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Abbreviations and Acronyms

ABG Autonomous Bougainville Government

AOSIS Alliance Of Small Island States

AROB Autonomous Region of Bougainville

BACRA Bougainville Agricultural Commodities Regulation Authority

BEC Bougainville Executive Council

BISDP Bougainville Integrated Sustainable Development Plan

CCDA Climate Change Development Authority

CEPA Conservation and Environment Protection Authority

DECCC Directorate for Environment, Conservation and Climate Change

DFAT Department of Foreign Affairs and Trade

Department of Lands, Physical Planning, Environment, Conservation and Climate

DLPPECCC Change

EU European Union

EU-DR European Union Deforestation Regulation

FPIC Free, Prior Informed Consent

GCF Green Climate Finance

IUU Illegal, Unregulated, Unreported (fishing)

KMGBF Kunming-Montreal Global Biodiversity Framework MSGTA Melanesia Spearhead Group Trade Agreement

MSME Micro, Small, Medium Enterprises
MTDP Medium Term Development Plan
NGO Non-Government Organisation

PICTA Pacific Island Countries Trade Agreement

PNG Papua New Guinea

PPP Public-Private Partnership
R&D Research and Development

REDD Reducing Emissions for Deforestation and Forest Degradation

SDGs Sustainable Development Goals
SIDS Small Island Developing States
SME Small, Medium Enterprises
SPA Strategic Priority Area

SPARTECA South Pacific Regional Trade, Economic and Commercial Agreement

STaRS National Strategy for Sustainable Development

UNFCCC United Nations Framework Convention on Climate Change

USAID United States AID

WTO World Trade Organisation

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Statement from the ABG President

Fellow Bougainvilleans, it is with great pride that I present the Bougainville Green–Blue Economy (GBE) Policy, a framework designed to pave the way for a prosperous, sustainable, and independent Bougainville. This policy represents a critical component of our journey toward achieving the ABG Vision 2052, which aspires for Bougainville to become a high-income, educated, healthy, and peaceful sovereign nation by 2052. Our vision, grounded in resilience and sustainability, is a roadmap to redefine our future and chart a course that ensures prosperity for all Bougainvilleans for generations to come.

A painful chapter of exploitation and conflict marks Bougainville's past. For years, unsustainable resource extraction, particularly in mining, devastated our land, tore apart our communities, and led to a tragic civil war. We learned hard lessons from this history — that the reckless depletion of our natural resources in pursuit of short-term gain cannot be the foundation for a peaceful and prosperous future. Instead, we must turn to our greatest strengths: the richness of our environment, our cultural heritage, and the resilience of our people.

The Bougainville Green–Blue Economy Policy is built on these principles of sustainability. It seeks to balance economic growth with environmental conservation, ensuring that our natural resources are utilized in a way that preserves them for future generations. We have a unique opportunity to shift from an extractive economy to one that prioritizes the sustainable management of our forests, oceans, and agricultural land. This policy is not just about economic growth; it is about creating an economy that works for our people, protects our environment, and ensures our sovereignty as a nation.

The Bougainville Integrated Sustainable Development Plan 2027 guides our journey to 2052 and sets clear milestones toward achieving our Vision. The GBE Policy is a cornerstone of this plan, aligning with the overarching goals of sustainable growth, community empowerment, and environmental stewardship. By integrating this policy into our development strategies, we ensure that our path is one of continuous improvement.

This continuous improvement framework will support Research, Development, and Innovation (R&D) as a driving force behind our economic growth. We will invest in research and embrace innovation to ensure agriculture, fisheries, forestry, and tourism become efficient, resilient, and environmentally friendly. In parallel, we will strengthen our planning, implementation, monitoring, and evaluation systems to ensure that every step is measured, responsive, and leads to positive outcomes for our people.

Key to our success is the efficient use and management of our resources. The GBE Policy outlines how we will utilise our financial assets, human capital, and natural resources to build long-term wealth and opportunity for all Bougainvilleans. We are committed to enhancing capacity-building programs and empowering our farmers, fishers, entrepreneurs, and artisans to participate in this new economy. At the heart of this policy are the guiding values and principles of inclusiveness, sustainability, equity, and respect for our cultural and environmental heritage.

One key objective of this policy is to support the community-level governance structures that are critical to our development. By strengthening our villages and community governments, we ensure that decisions made at the highest levels of government are felt in every corner of Bougainville. Local ownership of development projects and participation in decision-making processes are fundamental to the success of the Green–Blue Economy, as we recognise that the true wealth of Bougainville lies in its people.

The Green–Blue Economy Policy sets the foundation for self-reliance as we look to the future. Through sustainable natural resource management, Bougainville will become a nation that not only meets the needs of its people but also serves as a model for environmental stewardship and sustainable development. This policy will guide our steps toward economic independence, fostering industries that create jobs and wealth without compromising our land, culture, or future generations.

The GBE Policy also aligns closely with the Bougainville Vision 2052 by promoting education and health as integral to development. We cannot build a prosperous economy without investing in the well-being of our people.

As President, I believe that the Green–Blue Economy Policy represents a new opportunity for Bougainville. It embodies our collective aspirations for a future where we are sovereign and peaceful and thriving economically while preserving the natural beauty and cultural heritage that defines us. This is the Bougainville we want to build for our children and grandchildren.

In closing, I call upon all Bougainvilleans — from government leaders to community members, from business owners to farmers — to embrace this policy and work together to realise our vision. We have the power to transform our land, our economy, and our future. Let us commit to this path of sustainable growth, and build a strong, independent, and resilient Bougainville through the sustainable use of our natural resources.

President Honourable Ishmael Toroama Bougainville House of Representatives

Statement from the Minister for Lands, Physical Planning, Environment, Conservation and Climate Change

The Autonomous Region of Bougainville stands at a critical juncture in its pursuit of sustainable development, rooted in its ecological richness and historical challenges. Our island has lush rainforests, abundant marine biodiversity, and pristine coastal waters. However, decades of socio-political unrest and extractive industries have impacted our natural environment and economy with far-reaching consequences. The Bougainville Green–Blue Economy Policy (GBE) represents a vital shift to harmonise economic growth with ecological conservation to address these pressing issues.

Historically, Bougainville has relied heavily on mining, particularly the Panguna copper mine, which significantly contributed to our GDP and triggered environmental degradation and social unrest. We focus on harnessing sustainable and resilient revenue sources as we move towards independence. The GBE Policy prioritises the diversification of our economy through sustainable agriculture, eco-friendly industries, renewable energy, fisheries, and carbon offset programs. Investing in these sectors will protect our environment while enhancing livelihoods and community resilience.

The ecological challenges we face, such as deforestation, soil erosion, pollution, and declining marine resources, demand immediate action. The GBE Policy addresses these challenges by promoting sustainable land management practices, establishing marine protected areas, and promoting reforestation and other conservation efforts. We recognise the interconnectedness of our economy and environment, and through this policy, we aim to safeguard Bougainville's natural heritage while creating a prosperous future for our people.

The Green–Blue Economy also places Bougainville on the path toward carbon neutrality, aligning with our global responsibility to mitigate climate change. To achieve this vision, the Green–Blue Economy requires modern institutions, robust governance structures, and investment in science, technology, and human capital development. We must embrace international standards while adapting them to our unique context, ensuring that Bougainville leads in both innovation and sustainability. The success of this policy will depend on collaboration across all sectors—government, community, business, and civil society. Together, we can build a sustainable and resilient Bougainville that balances the needs of our people, economy, and environment.

This policy is more than an economic strategy; it is a collective mission for a sustainable future. Let us work hand-in-hand to ensure Bougainville becomes a nation of sustainable growth, resilience, and prosperity for all.

Honourable Minister Junior Tumare Minister for Lands, Physical Planning, Environment, Conservation and Climate Change Bougainville House of Representatives

Statement from the Minister for Primary Industries

My Ministry affirms Bougainville's commitment to a future that balances economic development with environmental sustainability through the Green–Blue Economy (GBE) Policy. This policy is a roadmap for our economic growth and a pledge to safeguard our natural heritage while creating sustainable livelihoods for our people.

Bougainville's ecological landscape is marked by fertile agricultural land, vibrant fisheries, and diverse marine ecosystems, forming our economy's foundation. Agriculture and fisheries have long been the backbone of our communities, and they now hold the key to unlocking the full potential of sustainable, climate-resilient growth. Our vision for a Green–Blue Economy is to transform these sectors, ensuring they are productive, profitable, and protective of our environment.

Agriculture offers us vast opportunities. Promoting sustainable farming techniques, improving soil health, and focusing on high-value, eco-friendly crops like cocoa can increase our agricultural output while reducing deforestation and land degradation. Similarly, our fisheries sector can thrive through improved management of marine resources, supporting food security and economic diversification while maintaining our commitment to marine conservation.

The introduction of international standards, such as the EU Deforestation Regulation (EU-DR), presents both a challenge and an opportunity. Our farmers and fishers must adapt to stricter sustainability criteria, but with the proper support, Bougainville's products—cocoa, fisheries, and more—can access premium markets worldwide, driving higher returns and a more resilient economy.

Through the Green–Blue Economy Policy, we aim to balance economic prosperity and ecological responsibility, ensuring that Bougainville's agriculture and fisheries sectors build a sustainable and inclusive future for all.

Honourable Minister Geraldine Paul Minister for Primary Industries Bougainville House of Representatives

Statement from ABG Chief Secretary

I am pleased to reaffirm our Administration's commitment to the Bougainville Blue-Green Economy Policy and drive Bougainville's economic growth and productivity while ensuring the sustainable use and preservation of our natural resources. This policy is more than a roadmap for economic growth; it is a pathway to protect and nurture our land, seas, and unique ecosystems for future generations, transforming Bougainville into a sustainable, community-driven development model.

To achieve these ambitious goals, I call upon each public servant across all departments of the Autonomous Bougainville Government to unite in support of this policy. Whether your focus is on agriculture, fisheries, conservation, or community services, your dedication and coordination will be vital. We must work coherently to implement this policy's priorities at all levels, ensuring that every effort contributes to Bougainville's sustainable and inclusive growth.

The ABG Administration stands firmly behind this policy and is committed to ensuring that it has the resources, guidance, and oversight needed for successful implementation. Our support will encompass all necessary assistance to foster green-blue economic initiatives that leverage our natural wealth and the talents of our people.

I also urge all community governments to actively collaborate with the Department of Lands, Physical Planning, Environment, Conservation, and Climate Change. The land and sea are the heritage of our people, and community governments play an essential role in stewarding these resources responsibly. With their involvement, we can maximise green-blue growth in locally sustainable ways, aligning traditional land stewardship with modern sustainable practices to create a self-sufficient and resilient economy.

Most importantly, this policy depends on the self-reliance and resilience of our village communities. It is a policy shaped by the strengths of our people and designed to empower communities to manage their own resources sustainably. By investing in our own villages and communities, we can build a foundation for Bougainville's self-sustaining future—one that stands as a beacon of responsible growth on the global stage.

Let us work together to realise the aspirations of the Bougainville Blue-Green Economy Policy.

Mr. Kenneth Nanei (LLB) Chief Secretary Autonomous Bougainville Government

Foreword

I am pleased to introduce the Bougainville Green Blue Policy, an outcome of a two-day planning workshop conducted on the 13th and 14th of January 2024 that was generously funded by Regional Member Honourable Peter Tsiamalili Jnr. This workshop aimed at shaping a sustainable economic strategy for Bougainville, responding to the island's multifaceted economic and social challenges that currently hinder its journey towards a resilient and inclusive future.

Central to the workshop's agenda is the increasing need to safeguard Bougainville's natural capital, spanning from its expansive oceans to its rugged, elevated landscapes. While the island holds significant mineral deposits that promise substantial financial returns, the extractive industries associated with these resources also pose considerable risks of ecological and cultural degradation.

The primary objective of this workshop was to identify key natural assets that can serve as catalysts for Bougainville's cultural, social, and economic advancement. Drawing inspiration from global agreements such as the Paris Agreement and various conventions under the United Nations Framework Convention on Climate Change (UNFCCC), the workshop sought to explore avenues for fostering sustainable economic growth as a viable alternative to the prevailing extractive industry-centric development paradigm.

While the workshop's scope encompasses broad policy considerations and international conventions, it maintained a distinct focus on fostering community-based projects. This approach is integral to ensuring the deployment of both immediate and long-term interventions that promote environmental stewardship, social equity, and effective governance, thereby paving the way for sustained and inclusive growth in Bougainville.

Notably, this policy was informed by a comprehensive report published by the European Union on the Autonomous Region of Bougainville (AROB) Green Blue Support Project. The report, carried out under the "Technical Assistance for the Support Program to the Implementation of EU-PNG Cooperation," provides a detailed assessment of Bougainville's capacity and opportunities regarding green—blue Initiatives. This EU report was informed by several stakeholder workshops, interviews, and research conducted in Bougainville and Port Moresby between March and May 2023.

More importantly, this policy directly responds to Bougainville Executive Council (BEC) Decision Number 164 of 2021, dated 14th of December 2021. In this decision, the BEC acknowledged the contents of the Green–Blue Policy Information and agreed to enact the Green–Blue Growth Policy Paper.

Ms. Lynette Baratai - Pokas (LLB) Secretary. Department of Lands, Physical Planning, Environment, Conservation and Climate Change

1. Introduction

1.1. Brief Overview of Bougainville's Ecological and Economic Context

The Autonomous Region of Bougainville boasts a diverse ecological landscape characterised by lush rainforests, pristine coastal waters, and abundant marine biodiversity. However, decades of socio-political unrest and extractive industries have significantly challenged its ecological integrity and economic stability. The Green-Blue Economy Policy acknowledges this historical context of the economy's nature that led to the "Bougainville Crisis" and proposes a shift towards sustainable development that harmonises economic growth with ecological conservation.

In the economic realm, Bougainville faces the dual challenge of limited revenue streams and a dependency on volatile commodity markets. Historically, the region has relied heavily on mining, particularly the now-closed Panguna copper mine, which contributed substantially to its GDP but triggered massive environmental degradation and social tensions. In the aftermath of the conflict and subsequent referendum in which 97.8 per cent of Bougainville voted for independence from Papua New Guinea, Bougainville seeks to diversify its economy and reduce its reliance on extractive industries. This necessitates the cultivation of alternative sources of revenue, such as sustainable agriculture, fisheries, carbon offsets, tourism, and renewable energy.

Ecologically, Bougainville grapples with the consequences of deforestation, soil erosion, pollution, and declining marine resources. The degradation of ecosystems threatens biodiversity and undermines the resilience of communities reliant on natural resources for their daily livelihoods. The Bougainville Green Blue Economy Policy recognises the intrinsic value of the region's ecosystems and seeks to implement measures that protect, restore and safeguard them. This entails initiatives such as sustainable land management practices, marine protected areas, reforestation programs, and the promotion of ecofriendly industries. Bougainville aims to foster resilience, prosperity, and sustainability for its people and environment by addressing the interconnectedness of economic and ecological systems.

1.2. BEC Decision 164 of 2021

Recognising the inherent value of its vast marine and terrestrial resources, the Autonomous Bougainville Government acknowledges the need to adopt a sustainable approach to development and economic growth. In alignment with this commitment, the Bougainville Executive Council, through **BEC Decision #164 of 2021**, issued a directive to formulate and implement the Green–Blue Growth Policy. This policy is a deliberate and strategic response to the abovementioned decision, reflecting the government's dedication to fostering environmentally conscious and sustainable development practices in Bougainville.

Guiding viewpoints

- Implementing Green-Blue Growth within Bougainville is integral to restructuring the region's economy. This strategy aligns with the overarching Bougainville Vision 2023-2053, Bougainville Integrated Sustainable Development Plan 2023-2027, Bougainville Economic Roadmap, Bougainville Food Security, and PNG's Fourth Medium-Term Development Plan. It seeks to enhance Bougainville's competitiveness, fortify its resilience against external shocks, and realise the objectives outlined in the policy frameworks and sector development strategies.
- Green-Blue Growth emerges as a policy instrument in pursuing sustainable development, actively contributing to reducing greenhouse gas emissions. This aligns with Bougainville's commitment to remain a carbon-neutral economy over the long term. By integrating sustainable practices into economic development, this approach promotes environmental responsibility. It sets the stage for Bougainville to become a leader in mitigating climate change impacts and emerging societal challenges.
- At its core, Green-Blue Growth prioritises the well-being of the people, aiming to reduce human vulnerability to climate change. This policy encourages individuals to adopt lifestyles that are socially and environmentally responsible. It serves as a guide for present generations in embracing green living culture and lays the foundation for a civilised and modern society that harmonises with nature, the environment, and the ocean.
- Green-Blue Growth necessitates a foundation built upon modern institutions and governance structures, cutting-edge science and technology, and innovation. Additionally, the cultivation of high-quality human resources is crucial. This approach must be adaptable to both international standards and the specific conditions within the Bougainville context, ensuring a robust framework for sustainable development.
- The strategic orientation of Green-Blue Growth emphasises investments in advanced technologies, digital transformation, and the development of smart and sustainable infrastructure. This creates momentum for increased private sector involvement in the green economy, fostering economic growth and innovation.
- Green-Blue Growth is a collective endeavour involving the entire political system, the community, the business sector, and relevant organisations. It is driven by a spirit of innovation and a shared aspiration to build a prosperous and sustainable country. This approach underscores the importance of collaboration across various stakeholders to realise the transformative potential of Green-Blue Growth within Bougainville.

1.3. Rationale for transitioning to a Green-Blue Economy

Green and Blue Economies (GBE) have recently received significant attention in small island developing states (SIDS), particularly in Papua New Guinea (PNG), as alternative development approaches to address growing social and economic uncertainty and vulnerability. GBE offers a more resilient and sustainable economic path that balances the social, environmental, and economic drivers. The Blue Economy has its origins in the Green Economy concept. The United Nations defined the Green Economy as "low carbon, resource efficient and socially inclusive.

In a Green Economy, growth in employment and income is driven by public and private investment into such economic activities, infrastructure, and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of biodiversity loss, cultural heritage and ecosystem services." It strives toward sustainable economic growth by focusing on resource management, investments, employment rates, and inflation.

To transform the different economic sectors into a green economy, it is necessary to develop tools and policies and promote regulations and knowledge at both national and regional levels. The resulting green economy will improve human welfare and social equity and significantly reduce environmental risks, ecological scarcity, and depletion¹.

According to UNESCO, the Blue Economy or an "Ocean Economy" seeks to promotes economic growth, social inclusion, and the preservation or improvement of livelihoods while at the same time ensuring the environmental sustainability of the oceans and coastal areas.

It encompasses the value of essential capital as a basis for a healthy marine environment, to maintain growth, and to foster and promote "blue" businesses and jobs through fisheries, aquaculture, shipping, maritime security, mining, oil and gas, and renewable energy. It also enhances resource efficiency and deals with scarcity issues.

Within the context of Sustainable Development, the GBE is one of the important tools that contributes to eradicating poverty as well as sustaining economic growth, enhancing social inclusion, improving human welfare, and creating opportunities for employment and decent work for all while maintaining the healthy functioning of the Earth's ecosystems.²

The Sustainable Development Agenda 2030 and its interlinked 17 Sustainable Development Goals (SDGs), underpin various international, regional and national GBE

¹ United Nations Environment Programme, Green economy in a Blue World: Synthesis Report (United Nations, 2012)

² United Nations, "United Nations Conference on Sustainable Development, Rio+20", accessed Sept. 01, 2018, https://sustainabledevelopment.un.org/rio20.html

governance frameworks.³ For instance, SGD 8 provides inclusive and sustainable economic growth, employment and decent work for all. Through SDG 14, the role of oceans and an ocean-based economy as important drivers for sustainable development is recognised by placing oceans more centrally on the development agenda and creating new opportunities to focus the efforts of the development and donor community on this essential aspect of sustainable development.⁴ SDG 13 and SDG 14 provide a development framework of targets, indicators and timeframe (2030) for measuring economic, social and environmental improvements. The Paris Climate Agreement (2015) also recognises the critical role of Green and Blue Economy in mitigating the impacts of climate change, its detrimental impacts on marine and coastal ecosystems and resulting disproportionate bearings on SIDS and their economies.

The Green and Blue Economy is the key to ensuring a safe, sustainable, and equal environment for the people, but it is also the right path to follow to preserve the natural assets, effectively preventing human actions and activities from purposedly harming and contaminating the natural habitats. It is a pathway to climate-smart and sustainable development and requires a paradigm shift in the mindset of users of forests, lands, ocean and coastal resources and how benefits from wealth creation may be shared. It is therefore inappropriate to continue with 'business as usual' and relabel the current uses of lands, marine and coastal resources as 'green-blue'.

1.4. Culture as an Imperative for Green–Blue Economy

Bougainville's cultural heritage is foundational to formulating and implementing the Green–Blue Economy Policy due to the inherent linkages between cultural values and sustainable development. The policy emphasises the significance of preserving and promoting Bougainville's cultural heritage to ensure local communities' resilience and active participation in sustainable economic activities.

The significance of culture in any development initiative in Bougainville is better exemplified in its flag, which places the UPE in the centre as a source of strength and identity for the people. In alignment with the "UPE Culture," the policy underscores the need to integrate traditional knowledge and practices into the Green–Blue Economy framework. This involves fostering a sense of cultural responsibility and stewardship towards the environment, encouraging sustainable agricultural practices and eco-industries, and promoting community-led initiatives for environmental conservation. By incorporating Bougainville's cultural values into the fabric of the Green–Blue Economy Policy, we not only safeguard the region's unique identity but also cultivate a foundation

³ United Nations Department of Economic and Social Affairs, "Sustainable Development Knowledge Platform: Sustainable Development Goals", accessed Jul. 18, 2018, https://sustainabledevelopment.un.org/sdgs

⁴ United Nations, UN Conference on Oceans (5-9 June 2017) "Our Ocean Our Future Call for Action", accessed Jul. 18, 2018, https://oceanconference.un.org/callforaction

for sustainable development that respects, preserves, and enhances the cultural heritage of Bougainville for current and future generations.



Figure 1: Mt. Takuan, in the background is one of two Key Biodiversity Areas on Bougainville. Mt. Balbi and the Kunua Plains are the other KBAs.

2. Vision and Mission

Vision

"Smart, resilient society through increased sustainable, innovative and inclusive low carbon growth, while promoting efficient ecosystem services, safeguarding community rights, reducing environment risks and ecological scarcities"⁵.

Mission Statement

We aim to implement a policy framework that coordinates efforts to achieve sustainable economic development in Bougainville, focusing on the green and blue sectors at the heart of our innovation ecosystem.

Purpose

The overarching purpose of this policy is to establish a thriving, sustainable economy in Bougainville that integrates blue and green sectors, fostering innovation, resilience, climate adaptation, and inclusivity.

Broader outcomes expected from this policy;

- Enabling Policy and Legislative Environment: Develop policies and legislation that support Bougainville's sustainable economic and productivity growth through its Green and Blue Sectors.
- Financing and Business Development Support: Ensure sufficient financing and support for business development to stimulate innovation and industrial growth in the region.
- 3. **Investment in Technology, Infrastructure, and Human Resources**: Allocate resources to build technological, infrastructural, and human capacity, enabling Bougainville to develop a sustainable green innovation and industrial ecosystem.

⁵ This vision was collectively formulated during extensive stakeholder consultation workshops through the EU project.

3. Policy Framework

As an autonomous region, Bougainville remains a geographical and political part of Papua New Guinea (PNG). PNG as a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), ratified the Paris Agreement in New York during the 72nd United Nations General Assembly. It is also a member of the Small Islands Developing States (SIDS) and aligns itself with the Alliance of Small Island Developing States (AOSIS) within the UNFCCC negotiations.

As part of its commitment, the country mainstreamed climate change in its development priorities and are captured in the national long-term political visions, plans and strategies of PNG Vision 2050, the National Development Strategies Plans 2010 – 2030, National REDD+ Strategy 2017 – 2027 and the Medium-Term Development Plan III and IV (MTDP3 and 4). These strategies are founded on the concepts of helping to strengthen and diversify the foundations of PNG's economic growth while taking action to both increase the country's resilience to climate change and take steps to mitigate emissions further.

3.1. Development and Endorsement of Sustainable Development Goal 13 Roadmap

In 2020, despite the COVID-19 pandemic-related global and national movement restrictions, the Government of Papua New Guinea (GoPNG) achieved the key milestone for the country to fight against climate change. It was the development and endorsement of its Sustainable Development Goal 13 Climate Response Roadmap⁶. The roadmap includes 30 actions by 2030 in critical sectors such as climate governance, energy, forestry, infrastructure, agriculture, minerals, health, biodiversity, and tourism. These themes are primarily related to the impacts of climate change that will be felt in PNG, as well as key sectors of the PNG economy, which are particularly important for both national development and the livelihoods of the people of Papua New Guinea.

The aim is better preparation for climate change impacts. The development of all four design elements of the Warsaw Framework⁷ under the United Nations Framework Convention on Climate Change (UNFCCC) were successfully completed. This allows PNG to move forward with the Results-Based Payments (RBP) to the Green Climate Fund (GCF) and other multilateral and bilateral donor agencies.

3.2. Revision of PNG's Nationally Determined Contributions (Second NCD)

At the end of 2020, the Government of PNG endorsed its revised Nationally Determined Contributions (NDC) and submitted it to UNFCCC. The revised NDC aligns with the national strategies noted above and builds on the first NDC submitted in 2016. The

https://www.pg.undp.org/content/papua_new_guinea/en/home/presscenter/pressreleases/2020/papuanew-guinea-launches-its-climate-action-roadmap-to-achieve-.html

⁶

⁷ https://unfccc.int/topics/land-use/resources/warsaw-framework-for-redd-plus

enhanced NDC further aligns with sectorial policies, plans, and strategies that stakeholders will implement in response to existing challenges and circumstances.

PNG's NDC sets out a comprehensive package of policies and measures, sectorial targets, and sector-specific actions tailored towards meeting defined contributions to addressing climate change through immediate action and developing the enabling environment and technical capacity for an ongoing process of increased ambition. The document complies with the Enhanced Transparency Framework (ETF) requirements as stipulated under the Paris Agreement.

PNG's mitigation efforts focus on two key subsectors: energy, agriculture, forestry, and other land use (AFOLU). In the AFOLU sector, Papua New Guinea has pledged to reduce 860 Gg of CO₂ emission from deforestation and forest degradation and to attain a total forest carbon stock value of 17.6 billion tCO₂ by 2030 – 2.9 billion tCO₂ higher than 2015. The energy sector comprises electricity generation, energy efficiency and transport subsectors. Papua New Guinea aims to increase renewable electricity generation to 78% by 2030 to serve on-grid populations through geothermal, hydropower, biomass, wind, solar and ocean wave energy technologies. It also aims to provide off-grid solar power to 605,055 households.

3.3. Conservation PNG Way

Bougainville remains an Autonomous Region of Papua New Guinea (PNG), and all economic development activities, including Green–Blue Economy interventions, will be closely linked to PNG until it obtains political independence.

At the highest level, the fourth goal of the PNG Constitution is titled "Natural resources and environment" and makes a commitment to:

- Wise use to be made of our natural resources and the environment in and on the land or seabed, in the sea, under the land, and in the air, in the interests of our development and in trust for future generations;
- The conservation and replenishment, for the benefit of ourselves and posterity, of the environment and its sacred, scenic, and historical qualities; and
- All necessary steps to be taken to give adequate protection to our valued birds, animals, fish, insects, plants and trees.

Section 27 of the Bougainville Constitution (2004) highlights the importance of the environment and conservation as:

- The Autonomous Bougainville Government and all other levels of government, formal and informal, shall promote sustainable development and public awareness of the need to conserve and manage land, air, sea and water resources in a balanced and sustainable manner for the present and future generations.
- The Autonomous Bougainville Government shall promote and implement energy policies that will ensure that the basic needs of all people in Bougainville and those of environmental preservation are met.

- The Autonomous Bougainville Government shall pursue the protection of the environment and the restoration of damage caused by mining operations and other major resource projects.
- The Autonomous Bougainville Government shall ensure protection of the flora and fauna of Bougainville.

These commitments are cemented in the national plan, Vision 2050 (National Strategic Plan Taskforce, 2011a), which was one of seven pillars related to the environment: "Conserve and wisely use our natural resources and environment, language and cultural diversity for the collective benefit of the present and future generations". Commitments include:

- Conserve biodiversity at the current five to seven per cent of the world's biodiversity.
- Establish a total of 20 national reserves, wilderness areas and national parks.
- Establish at least one million hectares of marine protected areas.
- · Conserve and preserve cultural diversity.

Any approach to PNG conservation, land management, and environmental issues must consider the complex nature of government and tenure systems. Nationally, 97% of land is estimated to be under customary authority, with the remaining 3% divided into public (2.5%) and freehold (0.5%) land, 'alienated' from customary tenure during the colonial period.

At many levels from the National Constitution to the Strategy for Responsible Sustainable Development (STaRs), PNG has made international and national commitments to conserving its environment.

At the national level, the Government of Papua New Guinea has recently developed and endorsed the fourth Medium Term Development Plan (MTDP) for the period of 2023 – 2027. It is based on the review of previous MTDP and consists of 12 Strategic Priority Areas (SPAs). The SPA 1 – Strategic Economic Development, SPA 2 – Sustainable Enabling Infrastructure, SPA 10 – Climate Change and Environmental Protection and SPA 12 – Strategic Partnership are related to Green–Blue Economy Growth.

3.4. Bougainville Strategic Development Plan

In Bougainville, the Regional Government has developed the 5-year Strategic Development Plan (BISDP) to provide a comprehensive and well-defined roadmap to support the aspirations of Bougainville for independence. This plan aims to guide the ABG and its stakeholders in building a strong foundation for self-determination by addressing critical areas of political autonomy, economic development, social development, cultural preservation, environmental sustainability, and international relations. The following Sectors and their Strategic Objectives are linked to Green–Blue Economy:

The following Bougainville Integrated Sustainable Development Plan objectives align with the GBE Policy

BSIDP Section 4.4: Research, Science, Technology and Innovation Sector.

• Strategic Objective 2: Establish effective coordination of Bougainville Research Agenda.

BSIDP Section 4.6: Economic Sector

- Strategic Objective 1: Strengthen the strategic policy direction and purpose of all economic sector lead agencies.
- **Strategic Objective 2:** Support a data-driven and knowledge-based Economy.
- **Strategic Objective 3**: Increase Engagement with the Green and Blue initiatives.
- **Strategic Objective 4**: Foster MSMEs and Special Economic Zones as drivers for Socio-economic development.

BSIDP Section 4.7: Social Sector

- Strategic Objective 4: Better disaster preparedness and climate-resilient communities.
- **Strategic Objective 5:** Protection of Bougainville values and cultures, equity and inclusiveness.

Figure 2: Key Alignment of GBE Policy with the Bougainville Integrated Sustainable Development Plan 2027

4. Key Principles

This vision is aligned with the STaRS, MTDPs and Bougainville Strategic Development Plans and policies and guided by the over-arching Green-Blue Economy principles of economic efficiency, sustainable use of forests, oceans and lands, social equity, resilience, innovation, transparency, accountability and partnerships. These principles should be incorporated into the Green-Blue Growth Policy to promote sustainable economic activities and to ensure the development and growth of the Green-Blue Economy as a driver for wealth creation and equitable distribution/participation in Bougainville.

The key principles and how they can be applied in Bougainville are addressed below:

First Principle: Economic Efficiency

The Autonomous Region of Bougainville has state and private-owned enterprises sector across all aspects of the economy, ranging from the provision of public services to commercial activities, and these have had mixed performance. This principle covers the respective roles of the Bougainville Government and the private sector and promotes the use of forests, lands, ocean and coastal resources in economically efficient ways on the basis that the private sector can better deliver efficiency where there is regulatory clarity and certainty.

Second Principle: Healthy Forests, Oceans and Sustainable Use of Land

A vibrant green—blue economy depends on healthy forests, oceans and sustainable use of land. This encompasses the protection and enhancement of critical biodiversity habitats, ecosystem processes and agricultural services, and sustainable management of forests, ocean and coastal resources. It is premised on the basis that protection of essential ecosystem services which underpin human wellbeing (e.g. forest conservation, coastal protection, water filtration, food security, recreation opportunities or carbon sequestration) should be priorities for transitioning to sustainable resource use.

Imperative components of this principle include ecosystem-based management, multiple land-use planning, sustainable forest management, marine research, appropriate valuation of ecosystem services in economic activity and national accounting, phasing out of undesirable subsidies and setting resource access rights commensurate with resource values to ensure correct price signals.

It is necessary that those who benefit from or affect assets, contribute accordingly to their maintenance.

Third Principle: Social Equity, Food Security, and Healthy Lifestyles

The Third Principle supports food security, shared prosperity and full participation in national development through quality education, skills development and access to job and local investment opportunities. The most recent survey of the Multidimensional Poverty Index (MPI) data available for Papua New Guinea refers to 2016/2018 and estimates that over 56 per cent of the population in Papua New Guinea (5.5 million people in 2020) are multidimensionally poor, while an additional 25.3 per cent is classified as vulnerable to multidimensional poverty (2.4 million people in 2020). The intensity of deprivation in PNG, which is the average deprivation score among people living in multidimensional poverty, is 46.5 per cent. The MPI value, which is the share of the

population that is multidimensionally poor adjusted by the intensity of the deprivations, is 0.263. In comparison, Indonesia and the Philippines have MPI values of 0.014 and 0.024, respectively⁸. This places a heavy burden on social policy and public expenditure. Food affordability may become an issue, as most foods are imported.

Fourth Principle: Transparency, Inclusiveness and Accountability

An essential aspect of the green—blue economy implementation is good governance and transparent decisions about resource use, investments and benefit sharing. Good governance provides certainty for public and private sector investment and builds trust in institutions. Crucial elements of a transparent and accountable governance system are a clear vision and well-defined objectives, inclusive, evidence-based multi-sector decision making processes, standardised criteria for accessing and allocating public resources (resource access rights and conditions, technical or financial resources, as well as codified appeal provisions) to ensure justifiable investment decisions.

Fifth Principle: Resilience

Bougainville is particularly vulnerable to environmental and economic shocks, mainly due to its physical vulnerability, small economic base, export-dependent economy, small population and limited access to finance. Resilience concerns the ability to anticipate, prevent and adapt to changing circumstances in ways that allow for recovery and generate new and innovative practices, which will reduce vulnerability over time. This principle is well established in aspects of climate change adaptation measures, disaster risk management and emergency planning, as well as risk transfer mechanisms such as insurance. Strategic forecasting and intelligence, good governance, diversification of economic activities and reduced dependency on imports such as food are critical elements of reducing vulnerability and building economic resilience.

Sixth Principle: Innovation

Innovation facilitates creative solutions and opportunities to achieve transformative outcomes and generates discovery and new knowledge, best practices or approaches that open up new opportunities. Innovation is at the core of Bougainville's Green–Blue Economy and is essential to moving from a commodity-based to a service and knowledge-based economy. Technological innovation in digital connectivity will benefit egovernment and provide applications such as remote global monitoring, control and surveillance tools and environmental monitoring for forests, land and marine resource management. It has the potential to reduce the costs of doing business, open up areas for new activities and enhance local capacity for MSMEs.

Seventh Principle: National, Regional and International Cooperation

PNG is at the forefront of international climate and environmental negotiations. It has established national and regional cooperation frameworks towards sustainable management of natural resources. Such arrangement is also critical for Bougainville as custodian of almost intact forests with huge potential for marine resources. Realising the benefits of a green—blue economy is the business of government, private sector, civil society and the public, whether through public-private partnerships in infrastructure

⁸ Oxford Poverty and Human Development Initiative 2022

development, co-management of resources, or in devolved service delivery such as environmental protection or health services. Effective engagement of the private sector, civil society and the public is essential to generate support for and participation in the green-blue economy.

Regional cooperation is essential to address common issues, including deforestation and forest degradation, maritime security, Illegal, unreported, and unregulated (IUU) fishing, climate change, and marine pollution. Pooling resources for compliance and enforcement, capacity building, research and development, and disaster risk reduction can be facilitated through partnerships with international organisations and donors to attract technical and financial resources and tools. As noted, PNG has been actively pursuing strategic alliances and demonstrating leadership in recent years by encouraging carbon dioxide emission reduction and decreasing ocean acidification, directly impacting islands like PNG, which rely on healthy forests and oceans for economic development and food security.



Figure 3: A thriving coral reef system on Sal island, west coast of Buka island

5. SWOT Analysis

The European Union conducted this comprehensive SWOT Analysis through its AROB Green–Blue Support Project. The report and analysis were developed after extensive stakeholder consultation workshops, which were attended by diverse stakeholder groups. This analysis is, therefore, considered representative and forms the basis for our policy development.

Table 1: Details of SWOT Analysis obtained from Stakeholder Consultations in 2023 under the EU-FCCB program

Strengths Weaknesses

- National and international commitments to sustainable development, climate change, forestry and environmental conservation. Strong will to integrate a Green-Blue Economy in the development planning process of Bougainville (policies, strategies).
- Rich natural resources: Bougainville possesses abundant natural resources, including fertile agricultural land, minerals, and marine resources, which can be harnessed for sustainable economic development.
- High functioning of many ecological services.
- Rich and diverse culture and traditional ecological knowledge and practices.
- Many highly committed people in the government and at the local level.
- Most land is under customary ownership with high level of stewardship commitment.
- Commitments by the current government to address governance issues.
- Many international agencies are willing to assist with funds and resources.
- Resilient population: The people of Bougainville have demonstrated resilience and adaptability in the face of societal challenges, which is an asset in pursuing sustainable development and selfdetermination.
- Non-government organisations with a lot of promise in addressing both environmental and social issues.

- Poor governance, especially relating to accountability and slow and opaque government functioning.
- Unclear division or responsibilities with multiple levels of government, a complicated system within which to work and achieve change.
- Delegation of environmental responsibilities to AROB level was not matched by resources.
- Limited infrastructure: Bougainville's infrastructure, including transportation networks, energy supply, and communication systems, is underdeveloped, hindering economic growth and access to basic services.
- Lack of current and effective legislation in climate change, biodiversity conservation, protected area management and forestry.
- Capacity constraints: The ABG faces capacity constraints in governance, planning, and implementation, which may impact the effectiveness of development initiatives.
- Lack of good practical land use planning and allocation to determine the best locations for developments, infrastructure and conservation investments.
- Very low coverage of formalised protected areas both terrestrial and marine.
- Weak environmental impact and enforcement of rules and conditions.
- Dependency on subsistence agriculture: the majority of Bougainvilleans depend on subsistence agriculture and fishing for their livelihoods, leaving them vulnerable to external shocks and limiting economic diversification.

Challenges, Conundrums and Threats

- Political instability: the ongoing postreferendum consultations and the path towards independence may create uncertainty and potential political instability, which could impact development efforts.
- External shocks: Global economic trends, natural disasters, and the impacts of climate

Opportunities

- Economic diversification: There is significant potential to diversify Bougainville's economy by developing sectors such as forestry, tourism, renewable energy, and sustainable mining (BISDP).
- Opportunities to raise internal revenue through taxes, from so-called "low-hanging fruits", such as taxes from departures and arrivals, road traffic infringement, etc.

- change pose threats to Bougainville's economy and environment.
- Lack of security and violence with implications for field work and progress of all kinds.
- Constant threat of gender-based violence limiting women's involvement.
- Unplanned migration and urbanisation.
- Planned roads and other infrastructure not taking environmental considerations into account.
- Rapid influx of international investment that does not comply with international standards or relevant domestic legislation.

- Opportunity to 'do development right' or "Bougainville Way" with green infrastructure, power and industry, given the low levels of development in much of the country.
- Development of Wealth/Trust fund/s Environmental jobs could lead appropriate development efforts, e.g. community environmental rangers, tour guides, and environmental scientists.
- Modern technology supports more distributed development of power, communication services, etc.
- Opportunities for payments of conservation stewardship and ecosystem services.
- Potential for tourism and research in natural areas (dependent on security and infrastructure).
- Potential for excellent reserve systems, including communitybased management.
- Genetic materials have the potential for high-value agriculture.
- Most of the islands in Bougainville have coconut trees and coconut oil production through provision of solar or wind powered driers could be explored and driers for marine and fishery products to meet domestic and international markets.
- Opportunities to support and co-finance long-term Infrastructural plans as enablers for economic growth, which will include road realignment of:
 - · Kokopau to Morgan Junction Highway,
 - Kokopau to Buin through Torokina and BANA.
 - · Wakunai to Torokina, Manetai to Torokina
- Opportunities to support Bougainville through educated citizens and building a University for Bougainville, where technical experts can deal with challenges of Green–Blue economy or develop mitigation strategies to minimize impacts.
- Opportunities to develop economic growth centres for marine and fisheries resources and build the economy by downstream processing of products sourced from the oceans, seas and coastline. Explore certified markets for SMEs processing marine and fisheries products.
- Investing in economic enablers is the way to build a sustainable cash economy; supporting the growth of SMEs based on local marine and fisheries products, reliable telecommunication, accessible medical facilities, i.e. sea ambulance, reliable and affordable shipping services ensuring return on investment as this is crucial for business development.

6. Policy Objectives

The SWOT Analysis presented in the previous section provided insights into the constraints that hindering the advancement of Green Blue Growth in the Autonomous Region of Bougainville. To address those critical constraints, the following Policy Objectives were articulated through a consultative process with various stakeholder groups and desktop research.

Policy Objective 1: Establish Institutional and Policy Frameworks

A strategic refinement of the institutional, policy, and legal framework is essential to pursuing a holistic approach to the Bougainville Green Blue Economy Policy. The focus will be on fostering coordination, complemented by integrating green—blue growth targets and solutions into Bougainville's economic pursuits. This concerted effort aims to accelerate the ongoing restructuring of Bougainville's economy, concurrently revitalising the growth model and optimising resource expenditure.

To operationalise green—blue growth targets, the policy advocates for their inclusion in key documents such as socio-economic development strategies, master plans, and corporate plans. These targets and criteria for green—blue growth investments will be strategically embedded in various sectors and regions. This approach is geared towards supporting industries and investments with minimal greenhouse gas emissions and pollution and those addressing environmental degradation. In addition, this policy promotes the circular economic model and creates an environment conducive to developing green industries. Simultaneously, it calls for a phased reduction and shift away from heavy reliance on extractive investment activities, prioritizing the enhancement of Bougainville's resilience against climate change and rising sea levels, specifically focusing on vulnerable areas.

Policy Objective 2: Communicate, Educate and Raise Awareness

The Bougainville Green Blue Economy Policy emphasises a multifaceted approach to instilling a culture of sustainability within the society. Central to this strategy is the ongoing education and heightened awareness campaigns aimed at informing the public about the pivotal role and significance of green—blue growth across all segments of society. Concurrently, the policy advocates for the implementation of tangible practices and actions that promote harmony with nature and align with our traditional and cultural values. The policy seeks to foster a collective consciousness that values sustainability and environmental stewardship by embedding green practices into societal practices.

Furthermore, the policy underscores the importance of soft skills education and the need to strengthen coordination between schools, families, and society at large. This collaborative effort aims to cultivate a lifestyle characterised by green, civil, and innovative attributes. Simultaneously, the policy encourages the enhancement of capabilities in identifying energy labels, ecology labels, and green labels for goods and products. The dissemination of information on low-emission and environmentally friendly products and services will be further popularised, promoting informed consumer choices and

contributing to the broader adoption of sustainable practices within Bougainville's society. Through these concerted efforts, the policy seeks to establish a pervasive ethos of environmental responsibility and sustainable living across all facets of Bougainville's community.

This policy also targets high–level audiences who will make decisions that will impact this policy. A communications strategy to encourage the use of digital media and short videos will be developed to complement this policy to capture key messages of the GBE policy and garner support for funding, technology transfer, and capacity building. The use of diverse communication tools, such as short videos, is encouraged by this policy as a way to reach out to global audiences, leaders, institutions, businesses, and industries.

Policy Objective 3: Develop Green Human Resources and Employment

A core directive of this Policy is to foster the development of human resources tailored for green industries, who can also innovate and build new industries thereby generating sustainable green jobs. This requires organized training activities, with a specific focus on instilling management and operational knowledge within the realm of the green economy and green—blue manufacturing industries.

Special attention is also dedicated to public administration cadres and businesses, particularly those in leadership and management positions and those engaged in policy planning and development. By enhancing the capabilities of these key stakeholders, Bougainville aims to cultivate a skilled workforce that aligns with the principles of sustainable development practices.

Simultaneously, the policy underscores the importance of the knowledge and capabilities of teachers and educational management cadres. Integrating green—blue growth content into educational curricula across different levels can drive human-centred green—blue growth. This policy envisions that forecasts are made through research, surveys, and data analyses to inform the demand and supply of human resources for the green—blue sectors and industries. Furthermore, school and vocational training infrastructure investments will be prioritised to provide a skilled labour force for an evolving industry into the future.

Policy Objective 4: Mobilise Financial Resources for Green Blue Growth

A key focus lies in refining policies and tools that facilitate the mobilisation of resources for green-blue growth. This policy particularly emphasises aid policies, financial incentives, and the development of capital markets, green credit/insurance markets, and carbon markets. It aims to synchronise these efforts towards establishing an emissions trading system based on market mechanisms.

The policy underscores the need to prioritise state budget resources, emphasising capital allocation in public investment plans and recurring expenditures for programs, schemes, projects, and tasks related to green—blue growth. The strategy involves leveraging the influence of state-owned enterprises and large economic entities to orient markets and guide green—blue production and consumption.

The policy advocates mobilising finance from international financial institutions, foundations, and private investors. Prioritising preferential loans, official development aid (ODA), and technical aid from various countries, international organisations, and nongovernmental organisations are central to achieving green—blue growth objectives.

To stimulate private sector involvement, the policy further encourages the creation of favourable conditions for diverse forms of public-private partnerships. This includes fostering collaborations between domestic and international investors in green projects and initiatives that apply green transformation technologies and solutions. A key facet of the policy is to enhance the ability of women and vulnerable groups in society to access green—blue sources of finance, ensuring inclusivity and equitable participation in the sustainable development agenda. Through these multifaceted approaches, the policy aims to create a robust financial framework that catalyses green—blue growth while fostering economic inclusivity and resilience.

This policy further advocates for the Bougainville Government, ABG and the National Parliament Leadership to conduct a mapping exercise to outline entry points for access to funds to implement GBE Initiatives to ensure financial sustainability and autonomy for the GBE policy.

Policy Objective 5: Science, Technology and Innovation

The Bougainville Green Blue Economy Policy places a significant emphasis on fostering research and development endeavours to leverage science, technology, and innovations in advancing green—blue growth objectives. A core component of this directive is to encourage the exploration and development of models integrating cutting-edge technologies and innovations. By harnessing the potential of scientific advancements, Bougainville aims to enhance the efficiency and effectiveness of sustainable development initiatives, positioning itself at the forefront of innovation in the pursuit of green—blue growth.

Concurrently, the policy advocates accelerating comprehensive digital transformation across various industries and fields within Bougainville. It envisions the integration of digital technologies across sectors, fostering a digitally enabled ecosystem that not only enhances economic productivity but also aligns with the principles of sustainability.

Policy Objective 6: International Integration and Cooperation

The focus is on fostering collaboration and leveraging international support to position Bougainville as an exemplar in green—blue growth. Through proactive engagement, the aim is to transform Bougainville into a global role model, effectively fulfilling international commitments related to sustainable development and climate change. This collaborative approach seeks to align Bougainville with the global discourse on environmental sustainability, positioning the region as a proactive contributor to international efforts.

Concurrently, the policy advocates for proactive research, education, and training cooperation, enabling enterprises and research institutions to access advanced technologies. The emphasis is on facilitating technological transfer and developing a skilled workforce for green–blue economic sectors in Bougainville. By actively organising

and participating in knowledge-sharing activities related to green—blue growth, Bougainville aims to bolster its capabilities to achieve sustainable development goals. Additionally, the policy encourages proactive coordination and collaboration with the international community to collectively address global and regional challenges in pursuing green—blue growth. This cooperative stance underscores Bougainville's commitment to actively participating in the global efforts towards promoting sustainable development practices and mitigating the impact of climate change.

As a core component of International Cooperation, this policy strongly advocates for Green Diplomacy in regional and international meetings such as the Conference of Parties (COP) for both Biodiversity and Climate Change and the UN General Assembly to increase the visibility of the reality of the challenges facing the atolls and lowland communities affected by Climate Change and rising sea level.

Policy Objective 7: Equality in Green-Blue Transformation

The Bougainville Green Blue Economy Policy underscores the commitment to fostering social inclusivity and equitable access to opportunities while restructuring the economy and renewing the growth model. This imperative particularly emphasises the inclusion of social groups adversely affected by new economic changes, with a focus on ensuring equal access for vulnerable populations such as women and children, minorities such as the atoll communities, the economically disadvantaged, and individuals with disabilities. The policy aims to create an environment where these social groups have or are given equal opportunities, easy access to information, technical infrastructure, and essential social services. This inclusive approach is tailored to align with the evolving dynamics of the green—blue economy, ensuring that all members of society can actively participate and benefit from the emerging fields and employment opportunities resulting from the transition. Through this commitment to social equity, the policy seeks to create a foundation for sustainable development that leaves no one behind.

Policy Objective 8: Mobilise the Participation of Stakeholders

This Policy emphasises mobilising broad-based participation across the political spectrum, government ministries, local administrations, the private sector, social organisations, non-governmental organisations (NGOs), and developmental partners. This collaborative approach ensures a collective commitment to successfully implementing the Green Blue Growth Policy, fostering a shared responsibility for its realisation.

Integral to this endeavour is the reinforcement of leadership and direction at various levels and branches of government. This entails strengthening coordination among presiding agencies, collaborating bodies, socio-political organisations, professional associations, the business community, and NGOs. Additionally, efforts will be directed towards enhancing coordination between national-level authorities and local agencies, facilitating integration and effective execution of the Green Blue Growth Policy across all tiers of governance.

Furthermore, the policy underscores the importance of promoting societal engagement in implementing, supervising, and evaluating the Green Blue Growth Policy. By encouraging active participation from all segments of society, including communities, civil society, and grassroots organisations, Bougainville seeks to ensure transparency, accountability, and inclusivity in enforcing and assessing the policy's impact on the economy's greening trajectory. Bougainville aims to foster a culture of accountability and ownership through collective action and shared oversight, driving the sustainable development agenda forward.

Policy Objective 9: Support Investment in Resilient Infrastructure

Resilient infrastructure plays a pivotal role in facilitating economic growth and ensuring sustainability for the region of Bougainville. It supports the movement of goods and services and the efficient communication and energy supply necessary for fostering broad and equitable growth across the area. Emphasising its criticality for sustainable development, resilient infrastructure must serve as the fundamental basis of the GBE Policy.

Bougainville's road networks, bridges, and other public infrastructure face persistent challenges from climatic conditions and atmospheric pressures. The resulting economic and social costs incurred by the government and residents of Bougainville are significant and cannot be understated. The repercussions of failing infrastructure extend to disrupting education, health, and key social sectors, with long-term societal costs becoming increasingly imminent. The limitations on the movement of goods and services within the region render Bougainville's economy vulnerable to shocks and disasters.

In response to these challenges, this policy strongly advocates leveraging data and qualified engineering and design inputs to fortify public investments in infrastructure against the pressures of climate change. It also underscores the importance of effective infrastructure management to ensure the adoption of international standards and the integration of resilience into infrastructure planning, management, and financing. Furthermore, the policy demands thorough measurement and monitoring of the exposure and vulnerability of infrastructure systems to strengthen the region's overall preparedness and resilience.

Policy Objective 10: Enhance Growth through International Trade

As an autonomous state, Bougainville has no legal powers to establish a separate international trade policy and agreements. However, at a subnational level, this policy advocates leveraging PNG's international trade agreements to foster sustainable economic growth, environmental stewardship, and social inclusivity domestically.

PNG has established multilateral trade agreements under the WTO framework. At the Regional level, PNG is part of the South Pacific Regional Trade, Economic and Commercial Agreement (SPARTECA), the Pacific Islands Countries Trade Agreement (PICTA), and the Melanesian Spearhead Group Trade Agreement (MSGTA). The MSGTA includes PNG, Solomon Islands, Vanuatu, and Fiji. Trade between PNG and Australia is executed through bilateral trade relations through the Trade and Commercial Relations Agreement. These are some opportunities for Bougainville to explore and engage in

through a partnership with the PNG National Trade Office (International Trade Administration - US Government, 2024).

Within the WTO framework, policy options for consideration can include deploying Preferential Treatment for the trade of green products and services to ensure lower tariffs and reduce trade barriers, especially for sustainable agricultural products and sustainably certified consumer goods and services. It is a policy imperative to identify existing trade agreements that PNG has through bilateral or multilateral arrangements to propose business-to-business trade relationships to promote Bougainville's domestic economic and productivity growth. Such an approach would support the establishment and resilience of new and emerging green and blue industries.

Promoting sustainable agriculture, establishing robust certification systems for ecofriendly products, and encouraging the production and export of green goods and services will ensure a comprehensive approach to embedding sustainability across key economic sectors of Bougainville.

New trade relationships outside the WTO are being formed through bilateral agreements and Free Trade Agreements around the green–blue economy. The EU recently enacted the EU Deforestation Regulation to tackle deforestation and forest degradation to reduce greenhouse gas emissions and biodiversity loss⁹. This regulation affects countries like Papua New Guinea, which supply the EU with agricultural commodities like cocoa and coffee. This policy advocates for responsiveness to these new trade regulations underpinned by international agreements such as the Paris Agreement and the Net Zero 2050 Targets.

The Singapore-Australia Green Economy Agreement is another example driven by joint efforts to drive growth while reducing emissions. The agreement combines trade, economic, and climate objectives. It promotes economic cooperation, boosts trade in environmental goods and services, generates new business opportunities, and decarbonises key industrial sectors (Department of Foreign Affairs and Trade, Australian Government, 2024).

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⁹ (Commission, n.d.)

7. Strategy Focus Areas

The policy objectives (Section 6) serve as the government's overarching intent, delineating its priorities in response to current and persistent challenges. Within this framework, the subsequent Strategy Focus Areas delineate the government's strategic approach to achieve its collective vision for a sustainable economy. These focus areas highlight specific pathways and measures through which the government aims to translate its broad policy objectives into actionable strategies for achieving economic sustainability.

7.1. Strategic Focus Area 1 – Enhance Governance Frameworks

Goal

To strengthen governance frameworks at all levels to ensure transparency, accountability, and effective coordination among relevant agencies, ministries, and stakeholders. This goal aims to uphold ethical standards and facilitate cross-sectoral collaboration for sustainable development and environmental conservation.

Actions

7.1.1 Policy Integration

Ensure smooth integration of blue-green growth principles into existing governance structures, policies, and frameworks, aligning them with the Bougainville Green Blue Economy Policy.

7.1.2 Institutional Strengthening

Enhance the capacity of government institutions involved in environmental management, economic planning, and sustainable development through training, recruitment, and strategic organisational development.

7.1.3 Inter-Agency Coordination

Establish effective coordination mechanisms between government departments, ministries, and agencies to promote collaboration and streamline efforts towards green–blue growth objectives.

7.1.4 Legislative Support

Advocate for and enact legislation that supports the goals of the Green Blue Economy Policy, providing a legal framework for sustainable practices, environmental conservation, and climate change resilience.

7.1.5 Public Funding Prioritisation

Strengthen community governments' capacity to implement green—blue growth initiatives, promote decentralised decision-making, and ensure community participation in sustainable development efforts.

7.1.6 Public-Private Partnerships

Foster partnerships between the government and the private sector to encourage investment in green industries, sustainable infrastructure, and technology development.

7.1.7 Capacity Building

Implement comprehensive training programs for government officials to enhance their understanding of green—blue growth concepts, sustainable practices, and effective policy implementation.

7.1.8 Community Involvement

Facilitate community engagement and participation in decision-making processes related to green—blue growth, ensuring that local perspectives and traditional knowledge are considered and incorporated.

7.1.9 Data and Information Management

Establish robust data collection and management systems to monitor progress, assess impacts, and inform evidence-based decision-making in the Green Blue Economy Policy context.

7.1.10 Financial Management

Develop transparent and accountable financial mechanisms to allocate resources efficiently, ensuring budget allocations align with green-blue growth priorities.

7.1.11 Performance Monitoring and Evaluation

Implement a comprehensive system for monitoring and evaluating the performance of green—blue growth initiatives, with regular reporting to assess strategies' effectiveness and identify improvement areas.

7.1.12 International Collaboration

Engage actively with international organisations, development partners, and other nations to share experiences, access technical assistance, and leverage external support to implement the Green Blue Economy Policy.

7.2. Strategic Focus Area 2 – Invest in Industry and Infrastructure

Goal

To catalyse sustainable economic growth and resilience by strategically investing in industry and infrastructure that aligns with green—blue principles. This goal aims to develop modern, environmentally conscious industries, enhance infrastructure resilience, and create a foundation for long-term economic prosperity and ecological balance.

Actions

7.2.1 Green Infrastructure Development

Prioritise constructing environmentally sustainable and resilient infrastructure projects, incorporating green building practices, renewable energy sources, and climate-resilient designs.

7.2.2 **Technology Integration**

Promote the integration of green technologies and innovations in various industries to enhance resource efficiency, reduce emissions, and support sustainable practices.

7.2.3 Circular Economy Practices

Encourage the adoption of circular economy principles, emphasising the efficient use of resources, waste reduction, and recycling across industries.

7.2.4 Green Industrial Zones

Develop designated green industrial zones that adhere to environmental standards and promote eco-friendly manufacturing processes, supporting the growth of sustainable industries.

7.2.5 Renewable Energy Transition

Accelerate the transition to renewable energy sources, such as solar, wind, and hydroelectric power, to reduce reliance on fossil fuels and decrease industries' carbon footprints.

7.2.6 Incentives for Green Businesses

Implement financial incentives and support mechanisms for businesses adopting green practices, including tax breaks, grants, and subsidies for environmentally friendly initiatives.

7.2.7 Sustainable Agriculture

Promote sustainable agricultural practices that align with green-blue growth objectives, emphasising organic farming, agroforestry, and eco-friendly approaches to food production.

7.2.8 Eco-Tourism Development

Encourage the development of eco-tourism initiatives that showcase Bougainville's natural beauty and biodiversity while promoting responsible tourism practices.

7.2.9 Smart Communities and Digital Transformation

Facilitate comprehensive digital transformation in planning and infrastructure development, promoting the concept of smart communities that prioritise resource efficiency and environmental sustainability.

7.2.10 Natural Resource Management

Implement policies and practices that ensure responsible and sustainable management of natural resources, preventing over-exploitation and environmental degradation.

7.2.11 Waste Management Strategies

Develop and implement effective waste management strategies, including recycling programs, waste-to-energy initiatives, and reduction of single-use plastics.

7.2.12 Eco-Industrial Parks

Establish eco-industrial parks that encourage collaboration among industries, resource sharing, waste reduction, and fostering a sustainable and interconnected industrial ecosystem.

7.2.13 Green Supply Chain Management

Encourage businesses to adopt green supply chain practices, including sourcing from environmentally responsible suppliers and promoting sustainable production methods.

7.2.14 Skills Development for Green Jobs

Facilitate training programs and educational initiatives to equip the workforce with the skills needed for green jobs in emerging sustainable industries.



Figure 4: Bougainville is blessed with many natural assets. Team members of biodiversity survey team in South Bougainville.

7.3. Strategic Focus Area 3 – Provide Financing and Business Support Services

Goal

To establish a robust and inclusive financial ecosystem that mobilises diverse sources of funding, fosters private sector engagement, and provides tailored business support services, ensuring sustained investment in environmentally sustainable initiatives.

Actions

7.3.1 Green Financing Mechanisms

Develop and implement financial instruments and mechanisms that incentivise investments in green-blue growth initiatives, including green bonds, loans, and venture capital funds.

7.3.2 Public-Private Partnerships

Facilitate collaborations between the public and private sectors, encouraging private investment in sustainable projects and businesses aligned with the Green Blue Economy Policy.

7.3.3 Financial Incentives for Green Businesses

Introduce tax incentives, grants, and subsidies to encourage businesses to adopt environmentally sustainable practices and technologies.

7.3.4 Capacity Building for Financial Institutions

Provide training and capacity-building programs for financial institutions (Mama Bank) to enhance their understanding of green—blue growth, enabling them to better assess and support sustainable projects.

7.3.5 Risk Mitigation Measures

Implement mechanisms to mitigate the risks of green—blue investments, including insurance products, risk-sharing agreements, and innovative financial instruments.

7.3.6 **Green Venture Capital**

Establish and promote venture capital funds supporting start-ups and businesses engaged in green technologies, renewable energy, and sustainable practices.

7.3.7 Green Credit Lines

Collaborate with financial institutions to establish dedicated credit lines for businesses involved in green-blue growth, ensuring easier access to capital for sustainable initiatives.

7.3.8 Sustainable Investment Criteria

Encourage financial institutions to adopt and adhere to sustainable investment criteria, considering environmental, social, and governance (ESG) factors in their decision-making processes.

7.3.9 Public Funding Prioritisation

Ensure that public funds, including those from the state budget, prioritise investments in green-blue growth projects and initiatives to create a conducive environment for sustainable development.

7.3.10 Financial Support for Research and Innovation

Allocate funds to support research and innovation in green technologies and sustainable practices, fostering the development of new solutions that contribute to green-blue growth.

7.3.11 Inclusive Financial Services

Promote financial inclusion by ensuring that women, vulnerable groups, and small-scale enterprises can access financial services that support their participation in green-blue initiatives.

7.3.12 Monitoring and Reporting Mechanisms

Establish robust systems for monitoring and reporting on the allocation and utilisation of funds for green—blue growth, ensuring transparency, accountability, and the efficient use of resources.

7.3.13 Green Certification Programs

Encourage the development and adoption of green certification programs for businesses. This will ensure that those adhering to sustainable practices receive recognition and attract more financial support.

7.3.14 Stakeholder Engagement in Financing

Develop financing mechanisms by involving businesses, financial institutions, and other stakeholders and ensuring that they align with the needs and priorities of the green-blue economy.

7.3.15 International Collaboration in Financing

Seek collaboration with international financial institutions, development partners, technical experts, and donors to access additional financing and technical assistance for blue-green growth projects.

7.4. Strategic Focus Area 4 – Build and Strengthen Partnerships

Goal

To cultivate strong partnerships and collaborative networks among government agencies, private sector entities, civil society organisations, local communities, and international partners to drive collective action towards achieving the objectives of the Bougainville Green Blue Economy Policy. This goal aims to leverage expertise, resources, and perspectives to foster innovation, enhance capacity, and promote inclusive and sustainable development practices.

Actions

7.4.1 Multi–Stakeholder Engagement

To ensure a collaborative approach to green—blue growth, foster partnerships with diverse stakeholders, including government agencies, local communities, private sector, businesses, non-governmental organisations (NGOs), academia, and international organisations.

7.4.2 Public-Private Partnerships (PPPs)

Actively promote and facilitate PPPs to leverage private sector resources, expertise, and innovation in implementing green—blue economy initiatives.

7.4.3 Community Collaboration

Engage local communities in the decision-making process, ensuring that their perspectives, traditional knowledge, free, prior and informed consent (FPIC) and needs are met and considered when developing and implementing green-blue projects.

7.4.3 Inter–Governmental Collaboration

Strengthen collaboration between different levels of government (local, regional, national) to align policies, share resources, and coordinate efforts for effective green—blue growth.

7.4.4 Cross–Sectoral Collaboration

Encourage collaboration across various sectors, such as agriculture, industry, energy, and education, to ensure a holistic and integrated approach to green-blue economy strategies.

7.4.5 Knowledge Sharing Platforms

Establish platforms for knowledge sharing and exchange of best practices among stakeholders, facilitating the dissemination of information and lessons learned in green–blue growth.

7.4.6 Research, Development and Innovation Networks

Foster networks for research, development and innovation, connecting research institutions, universities, and businesses to promote the development and application of sustainable technologies.

7.4.7 International Collaboration

Actively seek collaboration with international organisations, development partners, and neighbouring countries to access technical expertise, financial support, and best practices in implementing a green–blue economy.

7.4.8 Business Associations and Chambers of Commerce

Collaborate with business associations and chambers of commerce to engage the private sector in green-blue initiatives and encourage environmentally responsible business practices.

7.4.9 Capacity Building Programs

Develop and implement capacity-building programs to enhance the skills and knowledge of stakeholders involved in green-blue growth, ensuring effective implementation and management.

7.4.10 NGO and Civil Society Engagement

Partner with non-governmental organisations (NGOs) and civil society groups to leverage their grassroots connections, advocacy, and community mobilisation efforts to support green–blue initiatives.

7.4.11 Joint Research Projects

Collaborate on joint research projects with academic institutions and research organisations to address specific challenges and opportunities related to green-blue growth.

7.4.12 Regular Consultation Mechanisms

Establish regular consultation mechanisms, such as advisory boards or forums, to gather input from diverse stakeholders on policy development, project planning, and strategy implementation.

7.4.13 Joint Financing Initiatives

Explore joint financing initiatives with partners, sharing the financial burden and creating a pool of resources to fund green—blue economy projects.

7.4.14 Monitoring and Evaluation Working Groups

Form working groups involving various stakeholders to monitor and evaluate green—blue economy initiatives, ensuring ongoing feedback and improvement.

7.5. Strategic Focus Area 5 – Invest in Human Resource Development

Goal

To cultivate a skilled, adaptable, and empowered workforce through strategic investments in human resource development. This goal aims to enhance education, training, and capacity—building initiatives that equip individuals with the knowledge and skills required for active participation in the Bougainville Green Blue Economy, fostering a sustainable, knowledgeable, and innovative society

Actions

7.5.1 **Curriculum Integration**

Collaborate with educational institutions to integrate green-blue growth principles into formal education curricula at various levels, ensuring that students are equipped with knowledge relevant to sustainable practices.

7.5.2 **Specialised Training Programs**

Develop and implement specialised training programs and courses focused on greenblue economy concepts, technologies, and practices to enhance the skills of the workforce.

7.5.3 **Professional Development**

Provide opportunities for professionals to engage in continuous learning and development related to green—blue growth, encouraging certifications and ongoing education in sustainable practices.

7.5.4 Research Scholarships and Training

Establish scholarships and grants to support research initiatives and studies focused on topics related to the green–blue economy, fostering innovation and knowledge creation.

7.5.5 **Technical and Vocational Education**

Enhance technical and vocational education programs to include training in green skills, ensuring that the workforce is proficient in areas relevant to sustainable industries.

7.5.6 Internship and Apprenticeship Programs

Facilitate partnerships between businesses and educational institutions to offer internship and apprenticeship programs, providing hands-on experience in green–blue industries.

7.5.7 **Entrepreneurship Support**

Provide support for aspiring entrepreneurs in green-blue sectors, including mentorship programs, access to funding, and assistance in business development.

7.5.8 Capacity Building for Indigenous Communities

Implement programs that enhance the skills and capacities of Indigenous communities, ensuring their active participation and benefit from green—blue initiatives.

7.5.9 **Women and Youth Empowerment**

Prioritise programs that empower women and youth through skill development and educational opportunities, promoting inclusivity and diversity in the green-blue workforce.

7.5.10 Language and Cultural Competency Training

Provide training on language and cultural competency, ensuring the workforce is equipped to work collaboratively and respectfully with diverse communities.

7.5.11 Green Innovation Hubs

Establish innovation hubs or centres that focus on green technologies, encouraging collaboration between researchers, entrepreneurs, and students to drive innovation in sustainable practices.

7.5.12 Lifelong Learning Programs

Implement lifelong learning initiatives that encourage continuous education and skill development throughout individuals' careers, keeping them abreast of advancements in green-blue growth.

7.5.13 Partnerships with Industries

Collaborate with businesses and industries to identify specific skill requirements, tailoring educational and training programs to meet the evolving needs of the green-blue workforce.

7.5.14 International Exchange Programs

Facilitate exchange programs with international institutions, allowing individuals to gain exposure to global best practices and bring valuable insights and resouces back to Bougainville.

7.5.15 Monitoring and Evaluation of Educational Programs

Establish mechanisms to monitor and evaluate the effectiveness of educational and training programs, adjusting them as needed to align with the evolving demands of the green-blue economy.

8. Implementation Plan for Green Blue Growth

8.1 Establish a Coordination Framework (Short Term)

A four–tiered coordination framework will enhance legislative and policy alignment, ensuring effective governance and sustainable impact across Bougainville. The framework will be legitimised through a coordination policy and a Bougainville Executive Council (BEC) Decision.

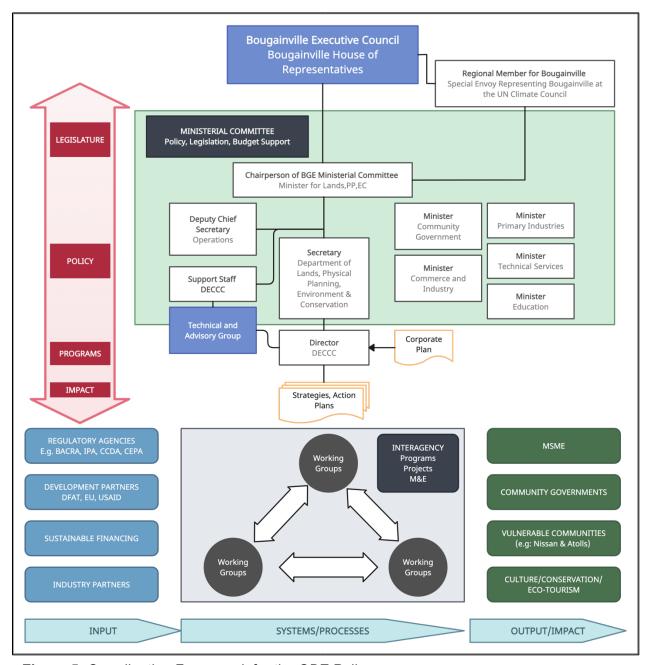


Figure 5: Coordination Framework for the GBE Policy

8.1.1. Ministerial Committee Reporting to the BEC

At the highest level, a Ministerial Committee chaired by the Minister for Lands, Physical Planning, Environment, Conservation, and Climate Change will oversee policy implementation. The Vice-Chair will be the Minister for Primary Industry, reflecting agriculture, fisheries, and forestry as key drivers of green growth. This committee will include additional ministries, such as:

- Ministry of Commerce and Industry: Focusing on green industrialisation and trade.
- Ministry of Education: To build human capacity for sustainable development.
- Ministry of Technical Services: Ensuring resilience in infrastructure design.
- Ministry of Community Government: Extending policy benefits to village and community levels.

The ABG Public Service, with representation from the ABG Deputy Secretary (Operations) and the Secretary for Lands, will ensure that relevant line agencies implement decisions.

8.1.2. Interagency Coordination

The **Directorate for Environment, Conservation, and Climate Change** will act as the Lead Agency, managing projects and establishing Technical Working Groups (TWGs) for specialised areas. The policy outlines clear roles for supporting departments in the Institutional Arrangements section.

8.1.3. Partners

To support project execution, the policy will engage with various partners for technical expertise and funding, including:

- Regulatory Bodies: BACRA, IPA, CEPA, CCDA, and others.
- National Government Departments: Agriculture, Trade, and National Planning.
- Development Partners: EU, USAID, DFAT.
- Sustainable Financing Institutions: GCF, commercial and investment banks.
- **Industry Partners**: Universities, investors, private sector and multinational corporations.

8.1.4. Stakeholders

Key stakeholders include:

- Micro, Small, and Medium Enterprises (MSMEs),
- Community governments,
- Vulnerable populations (e.g., Atolls and Nissan),
- Ecotourism groups, conservation communities, cultural groups and artisans.

This framework will ensure coordinated policy implementation, sustainable growth, and a wide-reaching impact.

8.2 Medium to Long-Term Goals

In the medium to long–term, this policy will take a sector development approach to ensure the attainment of economic and productivity growth. The administration, management and coordination of the entire ecosystem are the primary responsibilities of the Secretariat, and the key sectors are required to report on the outcomes as required by legislation.

Table 2: Forestry Sector Plan

Medium-term Targets (2026)	Long-term Targets (2030)
 Bougainville Forest Act and Forest Management Plan endorsed by the ABG. 	A dedicated Forestry Agency in Bougainville with sufficient technical and institutional capacity is operational.
Bougainville Forest Inventory process initiated, relevant climate and land-use policies/plans developed and endorsed by the ABG.	 The Forest Inventory is completed, the forest monitoring system is operational and ABG's readiness to participate in carbon trading in compliance with national and international obligations.
 Downstream process initiated to process timber in compliance with sustainability standards. 	At least five sawmills are operational with more than 200 green jobs.

Table 3: Energy Sector Plan

Medium-term Targets (2026)	Long-term Targets (2030)
A comprehensive feasibility study of all Renewable Energy conducted across Bougainville and a package of potential projects identified and submitted to ABG.	At least 300 households are supplied with electricity through renewable energy projects.
A dedicated Bougainville Water and Energy Authority is established, and institutional capacity strengthened.	Revenue generation from Renewable Energy Sources operationalised by the Water and Energy Authority.
The Bougainville Water and Energy Authority has representation in each district (13) and the District Energy Development Plans.	At least 20% of the District Energy Development Plans are effectively implemented.

Table 4: Fisheries Sector Plan

Medium-term Targets (2026)	Long–term Targets (2030)
 Benefit Sharing Agreement with the National Fisheries Authority is operational and ABG is effectively utilising 15% of the fisheries net 	 A designated Bougainville Fisheries Authority is operational, institutional and organisational

	profits for economic growth. Don't put hope on this.		capacity strengthened and revenue generation identified.
•	Centralised fisheries data management is commissioned, introducing innovative data management technologies and capacity building.	•	A centralised fisheries data management is operationalised, including an M&E system to effectively oversee fishery activities in Bougainville waters.
•	20% of coastal communities are engaged in family-based downstream processing of marine products and 100 unemployed youth are provided with jobs.	•	At least one marine product processing facility is operational and 300 unemployed youth are provided with jobs.

 Table 5: Agriculture Sector Plan

Medium-term Targets (2026)	Long–term Targets (2030)
 Agricultural cooperatives in 33 constituencies by the ABG in compliance with the Cooperative Act. 	 70% of cooperatives are fully operational and contributing to Bougainville's economy.
At least one Chocolate and White Copra Factory/processing plant established in Bougainville.	 Chocolate and White Copra Factory/processing plant is fully operational, with more than 200 jobs created and a % volume of exported commodities to the international market in compliance with international sustainability standards.
A Commercial Livestock Facility established in Torokina to supply local markets.	 The Commercial Livestock Facility is fully operational, with a % volume of quality meat products supplied to the local market at affordable prices.

Table 6: Tourism Sector Plan

Medium-term Targets (2026)	Long–term Targets (2030)
 A Sustainable Domestic Eco-Tourism Policy developed and endorsed by the ABG and relevant MoAs with TPA signed to support the tourism industry in Bougainville. 	 A number of Tourism Infrastructure such as Diving Shops, Culture, and Cottage Industries established and operational.
 Bougainville Tourism and Cottage Industry promoted and marketed at the national and international space (digitalisation, website, ect). 	Operational Tourist Registry with effective feedback mechanism.
Positive outcomes of negotiations with Air, Cruise and Mobile Companies to reduce the costs of travel to /from Bougainville.	 Sustainable partnership with Air, Cruise and Mobile Companies to develop ecotourism industry in Bougainville with significant contribution to the economy.

Table 7: Markets, Industry and Innovation Plan

Medium-term Targets (2026)	Long-term Targets (2030)
 Establish partnerships with financial institutions and investors to develop innovative funding mechanisms tailored to the needs of green businesses. 	The established funding mechanisms are funding 10 green businesses. This will be a start-up scale to test the systems, governance, and enforcement of any laws and regulations.
 Develop Bougainville's Innovation Ecosystem and design a Marketing Strategy including branding, trade fairs, exhibitions, and buyer-seller meetings. Support is key to achieve this. 	 Establish Innovation Hubs to facilitate collaboration between research institutions, entrepreneurs and businesses. There are sustainable value chains for green—blue products, and that new products are entering the market within PNG.
	At least one product from the Green–Blue Initiative enters the global market. The experience from this would inform better policy and marketing strategies.
 Develop a legislation for the Carbon Markets and a legislation governing the formation of a Sovereign Wealth Fund 	A model Carbon Offset project is earning revenue for the community and ABG Sovereign Wealth Fund

 Table 8: Protection of Natural and Cultural Heritage Plan

Medium-term Targets (2026)	Long-term Targets (2030)
• The Directorate for Environment, Conservation and Climate Change (DECCC) to develop a Conservation and Biodiversity Management Plan.	The Conservation and Biodiversity Management Plan is published and supporting community—led conservation programs and projects.
Develop plans for the preservation of Natural and Cultural Heritage.	 A conservation area in Bougainville will be on the World Heritage Tentative List. Gazette protected areas on Bougainville
 Planning and designing of the Bougainville Research and Cultural Centre (BRCC). 	Construction of the Bougainville Research and Cultural Centre (BRCC).

8.3 Lead Agencies and their Responsibilities

Three ministers and their departments oversee this policy and its implementation. The Ministry and Departments of Lands, Physical Planning, Environment, Conservation, and Climate Change (DLPPECCC) will be the lead agencies.

8.3.1. Department of Lands, Physical Planning, Environment, Conservation & Climate Change

The Department will play a critical role in managing Bougainville's natural resources, guiding sustainable land use, and addressing climate resilience as part of the Bougainville Green–Blue Economy (GBE) Policy.

Responsibilities include:

- Develop and refine policies aligning land use, physical planning, environmental conservation, and climate change with the Bougainville Green Blue Economy Policy.
- Act as the lead agency overseeing the effective implementation of the Green Blue Economy Policy, ensuring alignment with broader goals and objectives.
- Foster collaboration with government departments, ministries, local authorities, businesses, NGOs, and international partners for a holistic and integrated approach to green-blue growth, including sustainable land use planning, environmental conservation, climate change mitigation and adaptation, capacity building, regulatory framework development, public awareness, and education, as well as monitoring, evaluation, and international collaboration.
- Assume the primary responsibility in instructing, supervising, evaluating and reporting to the President and Bougainville Executive Council about the Policy's implementation on an annual basis, with a mid-term preliminary review in 2027 and a summative review of the Policy's implementation in 2030.

8.3.2. Department of Primary Industries

The Department of Primary Industries (DPI) will lead efforts to transition Bougainville's agriculture, fisheries, and forestry sectors toward sustainable, resilient practices under the Bougainville Green–Blue Economy (GBE) Policy.

Responsibilities include:

- Contribute to policy frameworks that support sustainable resource use and engage smallholder farmers in decision-making processes.
- Implement monitoring systems to track progress in sustainable agriculture, fisheries, and forestry, ensuring alignment with Vision 2052 and Sustainable Development Plan 2027.

- Develop partnerships with international organisations, development partners, and private sectors to support sustainable industries and community initiatives.
- Promote climate—smart, sustainable farming techniques, including agroforestry and organic cocoa production, to boost yields while protecting the environment.
- Ensure sustainable fisheries and develop marine protected areas, supporting aquaculture as a means to enhance livelihoods and food security.
- Promote reforestation and sustainable forestry practices, integrating forest conservation with community benefits.
- Provide training to farmers and communities in sustainable practices, and partner with research institutions to drive innovation.
- Facilitate market access for sustainably certified products and encourage valueadded production, aligning with international standards like the EUDR.

8.3.3. Department of Commerce, Trade and Economic Development

The Department of Commerce, Trade, and Industry is central to driving the economic transition towards sustainability under the Bougainville Green–Blue Economy (GBE) Policy. It promotes green industrialisation, sustainable trade, and innovation–driven enterprises that align with environmental goals and community well-being.

Responsibilities include:

- Facilitate trade agreements and partnerships that emphasise sustainable product exports, aligning Bougainville's trade strategy with global environmental standards such as the European Union Deforestation Regulation (EUDR).
- Ensure the competitiveness of Bougainville's products by supporting industries in meeting international environmental certifications and standards.
- Provide support and capacity building to local SMEs in sustainable sectors, ensuring they have access to markets, financing, and training to enhance productivity while minimising environmental impact.
- Develop programs that encourage eco-innovation among Bougainvillean businesses and startups, driving the adoption of green technologies and practices.
- Foster the development of environmentally friendly industries by supporting businesses that adopt sustainable practices in agriculture, fisheries, forestry, and eco-tourism.

9. Monitoring and Evaluation Mechanisms

Ministry/Department of Lands, Physical Planning, Environment, Conservation and Climate Change shall assume the primary responsibility and coordinate with ministries, departments and other respected organisations in,

- Formulating and promulgating specific instructions and regulations on supervising, evaluating and the mode of reporting on the Policy's implementation.
- Conducting the monitoring, inspection, supervision and evaluation of the Strategy's implementation outcomes and reporting the Policy's implementation outcomes annually to the President.
- On an annual basis, ministries, departments, and localities shall submit reports on the implementation outcomes of the Green Blue Growth Action Plan to the PNG Department of National Planning and Monitoring, the Climate Change Development Authority, and the Conservation and Environment Protection Authority.
- In implementing the Strategy, the Minister of Lands, Physical Planning, Environment, Conservation and Climate Change shall promptly report any issues that arise to the Bougainville House of Representatives or President.
- Encourage the participation of stakeholders, including the business community, social organizations, and non-governmental organisations along with domestic and international organisations in the provision of information and documents to serve the purpose of evaluating the Strategy's implementation outcomes.

Indicators:

The following indicators to measure the progress and success of the implementation of this policy by 2026 are categorised;

A. Policy and Legislations

- A 10-Year Implementation Plan is developed and adopted
- Subsidiary Policies (Environmental Policy, Carbon Policy, Oceans Policy, Innovation and Green Industrialisation Policy) and their consequential legislations are enacted.

B. <u>Institutional Strengthening</u>

- A Human Resource Development Plan is enacted and implemented
- At least 10 Strategic Partnership Agreements are developed within the region, nationally and globally

C. Business and Community

- Financial Services and SME Innovation Grants established
- A Biodiversity Trust is established

10. Institutional Arrangements

This policy requires strong partnerships within the ABG agencies to fully deliver on its intended policy deliverables. As a coordinating framework, there has to be institutional arrangements, through legislation or agreement, for the DECCC to work closely with the following ABG departments.

10.1 Department of Technical Services

Infrastructure Development

The Department of Technical Services is crucial in implementing the Bougainville Green Blue Economy Policy by overseeing infrastructure development projects. This includes planning, designing, and managing the construction of environmentally sustainable infrastructure, such as roads, buildings, and utilities, in alignment with green—blue growth principles.

Energy and Utilities

The department is responsible for implementing energy and utility projects that support the transition to renewable energy sources and promote energy efficiency. This involves integrating green technologies into the energy sector and ensuring utilities are developed in an environmentally friendly manner and affordable.

10.2 Department of Education

Human Resource Training

The Department of Education collaborates with other departments, particularly the lead agency, to coordinate human resources training programs for implementing the Green Blue Economy Policy. This includes developing curriculum components related to green—blue growth, fostering awareness, and providing training opportunities to build the skills needed for sustainable development practices.

GBE Policy requires the population to be educated of its importance for long-term benefits as far as the natural environment is concerned. We have destroyed the planetary beings and our attitude and behaviour should change for betterment of our living.

Institutional Development

One of the greatest challenges and development constraints that Bougainville must address is the absence or limited availability of higher education institutions in the region. Progressing policy initiatives and ensuring that the domestic economy is competitive, there has to be a broader policy discourse on investments to establish higher education institutions that will build the critical mass of knowledgeable and skilled labour force

required to drive economic and productivity growth. The Department of Education will be a valuable partner in driving and delivering this critical outcome.

10.3 Department of Primary Industry

Agriculture, Fisheries, and Forestry Sector

The Department of Primary Industry is a critical player in promoting sustainable agriculture, fisheries, and forestry practices. Its role involves implementing policies and initiatives that align with green—blue growth objectives, encouraging environmentally friendly farming and fishing practices, and ensuring the conservation of forestry resources. The department actively contributes to the sustainable management of natural resources within the green—blue framework. The shift towards a more sustainable planet is gaining momentum, with developed economies like the EU developing regulations to encourage good practices within global food value chains.

Regulatory Measures and Standards

The Department of Primary Industries has a commodity board enacted through the Bougainville Commodity Regulatory Act (BACRA). BACRA has a regulatory responsibility to ensure that commodities are safe and meet international standards, ensuring that Bougainville becomes a source of high-quality produce grown under sustainable practices.

10.4 Department of Health

Health and Wellbeing

The Department of Health addresses health-related aspects of the Bougainville Blue Green Economy Policy. This includes developing and implementing initiatives that enhance community health and well-being, especially those linked to environmental conservation and sustainable practices. The department collaborates with other agencies to ensure that green—blue policies positively impact the health of Bougainville's population.

Emerging Diseases

The changing climatic conditions are playing a role in accelerating the emergence, resurge, and redistribution of infectious diseases. Diseases, especially those transmitted by insects, are becoming responsive to the changing climate and are becoming public health issues in areas that they were previously not known for in distribution. Transmission of infections through water, food and soil are also on the rise (Anwar A, 2019). In addition, natural disasters and extreme weather systems are displacing communities and also affecting food systems, generating an environment for disease outbreaks requiring emergency responses and added economic constraints. The Department of Health and

its affiliates will have a role to play to ensure the populations health are protected to ensure economic productivity is maintained.

10.5 Department of Community Government

Rural and Community Interests

The Department of Community Government focuses on representing and addressing the interests of rural and local communities in implementing the Green Blue Economy Policy. Its role involves facilitating community engagement, ensuring that policies consider local perspectives, and supporting initiatives that promote sustainable development at the grassroots level. The department is a vital link between the government and rural communities to ensure their active participation in green—blue initiatives.

Data and Governance

The lack of data in the government's social and economic planning can lead to the misallocation of resources and stagnant growth. In Bougainville, where most of the population lives in rural areas, the community governments remain the local representatives of the ABG, with direct links to these rural and disbursed communities and people. In this regard, Community Governments across Bougainville have a pivotal role in providing the ABG with insights from the communities, aiding in decision-making, and driving better outcomes that people can see and feel. It is a policy imperative to build the capacity of Community Government to generate accurate and reliable data to promote evidence-based decision making, especially in the Green–Blue Economy space.



Figure 6: A business development training program underway for conservation communities in Siwai, South Bougainville

11. Budget Considerations

Resources to implement the Policy include capital from the state budget, the capital of investors, development grants, and other sources of capital that can be legally mobilised in accordance with the existing provisions of the law.

State budget funds will be allocated according to the established government structure. Based on the goals and tasks outlined in the Strategy, ministries, departments, and local authorities will create specific investment projects or budget plans. These will then be implemented in line with existing regulations.

In accordance with the provisions of the law, step up the mobilisation of financial resources from organisations, individuals and enterprises from within and outside of the country that participate in the Policy's implementation; integrate tasks that have been assigned to ministries, departments in public investment programs and other related national target programs.

12. Policy Review

The Autonomous Bougainville Government, through its ongoing Joint Supervisory Body engagements with the PNG Government, has committed to achieving Bougainville's independence from PNG by 2027. Given the timing per the ABG, this policy will undergo reviews at the following times.

- i. December 2026: A review of this policy will be conducted in 2026 to assess its progress and impact.
- ii. December 2027: After Bougainville attains independence, the policy will be subject to a separate jurisdiction and mandate. A major review will be conducted to adjust it to align with the new constitution and legislation.

13. Conclusion

This policy is a blueprint that aligns economic development with environmental stewardship, ensuring a harmonious and sustainable future for the region. It encapsulates the collective commitment and a shared vision to preserve Bougainville's natural resources, foster resilience, and steer the region towards inclusive growth.

We extend a call for collaborative action from all sectors – government, businesses, and communities alike. The success of this policy hinges on the active participation and commitment of every stakeholder. Governments must enact supportive regulations, businesses should integrate sustainable practices, and communities must embrace and contribute to the shared vision. Through collaboration, we can build a resilient and thriving Bougainville that not only meets the needs of the present but safeguards the ecological wealth for generations to come.

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