RESOLVING A REALISTIC MIDDLE GROUND TOWARDS THE SUSTAINABILITY TRANSITION IN THE GLOBAL POLITICAL AND ECONOMIC LANDSCAPE: A COMPREHENSIVE REVIEW ON GREEN CAPITALISM

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Abstract

In 2019, a climatic wake-up call was made by the IPCC as the world’s temperature is projected to increase by 4-6°C. With the systematically ingrained capitalist imperatives in the political and economic landscape, the notion of “green capitalism” was introduced in the justification of limitless economic growth with less energy consumption than the world can sustainably produce (Schweickart, 2010). Prior research has identified heterogenous stances on green capitalism. However, sustainable transition research has neither clarified the realistic middle ground that it should pursue, nor has it determined whether a pro- or anti-capitalistic stance should be taken in the first place (Feola, 2020). Through a literature review, the analysis of heterogeneous stances on green capitalism based on its debate scopes reveals the need to exploit capitalist imperatives to a sustainably appropriate extent rather than forcing it to produce a midway standpoint of the
“Net Zero” global consensus. The findings suggest the need for a potential reconceptualization of capitalism in the political and economic landscape as a tool of green revolution toward sustainable transition, providing a realistic middle ground.

Keywords
Green Capitalism, Middle Ground, Sustainable Transition, Climate Change

1. Introduction

The first Earth Day celebration in 1970 marked the turning point of how environmental issues have emerged as a political issue in the global political landscape when the global emission had nearly doubled to 16 billion tons only from the previous decade. Despite the increasing awareness of climate change seen by civil society, political actors, and businesses globally, the emissions doubled yet again in 2008 (Ritchie, Roser, & Rosado, 2020). Hence, the projection of a 4-6°C increase by IPCC (2019) was one of the many wake-up calls that led us to the global consensus to cut down half of the emissions by 2030 and eventually the “Net Zero” goals by 2050. Climate activist Greta Thunberg (2019) would argue that nothing is being done against climate change. In practice, this is not true, though sustainable development is not occurring at a meaningful pace in the race against climate change (Feola, 2020). With ongoing uneven development in the Global South and inequalities rooted in the systematically ingrained global imperatives of capitalism, the notion of “green capitalism” was introduced in the justification of limitless economic growth with less energy consumption than the world can sustainably produce (Schweickart, 2010).

Prior research has identified heterogenous stances on green capitalism. However, sustainable transition research has neither clarified the realistic middle ground that it should pursue, nor has it determined whether a pro- or anti-capitalistic stance should be taken in the first place (Feola, 2020). Moreover, the double-edged sword of capitalism complicates the view one must take toward green capitalism, contrasting the heterogeneous stances. On one hand, the historically proven free-market efficiencies have encouraged the economy to innovate ways of cutting costs without decreasing the quality of products or services (Delanty, 2019). Advocates of green capitalism opposed the pessimism of Marxism scholars, including McLean (1967) who argued that the inclusion of capitalism as the path to sustainable development cannot permanently improve the nature of working conditions, suggesting that a problem could not be
solved with the problem itself. Consequently, capitalism’s power dominance is argued to be a problematic contradiction to the sustainability transition, as Krishna (2015) highlights that the GDP obsession in India has become a “number fetish” (Gunderson, Stuart, & Petersen, 2017).

Without a clear stance on the path to green capitalism, the pace of sustainable development will be further behind in the race against climate change, resulting in the exaggeration of climate change impacts (Feola, 2022). Moreover, the complexity and interdependence of sustainability issues indicate the need for a holistic perspective, in addition to a willingness to change (Isaksson, 2019). While disagreement is expected, such a high variety of fundamental beliefs and approaches in realizing green capitalism scattered in multidisciplinary literature streams thus raises doubts about the legitimacy and direction of the sustainable transition. Moreover, despite the consensual global goal to achieve Net Zero by 2050, the heterogeneous stances on green capitalism can potentially clash with each other, which results in unproductive growth. Hence, resolving the realistic middle ground as a notion opens the pathway to pursue green capitalism towards the sustainable transition, not only with a system of growth that the world can sustainably produce but also the inclusivity of capitalistic principles and ideal goals that are significantly less heterogeneous and majorly acceptable across nations. Therefore, the research objective of this study is to extend our understanding of the ways that capitalism takes roles in the path toward a sustainable transition in the race against climate change.

Centered on resolving a realistic middle ground in the green capitalism discourse, my contribution in this research is threefold. Firstly, this paper contributes to assessing the feasibility of green capitalism as a notion in itself. To avoid a logical fallacy of forcing to produce a middle ground in capitalism’s multidimensional discourse, a “realistic middle ground” in this paper is introduced, questioning the feasibility of each side of the discourse rather than strictly determining the midway standpoint between the heterogeneous stances in the discourse of green capitalism. By clarifying the practical inputs deemed necessary for producing growth strictly in a sustainable way, the debate on the feasibility of reaching a realistic middle ground is followed by the assessment of its driving factors on the state’s power and the projection of an ideal post-growth society by evaluating the degree of utopianism as a result of the driven practical inputs.

Secondly, this paper contributes to classifying key concepts of green capitalism. For example, the debate scopes of green capitalism show a particular pattern that fictitious commodity market-based mechanisms supported by green technology are the basic assumptions
of a future resolution to sustainable development, which is highly driven by the obsession over capital accumulation by sub-imperialists. Based on the debate scopes, the classification of green capitalism is branched out based on its heterogeneous stances and realistic middle ground, followed by their respective sub-classifications to compartmentalize the review of key concepts in the literature.

Finally, once green capitalism’s key concepts are classified, the third contribution is to identify the connectivity and causality between the classified groups and key concepts through qualitative analysis, providing extensive insight into the missing gaps in the literature about green capitalism. Particularly, the evaluation of maximized capital accumulation reveals that the obsession over endless economic growth is the underlying cause of the uneven development in the Global South and the exploitation of labor as merchandise. As a result, the production of an integrative framework allows us to understand the causality of underlying issues and conflicting goals to the sustainable transition holistically, revealing that the path of taking sustainable development forward does not lie in the middle ground resolution whereby a globally accepted midway standpoint strategy is proposed, rather at the extent to which capitalist imperatives can be capitalized to stimulate sustainable transition.

2. Methodology

In this study, a systematic literature review will be conducted to understand the depth and breadth of the discourse on the sustainability transition towards green capitalism, including the different approaches in defining and implementing the ‘green’ in green capitalism (Loewen, 2022). Afterward, contrasting different approaches of capitalism in a sustainability context with various key concepts, ideologies, and theoretical frameworks will help to highlight the research gaps, resolving a realistic middle ground in the sustainability discourse by classifying relevant groups of key concepts in the discourse and discovering the causality between them.

In article collection, the database is Web of Science, where high-quality articles from various study fields were published. The keyword in the topic of “green capitalism” was used and afterwards, the keyword “capitalism” was paired with both “passive revolution” and “realist utopia” to ensure that the selected literature is able to capture the contrasting views on green capitalism. The division of keywords is based on the identified heterogeneous stance on green
capitalism according to prior research in order to classify groups and key concepts in green
capitalism literature.

Scales (2017) defined green capitalism as a form of environmentalism that emphasized
the economic value of the environment while attempting to reduce negative environmental
impacts. Roccu (2017) defined “passive revolution” as a term that depicts the transition toward
capitalism and the related process of structural state formation. Wall (2007) defined “realist
utopia” as an approach that invokes natural capitalism, emphasizing ways to produce more while
using fewer resources. Moreover, the search options are filtered based on the publication year
between 2007 and 2022, which is decided upon the fact that the political and economic landscape
has a shift in viewing climate change due to the shocking temperature increase estimation in
2007 by 4-6°C and the global financial crisis in 2007-2008. Moreover, adding a search filter
based on various relevant study fields is necessary because the study of capitalism is highly
inter- and multidisciplinary involving disciplines such as business, political science, international
relations, and environmental studies (Michie, 2018). The collected articles at this stage are 82.

In article selection, the abstract of each article was read to determine whether the
article contributes to the understanding of green capitalism, particularly the inclusion of
sustainability goals in resolving the reimagination of capitalism. The selected papers explained
its strategic interactions with innovations in the transformation of the socio-technical system, the
view of environmental urgencies, together with the political economy’s socio-technical system as
a part of the problematic gaps (Loewen, 2022). Furthermore, considering both the key indicators
and relevance to the research objective, the selected articles at this stage are 33.

In the article preparation for the analysis, the data of articles are firstly extracted to a
spreadsheet that includes its title, author(s), year of publication, and name of the publication (see
Table A1 in the appendix). Afterward, the full text of each article was read and analyzed based
on its stance on green capitalism by identifying the used key concepts relevant to capitalism and
the sustainability context. These key concepts obtained from the literature are therefore listed in
Table 1, while the classification of green capitalism drivers is listed based on a qualitative
process of questioning the feasibility of green capitalism. The process of identifying and
assigning groups is determined after or while reading the literature without any prior
assumptions before conducting the qualitative analysis to avoid bias. As a result, the drivers of
green capitalism are classified into 3 broad categories: the debate scopes, the heterogenous
stances, and the practical inputs to green capitalism. Finally, the connections within and between the classified drivers of green capitalism were identified through in-depth analytical thinking and the production of the integrative framework.

**Table 1: Classification of Green Capitalism**

<table>
<thead>
<tr>
<th>No</th>
<th>Driver</th>
<th>Key Concepts</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Debate scopes of green capitalism</td>
<td>Monetization of carbon as fictitious commodity</td>
<td>(Brand &amp; Christoph, 2020; Boehm et al, 2012)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dependence on green resources and technology</td>
<td>(Tienhaara, 2014; Magnin, 2018; Gunderson et al., 2018)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exploitation of capital accumulation</td>
<td>(Haas, 2021; Wanner, 2015; Jacobs, 2022)</td>
</tr>
<tr>
<td>2</td>
<td>Heterogenous stance on green capitalism</td>
<td>Economic growth</td>
<td>(Cavanagh &amp; Bwenjaminsen, 2017; Haas, 2021; Tienhaara, 2014; Trantas, 2021)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uneven and combined development (UCD)</td>
<td>(Feola, 2020)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Labour exploitation</td>
<td>(Frère, 2018; Harris, 2010; Mair et al., 2020)</td>
</tr>
<tr>
<td></td>
<td>Present state</td>
<td>Realist utopian goals</td>
<td>Economic degrowth or decoupling</td>
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<tr>
<td></td>
<td></td>
<td>Sustainable consumption</td>
<td>(Dermody et al., 2021)</td>
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<tr>
<td></td>
<td></td>
<td>Homogenous competitive advantage (Creative destruction)</td>
<td>(Magnin, 2018)</td>
</tr>
<tr>
<td>4</td>
<td>Realistic middle ground of green capitalism</td>
<td>Practical inputs</td>
<td>Corporate governance that crowds in virtue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corporate as social actor</td>
<td>(Jones &amp; Lubinski, 2014; Wright &amp; Nyberg, 2014)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sectoral-driven competitive</td>
<td>(Wallis, 2010)</td>
</tr>
</tbody>
</table>
3. Analysis of Existing Research

Table 1 classified key concepts that are compartmentalized into three main drivers that contribute to improving our understanding of the sustainable transition towards green capitalism. The debate scopes of green capitalism guide the basis for explaining the heterogeneous stances on green capitalism, which are broadly categorized as the present state, the realist utopian stance, and eventually the formulation of realistic middle ground through impact projection of synthesized practical inputs. In the following subsections, the three classifications of main drivers in the sustainable transition towards green capitalism are discussed, followed by a causality analysis between classified groups, depicted in an integrative framework.

3.1. Debate Scopes of Green Capitalism

Despite the vastly perceived ideologies and innovative approaches to conducting business sustainably, the root behind the unsuccessful consensus of green capitalism boils down to the interpretation of ‘green’ and the degree of optimism one has in the fundamental imperatives of capitalism (Tienhaara, 2013). Based on these varieties of discussion, the debate scopes of green capitalism are threefold: carbon monetization, dependence on green resources and technologies, and exploitation of capital accumulation.

Firstly, in the modern capitalist world, Polanyi’s concept of fictitious commodities is central to the dynamics of capitalism, but whether it could be deemed sustainable is debatable (Brand, Görg, & Wissen, 2019). Widely known as emission trading, the commodification of...
nature is done by essentially putting a price tag on carbon, followed by its monetization and taxation by the regulating bodies. On the contrary, Böhm, Misoczky, & Moog (2012) suggest that the institutionalization of the carbon market only provides new modes of capital accumulation for the elites to exploit without a radical path to transform capitalism.

Secondly, similar to the economic opportunities present in institutionalizing carbon markets, the growing industry of green resources and technology provides a new area of capital accumulation that dominantly benefits the bourgeoisie. As a result of green technologies’ growing market and the urgency for a transition, Magnin (2018) anticipates that change in the growth model due to the trigger of a new industrial revolution stimulates creative destruction, where capital accumulation is concentrated in green sectors. Consequently, in the attempt to harmonize the relationship between emission reduction and the role of technology, Gunderson, Stuart, & Petersen (2017) highlighted Marcuse’s conception of new technologies, which relies on a cultural shift towards a sustainable ethos of consumption.

Finally, as Wallis (2010) points out that technology and market are the most basic instruments of green capitalism in the environmental discourse, both instruments are heavily associated with the degree of exploitation of capital accumulation in the global political and economic landscape in achieving the “Net Zero” goal (Haas, 2020). The two most distinctive approaches to capital accumulation are centered on green growth through the classic pursuit of economic growth and the radical degrowth or decoupling from economic growth (Wanner, 2015).

3.2. Heterogenous Stances on Green Capitalism

Tienhaara (2013) highlights that there are 3 distinct types of proposals for green capitalism: “green new deal”, “green stimulus”, and “green economy”; with the view on growth being the fundamental difference in how the proposals are arranged. Proponents of green stimulus and green economy believe that the notion of growth can be sustainably reconstructed to be what is known as green growth. Alternatively, proponents of green new deals are pessimistic about the notion of growth itself, proposing that even degrowth will remain insufficient without lowering consumption and increasing efficiency.

Despite the progression of climate initiatives, its impact is not meeting the pace of climate change because of limited applicability within the Global South (Feola, 2020). As argued
in the debate on climate justice at COP-26, developing countries demand to obtain a higher proportion of importance in coping with climate change adaptation instead of reducing emissions, which they claim is caused by the imperialism of developed countries (Jacobs, 2021).

Furthermore, Mair, Druckman, & Jackson (2020) explain that the pressure put on labor productivity growth in a capitalist market leads to not only the environment but also to the overlooked effect on work degradation and gender equality, such as selecting a candidate based on biological traits that are simply practical in the working environment, thus increasing productivity. Despite the capability of capitalism to reduce consumption by redesigning modes of production as advocated by Marxism, Harris (2010) points out that it cannot accomplish this for all commodities, at least until the link between labor treatment, nature, and corporations is clarified in the sustainable transition.

Originating from a Marxism perspective, realist utopian scholars such as Magnin (2018) criticize that market-based mechanisms, green taxes, and other voluntary agreements are limited sustainability measures because it is strictly short-term focused, as their role is merely complementary to the institutions and not challenge the finance-dominated growth regime. Similarly, Wallis (2010) and Bosch & Schmidt (2019) also support a radical transformation of capitalism, although their stances on capitalism themselves differ from one another. Wallis (2010) believes that by diffusing ecological thinking and anti-capitalist critiques, the sustainability transition could adopt a symbiosis theory approach in shifting the scope of environmental policy into a sectoral focus. Meanwhile, Bosch & Schmidt (2019) state that radical transformation should be paired with exploiting capitalist competitiveness, triggering high rates of innovation, and ensuring that there will be a sufficiently diverse competitive advantage for markets to invent and sustain at the same time.

Moreover, the famously known Sustainable Development Goals (SDGs) by the United Nations, sustainable consumption, and production (United Nations, 2022). Despite criticizing the SDG-12 as utopian, Dermody, Koenig-Lewis, Zhao, & Hanmer-Lloyd (2021) signals the opportunity to advance the path to sustainable consumption when market-based neoliberalism is paired with pro-environmental self-identity, particularly via product lifetime extension and environmental activism. However, they navigate reaching the realistic utopian goals by knowledge transformation given that pro-environmental identity positively influences sustainable consumption. Besides environmental behavior, Frère (2017) extends that pro-environmental
identity is associated with the quality of labor. Unlike Marxism, Proudhonian rejects the aim for nature domestication through labor alienation as merchandise without rejecting the concept of work itself by improving the basic income theory in the post-revolutionary future.

3.3. Realistic Middle Ground of Green Capitalism

Considering the contrasting views in approaching the sustainable transition to green capitalism, three practical inputs are synthesized from the set of literature that shed light on reaching the realistic middle ground of the green capitalism discourse, followed by its respective drivers and projection in a post-growth society.

Firstly, Moore (2012) showcases the significance of crowd-in virtue corporate governance, emphasizing that such input in the privatizing model of change complements the fact that regulation change is too limited (Haas, 2020). Based on MacInteryan virtue ethics, Moore (2012) prescribed eight parameters as a range of possibilities for a design of virtuous corporate governance. However, it requires a significant transition for its implementation. Dörry & Schulz (2018) agree that the sustainability transition needs to reach beyond green capitalism, advocating alternative economies to adopt green financing, dissociated from profit-maximization logics, while addressing the urgency of stimulation from state’s subsidy policy as a driver to reach its maximum potential.

Secondly, Wright & Nyberg (2013) explain the capitalist logic of efficiency through the political myth of corporations as social actors, emphasizing that the purpose and action behind corporate environmentalism are not always legitimate. Despite added benefits for reputation and branding, the increasing market pressure to adopt corporate environmentalism thus concerns corporations on its added financial value which clearly originates from capitalist logic. As Jones & Lubinski (2014) explain, the role of the state is as the driver to stimulate corporate environmentalism, suggesting that its implementation is important, despite the lack of effort to maximize the effect of corporate environmentalism for nature exclusively. Consequently, the role of the state in this matter can be reflected in Green Keynesianism as suggested by Cömert (2019), where fiscal policy is prioritizing the contemporary capitalist industry in which its operations are in line with the sustainability transition, in the hope to incentivize corporate environmentalism.
Thirdly, Wallis (2010) suggests that green capitalism should be centered on the amount of resources it consumes sectorally, which is directed to the reflection of capital priorities and its ruling class rather than human satisfaction. The shift to sectoral-focused green capitalism is raised from the illusionary expectation to yield a universally accepted sustainable development because diversification in sectoral strategy provides more clarity in responsible production and consumption (Wallis, 2010).

In a post-growth context, scholars idealize society in compromising the capitalistic urgency to capital accumulation and class restoration. While not neglecting capitalist logic and prioritizing the flourishing of nature, relative decoupling acknowledges both the urgency to grow economically and sustainably, pertaining to the slogan “less is more” (Wanner, 2015). As laid out by Siebert (2020), ecologized uneven and combined development (UCD) approaches development as a social multiplicity of heterogeneous unevenness that not only capitalizes on the pressure of efficiency logic but also the distinctly capitalist form of societal multiplicity. Furthermore, Mair, Druckman, & Jackson (2020) explore the notion of work in Cockaigne from the 12th century, suggesting that doing jobs for the sake of social good instead of generating exchange value is possible by removing coercion through breaking the link between work and consumption at an individual level.

3.4. Integrative Framework

In previous sections of this study, the discourse of green capitalism has been discussed based on its debate scope, which distinctly separates the heterogeneous stances on green capitalism and sheds light on the path toward a realistic middle ground in the discourse. In this section, an integrative framework is outlined to clarify the causal relationship between the discussed debate scopes of green capitalism. Hence, by clustering processes and beliefs which attempt to realize sustainable transition, the integrative framework aims to highlight the extent to which each cluster contributes to reaching a realistic middle ground while suggesting necessary connections and inputs. This considers the pace needed for the race against climate change.

The integrative framework (Figure 1) reveals that the formulation of a realistic middle ground of green capitalism in the sustainable transition is not centered on the question of whether or not it should take a clear stance, nor is it at the midway standpoint between anti and pro-capitalism as it yields a logical fallacy. Rather, it is to the extent to which capitalist imperatives
can be capitalized to stimulate sustainable transition. Therefore, while the power of the state is crucial in restoring green capitalism, non-political actors, particularly multinational corporations.

**Figure 1**: The Sustainability Transition towards a Realistic Middle Ground of Green Capitalism in the Global Political and Economic Landscape

(Source: Author’s Own Illustration)

In the present state, the main discussion on green capitalism in an attempt to reach for a sustainable transition is not about the lack of effort, but the deeply held destructive beliefs that hinder the attempted effort in reaching its maximum potential. The solutions are very limited in their application, both for developing countries and governments’ capabilities (Magnin, 2018). Capitalism considers solutions that are not exclusively in line with sustainable development, but rather solutions that do not endanger the functioning of the system. As the concern raised by
Michie (2018) that the capitalism-unleashed form of globalization has been focusing on not saving the planet, people, or profit, but instead on saving capitalism itself.

While the carbon market has proven to effectively control the emission as the EU Emissions Trading System (EU-ETS) has set to reduce EU’s carbon emission by 8% between 2008 to 2012, it is limited to the extent that its pace remains insignificant to climate change (Feola, 2020). The motivation behind this set of actions is based on the pursuit of sub-imperial expansion, as one may call the highest class of capitalism, sub-imperialists’ reach for monopolies and finance capital which extends the opportunities for market exploitation, particularly in the Global South. Significantly, the obsession over endless economic growth originating from capitalist logic has brought an extensive burden that, if its continuity is based solely on economic growth, will spark the dawn of a new era of “green” capitalism yet to unfold – “green” not as in the fundamental imperatives, but rather as a blanket.

Widely known as green growth, its proponents’ optimism on reconstructing the notion of growth that is centered on the commodification of carbon raises concerns about its reliance on sustainable ethos consumption that is highly multidimensional in a way that exceeds the capability of regulations to control. Moreover, this obsession with growth has transformed the notion of labor into merchandise, positioning the endless capitalistic goals above the enhancement of labor welfare (Frère, 2017). In sum, the points of UCD in the Global South and the pressure on labor productivity growth both question the necessity of endless economic growth and reliance on the Invisible Hand.

In the realist utopian goals, the notion of decoupling from economic growth is applicable in rearranging priorities to achieve in the global political and economic landscape. However, the underlying degree of utopianism raises critiques and concerns about its implementability at a pace that is sufficiently compatible with climate change. Nevertheless, although the idea of radical sustainability has significant potential in transforming a healthier version of capitalism, there are three main reasons why it is called a realist utopian goal. First, the idea of deprioritizing economic growth in a capitalist society is fundamentally contradictory to the imperatives of a free market, especially considering that humans are naturally self-interested beings.

Widely termed as degrowth, its advocates believe that reversing and emphasizing the central aim of policies toward sustainable development is an indirect path to economic growth
Trantas, 2021). Although degrowth is heavily criticized by capitalists to be financially utopian, Schoppek (2020) argues that the transition to degrowth is a hegemonic passive revolution, which means that it is possible through the moralization of degrowth and modernization of hegemony, resulting in the politicization of degrowth. In this case, degrowth reveals its heavy dependence on the state’s power, suggesting that a radical shift may not be appropriate in all cases due to the paradox of sustainability (Arabindoo, 2020).

Furthermore, the exclusive faith that capitalists put in green technology to deal with climate change is misleading when the accumulation of capital is fundamentally destructive. Despite suggesting a realistic alternative: limiting reliance on green technology by supranational ecological constraints for European countries. This would be highly problematic for the ongoing uneven development in the Global South. The path to market homogeneity is reflected in enclave libertarianism proposed by Lynch (2017), suggesting the utopian idea that when private service providers compete for mobile populations in fragmented territories, a homogenous ideology is formed through free association in open markets.

Hence, in mitigating creative destruction due to homogenous competitive advantage, diversification of sectoral-driven focus on managing capital becomes important. The Roundtable on Sustainable Palm Oil (RSPO) has proven that the formation of committee industry representatives provides specific room for each industry to grow because as industries contribute differently to the global economy, so do their ways to innovate strategies for emission reduction adapt to the way the industry operates. However, it took almost a decade since its establishment in 2004 to effectively trace sustainable palm oil production and adoption by multinational companies on a global scale (RSPO, 2015). As a result, a sectoral-driven competitive advantage is able to address the failure of capitalism addressed by Harris (2010) in linking labor and capital by making it the main consideration in determining the extent to which technologies should be capitalized on. Reitz & Jörke (2021) agree, and they add that diverse competitive advantages within the transnational outlook is a new effort in developing the green knowledge of capitalism. As empirically proven by RSPO and theoretically supported by Wallis (2010), while capitalism’s competitiveness triggers innovation in a relatively short-term manner, the sectoral-focus approach to ensure diverse competitive advantages guarantees long-term sustainability, quintessential to the development of sustainable transition in green capitalism.
Despite the power that regulation possesses, from as incremental as adapting the current institutional system to as radical as a structural change of the modes of production and living, the execution is strongly conditional on the presence of resources and the willingness to deploy such resources in a way that will not endanger the survival of capitalism (Fox & Alldred, 2020; Brand, Görg, & Wissen, 2019). Originating from these limitations of regulatory transformation, Moore’s (2012) concept of crowd-in virtue corporate governance is to minimize the dependency on the state’s power by invigorating the privatized transformation within corporations in the hopes of influencing the way the state interacts with the debate scopes of green capitalism.

Therefore, in spite of Friedman’s belief that “the business of business is business,” corporations are also social actors after all, stimulated by the idea of corporate environmentalism that acknowledges both the urgency to grow economically and sustainably. This is mirrored in the concept of relative decoupling, whereby the need for economic growth is justifiable and is not limitless, while absolute decoupling is far from possible (Wanner, 2015). Furthermore, as the implementation of crowd-in virtue corporate governance requires transition, the stimulation from the state’s power to incentivize corporate environmentalism is a driving force to reach relative decoupling. Therefore, when there are comparable efficiencies in increasing resources and output, relative decoupling is conceptually a realistic middle ground for the growth conception in green capitalism.

4. Conclusion
4.1. Implications for Theory

The objective of this research is to extend our understanding of the role of capitalism in the path toward the sustainable transition in the race against climate change. Prior research has identified heterogeneous stances on green capitalism. However, as reflected in the literature, such a high variety of approaches hinders us from establishing a clear path toward the sustainable transition. Although advocates from various sides are very persistent, Jacobs (2021) shows that proponents can at least agree that capitalism will not be green by itself and that it will be a continuous battle. While existing research problematizes the unanswered question of whether the sustainable transition should take a pro or anti-capitalist stance, this paper reveals that the formulation of a realistic middle ground of green capitalism is neither a capitalistic
stance selection nor a midway standpoint, but rather at the extent to which the capitalist imperatives can be capitalized on to stimulate sustainable transition.

As the notion of green capitalism is vaguely defined in the context of the sustainable transition, this paper clarifies the heterogeneous stances on green capitalism based on its debate scopes at the international level of climate agreements to shed light on the realistic middle ground. The classification of green capitalism’s heterogeneous stances based on the present state and the realist utopian goals reveals that the degree of economic growth obsession is the fundamental cause of the highly polarized debates on green capitalism. With the support of economic growth and degrowth as polar opposites, this paper discovers the causality between this disparity and the treatment of the classified green capitalism debate scope, including carbon monetization, dependence on green technology, and modes of capital accumulation. For example, as the capitalistic goal setting based on economic growth has put an incredible amount of pressure on labor productivity, the accumulation of capital from such capitalistic goals is systematized in a way that exclusively benefits the goal-setter or the sub-imperialists, exaggerating uneven and combined development.

The realistic middle ground of green capitalism is therefore approached realistically by assessing the feasibility of the heterogeneous stances respectively based on each one’s degree of utopianism and compatibility of its pace against climate change. As a result, the realistic middle ground of green capitalism is classified into 3 categories, which are based on the practical inputs themselves, followed by their drivers and impacts.

First, recognizing the impossibility of fully exterminating uneven development in the Global South, the use of crowd-in virtue in corporate governance is not only progressive to ecologizing social multiplicity of heterogeneous unevenness, but it also improves the influence of privatized transformation within the global economic landscape on the policy assemblage in the global political landscape. The failure in linking state power with the impact of privatized transformation through crowd-in virtue corporate governance on regulatory transformation discourages sustainable consumption.

Second, the role of corporations as social actors has the potential to balance out the necessity of economic growth, while additionally supporting the urgency to accumulate capital that adds sustainability to the profit maximization equation. Driven by policy subsidies concentrated in green sectors, the realization of corporate environmentalism is reflected in the
concept of relative decoupling where the link between sustainable and economic growth is not broken, but dramatically diminished.

Third, in mitigating concentrated homogenous competitive advantages due to the maximized dependence on green technology, the input of sectoral-driven competitive advantages is proposed to restore and enhance the notion of labor productivity, thus abolishing the notion of labor as merchandise. Driven by the formation of committee industry representatives, a sectoral-driven competitive advantage is conditioned to tackle climate justice based on the unevenness of country and industry development.

4.2. Implications for Policy Makers

Policy makers in the political economy landscape should begin to criticize the need for endless economic growth and reliance on the Invisible Hand. This is possible by examining degrowth as the concept of passive revolution to promote policies that aim to resolve poverty, in turn resulting in economic growth indirectly (Trantas, 2021). Reversing the aim of policy towards ecologized unevenness reflects the capitalist imperatives that do not reject inequality but nevertheless fight poverty, which is a crucial distinction to be made in the modes of capital accumulation and the reconstruction of climate justice policies. With the newly formed transitional committee at COP-28, although the management of the damage and loss fund is in line with ecologizing uneven development, its implementation requires the expansion of funding sources on both the sectoral and national scale. Particularly, by formatting a sectoral-based industry representatives committee, it can design a method of tracing a lower consumption than the industry can sustainably produce based on respective industry obstacles, as previously demonstrated by the RSPO.

5. Future Research

The recommendations for future research are centered on systematically redefining green capitalism as a passive revolution towards the sustainable transition, particularly by assessing the feasibility and utility of the proposed practical inputs and its drivers and thus affirming the realistic middle ground of green capitalism. Beginning with the integrative framework, the unclarified relationships depicted with dotted arrows in Figure 1 are centered on the concepts and practices that can have a positive effect on growth while strictly prioritizing the
sustainable transition, which can potentially diffuse capitalism with ecological thinking systematically. Hence, the theory development of capitalism can be pursued based on the inclusion of environmental emergencies such as climate change, pursuing further studies on the unclarified relationship to respond to both growth and sustainable transition through a realistic middle ground. Consequently, the pursuit of a realistic middle ground study of green capitalism opens the avenue to new areas of sustainable development agenda, distinguishing utopian goals based on their feasibility and clarifying their utility as the means in itself.

For example, future research can focus on developing the existing system of industry representative committees and forming committees that can represent a wider range of industries. As the RSPO principles themselves require substantial improvement and rigorous enforcement to extract maximum significance from certifying palm oil, the inclusivity to smallholders is thus far the goal that showed the least progress, accounting for only 5% of certified palm oil producers (Morgans et al., 2018). As opposed to the farming industry, a study on the impact of fair trade shows a strong indication of economic opportunities for smallholder farming families that are capable of meeting the market and certification standards (Nelson & Pound, 2009). Therefore, it is worthwhile to study the underlying causes of smallholders’ welfare to affirm whether the issue is on capital accumulation and/or resource management and whether industry conditions are a contributing factor. By assessing the influence of various industry conditions on respective smallholders, future research can clarify the structure of industry representative principles and responsibilities, particularly in the interaction with states. Building upon the emerging transnational hybrid governance addressed by Johnson (2022), which combines state laws and private rules to reach sustainable development goals globally and nationally, future research can test the significance of private and state collaboration in regard to industries that require restructuring of a fairer supply chain. Empirically, these studies can be done by analyzing the data on smallholders’ contract terms to identify the extent to which supply chain actors are committed to providing a fair economic opportunity in the producing and exporting developing countries.

Furthermore, the data provided by RSPO on the profitability in the palm oil value chain that showed a 0% profit share for smallholders should be recalculated based on the 6% added value in comparison with the 30% added value by retailers. This can be done by accounting for the environmental degradation values that smallholders in palm-oil-producing
countries need to bear to accurately measure added value and profitability, offering equal opportunities across the supply chain. Therefore, with a significant difference in industry conditions and economic struggles of enforcing sectoral-based policy, the creation of sectoral-based competitive advantage can support the enhancement of labor welfare productivity while minimizing dependence on green technology.

The research on privatized transformation including crowd-in virtue corporate governance and corporate environmentalism can be examined to unveil the practical role that particularly large corporations can significantly contribute to. Based on the evaluative study on the efficacy of government subsidies and penalties on the promotion of corporate environmental governance by He, Zhong, Gan, Liu, & Xu (2022), future research can assess how it affects the decline in environmental impact per unit of economic output over time, affirming the utility of Green Keynesianism on partial decoupling moderated by corporate environmentalism (Wanner, 2014). The positive impact of environmental penalties on corporate environmentalism is strictly driven by the nature of risk-averse urges rather than the urgency to combat climate change in itself, while the negative effect of environmental subsidies is criticized to be due to a lack of effective mechanisms to measure the use of environmental subsidies by firms. Future studies can challenge the negative effects of environmental subsidies on their utility to a firm’s sustainability growth by collecting surveys from firms at the managerial level, affirming the fundamental problem to be a lack of climate awareness and/or lack of effective assessment. Empirically, a longitudinal study on the firm level in multinational corporations located in the Global North can also be conducted to hinder other critical social problems such as malnutrition or poverty that tend to be a higher priority in the Global South.

The co-production of critical theory reveals that the conception of sustainability raises the importance of going beyond the political economy vacuum, distinguishing the extent to which regulatory and state transformation is capable of meaningfully stimulating sustainable transition with other non-political factors being examined (Cavanagh & Benjaminsen, 2017). Therefore, the examination of the proposed partial decoupling on the firm level through the transformation of business-as-usual activities can be done, particularly through the further advancement of green financing by Dörry & Schulz (2018). Green financing advancements are set in motion to decrease dependency on the state’s power, supporting the influence of privatized transformation to policy assemblage in regulatory transformation. Besides green finance, the
privatized concept of sustainable transition can further be examined in the other corporate pillars such as green supply chain, marketing, and human resources with the orientation to partial decoupling.

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**APPENDIX**

**Table A1: List of Articles Used in the Analysis of Existing Research**

<table>
<thead>
<tr>
<th>No</th>
<th>Article Title</th>
<th>Authors</th>
<th>Year</th>
<th>Source Title</th>
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<tr>
<td>1</td>
<td>Renewable energy, sustainability paradox and the post-urban question</td>
<td>Arabindoo, P</td>
<td>2020</td>
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<td>2</td>
<td>Greening Capitalism? A Marxist Critique of Carbon Markets</td>
<td>Böhm, S; Misoczky, MC; Moog, S</td>
<td>2012</td>
<td>Organization Studies</td>
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<td>3</td>
<td>Is the post-fossil era necessarily post-capitalistic? - The robustness and capabilities of green capitalism</td>
<td>Bosch, S; Schmidt, M</td>
<td>2019</td>
<td>Ecological Economics</td>
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<td>No.</td>
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<td>4</td>
<td>Overcoming neoliberal globalization: social-ecological transformation from a Polanyian perspective and beyond</td>
<td>Brand, U; Gorg, C; Wissen, M</td>
<td>2020</td>
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<td>5</td>
<td>Political ecology, variegated green economies, and the foreclosure of alternative sustainabilities</td>
<td>Cavanagh, CJ; Benjaminsen, TA</td>
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<td>Journal Of Political Ecology</td>
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<td>6</td>
<td>Revival of Keynesian Economics or Green Keynesianism</td>
<td>Comert, M</td>
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<td>Sosyoekonomi</td>
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<td>7</td>
<td>The Politics of Postcapitalism: Labour and our Digital Futures</td>
<td>Cruddas, J; Pitts, FH</td>
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<td>Critiquing a Utopian idea of Sustainable Consumption: A Post-Capitalism Perspective</td>
<td>Dermody, J; Koenig-Lewis, N; Zhao, AL; Hanmer-Lloyd, S</td>
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<td>Journal Of Macromarketing</td>
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<td>9</td>
<td>Green financing, interrupted. Potential directions for sustainable finance in Luxembourg</td>
<td>Dörry, S; Schulz, C</td>
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<td>Local Environment</td>
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<td>Capitalism in sustainability transitions research: Time for a critical turn?</td>
<td>Feola, G</td>
<td>2020</td>
<td>Environmental Innovation And Societal Transitions</td>
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<td>Re-assembling climate change policy: Materialism, posthumanism, and the policy assemblage</td>
<td>Fox, NJ; Alldred, P</td>
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<td>British Journal Of Sociology</td>
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<td>13</td>
<td>Ideological obstacles to effective climate policy: The greening of</td>
<td>Gunderson, R; Stuart, D; Petersen,</td>
<td>2018</td>
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<td>No.</td>
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<td>From Green Energy to the Green Car State? The Political Economy of Ecological Modernisation in Germany</td>
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<td>Going green to stay in the black: transnational capitalism and renewable energy</td>
<td>Harris, J</td>
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<td>Race &amp; Class</td>
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<td>Reflections on COP26: International Diplomacy, Global Justice and the Greening of Capitalism</td>
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<td>Making 'Green Giants': Environment sustainability in the German chemical industry, 1950s-1980s</td>
<td>Jones, G; Lubinski, C</td>
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<td>Vote with your feet: Neoliberalism, the democratic nation-state, and utopian enclave libertarianism</td>
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<td>A tale of two utopias: Work in a post-growth world</td>
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<td>Forms of globalisation: from 'capitalism unleashed' to a global green new deal</td>
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<td>The reshaping of political representation in post-growth capitalism: A paradigmatic analysis of green and right-wing populist parties</td>
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<td>Passive revolution revisited: From the Prison Notebooks to our 'great and terrible world'</td>
<td>Roccu, R</td>
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<td>How Far is Degrowth a Really Revolutionary Counter Movement to Neoliberalism?</td>
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<td>The greening of uneven and combined development: IR, capitalism and the global ecological crisis</td>
<td>Siebert, J</td>
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<td>Varieties of green capitalism: economy and environment in the wake of the global financial crisis</td>
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<td>Could degrowth have the same fate as sustainable development? A discussion on passive revolution in the Anthropocene age</td>
<td>Trantas, N</td>
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<td>Creative self-destruction: corporate responses to climate change as political myths</td>
<td>Wright, C; Nyberg, D</td>
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