



GGGI

Fiji Country Planning Framework 2019 -2023







Copyright © December 2019

The Global Green Growth Institute
19F Jeongdong Building, 21-15, Jeongdong-gil
Jung-gu, Seoul, Korea 100-784

The Global Green Growth Institute does not make any warranty, either express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed of the information contained herein or represents that its use would not infringe privately owned rights.

Foreword

Fiji's 5-Year and 20-Year National Development Plan (NDP) 2017-2036 sets out a strategic, sustainable, and environmentally sound green growth pathway to guide and support the nation's development. Within the scope of Fiji's larger development priorities are clear blueprints for reducing carbon emissions, increasing renewable energy use, increasing resource productivity, improving the management of natural resources, and committing to an integrated approach that fosters an inclusive, enabling environment that benefits all Fijians.

Fiji is a hub of development in the Pacific, and has significant natural resources, robust tourism and services sectors, and growing manufacturing, textiles and agricultural sectors. Fiji has achieved ten consecutive years of economic expansion, with sustained positive growth projected in the years ahead. On the back of a surging economy, Fiji is ambitiously building its resilience to the intensifying impacts of climate change and, on the world stage, has emerged as a leading champion for climate action.

Fiji was the first country to ratify the Paris Agreement and was the first Small Island Developing State (SIDS) to hold the Presidency of the Conference of the Parties (COP). Fiji has established its National Adaptation Plan to build the climate resilience of the Fijian economy and people, the Nationally Determined Contribution (NDC) Implementation Roadmap 2017-2030 to meet Paris Agreement commitments, and the Low Emission Development Strategy (LEDS) 2018-2050 to achieve net zero carbon emissions.

Through the implementation of innovative policies and strategies Fiji has committed to advocating and achieving climate resilient green growth at home and on the international stage. This Country Planning Framework (CPF) outlines how Fiji and the Global Green Growth Institute (GGGI) will partner in support of these goals over a five-year period. Fiji became a member of GGGI in 2014. The Fijian Government signed a Host Country Agreement with GGGI in 2015, with the GGGI Office in Suva, Fiji, being established in the Ministry of Economy in October of that year.

The Fiji 2019-2023 CPF will focus on increasing renewable energy generation capacity, reducing the dependence on fossil fuels in the transport sector, and developing inclusive green towns and cities while integrating climate change adaptation needs across these areas. Achieving these outcomes will help Fiji move towards a low carbon, climate resilient pathway that also results in improved livelihoods, reduced poverty and achievement of the NDC and the Sustainable Development Goals (SDGs).

Affirming our partnership and commitment, both the Fijian Government and GGGI extend their appreciation to the line ministries, local partners and global stakeholders for their support and contribution to this CPF.

Signed by two parties,



Dr. Frank Rijsberman
Director General
Global Green Growth Institute



Hon. Aiyaz Sayed-Khaiyum
Attorney-General and Minister for Economy
Government of the Republic of Fiji



Table of Contents

Abbreviation and Acronyms	v
1 Executive Summary	1
1.1 Background	1
1.2 National Priorities	1
1.3 About the Country Planning Framework	2
1.4 GGGI's Impact Pathway	3
1.5 Overall Impact	6
2 Introduction to the Country Planning Framework	7
3 Green Growth Context	9
3.1 Macro-Economic and Fiscal Trends	9
3.2 Environmental Sustainability	10
3.3 Poverty Reduction and Social Inclusion	10
4 National Priorities	13
4.1 Political Economy of Green Growth	13
4.2 The National Development Plan	13
4.3 Green Growth Framework	14
4.4 Nationally Determined Contributions	14
4.5 Low Emission Development Strategy	16
4.6 Energy and Transport Sectoral Plans	16
4.7 Sustainable Development Goals	17
5 GGGI's Engagement in Fiji	18
5.1 GGGI's Achievements to Date	18
5.2 GGGI's Comparative Advantage in Fiji	19
6 Theory of Change	21
6.1 Strategic Outcome 1: Reduced dependency on fossil fuels, reduced greenhouse gas emission and increased resilience through increasing renewable energy generation	21
6.2 Strategic Outcome 2: Strengthened investment and enabling environment for resilient, low-carbon city and town development	24
6.3 Strategic Outcome 3: Reduced reliance on fossil fuels and strengthened sustainability and efficiency in the transport sector	28
6.4 Overall Impact	29

Abbreviations and Acronyms

BAU	Business as Usual
CO₂	Carbon Dioxide
COP	Conference of the Parties
CPF	Country Planning Framework
DoE	Department of Energy
EFL	Energy Fiji Limited
FAO	Food and Agriculture Organization
FJD	Fiji Dollar
GDP	Gross Domestic Product
Gg	Giga-grams (10 ⁹ grams = one billion grams) of GHG emissions
GGF	Green Growth Framework for Fiji
GGGI	Global Green Growth Institute
GHG	Greenhouse Gas
GCPV	Grid-connected Photovoltaic
IPP	Independent Power Producers
LEDS	Low Emissions Development Strategy
MoE	Ministry of Economy
MW	Megawatt
NAP	National Adaptation Plan
NDC	Intended Nationally Determined Contribution
NDP	National Development Plan
PPA	Power Purchase Agreements
PV	Photovoltaic(s)
SDG	Sustainable Development Goal
SIDS	Small Island Developing State(s)
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar

1 Executive Summary

1.1 Background

1. Fiji is a hub for the Pacific region, and has significant natural resources; large tourism, manufacturing, textiles and agricultural sectors; and a strong services sector. Fiji has experienced nine continuous years of economic growth, making this the longest period of sustained growth since independence in 1970.¹ Economic growth is projected to reach 3.2% in 2018 and 3.4% in 2019 with major contributions from public administration, wholesale and retail trade, manufacturing, agriculture, accommodation and food services, and construction.² Fiji is one of the largest and most developed economies in the Pacific. In 2017, Fiji graduated to the group of upper middle-income countries with a current per capita income of approximately FJD 10,000.³ Based on current economic performance, economic outlook and projected population growth, Fiji is aiming to achieve a fourfold increase in per capita income by 2036. In this context, Fiji is targeting a sustained annual real gross domestic product (GDP) growth averaging 4 to 5%, investment levels of 25% of GDP and an inflation target of 2 to 3%.⁴
2. Going forward, sustaining strong economic growth will require a strengthening of the economic base, with a focus on increasing opportunities for low-income households, while building resilience to climate change impacts and natural disasters. Fiji is vulnerable to shocks due to its considerable distance from markets, a population dispersed across a large archipelago, and exposure to natural disasters, which are being exacerbated by the impacts of climate change. Poverty has steadily declined in Fiji, with extreme poverty now rare, however, many households continue to face hardship, such as lack of access to improved sanitation, quality education and health care, and employment or income earning opportunities. The country is still heavily dependent on imported fossil fuels for electricity

and transportation, which has had a negative effect on balance of payments, as the economy has expanded over the last decade. Fiji has the potential to achieve climate resilient green growth through increasing renewable energy generation capacity, moving towards sustainable transport systems, and developing inclusive green towns and cities integrating adaptation to climate change.

1.2 National Priorities

3. The 5-Year and 20-Year National Development Plan (NDP) 2017-2036 for Fiji expresses a clear dedication to green growth, committing the government to an inclusive, pro-poor, environmentally sound green growth pathway. The NDP, moreover, supports and complements the Fiji Green Growth Framework (GGF), which has guiding principles of reducing carbon emissions, increasing resource productivity, improving the management of natural resources, and committing to an integrated approach that results in a strong and inclusive enabling environment. In the NDP, green growth is listed as a transformational strategic thrust and key guiding principle in the implementation of the NDP. The NDP includes goals, policies, and strategies for achieving climate resilient green growth through 100% renewable electricity provision, the development of low-carbon transport options, and strengthening green urban planning to serve Fiji's people and economy.
4. A core goal of the NDP is a resource-efficient, cost-effective and environmentally sustainable energy sector. The NDP has identified the green energy projects needed to achieve 100% access to electricity by 2021 and 100% electricity generation from renewable energy sources by 2036. These electricity infrastructure projects will be climate resilient. Energy efficiency is also a focus of the NDP, with the codes and standards for buildings and

¹ Government of the Republic of Fiji, *Economic and Fiscal Update Supplement to the 2018-2019 Budget Address*, (2018).

² Government of the Republic of Fiji, *Budget Briefing*, (2018).

³ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

⁴ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

industry to be updated to require mandatory minimum standards for energy use for ventilation, cooling and lighting, among other improvements – these can typically reduce electricity consumption by around 25%.

5. Urban sustainability is another priority area of the NDP, and creation of vibrant and environmentally sustainable urban centers which are adapted to climate change impacts is listed as a goal. Fiji is experiencing rapid urbanization, and the government aims to develop town and city centers that promote green growth initiatives including green energy, effective and environmentally friendly transport systems, green building construction, and technology advancement. The NDP also puts forward a number of policies and strategies for strengthening urban planning, including through building Fiji's capacity to undertake climate vulnerability assessments and developing climate resilient infrastructure.
6. The NDP also prioritizes the development of sustainable road and maritime transportation. Under the NDP, road transportation will be modernized and made more energy-efficient and environmentally friendly, with better emission and fuel standards to be adopted. The government also plans to support importation and use of fuel-efficient hybrid and electric vehicles to reduce fuel importation and reduce greenhouse gas (GHG) emissions. Another policy of the NDP is to achieve environmentally sound and sustainable shipping services, including through providing low-carbon shipping options and reducing levels of marine pollution.
7. The Fiji NDC Implementation Roadmap 2017-2030 outlines Fiji's pathway for achieving mitigation actions in the energy sector and achieving the transformational change called for under the Nationally Determined Contribution (NDC) of Fiji. The NDC of Fiji is specific to the energy sector, and has a focus on achieving mitigation through reducing electricity, industry, and transport GHG emissions. The Fijian Government has also prepared its Low Emissions Development Strategy (LEDS)

targeting net-zero emissions by 2050, as well as a comprehensive Climate Vulnerability Assessment and a National Adaptation Plan (NAP), recognizing the need to build resilience and adapt to climate change and emphasizing the need for strengthening of sub-national planning. Together these strategies lay the foundations for resilient, low carbon development for Fiji.

8. As the first country to ratify the Paris Climate Change Agreement, the first Small Island Developing State (SIDS) holder of the Presidency for Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), and one of the first SIDS to develop a comprehensive LEDES, Fiji has demonstrated global and regional leadership in the pursuit of climate action. The Global Green Growth Institute (GGGI) is core partner in the establishment of the Pacific Regional NDC Hub, which is hosted by Fiji, to implement Fiji's and the Pacific's NDCs. More broadly, Fiji acts as a base for GGGI's regional assistance, which enables the sharing of Fiji's and GGGI's global experience on green growth with other Pacific Island Countries.

1.3 About the Country Planning Framework

9. In line with the NDP and other national priorities, GGGI's Fiji 2019-2023 Country Planning Framework (CPF) will focus on increasing renewable energy generation capacity, reducing the dependence on fossil fuels in the transport sector, and developing inclusive green towns and cities while integrating climate change adaptation needs across these areas. Achieving these outcomes will help Fiji move towards a climate resilient pathway that also results in improved livelihoods, reduced poverty and achievement of the NDC and the Sustainable Development Goals (SDGs).

1.4 GGGI's Impact Pathway

10. Strategic Outcome 1: Reduced dependency on fossil fuels and reduced greenhouse gas emissions and increased resilience to climate change through increasing electricity generation from renewable energy sources and mobilizing associated finance

GGGI's interventions will support the government's goals of:

- 100% electricity generation from renewable energy sources by 2036 (NDP).
- 30% reduction in greenhouse gas emissions by 2030 from 2013 baseline (NDP and NDC).
- Ensuring access to affordable, reliable, modern, sustainable energy, increasing the share of renewable energy and expanding infrastructure and upgrading technology for equitably supplying modern and sustainable energy services (NAP).

11. Fiji has committed domestically in the NDP, and internationally in its NDC, to increase electricity generation from renewable energy sources to 100%. The NDP puts forward targets, strategies and policies for increasing electricity generation from hydro, solar and biomass sources. The NDC Implementation Roadmap, moreover, outlines a framework to reduce GHG emissions through renewable energy-based electricity, hand-in-hand with energy efficiency actions.
12. In order to achieve this, Fiji will need to mobilize concessional public financing, including climate finance, and private investment, raise awareness and increase participation in sustainable energy projects across actors in all the economic sectors, develop policies to promote sustainable energy and private

sector participation and increase implementation of demand-side energy efficiency. GGGI will support these efforts by:

- Supporting the development of feasibility studies to identify suitable sustainable energy projects.
- Assessing adaptation and mitigation financing and technology options, and providing support in preparing proposals, accessing concessional international climate financing and developing other financing options.
- Assessing and developing mechanisms and incentives for catalyzing private sector investment in sustainable energy; including services, generation, supply, and operation and maintenance.
- Supporting sustainable energy policy design, planning and institutional strengthening.
- Providing support for capacity building and awareness raising to the private sector, financial institutions and other key actors involved in the transition towards clean energy. This will include workshops on green entrepreneurship and the role of women in the energy sector, to catalyze the private sector and the whole workforce in Fiji's green energy transition.

13. This strategic outcome will contribute to achieving GHG reductions, adaptation to climate change and green job creation – under the LEDS Very High Ambition Scenario, it is estimated that the transition to sustainable electricity can reduce emissions (metric kilotonnes CO₂e) from 415kt CO₂e in 2013 to 208kt CO₂e by 2020 and 137kt CO₂e by 2025, and achieve a net increase of 2,917 jobs by 2050.
14. These interventions will also support Fiji in making important improvements in the renewable energy investment and implementation environment, and prepare the government for a long-term and large scale roll out of renewable energy generation towards net-zero emissions in the energy sector by 2050. In the medium term, GGGI will contribute to Fiji achieving its goals in the NDP and NAP and its

NDC commitments and assist in reaching SDG 7 on sustainable energy and 13 on taking urgent action to combat climate change and its impacts.

15. Strategic Outcome 2: Strengthened investment and enabling environment for resilient, low-carbon city and town development

GGGI's interventions will support the government's goals of:

- Creating vibrant and environmentally sustainable urban centers (NDP).
- 100% of the population to have access to clean and safe water by 2030 (NDP).
- Mainstreaming the low-carbon economy into the manufacturing, commerce and tourism sectors (NDC and LEDS).
- Incorporate climate change adaptation and disaster risk management into town planning schemes (NDP).
- Strengthening resilience and climate change adaptation at the sub-national level, including in cities and towns (NAP).

16. The NDP includes goals, policies, strategies and programmes/projects for creating vibrant and environmentally sustainable urban centers, and improving the enabling environment and mobilizing investment to achieve this ambition. Improving the productivity, and building the climate resilience, of the private sector will be core component of green city and town development and fostering green job creation. Recognizing that Fiji's cities and towns are as much ocean-scapes as landscapes, GGGI will support these efforts by:

- Providing assistance on strengthening sub-national planning for towns and cities, including through accessing finance, developing frameworks for achieving climate resilient green

growth and strengthening linkages and coordination between local and central government, including for data collection and MRV.

- Conducting assessments and options analysis for green cities and towns, taking a city/town-wide land/ocean-scape approach and assessing the opportunities for ecosystem-based services, products and job creation at city, town and island level.
- Providing capacity building and technical assistance support to local government (including city and town councils) and other key stakeholders in urban planning and green city development to share knowledge and develop partnerships.
- Assessing options and incentives for mobilizing green finance in the tourism, manufacturing and commercial sectors and thereby enabling green job creation. As part of this support, GGGI will also provide capacity building and organize workshops for the private sector on green entrepreneurship.
- Assessing options for developing waste, water and sanitation projects, and investigating opportunities to jointly involve communities and private sector.
- Developing and assisting in accessing finance for and implementation of green cities projects, including assessing investment opportunities in city/town/island land and ocean-scapes.

17. This strategic outcome will contribute to achieving GHG reductions. For example, under the LEDS Very High Ambition Scenario, it is estimated that actions in the waste sector can reduce emissions from this sector to 137kt CO₂ by 2025. GGGI's support will also improve the livelihoods of households in Fiji's cities and towns; and strengthening access to green and inclusive infrastructure, green jobs, and investment for ecosystem-based adaptation in cities and towns, including peri-urban areas and urban "catchments" which support the air quality and

water availability to urban settlements. This support will contribute to Fiji achieving its goals in the NDP, the LEDS and the NAP and assist in reaching SDG 8 on sustainable economic growth, SDG 11 on sustainable cities and communities, and SDG 13 on climate change.

18. Strategic Outcome 3: Reduced reliance on fossil fuels and strengthened sustainability and efficiency in the transport sector

GGGI's interventions will support the government's goals of:

- 30% reduction in greenhouse gas emissions by 2030 from 2013 baseline (NDP and NDC).
- Improving access to transportation through an efficient, sustainable transport network (NDP)
- Development of sustainable and resilient transport infrastructure (NAP).
- Reducing dependence on imported fossil fuel for transportation to around 32% by 2020 (NDP).
- Promoting renewable energy and energy efficient alternatives for maritime transport (NDP and GGF).

19. In the NDP, the NAP and the Greater Suva Transportation Strategy 2015-2030, the Fijian Government articulates its ambition to increase the affordability and quality of public transportation, while also increasing sustainability through reducing dependence on fossil fuels and resilience to climate change. The NDP also includes strategies for developing sustainable maritime transport, including through studying the incentives for low-carbon domestic shipping. These strategies have been further elaborated in the LEDS. GGGI will support these efforts by:

- Providing support for the development of green urban and sustainable transport plans and design of sustainable transport policies.

- Investigating options for greener, improved public transportation and non-motorized land transport, including walkability and connectivity of different transport modes.
- Identifying, developing and designing sustainable land transport projects.
- Assisting with identifying finance through providing assistance to prepare proposals for accessing climate finance and assessing incentives to stimulate private sector investment in sustainable land transport.
- Undertaking studies on sustainable maritime transport options and assessing incentives for enabling the transition to low-carbon sea transport.
- Promoting institutional strengthening and capacity building for an integrated transport strategic planning framework, which identifies and captures synergies between low carbon and resilient transport infrastructure development.
- Providing support for capacity building and awareness raising to the private sector, financial institutions and other key actors involved in the transition towards low carbon transport.

20. This strategic outcome will contribute to achieving GHG reductions and green job creation – under the LEDS Very High Ambition Scenario, it is estimated that emissions reductions from the land transport sector can be reduced to 712 kt CO₂ by 2025 from a peak of 790kt CO₂ projected in 2020 with a net increase of 168 jobs by 2050. In addition, GHG emissions can be reduced to 152 kt CO₂ by 2025 from a peak of 187 kt CO₂ projected in 2020 in the maritime transport sector.

21. GGGI's support on this outcome will result in transport plans which have green growth at the core, reduced dependence on fossil fuels, reduced GHG emissions and local air pollution, reduced traffic congestion, and improved public transport for low-income households. This will also assist Fiji with meeting its national commitments under the NDP, the Greater Suva Transportation Strategy 2030,

the NDC, and SDG 9 on resilient infrastructure and SDG 11 on sustainable cities. In the long-term, this outcome will contribute to laying the foundations for transitioning the transport sector to net zero as part of the LEDS.

1.5 Overall Impact

22. The CPF interventions directly align with the Fijian Government's medium and long-term goals and GGGI's strategic outcomes, as GGGI's support to Fiji will result in GHG emissions reductions, the creation of green jobs, increased resilience and access to sustainable services, such as, clean affordable energy and sustainable public transport, and contribute to the implementation of Fiji's NDC, the NAP and achieving the SDGs.
23. GGGI's support to Fiji will support achieving SDG 1 (end poverty and build resilience of the poor), SDG 6 (clean water and sanitation), SDG 7 (clean affordable energy), and SDG 8 (achieve higher levels of economic productivity), SDG 9 (build resilient infrastructure), SDG 11 (develop sustainable cities) and SDG 13 (combat climate change and its impacts).
24. Over the longer term, the positive impacts from GGGI's support are expected to include increased resilience to climate change and natural disasters, reduced dependence on fossil fuels, improved infrastructure services, and reduced GHG emissions. Achieving these impacts will be central for achieving the NDP 20-year vision of transforming Fiji towards a progressive, vibrant and inclusive society, and will also contribute to laying down the foundations for the implementation of the LEDS and achieving net-zero emissions by 2050.



2 Introduction to the Country Planning Framework

25. The Country Planning Framework (CPF) lays out the Global Green Growth Institute's (GGGI) green growth objectives and interventions that aim to support Fiji in the 2019-2023 period. The CPF objectives are derived from the *GGGI Strategic Plan 2015-2020*, reflect GGGI's comparative advantage, and are in alignment with Fiji's national goals and priorities of economic growth, poverty reduction, social inclusion and environmental sustainability

26. Central to the CPF is joint ownership between GGGI and the Government of the Republic of Fiji. The CPF formulation was undertaken by GGGI's country team in close dialogue with government counterparts and other stakeholders. The document is co-owned and endorsed by the Fijian Government, demonstrating commitment among both parties to collaborate on mutual goals.

27. The CPF is aligned to GGGI's corporate values, demonstrating:

- Transformational outcomes – GGGI takes a long-term outlook and aims for catalytic CPF outcomes that can trigger transformational change. The achievement of these outcomes is enhanced through partnership and synergy with other development actors;
- Boldness – GGGI responds to challenges with impatient optimism. CPF outcomes seek to design and scale up creative new solutions and continually learn and adapt to evolving local contexts;
- Excellence – The CPF process is underpinned by technical rigor, demonstrating thought leadership and drive toward continuous improvement;
- Inclusiveness – GGGI respects and prioritizes diversity, information sharing among a broad set of stakeholders and equal opportunity in its collaboration and interventions. CPFs are designed to respond to national poverty reduction and social inclusion challenges;
- Integrity – GGGI upholds high standards for transparency and accountability. CPF analysis balances the findings of analytical reports and data with stakeholder feedback.

Box 1. About GGGI

GGGI was founded to support and promote a model of economic growth known as “green growth”, which targets key aspects of economic performance such as poverty reduction, job creation, social inclusion and environmental sustainability.

GGGI envisions a resilient world achieved through strong, inclusive and sustainable green growth, and is dedicated to supporting the transition of partner countries toward a green growth model. In pursuit of these goals, GGGI works with developing and emerging countries to design and deliver programs and services that demonstrate new pathways to pro-poor economic growth.

GGGI supports stakeholders through two complementary and integrated work streams – Green Growth Planning & Implementation and Investment & Policy Solutions – that deliver comprehensive products and services designed to assist in developing, financing and mainstreaming green growth into national economic development plans.

GGGI’s interventions emphasize change in four priority areas considered to be essential to transforming countries’ economies including energy, water, sustainable landscapes and green cities. GGGI measures its success against six global Strategic Outcome targets related to GHG emission reduction, creation of green jobs, increased access to sustainable services, improved air quality, adequate supply of ecosystem services and enhanced adaptation to climate change.

Headquartered in Seoul, Republic of Korea, GGGI also has representation in a number of partner countries.

28. In developing the Fiji CPF, GGGI has consulted extensively with green growth stakeholders from across government, development partners, civil society, the private sector and state-owned enterprises. Consultations were held via bilateral meetings and small discussion roundtables.
29. The CPF aligns with national development policies and strategies, including the *Five- and Twenty-Year National Development Plan (NDP) 2017-2036*, the *National Adaptation Plan* and the *Fiji Green Growth Framework (GGF)*, as well as international commitments under the Sustainable Development Goals (SDGs) and Fiji’s Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC).
30. GGGI’s ability to achieve the long-term outcomes of the CPF will depend on resource mobilization and the anticipated cooperation and support of the Fijian Government and other relevant stakeholders.



3 Green Growth Context

31. Fiji is one of the largest and most developed economies in the Pacific. In 2017, Fiji graduated to the group of upper middle-income countries with a current per capita income of approximately FJD 10,000.⁵ Going forward, sustaining strong economic growth will require a strengthening of the economic base, with a focus on increasing opportunities for low-income households, while building resilience to climate change impacts and natural disasters.

3.1 Macro-Economic and Fiscal Context

32. Fiji has experienced nine continuous years of economic growth, making this the longest period of sustained growth since independence in 1970.⁶ Economic growth is projected to reach 3.2% in 2018 and 3.4% in 2019 with major contributions from public administration, wholesale and retail trade, manufacturing, agriculture, accommodation and food services, and construction.⁷ Based on current

economic performance, economic outlook and projected population growth, Fiji is aiming to achieve a fourfold increase in per capita income by 2036. In this context, Fiji is targeting a sustained annual real gross domestic product (GDP) growth averaging 4 to 5%, investment levels of 25% of GDP and an inflation target of 2 to 3%.⁸

33. In 2017, the population in Fiji was 884,887, with an average annual growth rate of 0.6%. The urban population was 55.9% in 2017; and when compared to 2007, the urban population increased by 16.3% while the rural population decreased by 5.3%. The median age of the population is 27.5 years. There were 625,099 people aged 15 or over, a labor force of 356,789, and a labor force participation rate of 57.1%, 76.4% for males but only 37.4% for females with an official unemployment rate of 4.5%, 2.9% for men and 7.8% for women.⁹

34. The country is a major hub for the Pacific region, and has significant natural resources; large tourism, manufacturing, textiles and agricultural sectors; and a strong services sector. The tourism sector contributed 17% of GDP in 2015, and the agricultural sector accounted for an estimated 45% of total employment.¹⁰ While the sugar industry continues to sustain the livelihoods of more than 200,000 people, the contribution of the sugar industry to economic growth is declining.¹¹ Sugar

⁵ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

⁶ Government of the Republic of Fiji, *Economic and Fiscal Update Supplement to the 2018-2019 Budget Address*, (2018).

⁷ Government of the Republic of Fiji, *Budget Briefing*, (2018).

⁸ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

⁹ Fiji Bureau of Statistics, *2017 Population and Housing Census - Release 1*, (2018).

was the largest export a decade ago, but in 2017 the biggest export commodity was water.¹² Tourism is currently the largest foreign exchange earner, and remittances are also a major source of foreign exchange for Fiji.¹³

3.2 Environmental Sustainability

35. Fiji is vulnerable to shocks due to its considerable distance from markets, a population dispersed across a large archipelago, and exposure to natural disasters, which are being exacerbated by the impacts of climate change. The 2016 World Risk Report ranks Fiji as the world's 14th most exposed country to natural hazards, including large scale flooding and droughts.¹⁴ Cyclones have also had a major impact: the most recent Category 5 cyclone, Cyclone Winston, in February 2016, affected 62% of the population, damaged or destroyed nearly 30,300 houses, and caused damages amounting to FJD 2 billion, or 20% of GDP.¹⁵
36. Available environmental indicators for Fiji are generally positive although the country is facing challenges related to land degradation, increased risk of flooding, and negative impacts from agricultural activity, including high soil erosion and river and stream contamination. Fiji's national CO₂ emissions in 2006-2011 were 2500 Gg per annum. Over this period, the sectoral greenhouse gas (GHG) emissions were: energy contributed 59% of emissions, agriculture contributed 22%, forestry contributed 15% and waste contributed 4%. Fiji's per capita emissions were around 2.8 tons, which equates to 40% of the world average for the reporting period. In absolute terms, Fiji's total CO₂ eq. emissions were around 0.006% of world emissions.¹⁶

37. As with other Small Island Developing States (SIDS), which have been recognized by the UNFCCC as the most vulnerable countries to face the impacts of climate change, Fiji faces extreme climate vulnerability. Fiji is already experiencing the negative impacts of climate change, especially through changing weather patterns, including droughts and flooding events, and increasingly damaging natural disasters. The current average asset losses due to tropical cyclones and floods are estimated at more than FJD 500 million per year, representing more than 5% of Fiji's GDP. Climate change will magnify the costs of natural hazards in the country, and is therefore a major risk to achieving future economic development. Climate change will affect all areas of life for the people of Fiji, and the expected impacts include reduced agricultural and fisheries productivity, declining health outcomes, reduced tourism revenues, and higher infrastructure costs.¹⁷

3.3 Poverty Reduction and Social Inclusion

38. Fiji is ranked in the United Nations Development Programme's (UNDP) high human development category. While basic needs poverty has declined nationally since 2002, 28% of the population was still poor in 2015.¹⁸ Poverty in Fiji largely differs from the extreme poverty of many developing countries, because of strong community-based agricultural and fishing traditions and traditional support networks that care for individuals within the community. Poverty in Fiji manifests as a lack of access to a nutritionally balanced diet, clean drinking water, improved sanitation, quality education and health care, and employment or income earning opportunities.

¹⁰ Asian Development Bank, *Fiji Critical Development Constraints Country Diagnostic Study*, (2015).

¹¹ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

¹² Fiji Bureau of Statistics, Trade Statistics, <https://www.statsfiji.gov.fj/statistics/economic-statistics/merchandise-trade-statistics>, (20 November 2018).

¹³ Isoa Wainiqolo & Seron Shivanjali, "Modelling Fiji's Tourism Arrivals", *Reserve Bank of Fiji Economic Group Working Paper*, (2018), <https://www.rbf.gov.fj/getattachment/Publications/Working-Paper-Modelling-Fiji-s-Tourism-Arrivals/Modelling-Fiji-s-Tourism-Arrivals.pdf?lang=en-US>.

¹⁴ United Nations University, *World Risk Report*, (2016).

¹⁵ Government of the Republic of Fiji and World Bank, *Climate Vulnerability Assessment*, (2017).

¹⁶ Government of the Republic of Fiji, *The Third National Communication to the UNFCCC* (2019).

¹⁷ Government of the Republic of Fiji and World Bank, *Climate Vulnerability Assessment*, (2017).

¹⁸ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

39. Fiji has adopted the SDG target of eradicating extreme poverty by 2030, currently measured as people living on less than USD 1.90 a day. Using the national poverty lines, there has been a slight reduction of poverty from 31% in 2008-2009 to 28.1% in 2013-2014.¹⁹ Income inequality decreased between 2008-2009 to 2013-2014, with the Household and Expenditure survey finding that in 2013-2014 the top 10% of income earners received 31% of total household income.²⁰ In 2015, the Gini coefficient was 0.32, and the target in the NDP is for equality to improve to a Gini coefficient of 0.16 by 2031.²¹
40. While gender parity has been achieved in education, there is still a gap in terms of women accessing professional positions. There is also a high prevalence of violence against women and children in Fiji.²² Fiji's National Gender Policy was developed in 2014, which aims to "promote gender equity, equality, social justice and sustainable development in the Republic of Fiji". This policy "intends to promote gender equality in all aspects of Fiji's development, and to eradicate or modify institutional and social barriers to such equality".²³ Women have made some progress in increasing representation in Parliament – from 9 women MPs elected in 2014 to 10 women in Parliament as of December 2018 (which is 20% representation) – but further efforts are needed for women's political advancement in Fiji.²⁴ There has been progress in the participation of women in paid employment (from 34.7% 2015 to 37.4% in 2017), but a larger fraction of educated women remain unemployed.²⁵ ²⁶ A larger proportion of women also continue to rely wholly on subsistence activities, which makes them more susceptible to poverty, impacts of climate change, disasters and other livelihood stresses. On many islands in Fiji, women do not have formal rights in the traditional land ownership system. It is thus crucial to take land access into account when designing and implementing projects to ensure both men and women benefit from GGGI's support.

Table 1: Fiji at a Glance

	Data	Year	Source
Population ²⁷	884,887	2017	Fijian Government
Land area (sq. km)	18,376	N/D	FAO
Ocean area (sq. km)	1,290,000	N/D	FAO
GDP per capita, PPP (current international \$)	9,554.6	2017	World Bank
World Bank income group classification	Upper middle-income	2018	World Bank
People living below national poverty line (%) ²⁸	28.1	2013-14	Fijian Government
Unemployment total (% of total labor force) ²⁹	4.5	2018	Fijian Government
Informal Economy Employment Rate ³⁰	60	2010-11	Fijian Government
Inflation, consumer prices annual %	3.4	2017	World Bank
Central government revenue (% GDP) ³¹	36.3	2018-19	Fijian Government
Central government expenditure (% GDP) ³²	39.8	2018-19	Fijian Government

¹⁹ Government of the Republic of Fiji, *2013-2014 Household Expenditure Survey*, (2015).

²⁰ Government of the Republic of Fiji, *2013-2014 Household Expenditure Survey*, (2015).

²¹ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

²² United States Department of State, *2015 Fiji Human Rights Report*, (2015).

²³ Government of the Republic of Fiji, *National Gender Policy*, (2014).

²⁴ Pacific Women, *Leadership and Decision Making*, <http://www.pacificwomen.org/focus-areas/leadership-and-decision-making/>, (8 September 2017).

²⁵ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

²⁶ Fiji Bureau of Statistics, *2017 Population and Housing Census - Release 1*, (2018).

GGGI Country Planning Framework (2019 - 2023) - FIJI

	Data	Year	Source
Public sector debt (% GDP) ³³	47.8	2018-19	Fijian Government
Total aid in kind (FJD m) ³⁴	146.7	2018-19	Fijian Government
Foreign direct investment, net inflows (% of GDP)	5.9	2017	World Bank
Human Development Index	0.741 (92 nd)	2017	UNDP
Gender Inequality Index	0.352 (79 th)	2017	UNDP
CO ₂ e emissions (metric tons per capita) ³⁵	2.8	2011	Fijian Government
Forest area (% of land area)	55.7	2015	World Bank
Agricultural land (% of land area)	23.3	2015	World Bank
Agriculture, forestry, and fishing, value added (% of GDP)	11.1	2016	World Bank
Terrestrial and marine protected areas (% of total territorial area)	1	2017	World Bank
Renewable energy consumption (% total final consumption)	31.3	2015	World Bank
Renewable internal freshwater resources per capita (cubic meters)	32,230.5	2014	World Bank
Renewable internal freshwater resources, total (billion cubic meters)	28.6	2014	World Bank
Urban population growth (annual %)	1.7	2017	World Bank
Urban population (% of total)	55.7	2017	World Bank
Environmental Performance Index	53.09 (107 th)	2018	Yale University
Gini coefficient ³⁶	0.32	2015	Fijian Government
Basic sanitation facilities (% of population with access)	95.7	2015	World Bank
ND-GAIN Adaptation Index (Rank) ³⁷	48.5 (89 th)	2016	ND-GAIN
Renewable energy consumption (% total final consumption)	31.3	2015	World Bank
Renewable electricity in generation mix (% total) ³⁸	67	2015	Fijian Government
Percentage of population with electricity access (%) ³⁹	90	2015	Fijian Government
Public transport mode share (%) ⁴⁰	25	2015	Fijian Government
CO ₂ emissions from maritime transport (kt CO ₂) ⁴¹	173.98	2016	Fijian Government
CO ₂ emissions from land transport (kt CO ₂) ⁴²	635.97	2014	Fijian Government

²⁷ Fiji Bureau of Statistics, 2017 *Population and Housing Census - Release 1*, (2018).

²⁸ Government of the Republic of Fiji, 2013-2014 *Household Expenditure Survey*, (2015).

²⁹ Fiji Bureau of Statistics, 2017 *Population and Housing Census - Release 1*, (2018).

³⁰ International Labour Organization, *Fiji Labour Market Update*, (2016).

³¹ Government of the Republic of Fiji, *Economic and Fiscal Update Supplement to the 2018-2019 Budget Address*, (2018).

³² Government of the Republic of Fiji, *Economic and Fiscal Update Supplement to the 2018-2019 Budget Address*, (2018).

³³ Government of the Republic of Fiji, *Economic and Fiscal Update Supplement to the 2018-2019 Budget Address*, (2018).

³⁴ Government of the Republic of Fiji, *Budget 2018-19: At a Glance*, (2018).

³⁵ Government of the Republic of Fiji, *The Third National Communication to the UNFCCC* (2019).

³⁶ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

³⁷ This index ranks countries based on their vulnerability and readiness to successfully adapt to climate change.

³⁸ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).



4 National Priorities

4.1 Political Economy of Green Growth

41. Over the past decade, Fiji has become a global leader on climate change action, becoming the first country to ratify the Paris Agreement and being the first Small Island Developing State (SIDS) to hold the Presidency of the COP. Domestically, Fiji has adopted a number of high-level green growth sectoral and national plans in recent years, including the NDP, GGF, NAP, NDC Implementation Roadmap 2017-2030, and the Low Emission Development Strategy (LEDS) 2018-2050, and has undertaken important policy and regulatory reforms to improve delivery of infrastructure services.
42. Fiji's endowment of natural resources and its political commitment to sustainable development are key enablers to achieving green growth. Firstly, Fiji has significant renewable energy resources and there are plans to increase renewable generation over the coming years. Secondly, Fiji has high levels

of natural capital, and sound management will be crucial for increasing water and food security and maintaining a strong tourism industry. Lastly, the government has demonstrated high-level commitment to green growth through national and sectoral planning and commitment to climate change mitigation in the international arena.

4.2 The National Development Plan

43. The 5-Year & 20-Year National Development Plan (NDP) emphasizes the importance of environmental sustainability for achieving green growth, and clearly demonstrates the commitment of the Fijian Government to an inclusive, pro-poor, environmentally sound green growth and low carbon development pathway. The NDP states: "Fiji will strive to formulate and communicate long-term greenhouse gas emission development strategies... As such Fiji will develop by 2020 mid-century long-term low greenhouse gas emission development strategies, laying out a plan to deeply decarbonize the Fijian economy by 2050".⁴³
44. The Fijian Government has developed a NDP that includes a 20-year planning framework for 2017-2036. A key feature of the NDP is the embedding of Fiji's GGF into all sectors. The 20-year Development

³⁹ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

⁴⁰ Government of the Republic of Fiji, *Fiji Low Emission Development Strategy 2018-2050*, (2018).

⁴¹ Government of the Republic of Fiji, *Fiji Low Emission Development Strategy 2018-2050*, (2018).

⁴² Government of the Republic of Fiji, *Fiji Low Emission Development Strategy 2018-2050*, (2018).

Strategy is based on two pillars: (i) “Inclusive Socio-economic Development”, which aims to put inclusivity at the center of growth and development so that benefits of prosperity will be shared to improve the social wellbeing of all Fijians; and (ii) “Transformational Strategic Thrusts”, including nurturing new and emerging growth sectors and improving transport and digital connectivity, which are forward looking policy shifts and use green growth as a key guiding principle.

45. The action plan for implementing the 20-Year Development Strategy is the 5-Year Plan in the NDP that covers 2017-2021, which contains sector specific targets and policies. This plan includes programmes and projects on sustainable cities and towns, clean energy, and modernizing land and inter-island transport systems. Key priorities are also achieving social inclusion and empowerment, including through the improved participation of women in development, and undertaking regulatory reform to increase the private sectors contribution to development.

4.3 Green Growth Framework

46. The focus of the GGF is on restoring the balance in development that is sustainable for Fiji’s future, and commits the country to achieving green growth across sectors. The core principles of Fiji’s GGF are: (i) improving resource productivity; (ii) shifting from a sector-based to an integrated approach to development; (iii) socio-cultural education for responsible environmental stewardship and civic responsibility; (iv) increased use of environmental auditing; (v) structural reform to encourage fair competition and efficiency; and (vi) incentivizing investment in efficient use of natural resources.⁴⁴

4.4 Nationally Determined Contribution

47. The NDC has an energy sector focus with a 2030 target of 100% renewable energy share in electricity generation by 2030.⁴⁵ In addition, the NDC has a target of decreasing CO₂ emissions by 10% through achieving energy efficiency improvements. The NDC is consistent with the goals outlined in the NDP and achieving the NDC target is contingent upon external financial support being made available. This contribution would reduce energy sector CO₂ emissions by 30%, with the renewable target reducing business as usual (BAU) emissions by 20% and the energy efficiency target reducing emissions by 10%.
48. Given Fiji’s extreme climate vulnerability, the NDC has an adaptation component. The impacts of climate change are considerable in Fiji, and the country faces increased droughts, floods and extreme events such as cyclones. The NDC therefore reiterates the adaption priorities of Fiji, and includes an action plan for effectively addressing future climate impacts.
49. The NDC Implementation Roadmap 2017-2030, moreover, identifies mitigation actions in electricity generation and transmission, demand-side energy efficiency, and transportation. The implementation of these actions under the roadmap is divided into short-term (2017-2020), medium-term (2021-2025), and long-term (2026-2030) action periods, and all mitigation actions are closely aligned to existing national policies, strategies, and plans.⁴⁶

⁴³ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

⁴⁴ Government of the Republic of Fiji, *A Green Growth Framework of Fiji*, (2014).

⁴⁵ Government of the Republic of Fiji, *Intended Nationally Determined Contribution*, (2016).

⁴⁶ Government of the Republic of Fiji, *Fiji NDC Implementation Roadmap 2017-2030*, (2017).

Table 2: National Green Growth Targets

National Plans	Key Goals
5-Year & 20-Year National Development Plan	<ul style="list-style-type: none"> • 4-5% GDP growth rate in 2021-2036. • 10% of incidence of national poverty by 2036. • 100% access to electricity by 2021. • 100% electricity generation from renewable energy sources by 2036. • Reduction in dependence on imported fossil fuel per km travelled for transportation to 32% by 2020. • Reducing vehicle emission levels to 40% by 2020.
NDC Implementation Roadmap 2017-2030	<ul style="list-style-type: none"> • Over 2017-2030, actions in electricity generation are increasing renewable energy generation capacity through solar PV, hydro, biomass and waste-to-energy, and the development of the electricity grid and storage capacity. • Energy efficiency actions over 2017-2030 include increasing efficiency in the private and public sectors, developing energy labelling and minimum energy performance standards, and updating codes and standards for building and industry. • Over 2017-2030, actions in the transport sector include a vehicle replacement programme, 5% biofuel in diesel, improved maintenance for sea vessels, and fuel-efficient outboard motors.
Low Emission Development Strategy 2018-2050	<ul style="list-style-type: none"> • Net zero carbon emissions by 2050 across all sectors of the economy. • Includes four possible low-emissions scenarios: BAU Unconditional Scenario; BAU Conditional Scenario; High Ambition Scenario; and Very High Ambition Scenario. • The LEDS shows that under the Very High Ambition scenario net zero emissions can be achieved during the year 2041.
International Commitments	Key Goals
Nationally Determined Contribution	<ul style="list-style-type: none"> • Renewable energy share in electricity generation to approach 100% by 2030. • Indicative reduction of 10% CO₂ emissions for energy efficiency improvements economy wide. • 30% reduction in greenhouse gas emissions by 2030 from 2013 baseline.

4.5 Low Emission Development Strategy

50. The central goal of the LEDES is for Fiji to reach net zero carbon emissions by 2050 across all sectors of its economy.⁴⁷ The LEDES has put forward four possible low emissions scenarios for Fiji: (i) a business-as-usual (BAU) unconditional scenario; (ii) a BAU conditional scenario; (iii) a high ambition scenario; and (iv) a very high ambition scenario
51. The LEDES presents scenarios for all key sectors: Electricity and other energy use; land transport; domestic maritime transport; domestic air transport; agriculture, forestry and other land use; waste; and coastal wetlands (blue carbon). The LEDES shows that under the very high ambition scenario net zero emissions can be achieved during the year 2041, after which emissions would increasingly be net negative. The most significant mitigation of emissions would result from complete transformation of Fiji's energy sector to one based on a wide variety of on-grid and off-grid renewable energy generation.

4.6 Energy and Transport Sectoral Plans

52. The NDC Roadmap is the key plan for moving Fiji towards 100% electricity generated by renewable energy sources by 2030.⁴⁸ The roadmap puts forward actions and a timeline in the following sub-sectors:
- Electricity Generation and Transmission: Emissions reductions of 427kt CO₂/yr; and investment cost of USD 1.671 billion;
 - Demand-Side Energy Efficiency: Emissions reduction of 30kt CO₂/yr; and investment cost of USD 150 million;
 - Transport: Emissions reductions of 137kt CO₂/yr; and investment cost of USD 1.149 billion.

53. Fiji will also pursue an economy-wide indicative reduction of 10% carbon dioxide emissions from energy efficiency improvements. Collectively, these measures will reduce the Fijian energy sector's total carbon dioxide emissions by around 30% by 2030.
54. The Sustainable Energy for All Report also puts forward the Fijian Government's targets for achieving sustainable energy for all Fijians and outlines the key policy and regulatory challenges that must be overcome.⁴⁹ The report outlines the potential projects required and investment needed for achieving three core objectives: (i) ensure universal access to modern energy services; (ii) double the global rate of improvements in energy efficiency; and (iii) double the share of renewable energy in the global energy mix.
55. The overall goal of the Maritime Transport Policy and the Land Transport Policy is to develop an integrated transport system that is safe, efficient, affordable, accessible to all and environmentally sustainable.⁵⁰ These policies include a number of green growth objectives, such as reducing the environmental impacts from all forms of transportation and reducing climate change impacts on transportation infrastructure, and committing to vigorously pursuing private financing in the transport sector. The policies also highlight public funding and investment strategies, and include a 20-year strategic investment plan for land and rural maritime transport infrastructure.
56. Environmental management in Fiji is provided through the Environment Act 2005 and the accompanying regulatory instrument the Environment Regulations 2007. Both are administered by the Department of Environment (DOE) within Ministry of Local Government, Housing and Environment (MLGHE). The Act provides for an integrated system of development control, environmental assessment, and pollution control.

⁴⁷ Government of the Republic of Fiji, *Fiji Low Emission Development Strategy 2018-2050*, (2018).

⁴⁸ Government of the Republic of Fiji, *Fiji NDC Implementation Roadmap 2017-2030*, (2017).

⁴⁹ Government of the Republic of Fiji, *Sustainable Energy for All (SE4All): Rapid Assessment and Gap Analysis*, (2014).

⁵⁰ Government of the Republic of Fiji, *Maritime Transport Policy and Land Transport Policy*, (2015).

4.7 Sustainable Development Goals

57. Fiji is committed, through ratifying the SDGs, to collaborate with the international community on a wide range of initiatives including climate change mitigation and adaptation, sustainable development, and improved water management. The NDP includes goals, policies and strategies that are aligned to implementing the SDGs in the context of Fiji. Successful implementation of the NDP will therefore support the realization of the SDGs.



5 GGGI's Engagement in Fiji

5.1 GGGI's Achievements to Date

58. Fiji became a member of GGGI in 2014 and the Fijian Government signed a Host Country Agreement and a MoU with GGGI in 2015. The GGGI Office in Suva, Fiji, was established in the Ministry of Economy in October 2015.
59. In 2015-2016, GGGI supported the Ministry of Economy (MoE) to integrate the GGF into the new NDP 2017-2036. The NDP was endorsed by the Fijian Government in October 2017 and launched at COP 23.
60. Building on this work, GGGI provided technical assistance to the Climate Change and International Cooperation Division (CCICD) of the MoE to develop an NDC Implementation Roadmap focused on the energy sector which aims to reduce greenhouse gas emissions by 30% by 2030 against a business-as-usual scenario. GGGI has also supported the CCICD to develop an economy-wide LEDS aiming at zero-net emissions by 2050 which was launched at COP 24.
61. In 2017, GGGI completed a pre-feasibility Study for 100% renewable electricity for Ovalau and Taveuni Islands which would bring affordable, clean electricity to over 17,000 people. In 2018, full feasibility studies for over 5MW of solar and storage started for Taveuni and Ovalau in partnership with MoE and Electricity Fiji Limited. All work undertaken has included social and environmental safeguards analysis. In 2017-2018, GGGI also expanded its work in Fiji into the area of green cities, carrying out a study on low emissions fuel for buses and trucks and a study on solid waste management.
62. Fiji is also the base for GGGI's activities in the broader Pacific region, with GGGI carrying out regional capacity building workshops in 2016, 2017 and 2018 on energy planning and green infrastructure project design and financing. A regional training program for green entrepreneurship was delivered in 2018 reaching out to over 200 men and women looking to start a new business. In 2017-2018, GGGI took part in and supported the organization of a number of national and regional dialogues centered around green growth, NDC implementation, private sector engagement and financing of an inclusive energy transition in the Pacific and SIDS including the

NDC Hub Business Breakfast, National Transport Consultation Forum, the Employers' Climate Forum and the Pacific Islands Regional Transport Forum, the first of its kind for the Pacific Island Countries.

63. Through this support, GGGI has contributed to Fiji achieving its NDP objectives and the implementation of the NDC and SDGs, while showcasing Fiji's green growth experience to the region. This puts GGGI in a strong position to advise and support the Fijian Government champion a transition to renewable energy, sustainable transport systems, and improved urban planning.

5.2 GGGI's Comparative Advantage in Fiji

64. GGGI defines green growth as "a development approach that seeks to deliver economic growth that is both environmentally sustainable and socially inclusive." Accordingly, GGGI's theory of change is rooted in the economic and political realities that guide developing countries' responses to climate change, environment, poverty reduction and social inclusion.
65. To support Fiji in achieving green growth, GGGI brings together many of the environmental and social objectives of other international organizations, and the economic growth and poverty reduction objectives of development banks and investors. This innovative approach allows GGGI to provide more holistic, results-oriented technical assistance to governments, and distinguishes GGGI from more traditional development partners.
66. A key feature of GGGI's approach is its emphasis on sustainable long-term results, which require a fundamental shift toward not only integrated planning and greener investment, but also stronger governance and implementation. For this reason, GGGI aims to strengthen the institutional capacity of governments to better understand the value of green growth, and implement their green growth objectives in an inclusive, effective and efficient

manner.

67. As sustainable and transformational green growth requires attention to both green growth planning and implementation, GGGI's work encompasses the full scope of green growth interventions to help developing countries achieve the best possible green growth outcomes. The process by which GGGI designs its interventions is based on its unique value chain model. The value chain presents a systematic process by which green growth planning and implementation takes place. This process includes four types of activities:
- Diagnosis and assessment of green growth challenges and potential;
 - Green growth policy and strategic planning;
 - Institutional capacity building and green growth knowledge sharing;
 - Green investment services to support tangible results.
68. GGGI takes seriously its mandate to connect local and national objectives with the global climate change and sustainable development agendas. GGGI's strategic advice aims to mainstream global objectives into national policy wherever possible. Utilizing various knowledge sharing mechanisms and platforms, GGGI facilitates application of these global agendas through exchange of best practices among country programs, the development community and technical experts from around the world.
69. GGGI has found a strong niche in Fiji. While there is ongoing support from several development partners, there is still a strong need for support on (i) building an enabling environment for increasing private investment in renewable energy, (ii) increasing sustainability and efficiency in the transport sector, and (iii) mainstreaming green growth into urban planning and strengthening integrated land and ocean-scape approaches. GGGI is vigilant to develop country capacities, not substitute them. GGGI emphasizes capacity development throughout its interventions and works jointly with government

day-to-day. This allows the build-up of sustainable technical and institutional capabilities, and strengthens the long-term enabling environment for green growth. In its interventions, GGGI aims for a medium-term hand-over of responsibilities to government, for implementation and upscaling of successes.



6 Theory of Change

70. GGGI's central goal is to support Fiji's transition to a green economy through assisting with increasing renewable energy implementation, strengthening sustainability and efficiency in the transport sector, and contributing to resilient, low-carbon city, town and island development.
71. GGGI will assist the Fijian Government with improving its policies and regulations, strengthening strategic planning, developing an enabling environment for private sector investment and mobilizing finance for implementing sustainable, resilient infrastructure. This CPF includes three specific outcomes which are interlinked, and are aligned with the GGGI energy, green cities and sustainable landscapes thematic strategies.

6.1 Strategic Outcome 1: Reduced dependency on fossil fuels, reduced greenhouse gas emission and increased resilience through increasing renewable energy generation

72. GGGI's interventions will support the government's goals of:
- 100% electricity generation from renewable energy sources by 2036 (NDP).
 - 30% reduction in greenhouse gas emissions by 2030 from 2013 baseline (NDP and NDC Roadmap).
 - Ensuring access to affordable, reliable, modern, sustainable energy, increasing the share of renewable energy and expanding infrastructure and upgrading technology for equitably supplying modern and sustainable energy services (NAP).

6.1.1 National Objectives

73. Fiji has committed in the NDP and in its NDC to scale-up renewable energy generation capacity to 100%. Increasing the share of renewables and ensuring access to energy is also a key element of the NAP. To achieve this ambition, the NDP includes a goal for achieving a resource-efficient, cost-effective and environmentally sustainable energy sector. The NDP also has targets, strategies and policies for increasing electricity generation from hydro, solar and biomass sources. These include improving access to affordable, reliable, modern and sustainable energy services for all; increasing the share of electricity generation from renewable energy resources; and increasing private sector participation in electricity supply through regulatory reform.
74. Fiji has invested heavily in renewable energy but remains highly dependent on imported petroleum fuel, with the country among the ten most vulnerable countries in the Asia and Pacific region to oil price volatility.⁵¹ Nationally, Fiji's grid electricity supply comprises mainly hydropower (varying between 45-65% over the last 10 years depending on annual rainfall and other factors) and thermal (industrial diesel oil and heavy fuel oil) with some contributions from biomass and wind power (1-3%) and under 1% contributed by solar during 2005-2015. The total installed capacity in 2016 was 316 MW with contributions from hydropower (130 MW), wind and biomass (21 MW), and diesel (164.9 MW). A 12 MW biomass plant near Sigatoka and approximately 3 MW grid-connected PV (GCPV) were added in 2017.⁵²
75. In 2015, 90% of Fiji's population currently has access to electricity and the NDP states that 100% of Fiji's population will have electricity access by 2020.⁵³ Most urban and rural households have access to electricity through Fiji's electricity utility Energy Fiji Limited (EFL), formerly Fiji Electricity Authority.⁵⁴ Rural electrification is increasingly based on renewable energy, with thousands of solar home systems deployed and solar-diesel and solar

with storage mini-grids also increasingly becoming a feasible option.

76. Meeting the targets in the NDP and NDC for achieving 100% renewable energy generation will require a scaling up of investment. The NDC Implementation Roadmap 2017-2030 states that an investment of USD 1.67 billion will be needed for renewable electricity generation and transmission.⁵⁵ While Fiji has made progress in implementing financial instruments for supporting mitigation within the energy sector, the scale of investments required by 2030 outpaces Fiji's current ability to finance the transformational change envisioned. Therefore, new or significantly expanded financial instruments and support are needed, and Fiji requires further assistance to design, implement, and capitalize expanded financial instruments.⁵⁶ The private sector will have to provide a significant contribution in order to reach these investment levels.⁵⁷

6.1.2 Barriers

77. Fiji has a high potential for increased renewable energy development, and this is a key priority for the government. There are a few major challenges, however, to achieving the goal of 100% electricity generation from renewable energy sources by 2036 under the NDP.
78. **Investment environment for private sector participation not fully developed.** The Electricity Act of 2017 provides for an independent regulator for the electricity industry with powers to make regulations, set tariffs and grant licenses to ensure the efficient running of the electricity industry. The EFL has been restructured and has become partially privatized with government retaining a controlling share. However, the government's reform of the electricity sector is on-going and includes strengthening the new electricity industry regulator, the Fijian Competition and Consumer Commission, and establishing processes and procedures which have to be disseminated and understood by the private sector.

⁵¹ United Nations Economic and Social Commission for Asia and the Pacific, *Pacific Perspectives on the Challenges to Energy Security and the Sustainable Use of Energy*, (2012).

⁵² Government of the Republic of Fiji, *Fiji Low Emission Development Strategy 2018-2050*, (2018).

⁵³ Government of the Republic of Fiji, *5-Year & 20-Year National Development Plan*, (2017).

⁵⁴ Government of the Republic of Fiji, *A Green Growth Framework of Fiji*, (2014).

79. Standards for independent power producers and grid-connected distributed generation need to be developed and implemented. Developing a framework for Independent Power Producers (IPPs) will greatly assist in meeting renewable energy targets, as this will allow sustainable energy project investors to achieve financial closure within an acceptable time frame. Clear standards, procedures and templates for IPPs, Power Purchase Agreements (PPAs) and grid-connection of distributed renewable energy generation (such as roof-top solar) are not available and their development and implementation could be a boost to renewable energy generation.

80. There is inadequate public and private financing to meet the goals of sustainable energy deployment. Fiji will therefore need to mobilize concessional public financing and private investment. Fiji will mobilize this financing from donors, such as development banks, climate funds, and bilateral government partners, and also domestic and international private investors. In addition, mobilizing the necessary private credit will require improving the business climate, which will include strengthening domestic credit markets, ensuring adequate flow of information on renewable energy technologies and costs and streamlining the regulatory environment for private sector investors to participate in IPPs.

81. A high percentage of rural electricity systems are currently based on diesel mini-grids. There are about 550-600 rural village-based diesel mini-grids of which about a third are poorly functioning. Since 2015, the rural electrification policy has been revised to indicate that new electrification of villages should be through renewable energy; and rehabilitation activities are also taking place to gradually replace diesel gensets with either solar-diesel hybrids or fully renewable (mainly solar) systems. Barriers to achieving this goal will be financing; technical challenges that may include energy storage (but this may be overcome by advances in battery technology); and an efficient payment system which has low transaction cost, even in remote rural areas and islands.

6.1.3 GGGI's Response

82. In order to contribute to overcoming these barriers, GGGI proposes to provide the following services in the areas of sectoral policy and planning, energy financing and project development, implementation support, and capacity enhancement:

- Supporting the development of feasibility studies to identify suitable sustainable energy and energy efficiency projects. This will include on-grid and off-grid projects in both urban and rural areas.
- Assessing adaptation and mitigation financing and technology options, and providing support in preparing proposals, for accessing concessional international climate financing and developing other financing options. GGGI will work with the Fijian Government on identifying financing from international and domestic sources (including concessional loans and guarantees), and GGGI will support government partners with drafting proposals for accessing financing, including from climate funds.
- Assessing and developing mechanisms and incentives for catalyzing private sector investment in sustainable energy; including services, generation, supply, and operation and maintenance. The technical assistance could include strengthening standards, guidelines and procedures grid-connected distributed renewable energy generation and fostering private sector participation in the energy sector.
- Supporting sustainable energy policy design, planning and institutional strengthening. Technical assistance could involve the development of electrification plans, monitoring and evaluation frameworks and finalizing national energy policies and plans.
- GGGI will also provide support for capacity building and awareness raising to government bodies, the private sector, financial institutions and other key actors involved in the transition

⁵⁵ Government of the Republic of Fiji, *Fiji NDC Implementation Roadmap 2017-2030*, (2017).

⁵⁶ Government of the Republic of Fiji, *Fiji NDC Implementation Roadmap 2017-2030*, (2017).

⁵⁷ Government of the Republic of Fiji, *Sustainable Energy for All (SE4All): Rapid Assessment and Gap Analysis*, (2014).

towards clean energy. This will include workshops on green entrepreneurship and the role of women in the energy sector, to catalyze the private sector and the whole workforce in Fiji's green energy transition.

83. The program will have a strong social inclusion and pro-poor focus and will also apply GGGI's safeguard policy to address environmental and social risks.

- GGGI will also explore policies and practices that are particularly beneficial to the poor and previously under-served communities, including through promoting community involvement in the project design and financing of energy projects.
- As renewable energy development will involve land use, the safeguards will assess risk resulting from construction of energy systems and also will ensure that property rights are appropriately taken into account.

6.1.4 Results

84. GGGI will contribute to the Fijian Government achieving its objectives for increasing renewable energy generation capacity through undertaking project studies, mobilizing financing, and strengthening the policy and institutional environment. Immediate outcomes of the CPF will be:

- Four pre-feasibility or feasibility studies completed by 2023.
- Assessments completed on mechanisms and incentives for catalyzing private sector investment, options for standards, guidelines and procedures for grid-connected distributed generation and other technology and financing options.
- Increased financing allocated to renewable energy projects from domestic and international investors.
- Strengthened institutional capacity, which will

create an enabling environment for increased private sector activity in the energy sector. This will include mapping out the capacity needs of different stakeholder groups and building the capacity of stakeholders based on these needs.

- This strategic outcome will also contribute to achieving GHG reductions, adaptation to climate change and green job creation – under the LEDS Very High Ambition Scenario, it is estimated that the transition to sustainable electricity can reduce emissions (metric kilotonnes CO₂e) from 415kt CO₂e in 2013 to 208kt CO₂e by 2020 and 137kt CO₂e by 2025, and achieve a net increase of 2,917 jobs by 2050.

85. These interventions will support Fiji in making important improvements in the renewable energy investment and implementation environment, and prepare the government for a long-term and large scale roll out of renewable energy generation capacity towards net-zero emissions in the energy sector by 2050. In the medium term, GGGI will contribute to Fiji achieving its commitments in the NDP, NAP and NDC and assist in reaching SDG 7 on sustainable energy and 13 on taking urgent action to combat climate change and its impacts.

6.2 Strategic Outcome 2: Strengthened investment and enabling environment for resilient, low-carbon city and town development

86. GGGI's interventions will support the government's goals of:

- Creating vibrant and environmentally sustainable urban centers (NDP).
- 100% of the population to have access to clean and safe water by 2030 (NDP).

- Mainstreaming the low-carbon economy into the manufacturing, commerce and tourism sectors (NDC and LEDS).
- 100% of the population to have access to clean and safe water by 2030 (NDP).
- Mainstreaming the low-carbon economy into the manufacturing, commerce and tourism sectors (NDC and LEDS).
- Incorporate climate change adaptation and disaster risk management into town planning schemes (NDP).
- Strengthening resilience and climate change adaptation at the sub-national level, including in cities and towns (NAP).

6.2.1 National Objectives

87. Fiji is experiencing rapid urbanization, with the 2017 census finding that 55.9% of the country's population of 884,887 is urban.⁵⁸ With the population of these urban centers growing, increased investment is required to support the supply and accessibility of urban services such as water, electricity, waste management and transportation.
88. To ensure urban and peri-urban areas drive low-carbon green growth into the future, the development of economically vibrant and inclusive cities and towns is a priority. Fiji's urban sector accounts for 60% of the country's gross domestic product, with the share of the Greater Suva Area estimated at 40%.⁵⁹ There are also linkages between growth in urban areas and rural livelihood creation – for instance, the value added from agricultural products being sold in urban markets. Urban development will therefore be essential for sustaining job growth in Fiji, and a goal under the NDP is to identify opportunities for urban growth and develop vibrant urban centers.
89. Fiji's cities and towns are urbanizing rapidly, placing pressure on planning systems and the environment and driving increases in GHG emissions.

Comprehensive forward planning is required for achieving low-carbon urban growth, improving urban services and building resilience. Public investment should be allocated to growth centers that can foster the development of the tourism, manufacturing and commercial sectors, which will also enable job creation. Achieving urban green growth will also require overcoming a number of challenges, including emissions intensive transport systems, poor air quality, unsustainable infrastructure that is not climate resilient, inadequate provisioning of basic services and addressing social inclusion and equal opportunities for all.

90. The provision of urban services to informal settlements is also a planning priority, with the national Green Growth Framework stating that approximately 78,000 people are living in 128 settlements in Fiji's major urban areas.⁶⁰ Upgrading informal settlements is also a priority in the NDP, and these settlements are often located in marginal, low-lying or flood-prone land in mangrove swamps and foreshore areas. The absence of improved sanitation and other urban infrastructure exacerbates the poor living conditions households face in these settlements.
91. As Fiji is highly climate vulnerable and prone to natural disasters, urban planning and development will need to also focus on building resilience in cities, towns and islands. Guidelines will need to be strengthened to ensure infrastructure projects incorporate resilience into design, and cities and towns incorporate resilience into their own planning frameworks.
92. The Green Growth Framework identifies the need to ensure that building codes are revised so that, going forward, buildings are cyclone resilient and also use energy and water more efficiently. As almost all of Fiji's cities and towns are coastal, investing in ecosystem-based adaptation for Fiji's land and ocean-scapes will also be required for protecting both Fiji's high-density and high-value coastal areas and low-density small settlements, including islands. Building coastal protection for cities and valuable

⁵⁸ Fiji Bureau of Statistics, *Key Statistics – National Income, GDP by Industry, December 2017*, (2017).

⁵⁹ UN-Habitat, *Fiji: Greater Suva Urban Profile*, (2012).

⁶⁰ Government of the Republic of Fiji, *A Green Growth Framework of Fiji*, (2014).

infrastructure is also needed – the cost of protection is relatively small in high-density areas but becomes more problematic for low-density small settlements, where the unit costs can be very high and exceed financing capacity.⁶¹

93. Taking action to reduce climate and disaster risks can also result in broader benefits in terms of development outcomes, job creation, poverty reduction, or access to infrastructure services. For instance, improved land-use planning would not only reduce flood risks, but also make towns and cities more livable and productive. The cost of improving land-use planning, supporting resilient housing, and strengthening informal settlements in Fiji has been evaluated at around FJD 202 million, including FJD 140 million in new investment, which will also create new green jobs.⁶²
94. The NDP has the goal of creating vibrant and environmentally sustainable urban centers. This goal will be achieved by strengthening urban management and administration of town planning at the municipal level, conducting long-term planning to identify growth centers, and completing vulnerability assessments of the impacts on urban assets from climate change and natural hazards.

6.2.2 Barriers

95. A key constraint for developing resilient, low-carbon cities and towns is the lack of an enabling environment for mobilizing investment. Through GGGI's implementation of this CPF, the following barriers will be addressed.
- 96. Need for integrating climate change mitigation and adaptation into planning and management of city and town development.** Urban planning frameworks do not reflect the current context of climate change mitigation and adaptation needs of cities and towns in Fiji, and the Urban Policy Action Plan 2007 needs to be reviewed and updated. The particular constraints faced by informal settlements also need to be reflected in planning frameworks. There are a shortage of low carbon plans at the city, town and island levels, and conducting GHG emissions

accounting in these environs will be important for achieving green growth. Poor coordination between national government, local authorities and service providers in planning and policy and regulatory development is also a barrier.

- 97. Inadequate financing for developing low-carbon and climate resilient urban infrastructure.** There is a lack of public funding, due to fiscal constraints, to deliver improved urban services and develop low-carbon climate resilient infrastructure. Private capital has mostly been allocated to larger urban projects, which have a lower risk profile; and novel financing mechanisms and incentives (including private-public partnerships and user-pay approaches for households) are required for mobilizing private sector investment for smaller projects and developments in peri-urban areas including ecosystem based, integrated land and ocean-scape approaches.
- 98. Lack of project proposals for cities and towns.** Up until now proposals have focused on large centralized projects over decentralized infrastructure projects. To expand service delivery to urban, peri-urban communities and more isolated towns, integrated project proposals that utilize ICT technologies and innovative financing approaches should be explored. Moreover, urban infrastructure projects do not adequately incorporate climate change considerations. Urban development projects should comply with guidelines to ensure resilience to climatic hazards and natural disasters.
- 99. Low institutional capacity and technical knowledge, including lack of data.** There is insufficient technical capacity and resources for designing climate mitigation and climate resilient urban programs and projects. Institutions involved in developing low carbon resilient cities and towns need support to be strengthened, and stakeholders requiring capacity building are the city and town councils of Fiji. Key challenges also include a lack of data and analysis on the needs of communities, technological and financing options, and poor access to international experiences and best practices for delivering affordable and modern urban services.

⁶¹ Government of the Republic of Fiji and World Bank, *Climate Vulnerability Assessment*, (2017).

⁶² Government of the Republic of Fiji and World Bank, *Climate Vulnerability Assessment*, (2017).

6.2.3 GGGI's Response

100. Improving productivity, and building the resilience will be core components of green city and town development. Recognizing that Fiji's cities and towns are as much ocean-scapes as landscapes, GGGI will support these efforts by:

- Providing assistance on strengthening sub-national planning for towns and cities, including through accessing finance, developing frameworks for achieving climate resilient green growth and strengthening linkages and coordination between local and central government, including for data collection and MRV.
- Conducting assessments and options analysis for green cities and towns, taking a city/town/island-wide land/ocean-scape approach and assessing the opportunities for ecosystem-based services, products and job creation at the city, town and island levels.
- Providing capacity building and technical assistance support to local government (including city and town councils) and other key stakeholders on urban planning and green city development. As GGGI's presence in Fiji also has a regional component, the Fijian Government can share knowledge and best practices and develop partnerships across the Pacific region on green city and town development.
- Assessing options and incentives for mobilizing green finance in the tourism, manufacturing and commercial sectors and thereby enabling green job creation. As part of this support, GGGI will also provide capacity building and organize workshops for the private sector on green entrepreneurship.
- Assessing options for developing waste, water and sanitation projects, and investigating opportunities to jointly involve communities and private sector.
- Developing and assisting in accessing finance

for and implementation of green cities projects, including assessing investment opportunities in city/town/island land and ocean-scapes.

6.2.4 Results

101. Through strengthening urban planning processes, improving institutional capacity, developing incentives for green job creation, and designing and implementing infrastructure investments, GGGI's support will strengthen the investment and enabling environment for resilient and low-carbon city and town development. The immediate outcomes of the CPF will be the following results:

- Climate finance accessed for mainstreaming climate change adaptation at the sub-national level, with particular focus on cities and towns.
- Strengthened sub-national planning for towns and cities, and improved coordination between central and local government, which will result in more efficient public resource utilization.
- Identification of opportunities for increasing ecosystem-based services in land- and ocean-scapes, leading to job creation at city, town and island level.
- Sub-national authorities will have improved capacity for conducting urban planning, and will have an increased understanding of the best practices for developing low-carbon climate resilient towns and cities. This will result in the avoidance of high emission producing infrastructure, and foster the development of low carbon buildings and transport infrastructure for cities and towns.
- Improved enabling environment for attracting investment in green tourism, and greening the manufacturing and commercial sectors, which will improve the potential for green job creation in Fiji's towns and cities.
- Assessments completed on waste, water and sanitation projects; which will identify

investment opportunities, potential for job creation, and benefits to the private sector and communities in city/town/island land and ocean-scapes. Moreover, as green urban environments in Fiji include ocean-scapes and islands, the development of sustainable landscapes and provision of ecosystem-based services is also a key investment opportunity for achieving green growth.

- This strategic outcome will also contribute to achieving GHG reductions. For example, under the LEDES Very High Ambition Scenario, it is estimated that actions in the waste sector can reduce emissions from this sector to 137kt CO₂ by 2025.

102. The greening of Fiji's cities and towns will provide opportunities to build resilient livelihoods through providing green jobs, reducing GHG emissions, and increasing access to sustainable infrastructure and services. The livelihoods of households in Fiji's cities and towns will be improved through strengthening access to green and inclusive infrastructure; the development of green jobs; and investment in ecosystem-based adaptation approaches, including in peri-urban areas and urban catchments which support air quality and water availability of urban settlements. Through delivering this outcome, GGGI will also help the Fijian Government to achieve its objective in the NDP of creating vibrant and environmentally sustainable urban centers.

103. This CPF will contribute to Fiji achieving its goals in the NDP, the LEDES and the NAP and assist in reaching SDG 8 on sustainable economic growth, SDG 11 on sustainable cities and communities, and SDG 13 on climate change.

6.3 Strategic Outcome 3: Reduced reliance on fossil fuels and strengthened sustainability and efficiency in the transport sector

104. GGGI's interventions will support the government's goals of:

- 30% reduction in greenhouse gas emissions by 2030 from 2013 baseline (NDP and NDC).
- Improving access to transportation through an efficient, sustainable transport network (NDP).
- Development of sustainable and resilient transport infrastructure (NAP).
- Reducing dependence on imported fossil fuel for transportation to around 32% by 2020 (NDP).
- Promoting renewable energy and energy efficient alternatives for maritime transport (NDP and GGF).

6.3.1 National Objectives

105. The government is planning to implement a greener approach to land and maritime transport systems. Land transport in Fiji is mainly comprised of road vehicles, which have experienced rapid growth over past decades. From 2002-2012, the number of vehicle registrations in Fiji increased by 43% with a total of 117,561 vehicles in 2017.⁶³ Even though the sales in private vehicles are growing rapidly, the vast majority of people in Fiji use public transport, or commute by walking.⁶⁴ In the urban context, public transport buses and passenger cars have a similar mode share of around 40% each of motorized trips, followed by taxis; while bicycle use is currently rare.⁶⁵ Maritime transport plays a particularly

⁶³ Fiji Roads Authority, *Greater Suva Transportation Strategy*, (2014).

⁶⁴ Government of the Republic of Fiji, *Fiji Low Emission Development Strategy 2018-2050*, (2018).

⁶⁵ Government of the Republic of Fiji, *National Household Travel Survey*, (2015).

important role in Fiji, with people relying on sea transport not just for trade and fishing, but also for personal transport and access to crucial services, such as health and education. Sea transport on Fiji is also a source of GHG emissions, with total emissions for the Fiji maritime sector are estimated at 174 kilotonnes of CO₂ in 2016. Commercial vessels on economical routes are the largest source of GHG emissions, followed by tourism vessels.⁶⁶

106. The transport sector is the main consumer of petroleum fuel imports. The transport sector is currently 100% petroleum based, which results in significant foreign exchange expenditure on fuel. Local air pollution is also a challenge in Fiji's urban areas, and at present there is no requirement for vehicles to comply with recognized overseas emission standards.⁶⁷ The government has eliminated all import duty on electric and hybrid vehicles, which has resulted in a surge in imports of hybrid petrol-electric vehicles, mostly used models. There is a need to collect and analyze data to identify further opportunities to reduce dependence on fossil fuels in the land and maritime transport sectors.

107. The Maritime and Land Transport Policy (2015) puts forward the Fijian Government's ambition to develop efficient and accessible decarbonized transport systems. The policy aims to reduce the environmental impacts from all forms of transportation and reduce climate change impacts on transportation infrastructure, including through the use of fuel-efficient vehicles and development of public transport systems. For maritime transport, the policy promotes improved efficiency at ports, the introduction of fuel-efficient technology to minimize CO₂ emissions, and the development and introduction of low carbon propulsion alternatives and hull designs.

108. The NDP and the Greater Suva Transportation Strategy 2015-2030 also articulate the ambition of the Fijian Government to increase the affordability and quality of public transportation, while also increasing sustainability through reducing dependence on fossil fuels. The NDP includes strategies for developing sustainable maritime

transport through studying the incentives for low-carbon domestic shipping. These strategies have been further elaborated in the LEDS which aims to reduce emissions for land and maritime transport to close to zero by 2050.

6.3.2 Barriers

109. Need to introduce integrated planning and technology options to reduce the high dependence of the transport sector on imported fossil fuels.

The current stock of vehicles and vessels will continue to emit GHGs until there is an alternate fuel source available or vehicles/vessels are replaced by green alternatives, such as electric vehicles, low carbon vessels and non-motorised transport. The government can explore incentives and options for switching to less polluting options, while improving reliability, safety and accessibility. This requires examination of a number of integrated planning and technology options in a short period of time and significant investment, and these are constraining factors in reducing the transport sectors dependence on fossil fuels.

110. Inadequate finance for developing sustainable public transport systems.

Given fiscal constraints, the Fijian Government will require assistance from development partners and concessionary financing from development banks to decarbonize the transport sector and sustain and increase affordable public transport mode share. The government also wishes to provide opportunities for the private sector to participate and invest in the development of the transport sector – including through operating, designing and constructing transport systems – but this requires building domestic private sector understanding of how to integrate new technologies into vehicle and vessel fleets and also a risk profile attractive to firms and investors.

111. Maintaining transport infrastructure.

Without an adequate user pays system, the Fijian Government will find it difficult to maintain infrastructure. In the past, limited funding has resulted in challenges in infrastructure maintenance and has led to higher costs for transport operators

⁶⁶ Government of the Republic of Fiji, *Fiji Low Emission Development Strategy 2018-2050*, (2018).

⁶⁷ Government of the Republic of Fiji, *Land and Maritime Transport Policy*, (2015).

and users. In order to maintain affordable transport systems, the Fijian Government will need to determine an appropriate model for financing the recurrent maintenance costs. In addition, infrastructure for charging EVs will also be needed as the share of EVs increase, and the impact of EV charging on the electricity grid needs to be assessed and considered and on the other hand systems and supply chains for scrapping and recycling of older vehicles and batteries need to be developed.

112. Inadequate urban transport planning. There are many authorities involved in transport planning, which results in challenges in policy and planning coordination. There is also limited planning for non-motorized options, such as bicycle use and pedestrians. Given high the number of municipalities and agencies overseeing the two main urban areas of Lami-Suva-Nasinu-Nausori and Nadi-Denarau-Lautoka, it may be difficult to achieve widespread changes within a five-year timeframe without additional support. Capacity and awareness needs to be built for urban transport planning to take into account social inclusion and integrated planning for accessible and safe pedestrian and non-motorised transport modalities.

6.3.3 GGGI's Response

113. GGGI will support the Fijian Government with meeting concurrent needs for greater mobility, cleaner air, and more efficient urban economies while limiting pollution and emissions. The focus will be on creating smart, sustainable, efficient, safe, integrated and low-carbon mobility (including non-motorized) options. GGGI will support these efforts by:

- Providing support for the development of green urban and sustainable transport plans and design of sustainable transport policies. This will include developing green public transport plans, planning for green energy in the maritime sector, and developing policies and regulations to incentivize cleaner and inclusive transport and mobility options. Improved planning will

also involve assessing future transport growth trends, and developing information systems for agencies to better identify and understand pollution sources.

- Investigating appropriate options for greener, improved public transportation and non-motorized land transport, including walkability and connectivity of different transport modes. Transport options could include bus rapid transit and electric vehicle options.
- Undertaking studies on sustainable maritime transport options and assessing incentives for enabling the transition to low-carbon sea transport. Maritime transport options could include the introduction of renewable energy (biofuel, solar, or sail assisted) vessels and the revival of traditional knowledge associated with use of small canoes and camakau (traditional watercraft) to reduce the reliance on fossil fuel outboard motors.
- Identifying, developing and designing sustainable land transport projects. GGGI will assist the Fijian Government with developing pre-feasibility and feasibility studies for green transport projects.
- Assisting with identifying finance through providing assistance to prepare proposals for accessing climate finance and assessing incentives to stimulate private sector investment in sustainable land transport.
- Promoting institutional strengthening and capacity building for an integrated transport strategic planning framework, which identifies and captures synergies between low carbon and resilient transport infrastructure development.
- Providing support for capacity building and awareness raising to the private sector, financial institutions, urban planners and other key actors involved in the transition towards low carbon transport. This will include workshops on green entrepreneurship to catalyze the role of the private sector in Fiji's green energy transition.

6.3.4 Results

114. GGGI's support will contribute to decarbonizing the transport system and strengthening efficiency in the sector. The immediate outcomes of the CPF will be the following results:

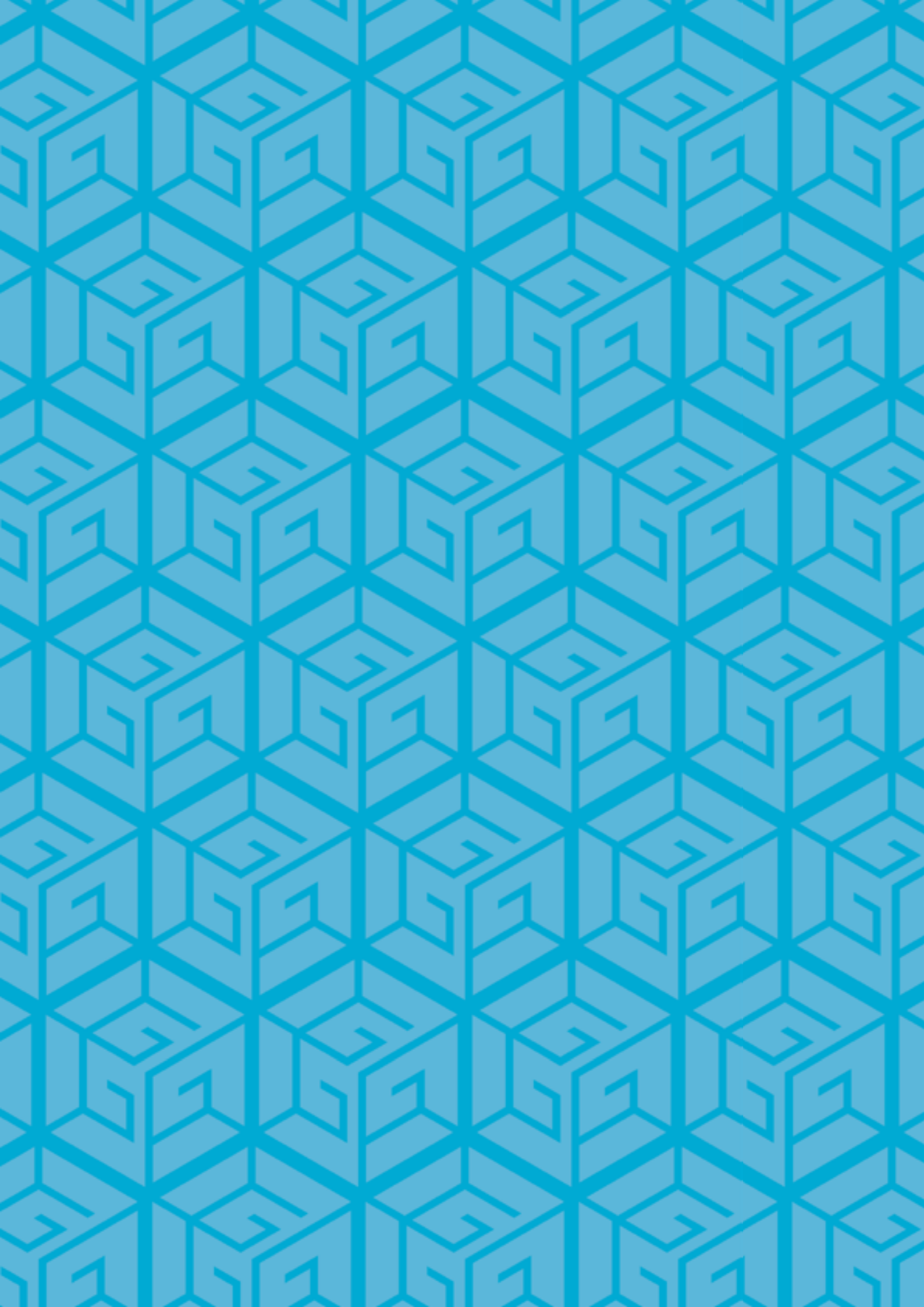
- The development of green, inclusive and sustainable urban transport plans, which includes an assessment of green transport options.
- Improved policies and regulations for strengthening the sustainability of Fiji's transport sector.
- Strengthened planning for moving towards green transport systems and accommodating increasing demand from urban population growth.
- Studies completed on sustainable maritime transport options, with incentives assessed for enabling the transition to low-carbon sea transport.
- The development of pre-feasibility and feasibility studies for green transport projects with investment mobilized from public and private financiers. Strengthened efficiency of transport systems from private sector participation in the design, construction, and operation of transport infrastructure.
- This strategic outcome will also contribute to achieving GHG reductions and green job creation – under the LEDES Very High Ambition Scenario, it is estimated that emissions reductions from the land transport sector can be reduced to 712 kt CO₂ by 2025 from a peak of 790kt CO₂ projected in 2020 with a net increase of 168 jobs by 2050. In addition, GHG emissions can be reduced to 152 kt CO₂ by 2025 from a peak of 187 kt CO₂ projected in 2020 in the maritime transport sector.

115. GGGI will contribute to achieving the NDP goal of developing efficient, resilient and sustainable land and maritime transport systems, and exploring the viability of implementing sustainable public transport networks in Fiji. This CPF commits to supporting the Fijian Government with facilitating actionable sustainable transport mode shifts, moving to more sustainable fuels, and improving energy efficiency for transport. GGGI's support on this outcome will result in transport plans which have green growth at the core, reduced dependence on fossil fuels, reduced GHG emissions and local air pollution, reduced traffic congestion, increased resilience and improved public transport for low-income households.

116. This CPF will also assist Fiji with meeting its national commitments under the NDP, the Maritime and Land Transport Policy, the NDC, and SDG 9 on resilient infrastructure and SDG 11 on sustainable cities. In the long-term, this outcome will contribute to laying the foundations for transitioning the transport sector to net zero as part of the LEDES.

6.4 Overall Impact

117. The CPF interventions directly align with the Fijian Government's medium and long-term goals and GGGI's strategic outcomes, as GGGI's support to Fiji will result in GHG emissions reductions, the creation of green jobs, increased resilience and access to sustainable services, such as, clean affordable energy and sustainable public transport, and contribute to the implementation of Fiji's NDC, the NAP and achieving the SDGs. The strategic outcomes are interlinked and complementary and including capacity building support to government and private sector in areas such as green entrepreneurship. As part of supporting the NDC implementation, capacity building for monitoring, reporting and verification is implicitly included to strengthen reporting of climate change actions
118. GGGI's support to Fiji will support achieving SDG 1 (end poverty and build resilience of the poor), SDG 6 (clean water and sanitation), SDG 7 (clean affordable energy), and SDG 8 (achieve higher levels of economic productivity), SDG 9 (build resilient infrastructure), SDG 11 (develop sustainable cities) and SDG 13 (combat climate change and its impacts).
119. Over the longer term, the positive impacts from GGGI's support are expected to include increased resilience to climate change and natural disasters, reduced dependence on fossil fuels, improved infrastructure services, and reduced GHG emissions. Achieving these impacts will be central for achieving the NDP 20-year vision of transforming Fiji towards a progressive, vibrant and inclusive society, and will also contribute to laying down the foundations for the implementation of the LEDS and achieving net-zero emissions by 2050.





Follow our activities
on Facebook and Twitter



www.gggi.org

The Global Green Growth Institute does not make any warranty, either express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed of the information contained herein nor represents that its use would not infringe privately owned rights.