**The Challenge**

The Indonesian government has deployed more than 10 million hectares of mining field concessions, managed by over 4400 companies, while this number is expected grows rapidly for the upcoming years. The country requires mining companies to set aside a portion of their budgets for financing the reclamation and rehabilitation of mined land in order to ensure its restoration to its original condition and mitigate detrimental environmental and social impacts. This presents a complex investment challenge for businesses in the mining industry while the mining companies, particularly for small and medium-sized, see it as a "burden" in their later operation stage. Regulators are complex and subject to change, making it challenging to determine the necessary bond amount. Reclamation costs can also increase over time due to factors such as inflation and additional remediation measures, placing a heavy financial burden on mining companies as they attempt to balance the cost of reclamation against other business objectives and obligations. Along with these financial difficulties, the program also has operational and reputational risks because mining companies are required to adhere to stringent rules and regulations and show their commitment to ethical and sustainable operations. Despite these obstacles, corporate’s participation in the reclamation program offers a rare chance to promote ethical and sustainable mining operations and show environmental care.

**Solution**

The major issue with the current model adopted by countries (and why the success rate has not been impressive) is that it requires companies to tie down funds for a long time.

To solve this problem, we came up with the following:

A Special Purpose Vehicle to operate the Green Future Reclamation Fund (GFRF). Two products shall be created under this fund in the form of Bonds and Carbon credit.

Later in this prospectus, the products are known as Eco-Revitalization Bond (ERB) and Carbon Credit Capital Fund (CCCF).
Risk Metrics

<table>
<thead>
<tr>
<th>Elements of Risk</th>
<th>Probability</th>
<th>Impact</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Damage</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>Collaborate with the Government to back up worst case or open an insurance option to cover any unforeseen damage particularly natural disaster occurrence</td>
</tr>
<tr>
<td>Currency Risk</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td>The capital will be raised and disbursed in US Dollar through issuing Eurobonds, to reduce the risk of devaluation through currency conversion</td>
</tr>
<tr>
<td>Carbon Price Fluctuation</td>
<td>HIGH</td>
<td>HIGH</td>
<td>Depending on the carbon credit market globally, longer-term agreements can be signed with investors through a futures contract</td>
</tr>
<tr>
<td>Political &amp; Regulatory Changes</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>To collaborate with the Government for long-term agreements to safeguard future transactions</td>
</tr>
<tr>
<td>Inability to generate carbon credits</td>
<td>LOW</td>
<td>HIGH</td>
<td>Confirm the carbon sequestration valuation and eligibility according to the Gold Standard before reclamation. CCCF is also focused on old abandoned mines, where generating carbon credits is more practical.</td>
</tr>
<tr>
<td>Execution risk</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>The Fund will appoint a Project Manager to supervise reclamation activities, and the disbursement of the fund to the contractors shall be according to satisfactory review of milestones backed by an advanced payment guarantee by the contractors bank</td>
</tr>
<tr>
<td>Cost Overrun</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>To use financial tools such as hedging to reduce risk of increase in expense of reclamation activities, such as personnel, equipment and materials costs.</td>
</tr>
</tbody>
</table>

Environmental and Social Impacts

1. **Environmental Benefits**: The fund can be used to pay for the reclamation and rehabilitation of mined land, which can help to restore damaged landscapes, stop soil erosion, and stimulate plant growth, thereby enhancing the health and biodiversity of the nearby environment. A research conducted by the Indonesian Ministry of Environment and Forestry discovered that successful restoration of mined land in Sumatra resulted in a 50% increase in the diversity of bird species and a decrease in soil erosion and runoff. This supports UNSGs 14 and 15 on life in the water and on land, respectively.

2. **Carbon Credits**: The fund can engage in the carbon credit market and make money by selling credits that are used to offset greenhouse gas emissions. This income can be applied to other environmental projects like renewable energy ventures, as well as reclamation and rehabilitation activities. The fund can support UNSG 13, Climate Action, by cutting emissions and addressing the global problem of climate change.

3. **Community Benefits**: The fund can assist in reducing harmful effects on nearby communities, such as air and water pollution, soil contamination, and land degradation, by funding the reclamation of mined area. Additionally, by promoting ethical and sustainable mining practices, the fund can assist UNSG 16 (Peace, Justice, and Strong Institutions) and UNSG 10 (Reduced Inequalities) by fostering positive connections and trust between mining firms and local people.

4. **Financial Gains**: The fund can make more money by participating in the carbon credit market. This extra money can be utilized to pay bondholders a return on their investment and to fund ongoing reclamation and rehabilitation operations. As a result, the mining sector in Indonesia may flourish and contribute to the realization of UNSG 8: Decent Work and Economic Growth & UNSG 17: Partnership For The Goals.

Assumptions


Scalability

The Indonesian reclamation bond model can be replicated globally to address the negative social and environmental effects of the mining sector. Other nations with large mining operations, such as Australia, Africa, and South America, can use the approach, which incorporates the backing of corporate bonds from mining corporations and transactions in the carbon credit market. The reclamation bond model provides a way to finance the restoration of mined land. These locations confront similar problems in reducing the negative consequences of mining, such as land degradation and environmental contamination. There is a substantial opportunity for businesses to invest in sustainable and responsible mining methods while simultaneously minimizing negative effects on the environment and society because the worldwide market for mine reclamation is expected to be worth billions of dollars globally.

Investor Pools

- Institutional investors
- Impact investors
- Endowment/pension funds
- Private investors