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Transforming a tourism destination into a green economy: A policy analysis of Wakatobi Islands, Indonesia

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Abstract. Using the green economy framework of DeLacy [14], this paper evaluated the policy environment regarding the green economy concept and circumstance in the destination of Wakatobi Island, Indonesia. The four policy clusters of the green economy framework guided the investigation in order to provide an understanding of the existing green economy framework policies and identify policy gaps that were pertinent to the transformation to the green economy of the tourism sector in the destination of Wakatobi Island. The policy analysis was also informed by observations in the destination to explore the extent that the destination has implemented green economy policies. It was found that the policy environment in Indonesia is generally conducive for the tourism sector to transform into a green economy. However, most of the green economy initiatives in the country are policy-level adaptation. Further, there is a strong need to incorporate measurement of indicators of progress towards the success of implementation of the published policies.

1. Introduction

Tourism, as one of the largest economic sectors in the world [1] needs to move into a green economy pathway as it delivers significant contributions on negative impacts [2]. According to Gossling *et al.* [3], the contribution made by tourism to global emissions of CO₂ is estimated to be in order of 5% in 2005. Further, forecasts show a potential growth of 161% of tourism's CO₂ emissions by 2035 in a business-as-usual scenario [4]. Individual tourism mobility leads to an increase of GHG emissions as highly mobile travellers may exceed annual emissions of 50 t CO₂ from air travel alone [5].

Indonesia has become aware of the significance of green economy, with the Indonesian government considering it an appropriate economic concept for sustainable development [6]. Through the Ministry of Finance, Indonesia has developed a green economy strategic plan and budgeting for sustainable development for 2015-2019. This is part of the implementation of the President's plans to reduce GHG emissions in Indonesia by 26% in 2020 [7].

However, it seems that there is only a limited understanding of the green economy among destination stakeholders in Indonesia. Most studies in the field of tourism have only focused on sustainable tourism [8,9,10,11,12] as only a few researchers have been able to draw on any systematic research of green economy [13].

The specific context, which this study addresses, is to understand the policy environments that facilitate or hinder the progress of transformation of the destination to the new green economy. Further, the research aims to evaluate the policy environment regarding the green economy concept and circumstance in the destination of Wakatobi Island, Indonesia.

The paper, therefore, begins with a review of the literature to clarify and frame the green economy concept from a tourism perspective. In this context, the four guiding areas of green economy



framework built by DeLacy [14] are explored. Based on the theoretical framework, the explicit-implicit policy analysis built by Hall and Higham [15] is presented and tested in the case study destination of Wakatobi Island, Indonesia. The paper finishes with an evaluation and discussion of the findings.

2. The green economy framework and its four clusters

According to the United Nations Department of Economic and Social Affairs (UNDESA) [16], the concept of green economy can be defined as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. The concept focuses on initiatives that are low-carbon, resource-efficient and socially inclusive, reflecting both environmental and economic dimensions [17].

As a theoretical framework, green economy theory, also referred to as green growth theory, has its roots partially in green economics philosophy. For the development of a sustainable transformation model for tourism, the green economy offers the advantage of global momentum, which provides credibility beyond the field of tourism and simplifies the stakeholder engagement processes [18,19,20]. Further, the green economy in tourism is identified as a framework that will reduce emissions from air transport, which is also essential for the future growth of tourism destinations [21].

DeLacy *et al.* [14] identify the green economy framework in tourism by incorporating (1) climate resilience (adaptation) and managing the low-carbon transition (mitigation); (2) natural resource and waste management, which includes biodiversity conservation; (3) product development and destination management; (4) branding, marketing and e-distribution; (5) capacity building and green jobs; (6) infrastructure, technology dissemination and communication; and (7) important means of implementation, such as policy reform, public private partnerships (PPPs), finance and innovation. Further, the framework has 12-key strategies to achieve green growth of the tourism economy which are (1) Enhance product; (2) Quality marketing; (3) Build human capacity; (4) Manage waste; (5) Manage water; (6) Conserve biodiversity; (7) Reduce GHG emissions (8) Build resilience; (9) Upgrade infrastructure; (10) Manage transport; (11) Improve land use planning; (12) Strengthen financing (see Figure 1).

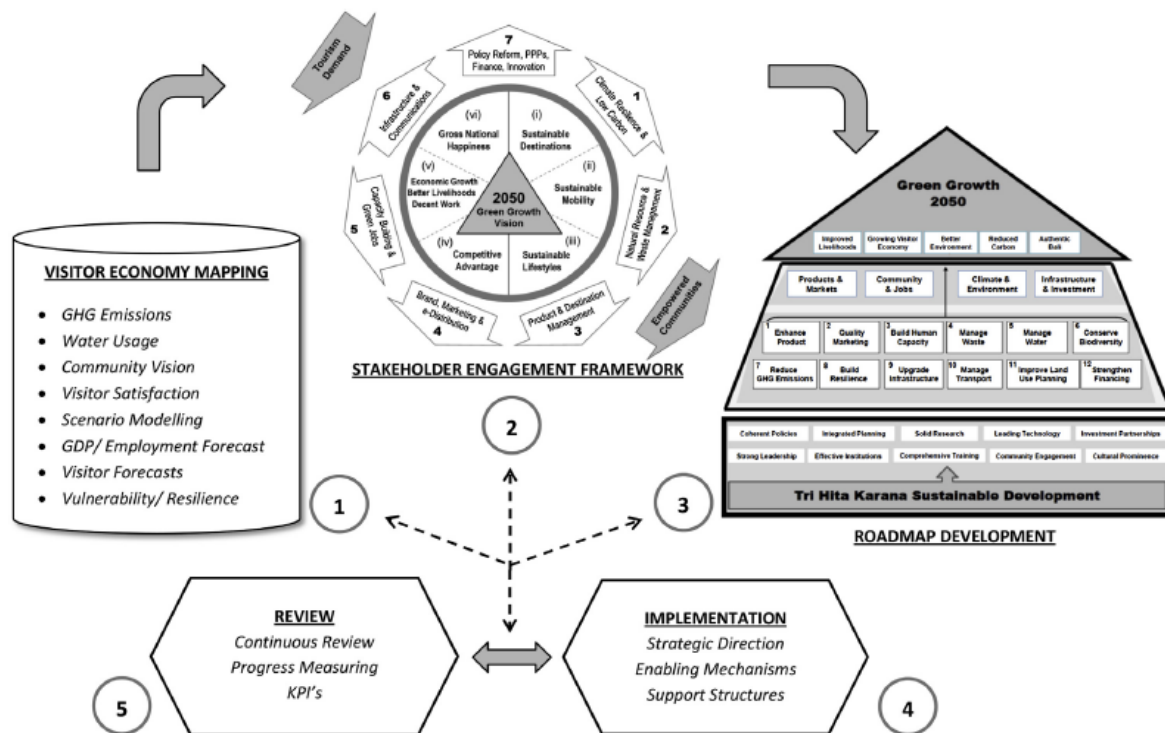


Figure 1. The Green Growth 2050 Roadmap Framework [14].

Key to green economy framework is engaging and analysing stakeholders. According to Act *et al.* [20], engaging stakeholders should be undertaken in four key areas. They are (1) products and markets cluster; (2) community and jobs cluster; (3) climate and environment cluster; and (4) infrastructure and investments cluster. Each of direction has its own sub-directions, which explain further how to operationalise the implementation of the framework.

This study builds on the previous work by both DeLacy *et al.* [14] and Jiang *et al.* [22] regarding guiding policy analysis to achieve a green economy in the tourism sector. This study examines the conduciveness of the policy environment in Wakatobi Island, Indonesia for the tourism sector to transform into a green economy along the four guiding areas of green economy framework built by DeLacy [14].

The first guiding area underpinning the investigation is products and market cluster. This indicator gives direction on how to rationalise programs of the government in order to encourage authentic products and experiences with stronger environmental performance.

Community and job cluster is the second indicator of the green economy framework that will guide the study to examine level of transformation in the destination into a green economy. At this direction, findings will be evaluated on how it can accelerate programs to create green jobs-with incentives, training and micro financing [20]. This direction will support the evaluation on how conducive the destination in transforming into a green economy.

The third guiding area is climate and environment cluster. According to DeLacy [14], this indicator is used to assess how the government strengthens the implementation of waste management, water management and biodiversity conservation. This could be a lens to explore the policy environment that supports both government and the private sector to seek investment to lower carbon intensity of electricity and reduce carbon emissions from ground transport. Moreover, it will also guide the study in analysing the policies that accommodate the dialogue between national, provincial and regency government and tourism industry around developing more effective integrated land use planning.

Infrastructure and investments cluster is the fourth indicator of the research to seek how policies create a comprehensive tourism infrastructure plan that cross relates to national and provincial plans or programs in the destination of Wakatobi Island. This point aims to explore the overlapping of green economy indicators with the master plan for tourism in Wakatobi Island.

Unpacking the policy environment in a destination is trying to comprehend the policy framework. According to Adam *et al.* [23], a clear understanding of national patterns of regulation will tell us about underlying conceptions of state-society relationships and their change over time. Moreover, Bauer and Knill [24] assert that by looking through the policies and regulations rigorously people may get information on how governments seek to motivate such changes.

3. Policy analysis

Policy analysis is a means of explaining the actual essence of public action because policies are interpreted as revealing its nature [25]. In this context, policy analysis is adopted as a way of understanding the role of the public sector in society and its evolution in time. In other words, policy analysis is employed to examine a policy agenda set by decision-makers [26].

In tourism studies, policy analysis has been applied to examine strategies taken by decision-makers in published policies [27]. Further, Jiang [22] asserts policy analysis can be employed to obtain understanding of the current policies and gaps of policy in terms of climate adaptation issues. This approach overlaps with transformation into a green economy as both are aimed at developing more resilience in a tourism destination to the impact of external risks. Therefore, by examining the existing policies and the policy environment, one can identify policy gaps, which are issues that are yet to be addressed, and evaluate the conduciveness of the policy environment for tourism sector to transform into a green economy.

In that regard, to obtain evidence for policy analysis in this research, data were collected from secondary sources about the geography, history, politics, the institutional structure, economy and green economy related issues of Wakatobi Island in Indonesia. Those sources are:

- Report of Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019 published by Ministry of Finance Republic of Indonesia.

- National and Local Policies documents.
- Report of Green Budgeting Tagging published by WWF-Ministry of Finance Republic of Indonesia.
- Report of the Economic and Fiscal Policy Strategies for Climate Change Mitigation in Indonesia published by Ministry of Finance Republic of Indonesia.
- Legislation reports.
- Report of Wakatobi Tourism Regency.
- Report of Statistics of Indonesia.
- Report of Statistics of Wakatobi Regency.
- Thesis and journal reports.
- United Nation reports.

In this context, published official documents and policy frameworks were acquired from the following institutions, namely:

- Ministry of Tourism Republic of Indonesia.
- Ministry of Forestry and Environment Republic of Indonesia.
- Ministry of Finance Republic of Indonesia.
- Ministry of Marine Affairs and Fisheries Republic of Indonesia.
- Secretariat Office of Republic of Indonesia.
- United Nations.
- Wakatobi Island Regency Office.
- World Wildlife Fund for Nature (WWF).
- National Development Planning Agency (Bappenas).
- Statistics Indonesia Agency (BPS).
- Statistics of Wakatobi Regency.

Most of the relevant data is available via open access and were accessible through online searches. However, data of report of WWF was requested personally through the project manager.

4. Data analysis

As of data analysis, this research builds heavily on the foundation of green economy guiding framework built by DeLacy *et al.* [14] and explicit-implicit policy analysis built by Hall and Higham [15]. Those were the set criteria in analysing evidence found from this research.

This study was started by developing literature review to understand the concept of green economy and tourism underpinning transforming destinations into a green economy. This was done to better understand how the notion of green economy evolved in its current form. Following this literature review the study created an inventory of policies that are pertinent to green economy transformation in the tourism sector by referring to official policy documents and other media such as research papers, news reports, statistics, etc.

The next phase of data analysis was to categorise policies into 4 clusters developed by DeLacy *et al.* [14], namely:

- Product and market cluster; Rationalised government programs that encourage quality, authentic product and experiences with stronger environmental performance. Specifically target high yielding market segments and provide incentives for green growth product development.
- Community and jobs cluster; Accelerate programs to create green jobs and build community program to strengthen the sector at local levels and increase local jobs entrepreneurs with focus on cultural authenticity.
- Climate and environment cluster; Government to strengthen implementation of waste management; water management; and biodiversity conservation. Tourism enterprises to measure and reduce waste production water use and GHG emissions using a simple, bespoke online measure tool.

- Infrastructure and investment cluster; Implement carbon pricing systems in line with national carbon commitments including polluting vehicles gradually being phased out due to supply/price regulations. Explore effective means to establish a sustainability financing facility to underpin green growth development.

Meanwhile, explicit-implicit policy analysis was set into two categories namely explicit policy and implicit policy (see Table 1). Explicit policies are those that were wholly or partly formulated with the intention to address green economy. Usually, the term green economy would be mentioned in the title and/or certain components of the policies. On the other hand, implicit policies are those that were formulated with the intention to address issues other than green economy but have components that are pertinent to green economy.

Table 1. Explicit-implicit policies pertinent to green economy for tourism sector [14, 26].

	No.	Policy	Types of Adaptation			
			Cluster 1	Cluster 2	Cluster 3	Cluster 4
Explicit	1.	ABC	?	?	?	?
	2.	XYZ	?	?	?	?
	3.	123	?	?	?	?
Implicit	4.	DEF	?	?	?	?
	5.	OPQ	?	?	?	?
	6.	456	?	?	?	?

*Cluster 1=Product & Market; Cluster 2=Community & Job; Cluster 3=Climate & Environment; Cluster 4=Infrastructure & Investment; Table is adapted from Wong et al [26].

Policy gaps are analysed by using Wong's *et al.* [26] policy environment indicators, namely (1) the level of commitment of key stakeholders to the policy agenda; (2) resources availability; (3) presence of an enabling policy mechanism. Further, DeLacy's *et al* [14] guiding policy indicators would be a benchmark of the implementation of existing green economy policy in Wakatobi Island due to the limited parameter in evaluating the success of adaptation of the policies.

5. The case study of Wakatobi Islands

This case study was conducted in Wakatobi Island, Southeast Sulawesi Province, Indonesia. It is a tourist destination and also a nature conservation area in Indonesia known as the Wakatobi National Park (WNP). WNP is one of seven Marine National Parks (MNP) in Indonesia, WNP consists of 823 Km² of land and 18,377 Km² of sea area. Therefore, 97% of Wakatobi Islands are ocean [29].

Wakatobi islands was stipulated as MNP by The Minister of Forestry of Indonesia through a Decree of The Minister of Forestry of Indonesia No.393/KPTS-VI/1996 in 1996 [29]. The Government chose to conserve Wakatobi region as it has a great number of coral reefs which studies have shown over 390 species of hard coral belonging to 68 genera and 590 fish species [30]. The government aims to conserve the destination by making it as a marine protected area with an intention to emphasise economic development based on promoting tourism [11].

Although the area is not as well-known as Bali, Wakatobi attracts many visitors, especially international tourists. In 2017, approximately 40,000 international tourists came to Wakatobi [31] and it is anticipated that this number will increase. The Indonesian government has set a target to attract 20 million international tourists by 2019 across all Indonesian destinations [31]. In addition, the potential to grow international visitor numbers is evident in the naming of Wakatobi as one of the top ten destinations in Indonesia, and the prediction that it will become the next Bali [29].

In terms of tourism's impact on Wakatobi's natural environment and community, the World Wildlife Fund (WWF) in Indonesia has indicated that there is a high level of threat [32]. Further, the Wakatobi local government has labelled the current situation as serious, with more than 70% of the

coral reef in critical condition [32]. Firmansyah *et al.* [33] contend that there are significant indications that underwater ecosystems in Wakatobi have been affected by global warming, with the coral reefs decreasing in size to a level below those in the Papua Ocean. This is exemplified in the work undertaken by Asuhadi and Arafah [34]. They highlight that Wakatobi's environmental quality index suggests there is a serious threat to the island's sensitive flora and fauna species, despite the area being considered safe for human beings.

6. Data and outcomes

A range of relevant policies to the green economy was identified through secondary data collection. From the available literature, 20 policies (3 explicit and 17 implicit) were identified as pertinent for the tourism sector to adapt to green economy, namely:

- The National Climate Change Action Plan (RANPI) – issued in 2007. The policy was issued by Ministry of Environment in 2007 containing a policy action matrix outlining priority mitigation and adaptation policies. RANPI encompasses actions covered in the Kyoto Treaty time Horizon
- The National Development Planning Response to Climate Change (Yellow Book). This policy was issued by the National Development Planning Ministry (Bappenas) in 2008 serving as the main guide for climate and donor financing and links priority objectives to medium and long-term development targets.
- The Indonesia Climate Change Sectoral Roadmap (ICCSR) 2010. This roadmap was published also by Bappenas aiming to direct the previous policy (Yellow book) with a comprehensive program for integrated planning into Rencana Pengelolaan Jangka Menengah (RPJM) in 2010-2014. Moreover, the ICCSR identifies an array of priority sectors regarding climate change mitigation efforts, which are agriculture, coastal, ocean and fishery, energy and forestry. It also provides guidelines for secondary sectors namely health, transportation, infrastructure, water and industry to cope with climate change issues. Further, the following cross cutting issues were also incorporated into ICCSR: research and technology, national security, biodiversity and poverty.
- The Economic and Fiscal Policy Strategies for Climate Change Mitigation in Indonesia. The policy was issued by Ministry of Finance in 2009 aiming to combat the impacts of climate change through economic and fiscal policy strategies for climate change mitigation. It lays out strategies for the Ministry of Finance for efficient and effective policies, both in the short term and the long term. Further, it provides details of policy approaches for cost-effective reductions in greenhouse gas emissions.
- The Presidential Decree for GHG Emission Reduction or RAN-GRK (issued in 2011). This policy was issued by the President of Indonesia in 2011 as a national action plan to reduce the GHG emissions in Indonesia. It was regulated as Act (ratified by parliaments) in which all local governments must abide and implement the regulation by publishing a similar policy locally namely RAD-GRK (Local action plan GHG Emission Reduction). One of the targets is the development of conservation areas by increasing the maintenance of ecosystem by 10%. It also encourages the development and implementation of a roadmap for green industry (including tourism industry) nationally. Further, it also stipulates a raise in capacity building, especially dedicated for government employees and industry players.
- United Nations Framework Convention on Climate Change (UNFCCC) (regulated by Act No.6, 1994). This policy was issued by Indonesian government to ratify the UNFCCC. It reflects the supports of the Indonesian government in supporting global environmental issues.
- REDDI-published in 2007. The Reducing Emissions from Deforestation and Forest Degradation in Indonesia (REDDI) has been one of green economy policy that was issued by Indonesian government through the Ministry of Forestry in 2007 aiming to address the increasing challenges caused by deforestation and forest degradation that could contribute to global CO₂ emissions. One of the priorities of this policy is to generate peatland

rehabilitation (Bappenas, 2008). The policy encourages activities and actions that are related to Indonesian biodiversity conservation and forest revitalisation including the non-timber-based forest industries.

- Kyoto Protocol to the UN Framework (Act No.17, 2004). The Kyoto Protocol to the UN Framework has been a binding regulation under Indonesian law number 17, 2004 aiming to highlight Indonesian government commitment on the UNFCCC. Further, this regulation reflects the implementation of sustainable development by reducing GHG emissions in Indonesia.
- Act No.23, 2014. This policy issued by central government of Indonesia and ratified by parliament to regulate the development of Wakatobi Island as an independent regency to manage its natural resources including water resources.
- Ministry of Forestry Regulation No.7651/KPTS-II, 2002. This policy stipulates Wakatobi Island as a marine protected area and labelled it as the Wakatobi National Park (WNP). As a result, it gives authority to the local government to design and implement conservation policies for the park as a whole.
- Strategic Plan Sustainable Tourism & Green jobs for Indonesia – issued in 2012. This document emphasises the need to address people’s welfare and quality of life, conserve natural and cultural resources, and promote international cooperation to advance the country’s development objectives. The policy was initiated by the International Labour Organisation (ILO), together with the Ministry of Tourism and Creative Economy (MoTCE) and the Ministry of Manpower and Transmigration (MoMT) under ILO’s Green Jobs in Asia Project in Indonesia, made possible by the Australian Government-ILO Partnership Agreement for 2010-2015 (ILO, 2013).
- Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019. This document was initiated by the Ministry of Finance of Republic of Indonesia as part of implementation of instruction of the President to reduce GHG Emission in Indonesia by 26% in 2020. The policy provides strategic action plans to guide the implementation of green economy in Indonesia through 21 priority programs such as forestry, fishery, energy, transportation, infrastructure development for both local and national, and natural disaster mitigation [7].
- Green Budgeting Tagging 2017 - A collaboration between local government and WWF. In 2007, WWF and local government of Wakatobi Island issued a green budget tagging as a method of checks and balances on the implementation of Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia. This is intended to be a parameter of the effectivity of implementation of green economy strategic plan of Ministry of Finance.
- Act No.5, 1990 – This policy was issued by central government of Indonesia and ratified by parliament to regulate the conservation of natural resources and ecosystem. The idea of producing this policy is to maintain the exploration of natural resources in Wakatobi Islands that sustainable development could be achieved.
- The Presidential decree no.36, 2010. The President of Republic of Indonesia issued a policy regarding the exercise of the business of ecotourism in Wakatobi Island as part of national park. In this regards, people are encouraged to explore the Wakatobi National Park to boost economy under the supervision of local government.
- Ministry of Forestry & Environment Regulation No.43, 2017. The central government of Indonesia has taken steps to encourage the economy of local people in conservation areas or national parks by producing a policy that empowers them in many potential jobs.
- Act No.32, 2009. This policy issued as a strategic plan of conservation development of the environment (RPPLH). It provides a technical method of reporting any potential destructive actions on the preserved areas. This aims to support sustainable development for the future of Indonesian next generation. The policy was issued by the President in 2009.
- Government Regulation No.50, 2011. This documents the central guidelines for development of Indonesian tourism over the long-term. The policy, which is known RIPPARNAS,

provides direction of what and how to develop Indonesian tourism from 2010 to 2025. It provides a big picture for the development of Indonesian tourism.

- Act No.10, 2009. This document is an umbrella for Indonesian tourism that underpins all tourism activities in every tourism destination in Indonesia. This policy also provides directions of the rights and obligations of both local and central governments. Moreover, it has been the basis of inter-sectoral coordination for all tourism activities in Indonesia.
- Regional Regulation No.12, 2012. The policy, issued by local government of Wakatobi Island, guides the management of the land of Wakatobi Island, to ensure it is sustainable and in line with the Indonesian constitution. It also provides direction on waste, water, and disaster management in Wakatobi Island.

Table 2 summaries the national, regional and local policies that are pertinent to green economy adaptation for Wakatobi Island. The policies overlap with the four green economy guiding clusters which are (1) Products and market cluster; (2) Community and Job cluster; (3) Climate and environment cluster; (4) Infrastructure and investment cluster [14].

Table 2. National policies pertinent to green economy for tourism sector [14, 26].

No.	Policy	Green Economy Guiding Policy			
		Product & Market Cluster	Community & Job Cluster	Climate & Environment Cluster	Infrastructure & Investment Cluster
1.	The National Climate Change Action Plan (RANPI).				
2.	The National Development Planning Response to Climate Change (Yellow Book).				
3.	The Indonesia Climate Change Sectoral Roadmap (ICCSR) 2010.				
4.	The Economic and Fiscal Policy Strategies for Climate Change Mitigation in Indonesia.				
5.	The Presidential Decree for GHG Emission Reduction or RAN-GRK.				
6.	United Nations Framework Convention on Climate Change (UNFCCC).				
7.	Reducing Emissions from Deforestation and forest Degradation in Indonesia (REDDI).				
8.	Kyoto Protocol to the UN Framework (Act No.17, 2004).				
9.	Act No.23, 2014.				
10.	Ministry of Forestry Regulation No.7651/KPTS-II, 2002.				
11.	Strategic Plan of Sustainable				

No.	Policy	Green Economy Guiding Policy			
		Product & Market Cluster	Community & Job Cluster	Climate & Environment Cluster	Infrastructure & Investment Cluster
	Tourism & Green Jobs for Indonesia.				
12.	Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019.				
13.	Green Budgeting Tagging 2017.				
14.	Act No.5, 1990.				
15.	The Presidential Decree No.36, 2010.				
16.	Ministry of Forestry & Environment Regulation No.43, 2017.				
17.	Act No.32, 2009.				
18.	Government Regulation No.50, 2011.				
19.	Act No.10, 2009.				
20.	Regional Regulation No.12, 2012.				

The products and markets cluster of green economy framework indicates that the tourism destination is a product that is unique and authentic, which could encourage people to be more environmentally and culturally responsible during their visitation. It has been identified that although five policies address the tourism sector in Indonesia; namely Act No.10, 2009, Government Regulation No.50, 2011, The Presidential Decree No.36, 2010, Act No.5, 1990 and Act No.23, 2014; no policies have been identified saying that Wakatobi Island is a unique and authentic tourism destination.

Meanwhile, there are two policies identified that address the community and job cluster of the green economy framework in Wakatobi Island. First, the Ministry of Forestry & Environment Regulation No.43, 2017 that provides a further step in encouraging the economy of local people in conservation area or national park by producing a policy that empowers them in many potential jobs. Second, the Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019 that emphasises the need to address people's welfare and quality of life, conserve natural and cultural resources, and promote international cooperation to advance the country's development objectives. Those policies cover the indicator of green economy framework as they support the program of green jobs development. The policies specifically encourage community programs to increase local jobs and entrepreneurs with cultural authenticity taken into account.

It is interesting to note that there are 12 policies that highlight the climate and environment cluster of green economy. Starting from UNFCCC-the policy of climate change adaptation that has been known globally as Act No.32, 2009 which issues a strategic plan of conservation development of the environment (RPPLH).

It is apparent from the inventory of policies that a number of the policies provide for waste management, water management and biodiversity conservation. For example, in the regional Regulation No.12, 2012, the local government specifically covers waste, water and disaster management in Wakatobi Island. The ratification of UNFCCC and Kyoto Protocol highlight the commitment of the Indonesian government on climate change. However, they do not specifically

mention tourism. Wong *et al.* [26] in their analysis of inventory of policy on the climate change adaptation in Samoa stated that policies could be developed in a general, national context, and were not specific to any industry sector. As such, the UN ratifications on climate change are relevant for the transformation of Wakatobi Island tourism into a green economy.

The policy inventory show there are a number of policies that highlight the infrastructure and investment cluster of the green economy framework. For instance, Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019. This document addresses the indicators of infrastructure and investment cluster, which provide a strategic sustainable financing facility to underpin green growth development. Ministry of Forestry Regulation No.7651/KPTS-II, 2002 is another policy that implements national park conservation in regard to infrastructure and investment. Further, the Act No.10, 2009 provides directions of tourism development in Indonesia including infrastructure and investment. It entails the principals in developing tourism enterprises in Indonesia that should give an extensive benefit to Indonesian people and preserve the environment. However, the implementation of the policy should a line with local or regional tourism development, which are regulated by local or regional governments.

Three explicit policies were identified from the policy inventory (see Table 3). They are policies that were formulated with the intention to address green economy for tourism sector, namely:

- The Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019 (Policy #1 in Table 3).
- Strategic Plan of Sustainable Tourism and Green Jobs for Indonesia (Policy #2 in Table 3).
- Green Budgeting Tagging 2017 (Policy #3 in Table 3).

Table 3. Explicit-implicit policies pertinent to green economy for tourism sector [26].

	No.	Policy	Types of Adaptation (Green Economy Guiding Policy of DeLacy, 2014) *			
			Cluster 1	Cluster 2	Cluster 3	Cluster 4
Explicit	1.	The Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019				
	2.	Strategic Plan of Sustainable Tourism and Green Jobs for Indonesia				
	3.	Green Budgeting Tagging 2017				
Implicit	4.	The National Climate Change Action Plan (RANPI)				
	5.	The National Development Planning Response to Climate Change (Yellow book)				
	6.	The Indonesia Climate Change Sectoral Roadmap (ICCSR) 2010				
	7.	The Economic and Fiscal Policy Strategies for Climate Change Mitigation in Indonesia				
	8.	The Presidential Decree for GHG Emission Reduction or RAN-GRK				
	9.	United Nations Framework Convention on Climate Change (UNFCCC)				

No.	Policy	Types of Adaptation (Green Economy Guiding Policy of DeLacy, 2014) *			
		Cluster 1	Cluster 2	Cluster 3	Cluster 4
10.	Reducing Emissions from Deforestation and Forest Degradation in Indonesia (REDDI)				
11.	Kyoto Protocol to the UN Framework (Act No.17, 2004)				
12.	Act No.23, 2014				
13.	Ministry of Forestry Regulation No.7651/KPTS-II,2002				
14.	Act No.5, 1990				
15.	The Presidential Decree No.36, 2010				
16.	Ministry of Forestry & Environment Regulation No.43, 2017				
17.	Act No.32, 2009				
18.	Government Regulation No.50, 2011				
19.	Act No.10, 2009				
20.	Regional Regulation No.12, 2012		□		

*Cluster 1=Product & Market; Cluster 2=Community & Job; Cluster 3=Climate & Environment; Cluster 4=Infrastructure & Investment; Table is adapted from Wong et al [26].

The Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019 has been the most significant policy in Indonesia that is related to tourism transformation to the green economy. It is a document that records Indonesian fiscal policy on green economy to achieve sustainable development goals (SDGs) by listing 21 top priority programs (see Table 4) and categorising it into 6 program areas namely (1) Environment conservation; (2) Agriculture; (3) Energy and Industry; (4) Transportation and Urban and Regional planning; (5) Health and Education; (6) Disaster mitigation [7]. Therefore, it entailed transformation on both technical and policy indicators. However, none of these programs directly involve the Indonesian Ministry of Tourism, which is the central regulator of tourism development in Indonesia. As a result, tourism is not involved directly in the Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019.

Table 4. 21 Top Priority Programs of The Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019 [7].

No.	Program	No.	Program	No.	Program
1.	Forest protection	8.	Renewable energy	15.	Waste
2.	Peatland rehabilitation	9.	Resource efficiency	16.	Climate proofing
3.	Coral protection	10.	Fuel pricing	17.	Regional and urban planning
4.	Adapted crop/practices	11.	Large scale power	18.	Disaster reduction/management
5.	Plantation (especially oil palm)	12.	Sustainable mining	19.	Green economy coordination
6.	Irrigation	13.	CSR	20.	Green education
7.	Energy efficiency	14.	Public transport	21.	Risk management for disaster

Those green economy programs were supervised by eight related ministries (see Table 5) as part of their integrated programs. The Ministry of Tourism is not included as it has no green economy programs financed by Indonesian Ministry of Finance.

Table 5. Indonesian Ministries responsible for green economy programs [7].

No.	Ministry	No.	Ministry
1.	Forest	5.	Industry
2.	Agriculture	6.	Transportation
3.	Public Works	7.	Home Affairs
4.	Energy and Mineral Resources	8.	National Development Planning Agency

The Strategic Plan of Sustainable Tourism and Green Jobs for Indonesia was completed in 2012 by the Ministry of Tourism in collaboration with the ILO. It laid important groundwork for existing sustainable tourism policies for the country as it provided a strategic framework for sustainable tourism planning to create more green jobs. This document could be a significant policy to assist the tourism sector transform into the green economy. Its long-term agenda is to create more green jobs via destination development, industry development, market development and institutional development.

The Green Budgeting Tagging 2017 was initially proposed by World Wildlife Fund for Nature (WWF) to encourage the transformation of the tourism sector in Indonesia into the green economy. The policy was made collaboratively with Ministry of Finance as it was developed on the basis of the Green Economy Strategic Plan and Budgeting for Sustainable Development in Indonesia in 2015-2019 by the Ministry of Finance. It aims to be a guiding policy for local or regional leaders in Indonesia in achieving sustainable development in the tourism sector. The document supports capacity building of local and regional leaders in developing, implementing strategic planning, and budgeting to move to a green economy. To date, there have been several local leaders that implemented the Green Budgeting Tagging such as Jambi Province, West Kalimantan Province, and also Wakatobi Island [35]. The result of the implementation of it has yet to be seen.

Seventeen implicit policies were identified (see Policy #4 - #20 in Table 3). They are all policies that do not directly address green economy in the tourism sector. Joining UNFCCC and ratifying the Kyoto Protocol were the first 2 policies that the Indonesian government implemented related to climate change [36]. The government ratifying the Kyoto Protocol into Act No.17, 2004 to reduce GHG emissions in Indonesia.

The concern to address climate change issue was emerging as the government published another document that set out the overall framework for climate change namely the National Climate Change Action Plan also called RANPI. This so-called “living” policy is continuously evaluated and improved periodically. It guides various institutions to implement an integrated and coordinated effort to tackle climate change [37]. However, it is still unclear as to whether the tourism sector – under the supervision of Ministry of Tourism -- has it included in this initiative.

In 2008, the National Development Planning Agency (Bappenas) published the National Development Planning Response to Climate Change or known as Yellow Book. It was developed from several line ministries whose sectors will be adversely affected by climate change phenomena such as marine and fisheries, agriculture, forestry and finance and disaster management. However, the tourism sector was not incorporated.

Further, the Indonesian government moved to further expedite climate change into national development planning by publishing the Indonesia Climate Change Sectoral Roadmap (ICCSR 2010) by Bappenas. This policy contains programs for integrated planning into the National Medium Term Development Plan (RPJMN) 2010-2014 [38].

There are a number of regulations that have been issued specifically to preserve nature. For example, Act No.5, 1990. The Act was ratified to regulate the conservation of natural resources and ecosystem all over Indonesia including Wakatobi Island. It was proposed initially by Ministry of Forestry to guide its programs in conserving Indonesian forest. Further, the ministry followed the regulation with a more technical one namely Ministry of Forestry & Environment Regulation No.43, 2017 which focuses on conserving national park while empowering local people through creating jobs.

There is a need to highlight the significance of Act No.10, 2009 on Tourism in Indonesia. It was an Act ratified to cover all tourism programs and developments in Indonesia including how to achieve sustainable development. The document discusses how tourism products in Indonesia can be designed to give maximum benefits both socially and economically to the people. However there is no mention of how tourism product in each destination can be developed to assist in transformation of destinations into the green economy.

7. Evaluation and discussion of the case study results

Based on the findings of examining existing policies it appears that the policy environment in Indonesia is somewhat conducive for the tourism industry to transform to the green economy. According to Wong *et al.* [26], conduciveness of a policy environment can be evaluated based on three indicators, namely (1) the level of commitment of key stakeholders to the policy agenda; (2) resources availability; (3) presence of an enabling policy mechanism. In the case of Wakatobi Island, the government of Indonesia expresses commitment to transform to green economy as it gives strategic direction especially on budgeting plan to many green programs to mitigate GHG emissions and increase resource efficiency as well as social inclusiveness.

Although an exemplar of policies related to green economy concept in Indonesia has been published, difficulties arise when an attempt is made to measure the impact of policies. It is critical for all Indonesian tourism stakeholders to have a strategic measurement to measure progress towards the success of the published policy implementation. In that regard, it is suggested that the adoption of a measurement framework develops the key performance indicators (KPIs) acting as benchmark of green economy policies [14].

Based on these observations, one can argue that Wakatobi Island provides an arena that allows the development of effective strategies to transform to green economy for the tourism industry. However, Wakatobi Island and its tourism industry still have a long way to go in their transformation journey. It was found in the policy inventory that most of the green economy initiatives in the country are policy-level adaptation. While they provide a good foundation for further actions, transformation needs to be more comprehensively addressed through specific action on the ground.

8. Conclusion

In this study, the policy environment regarding the green economy concept and circumstance in the destination of Wakatobi Island, Indonesia was investigated. It was found that the policy environment

in Indonesia is generally conducive for the tourism sector to transform into a green economy. In the case of Wakatobi Island, the government of Indonesia is showing a reasonable level of commitment to transform to green economy as it gives strategic direction especially on budgeting plan to many green programs to mitigate GHG emissions and increase resource efficiency as well as social inclusiveness. However, most of the green economy initiatives in the country are policy-level adaptation. Further, there is a strong need to incorporate a strategic measurement acting as benchmark of green economy policies related progress towards the success of the published policy implementation. To conclude, the results show some meaningful findings that can lay the foundation for future work.

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