



# Long-Term, Low Emission Development Strategies:

Pathways for Green Growth and Deep Decarbonization

## ● Why low emission development strategies (LEDS)?

Low emission development strategies, also known as long-term strategies (LTS), are a key tool to bridge national sustainable development and climate mitigation objectives. As part of the Paris Agreement, these strategies provide an important policy structure for countries to work towards decarbonizing their economies on an economy-wide basis by the year 2050, and they are formally communicated to the UNFCCC.



Stakeholder engagement and consultation is a critical part of the LEDS process.

LEDS are country-led and are not mandatory, but as national strategies they can nevertheless serve a critical role in implementing the Paris Agreement and supporting its ambitions. LEDS documents not only provide a framework for decarbonizing economies over the next 30 years, but also a structure for establishing targets and milestones in countries' nationally determined contributions (NDCs), as well as laying out priorities for attracting international and national financing for green, low-carbon projects over the near and long term.

## ● Elements of an LTS/LEDS

While there is no required structure, a typical national process for developing a LEDS includes, for example, five key steps:



### Organizing and implementing LEDS process

establishing institutional arrangements and coordination structures (e.g., LEDS Steering Committee), and conducting a series of national, sub-national, and sector-level stakeholder engagement and consultation activities

### Assessing

current strategies, policies, practices, and capacities (i.e. GHG emissions baseline)

### Analyzing business-as-usual and low emission scenarios

starting with a participatory visioning process with stakeholders to identify the national and sector-specific direction and ambitions for the LEDS, and conducting scenario analysis and modeling for further consideration by national and other stakeholders

### Prioritizing

policy, financing, and other implementation options and actions based on available scenario analyses and possible decarbonization and development pathways in consultation with national and other stakeholders

### Preparing, adopting, implementing, and monitoring the LEDS

based on well-established governance structures, linked to effective MRV systems, and including ongoing education and capacity building activities

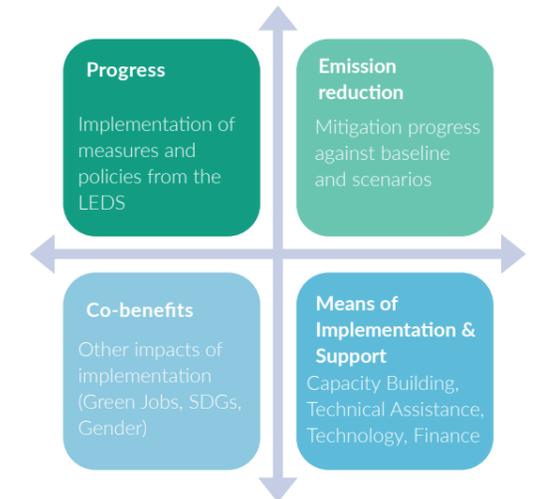
## ● Technical Support Services

At the request of its member and partner countries, GGGI provides end-to-end services to support countries throughout the LEDS process—including support for visioning and stakeholder engagement, policy assessment, scenario analysis and modeling, policy and project prioritization, document preparation, project development, and identification of project financing.

As an international development organization, GGGI works under the leadership and guidance of host country governments as part of a nationally-driven process of developing a LEDS. Given the importance of building local capacity when developing and implementing a LEDS, as with NDCs and MRV systems, GGGI aims to engage local experts and institutions wherever possible.

GGGI led the development of Fiji's LEDS in 2018 (available at <https://unfccc.int/node/193323>) and is discussing LEDS support with additional GGGI member and partner countries.

### Four dimensions of LEDS monitoring and evaluation



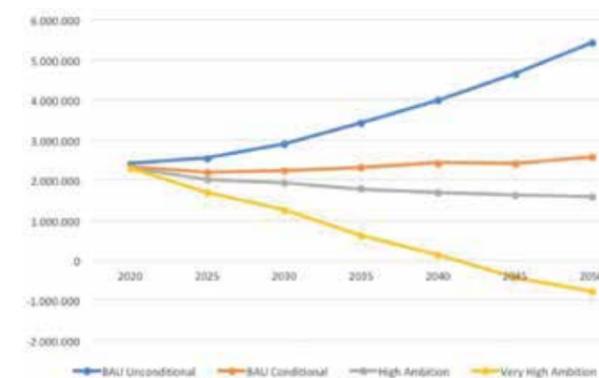
## ● Fiji's Robust and Ambitious Mid-Century LEDS

While Fiji emits only a small amount of carbon, it has aimed to promote Paris Agreement ambitions as a core national strategy and committed to develop a LEDS in its 10-year National Development Plan. In late 2017, the Fiji Ministry of Economy requested GGGI to play a leading role in developing a national LEDS to be delivered as part of the COP23 Fiji COP Presidency. Under the leadership of Fiji's Ministry of Economy, which coordinated engagement across government ministries and agencies, GGGI helped develop the LEDS with extensive support from the University of the South Pacific and selected local and international experts, as well as contributions from the Stockholm Environment Institute and Gesellschaft für Internationale Zusammenarbeit (GIZ).

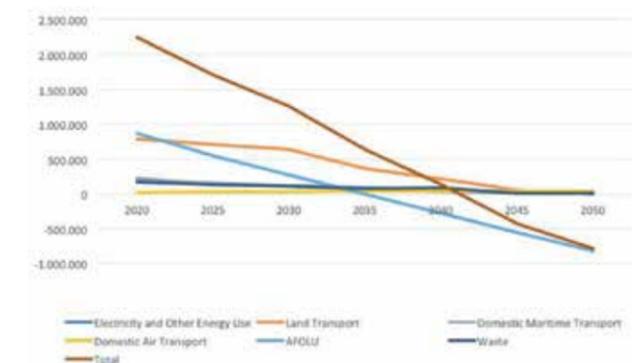
Fiji's LEDS included a comprehensive process for conducting stakeholder visioning and consultations, preparing economy-wide low emission scenarios, and identifying priority policies and mitigation actions while planning for continued 4% annual economic growth to the year 2050. The LEDS considers every sector of the Fijian economy, from fishing and food production to transport and education, to reduce emissions while promoting inclusive green growth.

The LEDS describes four types of long-term emissions scenarios which were elaborated for each sector, including: (1) a Business-as-Usual (BAU) Unconditional Scenario, based on existing policy; (2) a BAU Conditional Scenario which would benefit from external financing; (3) a High Ambition Scenario which envisions new, more ambitious policies, technologies, and financing; and (4) a Very High Ambition Scenario, which considers significantly more ambitious policies, technologies, and financing.

Based on the extensive stakeholder consultations, analysis, and modelling for each sector, the LEDS shows that under the Very High Ambition Scenario Fiji can achieve net zero emissions by the year 2041. After that emissions would increasingly be net negative, with Fiji's forests and mangroves then actively removing atmospheric carbon. The most significant mitigation of emissions would result from complete transformation of Fiji's energy sector to one based on broad expansion of renewable energy and adoption of clean energy for commercial, industrial, and household use, as well as the conversion of most of Fiji's land transport systems to electric vehicles.



Total net emissions under the four LEDS scenarios in the Fiji LEDS (metric tons CO2e) Source: Fiji LEDS 2018-2050, p.5



Projected emission reductions under the Fiji LEDS Very High Ambition Scenario (metric tons CO2e). Source: Fiji LEDS 2018-2050, p. 39

## How We Work

GGGI supports its Member and partner countries in mainstreaming green growth and climate change actions into national, subnational, and sectoral economic development plans and visions. GGGI also helps to address financial, policy, and knowledge gaps, and challenges in its Member and partner countries. In addition, GGGI delivers a compelling and rigorous evidence base that showcases impact through policy research, analysis, and data-driven tools and methodologies.

In the context of green growth, GGGI provides a comprehensive suite of services to address climate change and implement Paris Agreement commitments. GGGI supports countries in six relevant areas, including: governance to develop and integrate NDCs and LEDES into national planning processes and climate diplomacy; implementation of sectoral projects addressing climate mitigation and adaptation objectives; measurement, reporting, and verification through enhanced transparency frameworks; climate finance by building national financing vehicles, supporting Green Climate Fund readiness projects, and developing bankable projects; capacity-building to enable Member and partners countries to implement their climate commitments; and sectoral interventions in the areas of sustainable energy, sustainable landscapes, water and sanitation, and green cities to ensure climate resilient green growth.



Fijian Prime Minister Frank Bainimarama launched the Fiji LEDES during COP24 in Katowice Poland on December 13, 2018. Fiji formally communicated its LEDES to the UNFCCC on February 25, 2019. (Photo credit: enb.iisd.org)

**“LEDES have emerged as a key tool to bridge countries’ sustainable development and climate mitigation objectives”**



To learn more about our work, please contact us:

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## Our Approach

- Partnering with developing and emerging countries to design and deliver programs and services that demonstrate new pathways to pro-poor economic growth.
- Providing Member countries with the tools to help build institutional capacity and develop green growth policy, strengthen peer learning and knowledge sharing, and engage private investors and public donors.
- Leveraging a comprehensive network and governance structure to facilitate a multi-directional and multi-sectoral sharing of knowledge between South-South countries, while gathering global actors with the potential to set and drive the international agenda on green growth.

### Global Green Growth Institute

The Global Green Growth Institute (GGGI) is a treaty-based international, inter-governmental organization dedicated to supporting and promoting strong, inclusive and sustainable economic growth in developing countries and emerging economies. GGGI was established in 2012, at the Rio+20 United Nations Conference on Sustainable Development, and currently consists of 31 Member countries around the world. GGGI's mission is to support the transition of its Member and partner countries toward a model of green growth by developing and implementing strategies that simultaneously achieve poverty reduction, social inclusion, environmental sustainability and economic growth. By pursuing this mission, GGGI aims to achieve its vision of a resilient world of strong, inclusive and sustainable green growth.

GGGI's interventions emphasize change in four priority areas considered to be essential to transforming countries' economies including:



SUSTAINABLE  
ENERGY



WATER &  
SANITATION



GREEN  
CITIES



SUSTAINABLE  
LANDSCAPES

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