{figure}

\textsuperscript{7} Abubakar and Handayani, “Green Sukuk: Sustainable Financing Instruments for Infrastructure Development in Indonesia.”

\textsuperscript{8} Moghul and Safar-Aly, “Green Sukuk: The Introduction of Islam’s Environmental Ethics to Contemporary Islamic Finance.”

\textsuperscript{9} Hariyani and Kusuma, “Green Sukuk-Based Project on Sustainable Waste Management in Indonesia.”


\textsuperscript{11} Suherman and Manzilati, “Identifikasi Potensi Penerbitan Green Sukuk Di Indonesia.”

\textsuperscript{12} Risanti, Alwyni, and Nadya, “Peran Green Sukuk Dalam Mewujudkan Pembangunan Yang Berkelanjutan.”

issue corporate sukuk in 2002, while the state issued sukuk for the first time, known as State Sharia Securities (SBSN) 6 years later, namely in 2008\textsuperscript{14}. Until 2021, there were 188 corporate sukuk with a total nominal value of 34.79 trillion rupiah\textsuperscript{15}. The following figure is a comparison of the issuance of state and corporate bonds in Indonesia.

**Figure 1. Comparison of Outstanding Sukuk in Indonesia**

From the figure, it can be seen that for a period of 5 years from 2016 to 2020, the nominal issuance of corporate sukuk was extremely lower than that of state bonds. This shows that the state is more aggressive than corporations in issuing sukuk.

Some of the challenges faced by corporations in issuing corporate sukuk include, such as the legal framework which is still not strong enough\textsuperscript{16}, the legal framework which is still not strong enough, inflation and exchange rates which are also a consideration for corporate sukuk issuance\textsuperscript{17}, problems of understanding from market players both issuers and investors\textsuperscript{18}, to the condition

\textsuperscript{14} Ivan Hannoeradi Ardiansyah and Deni Lubis, “Pengaruh Variabel Makroekonomi Terhadap Pertumbuhan Sukuk Korporasi Di Indonesia,” Al-Mu\textsuperscript{2}zara’ah 5, no. 1 (February 5, 2018): 51–68, https://doi.org/10.29244/jam.5.1.51-68.

\textsuperscript{15} OJK, “Statistik Sukuk November 2021” (Jakarta, 2021)


\textsuperscript{17} Rizki Abdillah and Sahabudin Sidiq, “Dampak Faktor Internal Dan Ekstrenal Terhadap Penerbitan Sukuk Korporasi Di Indonesia” (Universitas Islam Indonesia, 2018), https://dspace.ui.ac.id/handle/123456789/8832; Ardiansyah and Lubis, “Pengaruh Variabel Makroekonomi Terhadap Pertumbuhan Sukuk Korporasi Di Indonesia.”

\textsuperscript{18} Erdinda Santoso and Rachma Indra Rini, “Analisis Pengaruh Marketing Mix Terhadap Minat Masyarakat Membeli Sukuk,” Al-Iq\textsuperscript{2}tishadiyiah: Jurnal Ekonomi Syariah Dan Hukum Ekonomi Syariah 6, no. 2 (2020): 86–98,
of the secondary market which not sufficiently liquid\textsuperscript{19} due to the behavior of sukuk owners who tend to hold ownership until maturity, resulting in low transaction volume of sukuk. It is very well realized how deep the sukuk market in Indonesia is and there is still a lot of homework to be done to stabilize and improve the state of corporate sukuk issuance in Indonesia.

From the existing corporate sukuk phenomenon, an even bigger challenge can be drawn in facing the issuance of corporate green sukuk. However, it cannot be denied that the embedding of ‘green’ creates a different image so that it can attract more attention from various groups. The state of the world that continues to experience climate change and global warming is common knowledge, so that individuals are starting to appear who are starting to look at programs related to environmental issues. Seeing the urgency of the need for funds for environmentally friendly projects, it is possible that green sukuk will be more in demand than ordinary sukuk. This can be a signal for investors to invest while supporting the improvement of the earth-while still getting a yield or profit from the investment.

PT Sarana Multi Infrastruktur (Persero) was the first company in 2018 to issue corporate green bonds in Indonesia, where prices continue to increase and carry less risk than conventional bonds\textsuperscript{20}. The Green Bonds issued by SMI at that time were allocated to 3 projects consisting of 2 projects in renewable energy and 1 project in environmentally friendly transportation. According to the published report, the total funds collected amounted to IDR 499,866,363,638, of which 36.3\% of the funds were allocated to 2 renewable energy projects which succeeded in reducing greenhouse gas emissions by up to 121,087 tons of CO\textsubscript{2}e, capable of producing 129,592 MWh of energy and increasing renewable energy capacity by 17.5 MW. Meanwhile, the environmentally friendly transportation project, which allocated 63.7\% of the funds, was able to avoid greenhouse gas emissions of 72,841 tons of CO\textsubscript{2}e and save energy of 2,775 TJ\textsuperscript{21}.

Of course, companies not only don't want to take advantage of opportunities to issue corporate green sukuk\textsuperscript{22}, but because there are so many problems that must be faced in issuing corporate green sukuk, one example is the large costs that must be prepared to issue corporate green sukuk in addition to the lack of literature related to green investment and the many obligations that are difficult


\textsuperscript{20} Pratanjana and Simbolon, “Issuance of Green Bond For Sustainable Development of Peatlands.”


\begin{thebibliography}{9}


Pratanjana and Simbolon, “Issuance of Green Bond For Sustainable Development of Peatlands.”


\end{thebibliography}
Identify the Issuance Problem of Corporate Green Sukuk in Indonesia

for the corporation concerned to implement, such as the obligations to reuse, recycle and reduce\textsuperscript{23}. Many studies have discussed sovereign green sukuk, but research discussing corporate green sukuk is still very advanced. Especially the discussion on the issue of green sukuk by corporations as a sustainable financing instrument. In fact, corporations have a great opportunity to participate in issuing green sukuk. Against this background, this research will try to see what the problems are and what are the solutions in issuing corporate green sukuk to support sustainable financing. This research will look at the problems from several aspects involved in issuing corporate green sukuk, namely the corporation itself, regulators and the government in Indonesia\textsuperscript{1}.

Methodology

This research is a qualitative research using the Analytic Network Process (ANP) method. ANP is a theory for measuring the relatively decreasing priority ratio of individual ratio scales which reflects the relative measurement of the influence of each element that interacts with each other related to control criteria\textsuperscript{24}. According to Ascarya and Masrifah (2014), ANP is a non-parametric and non-bayesian qualitative approach that is used to make decisions and how to treat these decisions without making assumptions regarding the independence of elements at each level, both higher and lower.

The population in this study are experts in the field of corporate green bonds and sustainable finance. Of the many experts, sampling will be carried out to determine the sample in the study. Sampling in qualitative research uses purposive sampling\textsuperscript{25}. Purposive sampling is a sampling technique with certain considerations and conditions\textsuperscript{26}.

The requirement for determining experts in this study are experts and masters in the field of corporate green sukuk. So the experts who will be selected in this study are Islamic economic experts who are directly involved in the world of Islamic capital markets, especially green sukuk. In the ANP method, the number of experts used is not a criterion for validity. The number of respondents is not the most important thing, but the competence and expertise of the


\textsuperscript{26} Sugiyono Sugiyono, \textit{Metode Penelitian Kuantitatif, Kualitatif, Dan R&D} (Bandung: Alfabeta, 2017).
respondents is more important. Various studies using the ANP method previously used a different number of experts. Chung et al. (2016) used 12 experts, Guo (2020) used 10 experts, Liu (2020) used 9 experts, while Hariyani and Kusuma (2020) used 3 experts. In the end, 5 experts will be used in this study as did Endri (2009) and Dewi (2011) who discuss issues related to the issuance of corporate sukuk in Indonesia. The number 5 is considered the right number because it is not too little or too much. While the odd value is used to avoid answers that has the same weight if the respondent is faced with two choices.

For the stages of analysis using the ANP method, Ascarya and Masrifah (2014) divide it into 3 stages namely, model construction, model quantification and analysis of results. In this study, the model construction was compiled from the results of a literature survey of previous research to obtain research variables, and then validated the results of the literature survey to experts to obtain accurate data. From the results of the validation to the experts, they then compiled the ANP model in the form of a framework.

The model quantification stage is carried out by compiling and submitting a questionnaire to experts in the form of pairwise comparisons between elements and clusters to find out which elements have a greater influence and dominant than the others, and how big the difference is using a numerical scale 1-9 with the guidelines below.

---


28 Chih Chao Chung, Li Chung Chao, and Shi Jer Lou, “The Establishment Of a Green Supplier Selection and Guidance Mechanism with The ANP and IPA,” *Sustainability (Switzerland)* 8, no. 3 (2016), https://doi.org/10.3390/su8030259.


31 Hariyani and Kusuma, “Green Sukuk-Based project on Sustainable Waste Management in Indonesia.”


Identify the Issuance Problem of Corporate Green Sukuk in Indonesia

Table 1 Numerical and Verbal Rating Scale

<table>
<thead>
<tr>
<th>Numerical Scale</th>
<th>Verbal Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Equally important</td>
</tr>
<tr>
<td>3</td>
<td>Importance currently</td>
</tr>
<tr>
<td>5</td>
<td>Importance strong</td>
</tr>
<tr>
<td>7</td>
<td>Importance very strong</td>
</tr>
<tr>
<td>9</td>
<td>Very very important</td>
</tr>
<tr>
<td>2, 4, 6, 8</td>
<td>Intermediate value</td>
</tr>
</tbody>
</table>

Use vice versa for comparison backwards

Source: Saaty, 2006 (processed by author)

In the last stage, all the results of ANP network processing based on respondents are put together. Then the data is processed by calculating the geometric mean and rater agreement. To add up the value of agreement between respondents, it is done by calculating the value of Kendall’s Coefficient of Concordance and then interpreting the results of the geometric mean of all respondents. From the results search to literature earlier, was found variables that will used in this study. The variables are:

Table 2 Variables used in research

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Problem</th>
<th>Explanation</th>
<th>Solution</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market players</td>
<td>Lack of Understanding and awareness(^{34})</td>
<td>Both from the side of investors who are still not aware of the importance of green investment, and also from the side of companies that are still not interested in green financing.</td>
<td>Outreach and education(^{35})</td>
<td>Good outreach from the government by collaborating with all the ministers involved to generate interest and awareness from market players.</td>
</tr>
</tbody>
</table>


addition to this, the understanding of the actors is still minimal about the financing scheme

<table>
<thead>
<tr>
<th>Industries that label themselves as 'Green'</th>
<th>Projects that label themselves as green projects respond to climate change in the world to attract public sympathy.</th>
<th>Corporate supervision(^{17})</th>
<th>The regulator responsible for this instrument must be more vigilant in supervising the progress of the project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project evaluation and selection(^{18})</td>
<td>Regulators must also be more selective in passing projects that are truly green in order to prevent losses from various parties and create a bad green image for sukuk.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Characteristics</th>
<th>Limited variety of contracts(^{39})</th>
<th>Variations in contracts that are still difficult for companies to implement make companies reluctant to issue of green sukuk. Coupled with the complexity of the product from the green bond itself.</th>
<th>Socialization of corporate sukuk contracts(^{40})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The lack of public interest has caused the issuance</td>
<td>Socialization related to contracts or types of sukuk that are appropriate and suitable for use by companies to issue green sukuk.</td>
<td></td>
</tr>
</tbody>
</table>

| Expensive administrative costs\(^{41}\) | The lack of public interest has caused the issuance | Global promotion\(^{32}\) | Massive promotion globally is needed to attract investors so


\(^{39}\) Dewi et al., “Tinjauan Sukuk Korporasi Di Indonesia Dari Perspektif Penawaran, Permintaan Dan Regulasi.”

\(^{40}\) Dewi et al.

### Identify the Issuance Problem of Corporate Green Sukuk in Indonesia

<table>
<thead>
<tr>
<th>Regulation</th>
<th>The absence of standard regulations[^43]</th>
<th>Description</th>
<th>Revision of laws and regulations[^44]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>green actors financing to the extent that the boundaries of what projects include green projects that can be funded with green sukuk have not been clearly laid down.</td>
<td>that this expensive admin fee will be covered by the large number of investor requests.</td>
<td></td>
</tr>
</tbody>
</table>


---


especially from the issuer side, so that they are encouraged to issue *green* sukuk. In making this regulation, of course, there must be collaboration from all ministers or stakeholders involved in *green* sukuk, both from the minister of finance, the minister of environment and the minister of social welfare.

| Government | Incentive\(^{45}\) | There is still a lack of incentives provided by the government as a form of support to companies. | Incentive push\(^{46}\) | The existence of incentive assistance from the government for industries that apply *green* sukuk will motivate issuers to remain consistent in issuing *green* sukuk. |

**Result and Discussion**

Respondents in this study consisted of 5 (five) experts in research problems. Based on a literature review and interviews with respondents, the feedback network for research on corporate green sukuk issuance in Indonesia in Super Decisions is as follows:

Figure 2. Research Feedback Network Issuance of Corporate Green Sukuk in Indonesia

---

\(^{45}\) Morea and Poggi, “An Innovative Model For the Sustainability of Investments in the Wind Energy Sector: The Use of Green Sukuk in an Italian Case Study.”

\(^{46}\) Pratanjana and Simbolon, “Issuance of Green Bond For Sustainable Development of Peatlands.”
Identify the Issuance Problem of Corporate Green Sukuk in Indonesia

The results of data processing using Super Decision software and Microsoft Excel obtained results in tabular form as follows:

Table 3. Answer Data Processing Results Whole Research Respondents

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>GM</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>0.057522</td>
<td>1</td>
</tr>
<tr>
<td>Regulation</td>
<td>0.056005</td>
<td>2</td>
</tr>
<tr>
<td>Market Participants</td>
<td>0.045314</td>
<td>3</td>
</tr>
<tr>
<td>Product Characteristics</td>
<td>0.034492</td>
<td>4</td>
</tr>
</tbody>
</table>

The results of data processing using Super Decision software and Microsoft Excel obtained results in tabular form as follows:

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>GM</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lack of understanding</td>
<td>0.039126</td>
<td>1</td>
</tr>
<tr>
<td>Absence of incentives</td>
<td>0.032528</td>
<td>2</td>
</tr>
<tr>
<td>The absence of standard regulations</td>
<td>0.029993</td>
<td>3</td>
</tr>
<tr>
<td>Projects that label themselves as 'Green' projects</td>
<td>0.026904</td>
<td>4</td>
</tr>
<tr>
<td>Cost Expensive administration</td>
<td>0.023365</td>
<td>5</td>
</tr>
<tr>
<td>Limited contract variations</td>
<td>0.018922</td>
<td>6</td>
</tr>
</tbody>
</table>

The research results will be described per cluster in this study. In terms of aspects of corporate green sukuk issuance. The value of each aspect in the figure above is the Aspect of Market Players with a value of 0.045314, Product Characteristics with a value of 0.034492, then Regulation with a value of 0.056005 and Government with a value of 0.057522. So the priority aspect in issuing corporate green sukuk is the Government and followed by Regulations.

Subsequent results in terms of the Issue of Corporate Green Sukuk issuance, the mean geometric value is obtained from the lack of understanding of 0.039126, while from the criteria for projects that label themselves as ‘Green’ projects of 0.026904. Then from the limited contract variations of 0.018922 and expensive administrative costs of 0.023365. From the problem of the absence of standard regulations with a mean geometric value of 0.029993. And from the problem of the absence of incentives of 0.032528.

Of all the problems, the lack of understanding of market players is the priority problem in issuing corporate green sukuk, then followed by the absence
of incentives from the government and in third position there is the problem of the absence of standard regulations.

In terms of solutions, it was found that solutions for incentives from the government had the highest priority with a score of 0.049483, followed by outreach and education with a score of 0.03253. Furthermore, in the third position there is a revision of laws and regulations with a value of 0.032531. The fourth position and so on sequentially are socialization of corporate sukuk contracts with a value of 0.021965, project evaluation and selection with a value of 0.021176, global promotion with a value of 0.017134 and the last position is corporate supervision with a value of 0.07078.

The answers of the questionnaire submitted to all respondents then calculated the value of the rater agreement. Kendall’s Coefficient Concordance is a tool used in determining the rater agreement. The results obtained are as follows:

Table 4. The P-Value of the Rater Agreement

<table>
<thead>
<tr>
<th>CLUSTER</th>
<th>RATER AGREEMENT</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect</td>
<td>0.116504854</td>
<td>0.6264096</td>
</tr>
<tr>
<td>Problem</td>
<td>0.125283019</td>
<td>0.6796320</td>
</tr>
<tr>
<td>Solution</td>
<td>0.210764675</td>
<td>0.3880030</td>
</tr>
</tbody>
</table>

From these results, the value of W which is between 0 < W < 1 means that there are no respondents who as a whole do not agree or unanimously agree. The p-value of all clusters is above 1%, 5% or 10% which means that there is no significant agreement from all respondents in each cluster.

Problems Issuance of Corporate Green Sukuk

The priority problem in issuing corporate green sukuk is the lack of understanding of market players. Good understanding of sukuk products in general, to the advantages and benefits of sukuk and green sukuk, of course. In terms of issuers or companies, there are still many who do not understand green sukuk products up to the publishing steps.

The condition of a company without green sukuk that is still doing fine, of course, makes the company not glance at or try to find out about green sukuk in depth. Not to mention knowing the problems related to the sukuk product itself, makes companies even less interested in knowing more about green sukuk. This is in line with the findings of Abubakar and Handayani (2020) who said that the understanding of green sukuk is a crucial issue in Indonesia, both in terms of issuers, companies and even regulators. According to him, this lack of understanding will have an impact on the success of issuing corporate green sukuk.

The second priority is from the government aspect, namely the lack of incentives from the government for companies issuing green sukuk. One of the
problems companies are reluctant to issue corporate green sukuk is because the costs incurred to issue corporate green sukuk are quite high. No assistance from the government makes companies even more reluctant to issue corporate green sukuk. According to Morea and Poggi (2017), incentives from the government will really help overcome the relatively large cost of green sukuk, so that companies will be motivated to issue green sukuk.

The third priority problem is there are no standard regulations from a regulatory aspect. There are no standard regulations governing the issuance of green sukuk by corporations, making corporations reluctant to issue green sukuk. An example is the obligation to have an SPV in issuing green sukuk. While in Indonesia there are no regulations governing the establishment of SPV by companies. If a company wants to establish an SPV, then the company must choose the form of the SPV, whether it is a foundation, institution or firm and so on, which are permanent in nature. While the SPV itself is basically needed only to issue sukuk which is as old as the sukuk itself. Even though you can make other companies as SPV, this problem will return to the problem of the costs involved being quite expensive.

**Corporate Green Sukuk Issuance Solution**

Incentive encouragement is the main solution in issuing corporate green sukuk originating from the government aspect. Even though the incentive problem cluster is not the first priority, the incentive encouragement solution is the first solution. This shows that incentives from the government can be very helpful and motivate companies to study and understand corporate green sukuk. Incentives from the government will certainly assist the government in overcoming the problem of the expensive cost of issuing green sukuk.

The second solution is outreach and education. Seeing the previous results regarding the first priority problem, the second priority solution is more lively and deeper outreach and education to all market participants, both from the company and investor perspective. Of course, carrying out this socialization and education requires the integrity of many parties, both from the perspective of regulators, government and academics. It is hoped that with a good understanding of market participants, the green sukuk market will deepen and continue to grow, so that green sukuk instruments can be truly useful for solving environmental problems, in addition to receiving investment benefits.

Regulatory revision is the third priority. Regulators are expected to be able to revise and strengthen all laws and regulations regarding corporate green sukuk. But of course the good revision of regulations will work well if stakeholders or regulators have a good understanding of corporate green sukuk, considering that the main problem with issuing corporate green sukuk is the lack of understanding which also includes the understanding of regulators.

Seeing that socialization solutions are the second priority even though understanding problems are the first priority, and incentive-driven solutions are the first priority even though incentive problems are the second priority, it can be concluded that costs are also again become a solution to overcoming the main
problem. This is because, to carry out outreach and education, support costs are still needed.

**Conclusion**

Based on the results and discussion of the research in the previous chapter, it can be concluded that the main problem with companies' reluctance to issue corporate green bonds is the lack of understanding from market participants. Even though the aspect of Market Actors is in third place, problems from market players are priority issues that must be addressed immediately. While the priority solution from the answers of all respondents is the Incentive Drive from the Government aspect. The Government aspect is also the aspect with the highest priority. Even though the problem of incentives is not the first problem, encouragement of incentives is the first solution, because providing education to overcome the first problem also requires costs, one of which can come from encouraging government incentives.

**References**

Al-Qur'an Translation, Ministry of Religion of the Republic of Indonesia
Identify the Issuance Problem of Corporate Green Sukuk in Indonesia


Liu, Perry C.Y., Huai Wei Lo, and James J.H. Liou. “A Combination of DEMATEL and BWM-Based ANP Methods For Exploring The Green Building Rating System In Taiwan.” *Sustainability (Switzerland)* 12, no. 8


