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Turning Sustainability into Strategic Growth in Frontier Markets

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ABSTRACT

In the scenario that frontier markets are currently facing up with pressure of rapidly growth but without sustainability, this paper offers an approach to sustainability growth, based on "Beyond Greening", a sustainability strategy launched by Stuart L.Hart. Instead of considering environment protection as a compliance, the paper emphasizes that companies can take advantages of growing sustainable as a motivation to create long-term strategic values via three stages: Pollution Prevention, Product Stewardship, and Clean Technology. However, the results show that the pursuing sustainability strategies cannot be separated from governance reform, the readiness in investing in intrinsic capabilities to transit from compliance to value creation.

Keywords: Sustainability, Strategic growth, Sustainability strategy, Frontier markets.

INTRODUCTION

"Frontier markets" are places where the different forms of provision are vaguely and commercial interests are increasing into areas previously monitored by communal and public logic, causing social and political contestation about what is the role of market in meeting human needs *(Sally Davison, 2004).* Morgan Stanley Capital International listed frontier markets countries including Croatia, Estonia, Iceland, Lithuania, Kazakhstan, Romania, Serbia, Slovenia, Kenya, Mauritius, Morocco, Nigeria, Tunisia, Bahrain, Jordan, Oman, Bangladesh, Sri Lanka, and Vietnam *(Boom Cárcamo and Penabaena-Niebles, 2022).*

According to the research conducted by Capgemini, *"A World in Balance – Why sustainability ambition is not translating to action"*, representing that only 21 percent of leaders clearly understanding the benefits of sustainability action, such as decrease in carbon emission, innovate clean technology, or invest in ESG *(Brands, 2022).* Almost companies see sustainability as costs, not opportunities, especially with companies venturing in frontier markets with developing economics.

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An academic named Stuart L. Hart mentioned that companies need to overcome the basic "greening" approaches - only focus on decrease the impact on environment – to redirect toward comprehensive sustainability developing strategies for long-term and integrate into core business *(Hart, 1997).* In the case of frontier markets coping with economic growth and environmental - social degradation, this paper tend to offer a practical strategic framework, assisting companies in these markets identify current position in sustainable development roadmap, choose suitable steps to enhance business efficiency and contribute to social long-term developing goals simultaneously.

WHY "GREENING" IS NO LONGER ENOUGH?

Environmental governance was initially established through legislative frameworks to address the twentieth century's environmental issues, including Environmental Protection Agency (EPA) in the US in 1970, key environmental legislation, such as Clean Air and Clean Water Acts. These restrictions aimed to promote the environmental protection, but just solely focus on reducing pollution, adhering to regulations, and improving operational efficiency, which are narrowly referred to "greening" *(Tochukwu Ignatius Ijomah et al., 2024).* These perspectives are just stopping at *reactive*, reaching to ease the environmental impact, but not proactive, which can generate values from sustainability *(Kim, 2018).*

According to Stuart L. Hart, previous environmental strategies were mainly aimed to minimize cost and reduce risk. At the first stage of sustainability strategy published by Hart, the program of pollution prevention supported enterprises in avoiding penalties, reduce waste while using materials, and enhance the effectiveness in operations. The author also explained this point by the Aeroquip Corporation's case, which now turning to use its industrial components as ways to decrease emissions, take advantages of a compliance function to generate a revenue stream of $250 million *(Hart, 1997).* Moreover, the BASF, a giant German chemical, leveraged pollution prevention, collocate and share inputs to arrange clustered industrial ecosystems to minimize waste *(Hart, 1997).*

The illustration of these above examples emphasizes the financial benefits of pollution prevention. The ISO 14000 environmental regulation encouraged companies to follow proactive environmental monitoring, and one of the core tenets of environmental strategy in developed is "pollution prevention pays" as Hart mentioned *(Hart, 1997).* However, the frontier markets are lacking of the appearance of established institutions, implementable standards, and stable infrastructure – conditions that are assumed in the logic above *(Christensen, Ojomo, & Dillon, 2019).*

Frontier markets characterized by low liquidity, limited regulatory capacity but high rate of returns *(Thompson, 2024)* cannot rely only on the "greening" model. The growth in frontier economies has caused several barriers, including fragmentation of water and waste management, no or weak environmental compliance *(Hart, 1997)* or generates large amount of waste *(Boom Cárcamo and Penabaena-Niebles, 2022).* As a result, frontier markets, especially SMEs are not suitable and affordable for using pollution control.

Furthermore, the "greening" model cannot fully address the limitations in achieving both development and sustainability faced by frontier economies *(Christensen, Ojomo, & Dillon, 2019).*

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One of the remarkable opinions of Hart is the Earth would always be under the pressure of ecological stress caused by the increasing in population and the expansion of industries in developing world, even when all companies operating in developed world reached zero emissions *(Hart, 1997).* Hence, there must be another approach for frontier markets that does not take sustainability as a constriction, but as a base for inclusive growth.

This is the reason why the *"beyond greening"* strategy was born, moving to higher stages: product stewardship and clean technology, which create newly models for business, step to new markets, and foster the cutting-edge technologies. In frontier markets, this could mean developing financial services that encourage inclusive access to capital, generating green investment products on frontier stock exchanges, or improving manufacturing processes to reduce waste and energy costs in local factories. Therefore, greening is a good beginning, but in frontier markets, strategic sustainability offers the most potential.

THREE STAGES OF ENVIRONMENTAL STRATEGY

There is a simple but insightful formular about sustainability development established by environmentalists such á Paul Ehrlich and Barry Commoner:

The total environmental burden (EB) = Population (P) x Affluence (A) x Technology (T)

In order to attain sustainability development, it is crucial to stabilize this burden via decrease population, decrease consumption, or advanced technology.

However, the first 2 options are not feasible or even go against what people expect: decrease population is unreality in political and ethical; and decrease consumption causes the starving and population increasing more seriously due to the research that poverty is directly proportional to the high fertility because children in poor families are considered as economic assets, additional labor of family, and support elderly *(UNFPA, 2002).* Hence, the only option that could be chosen is simply change the technologies that create assets – and this also is a responsibility and big opportunity of enterprises.

To meet the basic demand of civilians in the future (8 to 10 billion people), the economics could have to growth tenfold, while technologies have to be advanced at least 20 times to keep the EB not to increase more. This turns sustainability development into one of the biggest commercial opportunities up to now. However, currently, almost enterprises are just standing at baby projects such as pollution control, but to actually generate an impact, companies need to have a different strategic mindset, see this planet as an operation scenario and question themselves: **Our companies are contributing in addressing or making the social and environmental issues worst?**

Then and only then, the companies could develop their visions of sustainability growth – beyond "greening" internally, toward a comprehensive and proactive strategy for future *(Hart, 1997).*

The first stage in environmental strategy is Pollution Prevention – moving from pollution control to pollution prevention. Instead of addressing waste after existing, pollution prevention

focuses on decrease or eliminate waste at the beginning *(Hart, 1997).* This not only helps dropping costs but also enhance operational effectiveness and energy savings. For example, the Pollution Prevention program of West Virginia University (WVU) assisted manufacturers in decreasing energy and water consuming, enhancing operational effectiveness and minimizing threats to people's health in industrials *(US EPA, 2023).* In some emerging market economy, several companies are now applying 3R (Reduce – Reuse – Recycle) for reducing waste and saving costs. Applying simple solutions such as reuse materials, use less energy and inputs have effectively and drastically benefit the profit *(earthhow, 2023).*

The second stage is Product Stewardship, paying attentions to reduce impact on environment throughout the lifecycle of products, from designing, producing, using to processing after use. This requires companies to take all the value chains into consideration and integrate environmental elements into designing and developing processes *(Hart 1997).* For instance, in textile industry, applying environmental standards such as OEKO-TEX® and Bluesign® helps enterprises to meet the requirements of international markets and boost the brand images *(Warrender, 2025).*. Moreover, leveraging tools such as Digital Product Passport (DDP) assists organizations to provide transparent, clear information about origins, elements, and impacts on environments, hence, improve customer's engagement *(Org/, 2025).*

The third stage converts into Clean Technology, focus on developing and applying eco-friendly technologies to manufact products and services. This not only reduces negative impacts on habitats, but also expand new business opportunities and enhance competitive capabilities of companies *(Hart 1997).* In these markets, the "leapfrogging" to Clean Technology supports countries to avoid mistakes in industrialization process. Taking China as an example, this country invested strongly in renewable energy and become a top leading country in clean technology. Similarity, Africa and Asia companies are being supported by global financing institutions in building up renewable energy projects and sustainable agriculture *(Tauschinski, Stylianou and White, 2025).*

WHY IS THIS STRATEGY SUITABLE FOR FRONTIER MARKETS?

Firstly, these are still younger markets, have not been bound with old infrastructure, creating advantageous conditions for applying new and eco-friendly technologies. According to McKinsey, around 400 medium and small sized cities in these frontier markets will generate about 40% growth globally in the next 15 years, representing the huge potential for sustainable growth *(www.mckinsey.com, n.d.).*

Secondly, increasing in population and urbanization require sustainability solutions in every early step because of the highly pressure of infrastructure and ecological. The integration between multiple sustainability solutions helps ensure the long-term growth and reduce negative impacts on environment. The World Bank report emphasizes the importance of leveraging sustainable into urbanization process to ensure the stabilize of environment and infrastructure in long-term *(The World Bank, 2021).*

Thirdly, international financial institutions such as IFC and World Bank are positively assisting green projects in frontier markets via investment funds and green bond. This creates advantageous conditions for companies in these markets access to funds to develop sustainable

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projects. IFC has supported 19 banks issue 2,4 billion USD green bonds from 2015 to 2020, reflecting a strongly commitment in assisting green finance *(IFC, n.d.).*

Lastly, consumers in frontier markets are now getting more and more health-conscious, pay great attention to quality of foods, energy and habitats. This encourages demand in sustainability goods and services, making more opportunities for enterprises which are applying sustainability developing models to meet these market demands *(Simmons, 2025).*

LIMITATIONS AND REALISTIC SOLUTIONS

Limitations

This model by Hart brings many potential benefits but the expanding application in frontier markets still has some barriers. The first barrier is the lack of long-term investment capital. Almost companies venturing in frontier markets are SMEs which have difficulties in green financial accessing due to the lack of guarantee assets, weak credit profile and still strange to sustainability reporting process. According to IFC, rather than 70% of SMEs in frontier markets could not get access to the capitals for greening development *(IFC, 2020).*

The second disadvantage is the limitation in ability and technology. Several organizations do not have knowledge in assessing products' lifecycles, environmental standards, and technology base to implement greening. A report on ScienceDirect highlights the barrier in technology and internal ability are the main reasons making these enterprises could not take any actions in Clean Technology effectively *(Gao et al., 2025).*

The third limitation is the unstable in legal. The legal about sustainability growth in many frontier countries are still lacking of synchronization and delay in implementation, leading to a "wait-and-see" attitude in private sector. According to Statista, just 12% of countries in frontier markets have fully legal in sustainability investment and ESG reporting *(Statista, 2018).*

Solutions

- *Encouraging green finance in local:* Establishing green credit guarantee funds, generate a bridge connecting banks and SMEs *(IFC, 2020).*
- *Training and supporting IT:* Professional associations and researching institutions need to enhance coaching programs for enterprises in evaluating products' lifecycle and energy saving technologies *(Gao et al., 2025).*
- *Stabilizing legal and encouraging investment:* The Government should launch tax promotions, exempt licensing fees for sustainable companies. One research on JSTOR pointed out that clearly promotions programs can increase 40% of companies pursuing green strategy *(Mazzucato, 2015).*

HOW TO APPLY SUSTAINABILITY PORTFOLIO MODEL

Sustainability model portfolios by Stuart L. Hart and Mark B. Milstein is a strategic tool helping enterprises to make an assessment and monitor sustainability development. This model is being divided by 4 main parts *(Hart&Milstein, 2003)*:

- *Reducing current risks:* Focusing on easing negative impacts on environment and social from current business operations.

- *Improving operating effectiveness:* Optimizing manufacturing and managing processes to enhance the effectiveness in using resources and costs.
- *Developing new markets:* Searching and exploring new business opportunities, especially in developing markets via sustainable products and services.
- *Generating future visions:* Reshaping strategies for companies toward innovation and sustainability development in long-term.

Companies can assess their positions in this model by themselves via identifying development level in each phase: non-existent, emerging, established, or institutionalized. The assessment supports companies in recognizing their strengths, and weaknesses, then have their own strategies to develop sustainability by linking sustainability portfolio with "triple bottom line" *(Jeurissen, 1997).*

For example, a texture company in frontier markets which is in i*mproving operating effectiveness* phase if it already applied solutions for less consuming energy and reduce waste. To step into *developing new markets*, it has to research and launch eco-friendly products to meet the rapid increasing demands in sustainability fashion *(Prahalad and Hart, 2002).*

Applying Sustainability Portfolio not only help companies in frontier markets to improve competitive ability, but also contribute to sustainability development goal globally.

CONCLUSION AND RECOMMENDATIONS

Sustainability development in frontier markets should not be considered simply as social response, it should be seem as strategic opportunity for companies to enhance their competitive ability, expand markets and get access to green capitals globally. In the scenario of shortage in resources, companies may have to kick start with baby steps such as optimizing manufacturing processes, saving energy or designing eco-conscious products. However, to create long-term effects, it is crucial to have a clear and commitment strategic vision from top to bottom.

For recommendations,

- *In terms of companies*, it is important to proactively building internal ability from ESG knowledge, products life cycle's assessment, to capability in innovating green technologies.
- *In terms of Government and international institutions,* stabilizing legacy, encouraging green finance, and supporting technical training for SMEs are necessary movements.
- *Focusing on invest in ESG and collaborate internationally* are the keys for frontier markets not only catch up with but also "leapfrogging" in the journey of developing sustainable.

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