

Climate justice in Vietnam's green transformation: A three-dimensional analysis of the green growth and climate change mitigation sectors

Hoang Khoi Nguyen*

Research Associate, Leuven International and European Studies (LINES), Faculty of Social Sciences,
University of Leuven, Oude Markt 13, 3000 Leuven, Belgium

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Abstract:

Vietnam has been making great strides in promoting a low-carbon development pathway to ensure high growth rates, environmental protection, and fulfilment of international climate change commitments. These efforts are concretized in the form of a green transformation policy framework of which the most important components are the National Green Growth Strategy for the period 2021-2030 and the National Climate Change Strategy for the period up to 2050. As these policies employ an integrated approach that aim to achieve economic growth and climate change mitigation simultaneously, there is a possibility that the social pillar of sustainable development may be neglected, potentially leading to issues with equity and fairness in planning and implementing concrete missions and tasks. This article seeks to determine whether this is the case by assessing how three dimensions of climate justice -namely recognition justice, procedural justice and distributive justice - are reflected in the Green Growth and Climate Change Strategies.

Keywords: climate change mitigation, climate justice, green growth, green transformation, social sustainability.

Classification numbers: 4.1, 5.1

1. Introduction

The ongoing international efforts in climate change mitigation - which includes reducing the emission of greenhouse gases (GHG) and increasing carbon sinks - are highly consequential to the long-term socio-economic stability of Vietnam, which is among the five countries most vulnerable to the adverse impacts of climate change in the world [1]. Although the historical GHG emission of Vietnam is considerably lower than that of developed countries, as an emerging economy with rapidly rising emissions, Vietnam still has a responsibility to contribute to global mitigation efforts. Accordingly, at the 26th Conference of the Parties to the United Nations Framework Conference on Climate Change (COP26) in November 2021, Prime Minister Pham Minh Chinh on behalf of the government made the pledge that Vietnam will reach net zero emission by 2050. This not only reaffirms Vietnam's commitments to the international community but also paves the way for a comprehensive transition to a low-carbon development model.

On this basis, since late 2021, Vietnam has approved numerous legal documents to fulfil this long-term objective such as Decision 888 on the Plan on missions and tasks to implement the COP26 outcome (COP26 Implementation Plan), Decision 892 on the National Strategy on climate change for the period up to 2050 (National Climate Change Strategy) and Decision 882 on the National Action Plan on Green Growth for the period for 2021-2030 (Green Growth Action Plan) to implement the Decision 1658 on the National Green Growth Strategy (Green Growth Strategy). In essence, these policies utilize an integrated, cross-sectoral approach that aims to simultaneously solve ecological and economic objectives [2], for example, by encouraging the domestic automobile industry to improve land transportation, create jobs, and reduce carbon dioxide emission. Although this policy combination can theoretically achieve growth and climate change objectives, it does not take into account problems related to the social dimension - which is one of three pillars of sustainable development alongside the economic and environmental ones. Therefore,

*Email: nguyenhkhai@gmail.com

if social objectives in the green transformation are underrepresented, sustainable development will be difficult to achieve even when environmental and economic targets are fulfilled.

The social dimension in environmental and climate issues can be analysed through a variety of conceptual frameworks, for instance, environmental justice, just transition, or energy justice [3]. Despite being mostly applicable to specific ecological themes, these concepts generally share the same analytical tools. This article zooms in on the climate justice concept, as climate change mitigation is the shared and overarching objective of Vietnam's green transformation framework, which includes the Green Growth Policy and the Climate Change Strategy.

Climate justice refers to the protection and promotion of the legitimate rights and interests of vulnerable communities in the face of adverse impacts caused by both climate change as a natural phenomenon and efforts to mitigate GHG emission to stop climate change [4]. Climate justice is especially important for mitigation policies as the transition of the economy to a low carbon model has many implications for equity and justice. For example, the phase-out of coal - which is the most polluting fossil fuel - can raise electricity prices in the short term and take away low-skilled jobs, causing economic damages to low-income families, increasing unemployment rates, and sowing the seeds of social discontent.

Research has shown that ordinary citizens can develop a clear perception of the extent of equity and justice of mitigation policies [5, 6]. An equitable mitigation policy will achieve social approval, enabling the execution of controversial measures that can cause disturbances in the basic arrangements of the economy. Therefore, a just policy can improve its efficiency and also ensure that its implementation is free of hurdles.

Ever since the COP26 pledges, there has been an uptick in official endorsement of climate justice and equity in Vietnam. During COP26 itself, Prime Minister Pham Minh Chinh remarked that economic growth and climate change response in Vietnam must be consistent with equity and justice principles [7]. Domestically, the National Steering Committee on Implementing Vietnam's Commitments at COP26 has requested that ministries and sectors complete a report on equitable and just transition in their sector before 15 August 2022. Nonetheless, through speeches delivered by national and regional leaders,

commercial events, and other outreach activities on climate change mitigation that have proliferated since late 2021, it can be observed that the role of the social sustainability dimension remains underreported compared to the economic and environmental dimensions. This necessitates an initial project to determine the legal and theoretical basis for climate justice within Vietnam's green transformation framework.

2. Research design

The research design is an embedded case study, which contains multiple sub-units of analysis within a larger case [8]. The case here is the green transformation policy framework with the sub-units of analysis being the Green Growth Strategy and the Climate Change Strategy. The embedded case is chosen instead of the multi-case approach because the boundaries between the two units of analysis are not self-evident. In other words, the purpose of this research is not to compare and contrast the two strategies but to assess how they collectively contribute to the overall extent of climate justice as demonstrated in the green transformation framework.

Due to the recent introduction of these strategies, their implementation process remains in the very early phase. This prevents the assessment of climate justice in terms of policy outcome and impact. Therefore, the article focuses on the output aspect by employing a qualitative content analysis research method [9] to analyse the texts of the Green Growth Strategy and the Climate Change Strategy. The article attempts to address the research question: "To what extent are the dimensions of climate justice represented in Vietnam's green transformation policy framework?" The answer to this puzzle will help identify the advantages and shortcomings of the green transformation framework, allowing policymakers to improve the degree of equity and justice in the country's sustainable development efforts.

The rest of this article is divided into six sections. The very next section introduces the green transformation policy framework and the content of the most important policies. This is followed by an operationalization of the three dimensions of climate justice - namely recognition justice, procedural justice, and distributive justice. Then, the coding agenda to assess the extent of these dimensions' representation in the green transformation framework is introduced. Based on these coding rules, the results of the analysis are presented and discussed. Some recommendations

to enhance each of the dimensions are then provided in the penultimate section. Finally, the conclusion summarizes the findings and suggests future research directions.

3. Vietnam's green transformation policy framework

The green transformation framework is a collection of policies that share many similarities in terms of guiding visions, objectives and solutions in the fields of green growth, and climate change mitigation. This is a semi-official terminology that, despite not being formally defined in legal documents, is widely used by government agencies to refer to mutually reinforcing policies that regulate GHG reduction and transformation of the economic model [10]. The focal policies of this framework are the Green Growth Strategy and the Climate Change Strategy, respectively approved in November 2021 and July 2022. The dynamic policy framework centred around these two strategies is constantly evolving with the additions of implementation plans by specific Ministries, sectors, and local regions. In July 2022, the Green Growth Action Plan was released to guide the implementation of the Green Growth Strategy, while the Climate Change Strategy does not yet have an equivalent.

The Climate Change Strategy is nearly identical to the Plan to Implement COP26, which was also introduced in July 2022. The Climate Change Strategy is chosen to be one of the sub-units of analysis because it emphasizes domestic issues instead of focusing on fulfilling international commitments like the Plan to Implement COP26. Furthermore, analyses of two strategies, which are legal equivalents, will lead to more consistent findings than between a strategy and a plan. The choice of the Climate Change Strategy also ensures continuity with past works by international scholars, which have determined that the previous versions of Climate Change Strategy and the Green Growth Strategies were major components of the green transformation process [11].

The Climate Change Strategy was developed and supervised by the Ministry of Natural Resources and Environment (MONRE). The first version of this strategy was released in December 2011, followed by an Action Plan in 2012. In this period, the Climate Change Strategy mostly focused on climate change adaptation rather than mitigation [11]. A succession of international and domestic events, for example, the introduction of the Paris Agreement, the 17 Sustainable Development Goals of the United Nations in 2015, and Vietnam's net zero commitments at COP26, soon rendered this version incompatible with reality. Since

July 2022, the revised strategy has brought Vietnam's climate change policies closer to the international situation and the country's decarbonization drive. The current strategy prescribes three objectives: adapting to climate change and minimizing losses caused by adverse effects of climate change; mitigating GHG emission to achieve net zero emission by 2050; and leveraging opportunities created by climate change mitigation to transform the growth model and improve competitiveness. Since climate justice issues mostly stem from mitigation activities, the second and third objectives are more relevant to the article. To achieve these objectives, the Climate Change Strategy assigns responsibilities to local regions and socio-economic sectors, in particular, energy, industry, construction, agriculture, and transportation [12].

The Green Growth Strategy is drafted and overseen by the Ministry of Planning and Investment (MPI). This strategy was also first released in 2012 for the period 2012-2020 with three major objectives: reduce GHG emission; promote greening of economic sectors; and promote a green lifestyle and sustainable consumption. The first and third objectives are relevant to climate justice as they are concerned with promoting climate change mitigation and a lifestyle compatible with a decarbonized economy. In October 2021, this strategy was updated for the period 2021-2030 with vision towards 2050. The revised version adds a fourth objective, which is to ensure the equity, inclusiveness, and resilience principles [13]. Therefore, the Green Growth Strategy is highly relevant for the purpose of this article. In July 2022, the Green Growth Action Plan was approved in order to elucidate the precise tasks and missions of relevant Ministries, sectors, and local regions. In particular, there are 18 themes, 57 task clusters, and 134 tasks [14].

4. Three dimensions of climate justice in Vietnam's green transformation policy framework

This section introduces and operationalizes the three dimensions of climate justice. Indicators to assess the content of each dimension will also be used in the coding agenda in the very next section.

To this date, no single definition nor typology of climate justice has been universally accepted. Nonetheless, there are three dimensions of climate justice that are widely employed by scholars and governments around the world, namely, recognition justice, procedural justice, and distributive justice.

Recognition justice refers to acknowledgement of vulnerable communities that often bear the brunt of climate change with a view to granting them privileges and special treatment. Procedural justice refers to the rights of citizens, no matter their income level, gender, ethnicity, or geographic origin, to participate in the deliberation process that leads to the creation of climate policies that directly affect their livelihood. Distributive justice is achieved when there are policy measures that aim to distribute the costs and benefits of climate change actions in a fair manner among all citizens, with special focus on marginal groups. As such, we can conceptualize recognition as the basis, procedure as the process, and distribution as the outcome of climate justice.

Although all three dimensions can be applied to climate justice between countries, this article only focuses on the domestic level. The three dimensions are closely related and mutually reinforcing, which means that the absence of one dimension precludes the achievement of climate justice. Take for example, if equity and justice are not even considered a potential issue, then there is no legal basis to develop procedural and distributive measures. If procedural justice is not strong, vulnerable groups will have difficulty making their concerns be known to the government, which will then develop distributive measures that do not reflect the people's wishes. On the other hand, if a policy is distributionally just, citizens will strongly approve it and actively take part in consultations to improve it further. The article will now turn to the precise definition and indicators of the three dimensions of climate justice and assess the degrees of their representation in Vietnam's green transformation framework.

4.1. Recognition justice

Recognition justice advocates that mitigation policies must take into account potential impacts on vulnerable communities, which are often neglected in their formulation and implementation. This aspect is considered a stepping stone to achieve the other forms of climate justice, because we can only explore the causes of injustice if it is confirmed to exist in the first place.

The recognition dimension addresses both the natural and man-made causes of climate change injustice. For the former, recognition refers to the acknowledgement of the elevated risks to marginal

communities caused by the natural phenomenon of climate change [15]. For the latter, recognition justice admits that actions to mitigate climate change can also create or exacerbate existing injustice patterns [14]. More importantly, recognition must go beyond theoretical acknowledgement by granting vulnerable groups special rights and treatment, which are the bases for procedural and distributive justice measures [16].

4.2. Procedural justice

Procedural justice refers to the assurance of favourable conditions that allow the majority of a country's citizens to take part and influence policies that directly affect their livelihood [17]. Although the national government remains the most important subject in environmental and climate change governance, ordinary citizens must be allowed to raise their voices to ensure the fairness of policies that can strongly impact their employment and financial well-being. J. Pretty (1995) [18] identified seven levels of popular participation in environmental issues, which can be further encapsulated into two major types: passive and active participation. Passive methods include public consultation, discussion, and debate, while active methods allow the people to directly interact with government institutions to design and carry out policy measures.

Procedural justice emphasizes inclusiveness, meaning that all communities must be able to contribute to policy formulation, especially minority, marginal, and vulnerable ones [19]. Accordingly, there must be policies to empower women, the elderly, youths, low-income households, ethnic minorities, and people who suffer disproportionately from the green transformation in general. Procedural justice prioritizes the diversity of social groups, especially disadvantaged ones, over the number of individuals that can participate [20]. This is because vulnerable groups typically have a weaker understanding of mitigation policies and are less likely to vote due to financial and mobility constraints, thus allowing privileged groups to continue dominating the agenda. Therefore, procedural justice is normatively predisposed towards "quality" rather than "quantity".

4.3. Distributive justice

Distributive justice is achieved when the costs and benefits of climate change mitigation policies are fairly allocated among all social segments [19]. Many

research projects have pointed out that GHG reduction policies can directly or indirectly create or worsen livelihood difficulties of vulnerable groups [11]. For instance, measures to promote the electrification of private vehicles may add to the financial burden of low-income households, since the average price of electric cars remain much higher than cars running on diesel or gasoline. Meanwhile, as infrastructure for electric vehicles is not yet adequate for long-distance travel, this measure can isolate rural residents from urban centres, thus reducing social cohesion and solidarity.

Many distributive measures have been proven to be effective in reducing the burden caused by mitigation policies. Some of the more popular ones include: direct cash transfer, social policies such as pension and health insurance, investment in low-carbon infrastructure, reducing value-added tax, and capacity-building for green jobs [21]. While some authors have focused on what should be distributed and who should be the recipients [22], the technical nature of distributive measures have received less attention. No single policy instrument - for example, informational, economic, or regulatory instrument - can lead to a vastly improved distributional outcome. As such, for such instruments to be more than the sum of their parts, the distributive policy mix must be functionally diverse and synergistically designed [19].

In practice, many national governments only modify existing social welfare policies and argue that this constitutes an effort to protect vulnerable groups. This approach is ineffective as the transition to a low-carbon economy can create many unpredictable changes that social security, pension, and insurance were not designed to cover [21]. Therefore, distributive measures must exist in parallel to and complement existing social welfare policies.

5. Coding agenda

The practice of qualitative coding is employed to evaluate the extent of climate justice representation in the green transformation policy framework. Coding in the social sciences refers to the assignment of a concise label (a “code”) to a portion of language-based or visual data, for instance, written texts, interview transcripts, or photographs, to summarize and evoke its essential attributes [23]. Different codes within the same unit of

analysis can be converted into quantifiable variables for correlational and causal analysis, or they can remain descriptive if the value of the variable itself is of interest to the researcher - which is the case in this research project.

The process of coding revolves around a coding agenda (or codebook), which identifies the variables, indicators of such variables, different values/ranks of such variables, and coding rules that allow the researchers to arrive at the values of variables based on the content of the indicators [9]. As qualitative research lacks the measurement rigor of the quantitative approach, a transparent coding agenda is vital to ensuring its credibility and replicability. Because there can be different accounts of a single aspect of social reality, a qualitative study must enhance its credibility by employing established scientific practices. Credibility thus has strong parallels with the principle of internal validity in quantitative research [24]. In the coding agenda of this project, such practices include the construction of indicators based on a thorough examination of the relevant literature, and the division of the three climate justice dimensions into qualitative ordinal ranks. Detailed coding rules also allow other researchers to repeat the analysis and arrive at essentially the same findings, boosting the replicability of the project. This not only confirms the accuracy of the findings but also lays the groundwork for future works that build on the current research project [24].

In this research project, each dimension of climate justice is treated as an ordinal variable, divided into four ranks. In ascending order of climate justice representation, these ranks are respectively: weak, fairly weak, fairly strong, and strong. The value of each variable is determined based on three indicators, synthesized from insights of the climate justice and governance literature (already discussed in the preceding section). An encoding rule is given in Table 1 - alongside a summary of other components of the coding agenda - to explain how these indicators are used to assess the value of each climate justice dimension/variable.

5.1. Recognition justice

Recognition justice is evaluated based on three indicators: a) formal acknowledgement of the harmful impacts of climate change as a natural phenomenon; b) formal acknowledgement of the harmful impacts of

Table 1. Coding agenda for the three dimensions of climate justice.

Variable	Indicators	Value	Definition	Encoding rule
Recognition justice	a) Acknowledgement of the adverse impacts of climate change as a natural phenomenon; b) Acknowledgement of the adverse impacts of measures to mitigate climate change; c) Identification of particularly vulnerable communities.	Strong	Acknowledgement of different forms of climate injustice and identification of particularly vulnerable communities.	All three indicators are present.
		Fairly strong	Climate change injustice is acknowledged as both a natural and man-made process. or The natural climate change injustice is acknowledged and particularly vulnerable communities are identified.	Indicators a) and b) are present. or Indicators a) and c) are present.
		Fairly weak	Only the natural impact of climate change is recognized as causing injustice to vulnerable groups.	Only indicator a) is present.
		Weak	Injustice caused by climate change is not acknowledged at all by the policy document.	No indicators are present.
Procedural justice	a) Stipulation of passive participation methods; b) Stipulation of active participation methods; c) Identification of communities whose participation shall be prioritized.	Strong	Strong conditions to promote popular participation along with clear beneficiaries.	All three indicators are present.
		Fairly strong	Active forms of popular participation are stipulated. or Only passive forms of popular participation are stipulated but with clear identification of communities to be empowered.	Indicators a) and b) are present. or Indicators a) and c) are present.
		Fairly weak	Only passive, consultative forms of popular participation are stipulated.	Only indicator a) is present.
		Weak	Empowering popular participation in mitigation policy planning and implementation is not a concern of the policy.	No indicators are present.
Distributive justice	a) Stipulation of measures to alleviate the burden of mitigation policies on vulnerable groups; b) Diversity of such distributive measures; c) Complementarity of such distributive measures with existing social welfare policies.	Strong	Distributive measures are diverse and complementary with existing social welfare policies.	All three indicators are present.
		Fairly strong	Distributive measures are diverse or complementary with existing social welfare policies.	Indicators a) and b) are present. or Indicators a) and c) are present.
		Fairly weak	There are some measures to fairly distribute the burden of mitigation measures, but limited to certain types of policy instruments.	Only indicator a) is present.
		Weak	Distributing the adverse impact of mitigation measures is not a concern of the policy.	No indicators are present.

climate change mitigation measures; c) identification of especially vulnerable communities. Accordingly, a policy is considered as “weak” in the recognition dimension if it does not recognize either the adverse impacts of climate change or mitigation efforts on vulnerable communities. If a document acknowledges the adverse impact of climate change as a natural phenomenon without addressing the potential burden placed on vulnerable groups by mitigation measures,

it is regarded as “fairly weak”. If, on top of recognizing the natural impact of climate change, a policy also identifies the vulnerable communities that will receive additional support but not the economic harm posed by mitigation efforts, it is considered “fairly strong”. This value also applies if the policy acknowledges both the burden of climate change and mitigation measures but without listing especially affected communities. Finally, if a policy contains a list of communities that

deserve special support and recognize the negative effect of both aspects of climate change, then its recognition justice dimension is regarded as “strong”.

5.2. Procedural justice

Three indicators are used to evaluate the strength of procedural justice in a policy: 1) Passive participation methods; 2) Active participation measures; 3) Identification of participating communities. Passive participation includes public consultation, feedback, and advisor panels, while active participation endows citizens with the right to design and implement all of parts of mitigation policies. Accordingly, a policy is considered “weak” on this dimension if there are no provisions for popular participation in either the development or implementation of mitigation measures. If participation is only passive, thus being limited to the solicitation of opinions, then the procedural dimension is considered “fairly weak”. If a policy provides for common citizens to advise, design, and implement mitigation measures without specifying which communities are eligible, then it is considered “fairly strong”. This rating is also applicable if the policy only stipulates passive participation methods but clearly establishes the identity of stakeholders. Finally, if a policy provides for active citizen involvement in policy design and implementation while also having a list of eligible participants, it is considered to have a “strong” procedural justice component.

5.3. Distributive justice

The strength of distributive justice is assessed based on the a) existence of measures to alleviate the burden of mitigation policies on vulnerable groups, b) diversity of such distributive measures, c) complementarity with existing social welfare policies. Accordingly, a “weak” rank is assigned if the policy contains no distributive measures or an intention to develop them in the foreseeable future. A “fairly weak” rank occurs when distributive measures are provided by a policy, but the diversity of the policy mix is too low. A “fairly strong” rating is given if the policy features different forms of policy instruments to support vulnerable groups such as information, financial, and capacity building measures. Finally, for a policy to be considered as having a “strong” distributive justice component, its distributive measures must be designed as a standalone policy package that complements traditional social welfare measures rather than replacing them.

6. Results

This section discusses the results of the analysis of the three dimensions of climate justice in the green transformation framework based on the coding agenda presented above. A summary of the findings and data sources is presented in Table 2.

Table 2. Findings on the three dimensions of climate justice in Vietnam’s green transformation policy framework.

Units of analysis	Variable	Coded value	Evidence for code
National Green Growth Strategy	Recognition justice	Very strong	Indicators a), b) [13]; Indicator c) [14]
	Procedural justice	Fairly strong	Indicators a), c) [14]
	Distributive justice	Fairly strong	Indicators a) [14] Indicator c) [14]
National Climate Change Strategy	Recognition justice	Fairly strong	Indicator a), c) [12]
	Procedural justice	Fairly strong	Indicators a), b) [12]
	Distributive justice	Fairly weak	Indicator a) [12]

6.1. Recognition justice

Regarding the Green Growth Strategy, the fourth objective stipulates improving the people’s resilience in the context of climate change, ensuring equality in accessing the fruits of economic development, and that no one is left behind [13]. To ensure the fulfilment of this objective, the people will be guaranteed equal access to social services such as jobs, healthcare, tourism, and information [13]. Regarding duty assignment, the Ministry of Labour, Invalids and Social Affairs is requested to develop social welfare policies to support vulnerable groups in the green transformation process [13]. This task is more concretely defined in Task Cluster 7 of the Green Growth Action Plan, which identifies vulnerable groups as being composed of: women, children, ethnic minorities, the poor, and the elderly. While the Strategy itself mostly focuses on identifying damages caused by climate change, the Green Growth Action Plan directly acknowledges that the economic transformation to combat climate change will lead to implications for vulnerable groups and stipulates specific measures to understand the impact and design remedial policies [14]. Therefore, it can be concluded that the recognition justice dimension of the Green Growth Strategy is strongly represented, thanks to the acknowledgement of the adverse impacts of climate change and climate change mitigation efforts, as well as the explicit recognition of increased rights for vulnerable groups.

The Climate Change Strategy determines that one of its five guiding visions is to “reduce vulnerability and increase resilience in the face of climate change impacts,” with the main beneficiaries being communities living in especially vulnerable areas. The strategy also calls for increasing the adaptive capability of the social system through disaster management, construction of green projects, and provisions of clean water, healthcare, and food. Groups earmarked for support include women, youths and adolescents, and people living in disaster-prone regions [12]. Although the adverse effects of climate change have been recognized and the identity of vulnerable groups is established, this is only limited to climate change adaptation. The strategy has not touched on the impacts of a comprehensive transformation towards decarbonized economic activities, despite having a very detailed section on mitigation targets, timeline, and responsibility assignment. Therefore, the recognition justice dimension of the Climate Change Strategy is rated as fairly strong.

6.2. Procedural justice

The Green Growth Strategy calls for the mobilization of all social components in achieving the green transformation, in particular, social organizations, non-governmental organizations, residential communities, and development partners. These entities are encouraged to participate in the implementation, supervision, and evaluation of the Green Growth Strategy in particular and the economic greening process in general [13]. For the Green Growth Action Plan, while social mobilization issues are not directly mentioned, they are still indirectly present in the form of Task Cluster 12 on agriculture and Task Cluster 13 on waste management. In particular, Task 12.5.2. regulates efforts to develop a new countryside on the principles of respecting the environment, traditional customs, and lifestyle of each region and ethnic group, while Task 13.1.3. encourages solid waste management initiatives that involve local citizens [14]. These tasks and solutions show that while the Green Growth Strategy has attempted to empower stakeholders, they are still limited to sectors that have a directly observable impact on daily lives. On the other hand, for sectors that have a profound impact on climate change and green transformation such as energy and transport, the named non-state actors are mostly trade associations and companies. Although the specific tasks have not covered all relevant sectors and the methods of stakeholder participation are not yet clarified, the procedural justice dimension of the Green Growth Policy is still considered fairly strong as it has adequately identified

the types of groups that deserve additional procedural privileges [14], creating a sound legal basis for future improvement.

The Climate Change Strategy calls for increased participation and contribution from women and youths in applying traditional knowledge in climate change adaptation and disaster management, while ensuring local people’s buy-in in developing sustainable forestry practices [12]. In particular, the reliance on local communities to formulate new mitigation and livelihood models is highly progressive and notable. This shows that the Climate Change Strategy has shown genuine efforts to support local communities on the basis of ethnic identity and regional customs, which are often at risk of disappearance in times of large-scale socio-economic transformation [25]. However, these regulations are only confined to climate change adaptation. Moreover, the identification of populations that are granted special procedural rights is limited to women, youths, and those who suffer directly from natural disasters, while many studies have shown that low-income people are most prone to climate change impacts, whether they live in cities or the countryside [26]. Therefore, the procedural justice dimension of the Climate Change Strategy is rated as fairly strong.

6.3. Distributive justice

There are two task clusters in the Green Growth Action Plan that are directly relevant to distributive justice issues, namely, Task Cluster 3 on green employment and Task Cluster 7 on ensuring equality in the green transformation. Specifically, Task Cluster 3 stipulates the development of a green job database and making it accessible to job-seekers. Task Cluster 7 has two missions: Mission 7.1. on researching the impact of the green transformation on vulnerable groups and developing policies to assist them, while Mission 7.2 calls for the integration of such policies with the three National Target Policies - including the Sustainable Poverty Alleviation Program, the New Countryside Development Program, and the Socio-economic Development Program for Ethnic Minority Areas.

A notable advantage of these provisions lies in the fact that new redistributive policies are added on top of existing social policies. This is a very progressive and effective approach that has been proven in other countries. However, the redistributive measures are not very diverse, being confined to capacity building and financial transfer. As such, the distributive justice dimension of the Green Growth Strategy is considered fairly strong.

Although the Climate Change Strategy stipulates numerous missions and targets in GHG reduction for various economic sectors, it has not clarified the impact on vulnerable groups. As discussed in the section on recognition justice, the Climate Change Strategy prioritizes the protection of people against extreme weather events instead of sharing the burden of climate change mitigation. As such, difficulties arising from the green transformation are only cursorily mentioned in the section about institutional reforms and public mobilization, particularly through the utilization of technologies such as blockchain and big data [12]. However, the strategy has yet to explain what these difficulties actually are, although it can be safely inferred that they stem from job losses caused by decarbonization of economic sectors. As such, the Climate Change Strategy is assessed as having a weak distributive justice dimension.

7. Recommendations to improve the three dimensions of climate justice in the green transformation framework

Regarding the dimension of recognition justice, the Climate Change Strategy has only recognized adverse impacts from climate change adaptation, while in practice the switch to a low-carbon development pathway entails numerous risks and uncertainties for vulnerable groups. Therefore, the Climate Change Strategy must recognize the possible harm caused by mitigation policies so as to create a basis to improve the other two justice dimensions. Moreover, this will also lead to consistency between the Climate Change Strategy and the Green Growth Strategy, helping to harmonize and integrate two cross-sectoral documents with many identical guidelines and objectives.

Regarding procedural justice, the Green Growth Strategy and Climate Change Strategy both emphasize the participation of stakeholders in the green transformation, identify vulnerable groups, and recognize the role of traditional culture in designing climate change response actions. However, both strategies have only incorporated procedural privileges into adaptation and disaster management aspects. In the future, the green transformation framework should create favourable conditions for individuals and local communities to raise opinions, design, and directly implement mitigation measures. Notably, initiatives that have been successfully piloted in local regions, such as energy efficiency contests, should be multiplied and given a focus on the participation of individuals and households as opposed to companies and organizations [27].

Regarding distributive justice, the Green Growth Strategy should expand its policy mix to cover more economic sectors. The types of assistance should also be diversified, for example, by including the investment of green infrastructure. In addition, the Climate Change Strategy should consider integrating social sustainability factors into its objectives and missions on decarbonization of economic sectors to cement its status as the leading legal document in both climate change adaptation and mitigation in Vietnam. Furthermore, both strategies could benefit from research into how revenues from the carbon credit market, stipulated in the revised Law on Environmental Protection and piloted starting from 2025, can be used to invest in the aforementioned distributive measures.

8. Conclusions

In recent years, the Vietnamese government has exerted strong efforts to promote economic development, protect the environment, and fulfil international obligations. To guarantee the success of these ambitious goals, social sustainability principles must be respected and pursued. The climate justice conceptual framework, divided into three interconnected dimensions, is highly appropriate for this purpose.

This article is the first effort to assess the strength of the three climate justice dimensions in Vietnam's green transformation policy framework, which primarily covers the green growth and climate change mitigation fields. Despite relatively muted popular interest in the social sustainability dimension, the two major policies of the green transformation contain fairly detailed provisions for climate justice, covering the recognition, procedural, and distributive dimensions. This suggests that the drafting Ministries have taken an active interest in ensuring a just transition and conducted systematic research based on the international state of the art. This demonstrates a serious commitment from the Vietnamese government to achieve comprehensive sustainable development in all three pillars and contrasts sharply with the Western literature that predominantly depicts the country's environmental governance as driven by crony interests at the expense of common citizens [28].

The stark difference between the literature and the article's findings can be explained by two distinct hypotheses, which are also potential research directions. In the first scenario, Vietnam's environmental governance has actually always taken into account the social sustainability dimension, yet

its implementation is watered down by bureaucratic enforcers. Therefore, future research should explain which factors have prevented the implementation of justice and equity provisions in ecological policies and what remedial measures can be proposed. In the second explanation, the Vietnamese government has undergone a paradigm shift in its conceptualization of the role of social sustainability vis-à-vis the economic and environmental pillars. Prior to and including much of the 2010s, Vietnam's environmental-economic policy mix closely corresponded with the 'ecological modernization' school of thought, which argues that industrialization can lead to better environmental conditions but often disregards social concerns [29]. Starting in the late 2010s, Vietnam's official discourse has shifted to promoting equitable distribution of the fruits of development instead of a growth-at-all-cost mentality [30], which would be more compatible with climate justice. The research purpose of this direction will be to determine whether and why such a change has taken place and their implications for the country's sustainable development.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

- [1] World Bank Group (2020), *Climate Risk Country Profile: Vietnam*, 32pp.
- [2] J. Sathaye, et al. (2007), "Sustainable development and mitigation", *Climate Change 2007: Mitigation*, Contribution of working group III to the fourth assessment report of the intergovernmental panel on climate change, pp.691-743.
- [3] M. Lederer, et al. (2021), "Low-carbon energy, sustainable development, and justice: Towards a just energy transition for the society and the environment", *Sustainable Development*, **29**(6), pp.1049-1061.
- [4] S. Caney (2013), "Two kinds of climate justice: Avoiding harm and sharing burdens", *Journal of Political Philosophy*, **21**(4), pp.125-149.
- [5] A.L. Bristow, et al. (2010), "Public acceptability of personal carbon trading and carbon tax", *Ecological Economics*, **69**(9), pp.1824-1837.
- [6] M. Buchs, et al. (2011), "Who bears the brunt? Distributional effects of climate change mitigation policies", *Critical Social Policy*, **31**(2), DOI: 10.1177/0261018310396036.
- [7] Thanh Vo (2021), <https://vnexpress.net/thu-tuong-keu-goi-cong-bang-cong-ly-khi-hau-tai-cop26-4380072.html>, accessed 1 November 2021.
- [8] R.K. Yin (2003), *Case Study Research: Design and Methods*, Sage Publications, 181pp.
- [9] P. Mayring (2000), "Qualitative content analysis", *Forum: Qualitative Social Research*, **1**(2), DOI: 10.17169/fqs-1.2.1089.
- [10] Thu Ha (2022), <https://baohinhphu.vn/quoc-te-dong-hanh-cung-viet-nam-trong-chuyen-doi-xanh-phat-trien-ben-vung-10222060309222338.htm>, accessed 3 June 2022.
- [11] Dang Nguyen Anh, et al. (2018), "Green transformations in Vietnam's energy sector", *Asia and The Pacific Policy Studies*, **5**(3), pp.558-582.
- [12] Prime Minister of the Government (2022a), *Decision 896-QĐ-TTg on Approving the National Climate Change Strategy for The Period up to 2050* (in Vietnamese).
- [13] Prime Minister of the Government (2021), *Decision 1658-QĐ-TTg on Approving the National Green Growth Strategy for The Period 2021-2030, Vision Towards 2050* (in Vietnamese).
- [14] Prime Minister of the Government (2022b), *Decision 882-QĐ-TTg on Approving the National Green Growth Action Plan for The Period 2021-2030* (in Vietnamese).
- [15] S. Caney (2020), *Climate Justice*, Stanford Encyclopedia of Philosophy.
- [16] H. Bulkeley, et al. (2014), "Contesting climate justice in the city: Examining politics and practice in urban climate change experiments", *Global Environmental Change*, **25**, DOI: 10.1016/j.gloenvcha.2014.01.009.
- [17] Ian Preston, et al. (2014), *Climate Change and Social Justice: An Evidence Review*, Report of Joseph Rowntree Foundation.
- [18] J. Pretty (1995), "Participatory learning for sustainable agriculture", *World Development*, **23**(8), pp.1247-1263.
- [19] S. Williams, A. Doyon (2019), "Justice in energy transitions", *Environmental Innovations and Societal Transitions*, **31**, pp.144-153.
- [20] A. Silveira, P. Pritchard (2016), "Justice in the transition to a low carbon economy", *A Working Paper by the Cambridge Institute for Sustainability Leadership*, University of Cambridge, Institute for Sustainability Leadership, DOI:10.13140/RG.2.1.4933.2727.
- [21] G. Zachmann, et al. (2018), "The distributional effects of climate policies", https://www.bruegel.org/sites/default/files/wp-content/uploads/2018/11/Bruegel_Blueprint_28_final1.pdf, accessed 1 July 2022.
- [22] S. Juhola, et al. (2022), *Connecting Climate Justice and Adaptation Planning: An Adaptation Justice Index*, *Environmental Science and Policy*, **136**, pp.609-619.
- [23] J. Saldana (2009), *The Coding Manual for Qualitative Researchers*, Second Edition, SAGE Publications, 440pp.
- [24] A. Bryman (2022), *Social Research Methods 4th edition*, Oxford University Press, 750pp.
- [25] O. Serdeczny, et al. (2016), "Non-Economic Loss and Damage in the Context of Climate Change Understanding the Challenges", *Discussion Paper, German Development Institute*, https://www.idos-research.de/uploads/media/DP_3.2016.pdf.
- [26] B. Levy, J. Patz (2015), "Climate change, human rights, and social justice", *Annals of Global Health*, **81**(3), pp.310-322.
- [27] Vietnam Electricity (2021), <https://tietkiemnangluong.evn.com.vn/d6/news/-Suc-lan-toa-cua-phong-trao-thi-dua-tiet-kiem-dien-111-135-14237.aspx>, accessed 11 January 2021.
- [28] S. Ortmann (2017), *Environmental Governance in Vietnam: Institutional Reforms and Failures*, Palgrave Macmillan, 327pp.
- [29] A. Mol (2003), *Globalization and Environmental Reform the Ecological Modernization of the Global Economy*, The MIT Press, 288pp.
- [30] Party Central Committee of the Communist Party of Vietnam (2016), *Resolution No.5-NQ/TW, The Fourth Plenum of The 12th Party Central Committee on a Number of Orientations and Major Policies to Continue The Growth Model Innovation and Improve The Quality of Growth, Labour Productivity Competitiveness of The Economy* (in Vietnamese).