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FIJI

# POLICY ENVIRONMENT PAPER

BERLIN, 2018



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# Urban Pathways

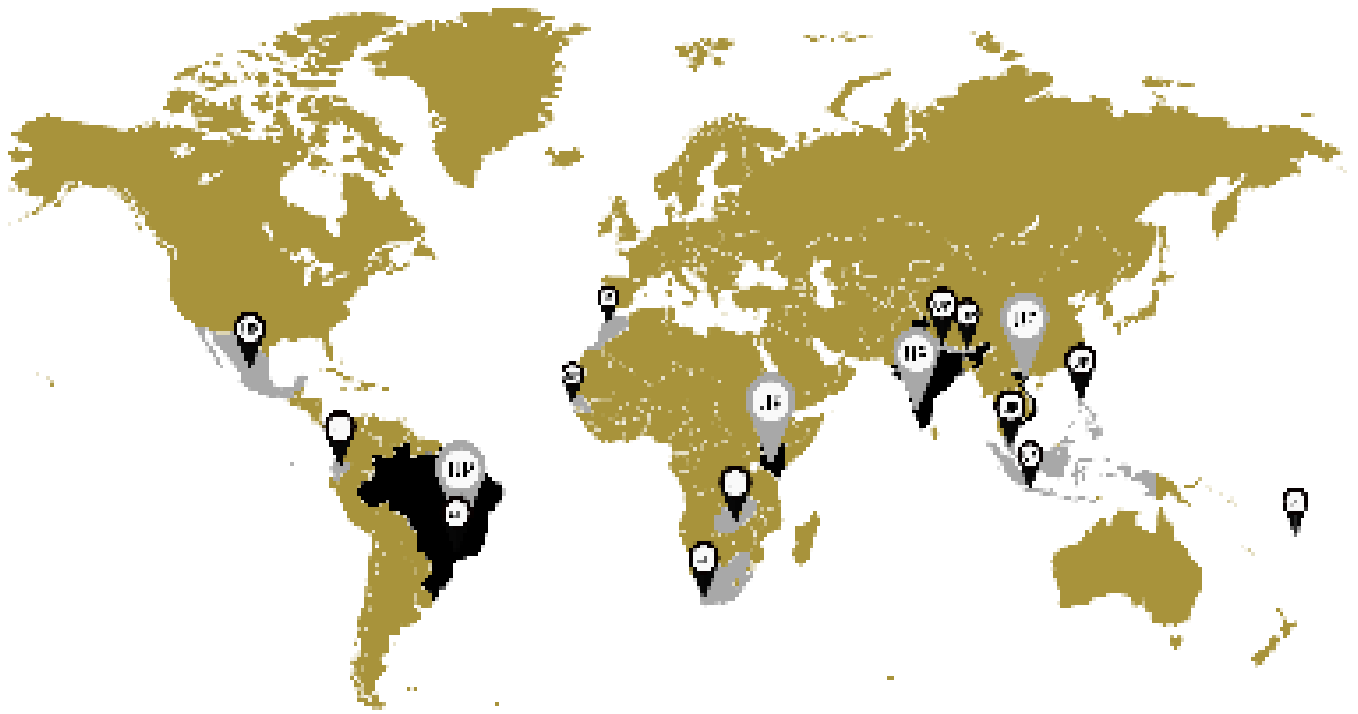
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## Urban Pathways Replication Cities

# ABSTRACT

**T**his paper reviews policy measures associated with Fiji's Intended Nationally Determined Contributions which were communicated to the United Nations Framework Convention on Climate Change (UNFCCC) in 2015. The paper highlights the Fijian government's efforts to mitigate greenhouse gas emissions and adapt to climate change impacts in the context of the New Urban Agenda. The paper also presents an overview of the transport, energy and waste sectors and reviews policy strategies and actions implemented by the city of Suva in the bid to promote environmentally sustainable development.





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# COUNTRY OVERVIEW

Fiji is an island country in the South Pacific Ocean consisting of 330 islands and 500 islets, out of which 110 islands are inhabited (Worldatlas, 2017). The country lies 1,850 km north of Auckland, New Zealand; and 2,800 km north-east of Sydney, Australia (The Commonwealth, 2018). The total land area of Fiji is about 18,700 square kilometres bounded by a huge economic zone of ocean covering 1.3 million square kilometres (Ministry of Strategic Planning, National Development & Statistics, 2014). The country has a total population of 898,760 as at 2016 growing at an annual rate of 0.73%. The share of the urban population in 2016 was estimated to be 54% with an upward growth rate of 1.4% (World Bank, 2018). Fiji's capital, Suva, is the largest metropolitan area; and

is located on the Viti Levu island which hosts about one third of the national population. Other large cities in Fiji include: Lautoka, Nadi, Labasa, Ba and Levuka. The country's economic performance over the last decades has been oscillating due to global economic and financial shocks and natural disasters (Republic of Fiji, 2015). The Gross Domestic Product (GDP) of Fiji was projected at 4.7 Billion USD in 2016 with a growth rate of 0.3% and a GDP per capita of 5,233 USD (World Bank, 2018). As a country whose economy has experienced unstable growth as a result of natural shocks possibly caused by climate change, Fiji has committed to promoting a sustainable development that inures to the general wellbeing of its citizens.



Fiji became party to the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. After ratification in 1993, the country committed to climate change activities as obligated under the convention. In 2012, Fiji reviewed its 2007 National Climate Change Policy to incorporate emerging issues of climate change. The policy was expected to guide policy implementers in mainstreaming climate issues in the planning and execution of sector programmes and projects. The National Climate Change Policy (2012) sets the tone for Fiji's Intended Nationally Determined Contributions as communicated to the UNFCCC in 2015. As a country whose economy is largely dependent on its natural resources, Fiji recognizes the potential effects and risks climate change has on its socio-economic development (Republic of Fiji, 2012). Fiji's INDCs is specific to the energy sector; as such, the country commits to reduce CO<sub>2</sub> emissions from energy supply by 30% of the Business-As-Usual (BUA) scenario by 2030. The country's recognition of the potential impacts of the energy sector on the economy underlines its priority for the sector. In this regard, Fiji in order to achieve this target, intends to generate its electricity almost fully from renewable sources by 2030 and improve on energy efficiency. Mitigation measures as outlined in Fiji's INDCs are focused on the energy sector particularly on reducing CO<sub>2</sub> emissions from electricity generation and from combustion of fossil fuels used in the transport sector. Adaptation measures include enhancing early warning signs, building cyclone-resilient infrastructure, constructing sea defense facilities in vulnerable communities, reducing land erosion, land degradation and desertification. The country is also making

efforts to conduct vulnerability and adaptation studies to better understand the effects of climate change on communities so as to prepare and plan adequately (Republic of Fiji, 2015).

As identified in its INDCs, Fiji's energy supplies consist of biomass or wood for cooking; fossil fuels for transport; and electricity which, as at 2013, was generated from 60% renewable sources from hydro, biomass and wind. The intention to increase renewables sources from 60% to 99% for electricity generation by 2030, is expected to reduce CO<sub>2</sub> emissions by 20% whilst efforts targeted at improving energy efficiency within the Fijian economy will account for the 10% CO<sub>2</sub> reduction by 2030. The implementation of these intents will be guided by the following policy instruments: Green Growth Framework 2014, Draft Energy Policy 2013, Draft Energy Strategic Action Plan (2013), Sustainable Energy for All (SE4All) global report, Fiji Electricity Authority's draft Power Development Plan, Electricity Act (Cap.180), and Clean Development Mechanism Policy Guideline 2010. The Government also noted that attaining its mitigation and adaption goals will require the need to cut down on its import of fossil fuels for electricity generation, develop an integrated policy to tackle climate change, strengthen the capacity of local government authorities to build resilient infrastructure, and foster partnerships at all levels of governance to address climate change issues. The Fijian government in communicating its INDCs to the UNFCCC, however, acknowledged that external financial support in the form of bilateral, regional and international market mechanisms will be a key condition for achieving most of its targets (Republic of Fiji, 2015).





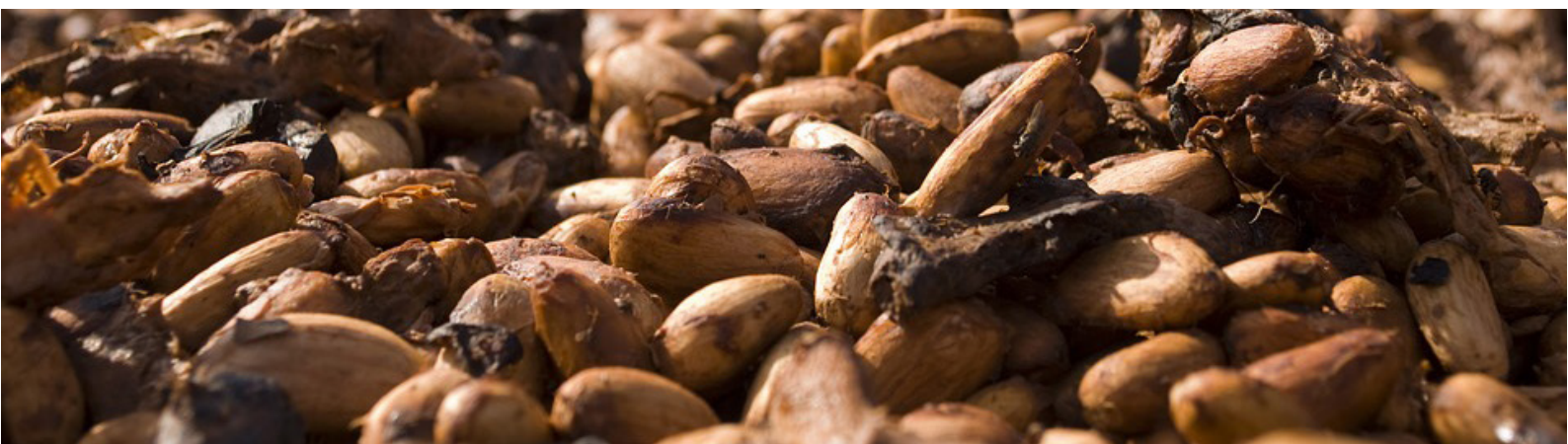
# POLICY AND STAKEHOLDER MAPPING

## Political background

Fiji is a democratic republic and practices a parliamentary democracy with a single-chamber legislature parliament having 50 members directly elected by universal adult suffrage (The Commonwealth, 2018). As stipulated in its Constitution of 2013 which replaced that of 1997, Fiji's government consists of the legislature (parliament), the executive and the judiciary. Governance in Fiji is generally participatory as citizens are given the right to fully partake in the economic life of the country (Government of Fiji, 2013a). The local government system in Fiji is enshrined in the country's Local Government Act of 1985 which makes provisions for the involvement of citizens and civil society organizations in governance. At the urban level, the system is structured into Councils (2 City Councils and 11 Town Councils) all of which have the same responsibilities to promote the health, welfare and convenience of its inhabitants (Commonwealth Local Government Forum, 2018). These 13 Councils are overseen by the Ministry for Local Government, Housing and Environment. There exist other local authorities at the rural level consisting of 17 provincial councils under the Fijian Affairs Board and 14 rural local authorities which are superintended by the National Board of Health. These rural authorities equally discharge their duties to improve

the lives of inhabitants.

The delivery of socio-economic services to citizens in Fiji is largely undertaken by the Councils. For instance, in the management of waste, the Councils are mandated to ensure that household wastes are collected, transported and disposed of in a proper manner. Councils are also mandated to establish and maintain public utility services; provide public transportation and public works; carry out town planning activities, among others. In 2006, the Local Government Act (1985) was amended to allow Councils engage in partnerships and commercial joint ventures with other statutory bodies in the discharge of their development functions (Commonwealth Local Government Forum, 2018). With regards to participation in political governance processes, the Fijian government in its roadmap for the implementation of its Intended Nationally Determined Contributions, recognized the importance of public participation in promoting climate change mitigation and adaptation efforts. The roadmap also acknowledges and emphasizes on private sector involvement in the implementation of environmentally sound programmes and projects which are expected to help the country achieve its climate change goals and objectives (Fiji Ministry of Economy, 2017).



# SECTOR OVERVIEW: ENERGY

The Fiji National Energy Policy (2013-2020) provides a framework for the development of the energy sector in Fiji. The policy aims at improving access to affordable and reliable modern energy for all citizens; establishing environmentally sustainable systems in the energy supply chain of Fiji; and enhancing energy efficiency and use of domestic energy sources so as to reduce the cost of energy imports. In Fiji, electricity access is estimated to cover about 80% of the population. As illustrated earlier in this paper, electricity is generated largely from renewable sources with potentials for increasing this share. The transport sector as reported in the Fiji National Energy Policy, consumes the chunk of imported fossil fuels into the country (Government of Fiji, 2013b). The Policy in this regard advocates for alternative cleaner sources of fuel such as biofuel, electricity and gas to power the transport sector. Energy governance in Fiji, ac-

ording to the Energy Policy, is complex and made up of several institutions and agencies who play varied roles and responsibilities ranging from generation, transportation, distribution, regulation and setting of tariffs. Grid-based electricity in Fiji is provided by the Fiji Electricity Authority which is a vertically integrated state-owned institution. Other energy sector players include: The Ministry of Works, Transport, and Public Utilities; the Ministry of Tourism and Public Enterprises; the Ministry of Finance and National Planning; the Ministry of Foreign Affairs and International Cooperation; the Fiji Commerce Commission; and the Land Transport Authority. Private sector involvement in the energy sector in Fiji is limited; as such the Energy Policy encourages private investments into large-scale electricity generation and small-scale grid-connected renewable electricity generation (Government of Fiji, 2013b).



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# SECTOR OVERVIEW: TRANSPORT

Fiji's first national household travel survey conducted in 2015 revealed that 53% of all recorded trips were made entirely on foot, whilst trips made by public transport (using buses and mini-buses) accounted for 17%, private vehicle 17%, and taxi 6%. Other modes used by respondents include horses and boats. These figures suggest that road transport remains the most dominant motorized transport mode in Fiji (Mackay, Ampt, et al., 2017). It is interesting to note that unlike the national figures which showed greater share (53%) for non-motorised transport (walking), urban areas in Fiji such as Suva, rather recorded greater use (63%) for motorized transport. In Suva, for instance, public transport provided by buses, mini-buses and taxis forms an integral part of the city's transport system with bus services being the most used. The buses are reported in the Greater Suva Transportation Strat-

egy, as old-aged vehicles which are noisy and emit substantial emissions that are environmentally detrimental to city dwellers. Like many other developing countries, Fiji is experiencing increasing vehicle ownership with a 43% increase in vehicle registration from 2002 to 2012 (Fiji Roads Authority, 2014). The road transport sector in Fiji is under the oversight of the Fiji Road Authority which was established in 2012 by a Government Decree. The Authority has the responsibility to develop all roads used for public transport as well as public jetties. Other stakeholder institutions relevant for the overall development of the transport sector in Fiji include: The Ministry of Finance; the Ministry of Works, Transport and Public Utilities; and the Ministry of Local Government, Urban Development, Housing and Environment (Fiji Roads Authority, 2014).

# SECTOR OVERVIEW: WASTE MANGEMENT

In Fiji, guidelines for solid waste management are stipulated in the country's National Solid Waste Management Strategy (2011– 2014). The policy strategy focused on building communities that are informed, responsible and committed to sustainably manage solid waste. The goal of this policy is to “increase the proportion of solid waste that is managed in a cost effective, financially sustainable, legally-compliant and environmentally sound manner” (Republic of Fiji, 2011). The responsibility of solid waste management lies with the various city and town councils which are expected to deliver waste services within their respective jurisdictions. The City Council manages the collection, transportation and disposal of refuse gen-

erated at the household and institutional levels. At the national level, the Department of Environment under the Ministry of Local Government, Urban Development, Housing and Environment plays control and guidance roles in the management of waste and pollution. Apart from this department, there are other institutions which are legally mandated to exercise some responsibilities in managing waste; these include: the Central Board of Health (CBH), under the Ministry of Health whose responsibility is to collect, treat, and dispose biomedical waste; and a host of private sector contractors who are engaged in waste collection and transportation as well as management of landfill site (Asian Development Bank, 2014).

# CITY EXAMPLE: SUVA

Suva is the capital of Fiji and the largest metropolitan area. The city is located on the Viti Levu island which hosts about one third of the national population. The 2014 population of Suva is estimated at 182,140 with an annual growth rate of 0.8% (Atlas of Urban Expansion, 2016). According to Phillips and Keen (2016), the urban population of Suva had increased by 5% between the years 2002 and 2010. As the administrative and political capital of Fiji, Suva is experiencing the pressure of rapid urbanization with resultant effects such as unemployment, inadequate socio-economic services and growing formation of informal settlements.

In order to promote sustainable transportation in Suva, the Fiji Roads Authority in collaboration with relevant national and local stakeholders has formulated the Greater Suva Transportation Strategy with the vision “to have an integrated and sustainable transport system that contributes to an inclusive, prosperous and environmentally responsible region” for the period 2015 to 2030 (Fiji Roads Authority, 2014). The strategy is expected to address the following key issues: traffic congestion, enforcement and regulation, bus infrastructure and routes, quality transport infrastructure, road safety, driver education and awareness (Fiji Roads Authority, 2014). Also, the government of Fiji in partnership with the World Bank is implementing the Transport Infrastructure Investment Project with the objective of improving resilience and safety of land and maritime transport infrastructure in the country (World Bank, 2015). In the energy sector, the Fijian government over the years has implemented energy-efficiency initiatives such as labeling of refrigeration appliances and carrying out of public campaigns

and sensitization on energy-efficiency (Government of Fiji, 2013b). In support of government’s efforts to improve access to modern cleaner energy sources, the Department of Energy in Fiji is promoting biogas technologies as alternative sources of fuel for cooking at the household level (Government of Fiji, 2015).

In Suva, about 68 tons of waste is generated per day; out of which more than 80% are organic waste. In attempt to improve on its waste management system, the Suva City Council has introduced initiatives to promote waste minimization and the concept of reducing, reusing and recycling of waste. For instance, the City Council encourages its residents to compost food peelings, grass cutting and yard clippings by subsidizing the cost of purchasing home compost bins. In this way, residents can produce compost manure which is environmentally friendly and used for gardening and other farming activities (Suva City Council, 2017). The Council has also established a compost processing centre to aid in the composting of domestic wastes and wastes from public places. The collection of these green wastes is done by private contractors who have been engaged by the Council. The product from the composting centre is sold to the public as soil conditioner for agricultural purposes. Again, the Suva City Council provides recycling bins at strategic locations within the city to promote the separation of recyclable wastes such as aluminum cans, bottles, wrappers and papers. These wastes are then recycled into valuable products such as eco bags which are sold at designated markets in the city. All these initiatives according to the Suva City Council are expected to enhance the city’s efforts to promote cleaner and greener environment.



# CONCLUSION

In concluding, Fiji's commitments to mitigate and adapt to climate change effects, are evident in the country's efforts to embark on environmentally friendly initiatives. For instance, in 2017, the government of Fiji under the technical guidance of the World Bank and other partners, raised green bonds in the amount of 50 million USD to undertake its climate change mitigation and adaptation agenda. The bonds are expected to attract investments into programmes and projects which are environmentally supportive of the Fijian economy (World Bank, 2017). Again, Fiji in response to its nomination as the President of the Conference of Parties of the Convention (COP 23), has enacted an Act of Parliament (COP 23 Presidency Trust Fund Act 2017). These initiatives are expected to give backing to the country's commitments to support climate change programmes, projects and activities as required under the Paris Agreement (Government of Fiji, 2017).

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