



ANNUAL  
REPORT  
2021

# GREEN BONDS





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REPORT  
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# SUSTAINABLE

## MESSAGES FROM LEADERSHIP

Message from the President of the Assembly and Chair of the Council 06

Message from the Director-General 07



About GGGI 08

2 GGGI Members and Operations 12

3 Resource Partners 14



2021 Highlights from GGGI: Results and Finance 16

5 2021 Overview on Results 20

6 Green Bonds 23



2021 Key Achievements and Accomplishments 37

8 Key Developments for GGGI 55

9 Testimonials from Council Members, Beneficiaries, Government Counterparts, and Staff 59



Key Trends and Organizational Effectiveness and Efficiency 63

11 Working during the Pandemic, Empowering our People 69

12 Summary of Financial Statement 77

13 Greening GGGI 80

Annexes 83

## Message from the President of the Assembly and Chair of the Council

Dear Friends and Members of the Global Green Growth Institute,

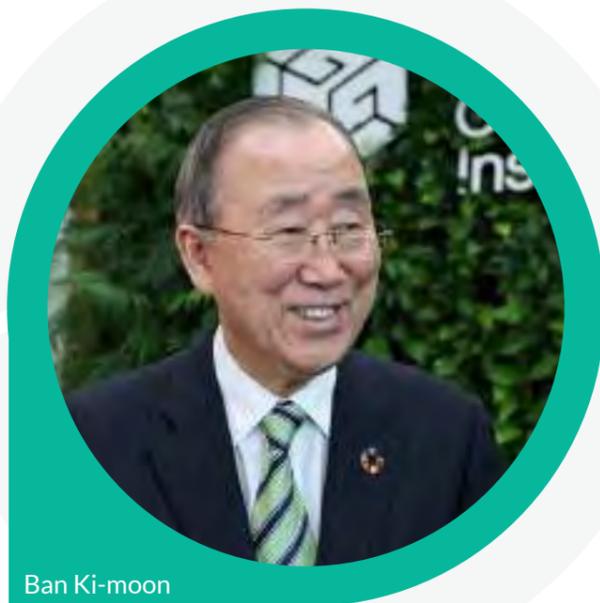
The year 2021 was still heavily dominated by the COVID-19 pandemic that has affected billions of people worldwide through direct health impacts, as well as the lockdowns and economic slowdowns throughout the developing world. The economies of developed countries, by contrast, rebounded surprisingly quickly, and so did their greenhouse gas emissions, unfortunately.

GGGI supported 30 countries to update their Nationally Determined Contributions to the Paris Agreement. In many cases NDCs became more ambitious, in others more sectors were included, in more cases leading to a cabinet approval of the revised NDCs. As we now know, while some countries significantly strengthened their NDCs, on the whole the NDCs submitted to COP26 in Glasgow did not quite commit reductions sufficiently enough to achieve the Paris Climate Change Agreement goal of limiting global warming to well below 2°C. The increased prominence of the 1.5°C target was heartening to see, with many leaders making pledges for NetZero or carbon neutrality. If all those pledges are realized, global warming could be limited to 1.8°C, which would be the most positive result that could be derived from COP26.

That also means most of the hard work is still ahead of us because most of the NetZero pledges are not yet translated into solid plans and backed up by clear financing commitments. For GGGI, that means much of our work will be linked to exactly that challenge in the coming months and years, including developing more ambitious NDCs to submit to COP27 in Egypt later this year and translating NetZero pledges into Long Term Strategies and then medium-term action plans, supported by climate finance strategies.

Finance is clearly critical. Unfortunately, not enough countries used the opportunity to allocate COVID-19 recovery funds for a **green** recovery—or simply did not have the financial resources to allocate to a green recovery—as is the case for many least developed countries. GGGI did support 15 countries in 2021 with policy advice on how there are green growth opportunities and green jobs creation, in particular, linked to a recovery from the pandemic. In 2022, the G20 Chair, the Republic of Indonesia, has asked GGGI to prepare a background paper on green recovery opportunities for the G20 meetings.

Developing countries expressed their concern at COP26 that the USD100 billion in climate finance committed by developed countries to support developing countries has not fully materialized. In addition, all calculations of the financial needs to deal with both mitigation and adaptation in developing countries now show that the actual financial requirements are far in excess of the USD100 billion per annum.



Ban Ki-moon

It is clear that to mobilize sufficient financial resources will require a significant involvement of the private sector, as the needs are well beyond the ability of the public sector and ODA to mobilize climate finance. One important opportunity may arise from the international collaboration governed by Article 6 of the Paris Agreement, for which the rulebook was finished at COP26. Governments may agree to transfer emissions reductions, and buyers of such carbon credits (generally developed countries) may agree to pay sellers (generally developing countries). Once governments agree on the terms and conditions, private developers can develop projects in seller countries, and private companies in buying countries can agree to buy such credits to meet their national obligations.

GGGI believes that this new “carbon market” has the potential to be much more inclusive than the first “Carbon Development Mechanism” market that is coming to an end. To this end, I am pleased to share that GGGI—with strong support from donors—is actively building capacities in more than 10 developing countries to enable them to engage in such carbon trading at terms that are in the mutual interests of buyers and sellers among GGGI’s Members and partners.

In addition, there is growing interest to green the finance sector, including an exponential growth of green bonds in developed countries. GGGI has entered this new space with spectacular success in 2021 by supporting the government of Peru in issuing more than USD4 billion in green bonds. I hope this is indicative of future opportunities to scale up GGGI’s support to mobilize green and climate finance for the green transition that the world so desperately needs.

Despite the severe global challenges, GGGI had an excellent year of outstanding performance in 2021. I would like to extend my sincere thanks to Members, donors, partners and, above all, the diligent staff for all their efforts to fight the climate crisis and to make the future a little greener and more sustainable!

Ban Ki-moon

President of the Assembly and Chair of the Council

## Message from the Director-General

While 2020 was a very challenging year, GGGI did end up signing a record volume of new agreements for earmarked projects, at over USD60 million. That set the scene for a period of rapid growth for the organization. The budget for 2021 called for the recruitment of a hundred new staff members and an increase in the volume of our earmarked project work of 40%. That was a very ambitious plan under normal circumstances, let alone during the second year of a pandemic that still closed many borders and caused most of us to work from home for a very large part of the year.

As you will read in this Annual Report, to make a long story short, we ended up recruiting 110 new staff and 121 consultants and increased the volume of our earmarked project work by 57% year on year – and managed to generate a surplus of a little over USD3 million. And we signed another close to USD60 million in new earmarked project agreements. That already makes 2021 an exceptionally good year for GGGI as an organization, but I am pleased to report we also had extraordinary results in terms of our intermediate outcomes as well.

In 2021 GGGI helped mobilize USD5.1 billion in green and climate finance for GGGI Members, dominated by the green bonds issued by the government of Peru with GGGI’s support. Even outside this very large result in Peru, though, GGGI exceeded its USD700 million target for green finance mobilization in 2021. In addition, the overall pipeline of green investment projects GGGI works on has increased from USD1 billion to USD5 billion last year, making it more likely GGGI will be able to meet or exceed its investment targets in 2022 as well. As scaling up our green investment mobilization is a critical step in our theory of change to generate impact in terms of GGGI’s Strategic Outcomes, this means our opportunity to deliver impact is improving as well.

We recognize that despite GGGI’s successes outlined above, the challenges we all face are daunting. While there was some solid progress made at COP26 to fight the climate crisis, most observers agreed that while the 1.5°C target could be considered “still alive” – it was also “on life support”. With the most recent IPCC reports it would appear we have to revise this position as it appears 1.5°C warming is no longer a realistic target, unfortunately.

Greenhouse gas emissions keep going up and the record high fossil fuel prices tempt many producers to step up their exploration and production. At the same time, fossil fuel importers struggle to pay for those expensive imports which only strengthens the argument to accelerate the clean energy transition.



Dr. Frank Rijsberman

The war in Ukraine, and the cost of supporting refugees, put pressure on international aid budgets, and the reduction of wheat exports threaten to cause famines in the most vulnerable countries. That would include particularly the most vulnerable, least developed countries already suffering from droughts and instability, not least in the Sahel and Horn of Africa.

This continuing challenging outlook only makes GGGI’s work going forward even more relevant and meaningful. For the 30 countries where we supported improved NDCs and the 15 countries where we worked on green recovery from the pandemic in 2021, the work continues and shifts gradually from planning to implementation. Countries that made NetZero pledges in 2021 now need roadmaps, implementation plans and finance strategies to turn these pledges into reality. As many developing countries face high levels of indebtedness, finding financial resources that do not increase sovereign debt is a priority for GGGI and we have several projects focusing on alternative sources of green finance, including innovative instruments such as debt for nature swaps.

The rapid growth of GGGI in 2021, that we expect to continue in 2022, was made possible by the confidence given to GGGI by our Members, donors, and partners, and through the hard work of our very dedicated GGGI staff. I am grateful to all GGGI’s stakeholders for your continued support and look forward to continuing our green growth journey together in 2022!

Dr. Frank Rijsberman

GGGI Director-General

# 01

## ABOUT GGGI

The Global Green Growth Institute (GGGI) was established as an international, intergovernmental organization in 2012 at the United Nations Conference on Sustainable Development, also known as Rio+20. GGGI was established to support developing country governments' transition to a model of green growth that promotes economic growth to meet development aspirations while solving the climate crisis and protecting natural capital, with a strong focus on nature-based solutions and reducing social inequities.

### 1.1 GGGI Vision, Mission, and Core Values

The organization's vision is a low-carbon, resilient world of strong, inclusive, and sustainable growth, and its mission is to support its Members in the transformation of their economies to a green growth economic model.

#### VISION AND MISSION



A low-carbon resilient world of strong, inclusive, and sustainable growth.



GGGI supports its Member countries in the transformation of their economies to a green growth economic model.

GGGI has five core values that shape the organization's culture and inspire its employees to work together toward GGGI's vision and mission. These core values are **Integrity**, **Transformational**, **Boldness**, **Excellence**, and **Inclusiveness**. They are critical to enabling GGGI as a long-lasting, successful, and motivating place to work. GGGI reinforces its ONE GGGI approach to unite knowledge, expertise, and effort across the organization for the effective implementation of Strategy 2030.



#### INTEGRITY

- We uphold high accountability and transparency standards;
- We are objective and independent;
- We prioritize social and environmental responsibility.



#### TRANSFORMATIONAL

- We aim for catalytic outcomes serving country needs;
- We balance short-term results with a long-term outlook;
- We leverage our outcomes through partnership.



#### BOLDNESS

- We solve problems with optimism;
- We continuously learn and adapt;
- We seek and scale up creative new solutions.



#### EXCELLENCE

- We apply technical rigor;
- We demonstrate thought leadership;
- We drive continuous improvement.



#### INCLUSIVE

- We champion diversity;
- We engage widely in decision-making;
- We provide equal opportunity.



## 1.2 GGGI's Strategy 2030 and 5-Year Roadmap 2021-2025

Approved in 2019, **Strategy 2030** (and its **Addendum** further approved in 2021) **reaffirms the vision, ambitions, and strategic directions set by GGGI Members in terms of growth and expansion.** The key scenario in Strategy 2030 sees GGGI's in-country presence grow to at least 50 countries by 2030, if it can mobilize revenues of USD100 million-USD110 million per annum within that time period. GGGI targets to mobilize over **USD16 billion in green and climate finance commitments** for its Members. GGGI's ex-ante attribution impact assessment shows that at this scale, it will support its Members to reduce emissions by an estimated **one million gigaton of CO<sub>2</sub>e, generate two million green jobs, provide sustainable services to 100 million people, save 0.5 million of hectares of forests, and support 8 million people to cope with climate change.** GGGI further targets to become **a zero-carbon organization by 2050 or earlier.** As a significant milestone to this ambition, GGGI aims to reduce its greenhouse gas (GHG) emission per employee by 40% in 2030 against a 2015 baseline, both by targeting green office operations and by lowering emissions through reduced GGGI's travel activity.

Following the path laid out in previous years, GGGI targets its interventions toward its six Strategic Outcomes (SOs) (Figure 1), areas of high-level and longer-term impacts of direct relevance to countries' Nationally Determined Contributions (NDCs) and Sustainable Development Goals (SDGs) commitments, and the following two strategic goals:

- By 2030, the economies of GGGI Members will have transformed into a low-carbon and resilient economic development model with GGGI's support to maximize their green growth outcomes and NDCs and SDGs implementation.
- By 2030, GGGI will be well-positioned as a world-class, effective, and agile intergovernmental organization that is respected, financially sustainable, efficient, transparent, accountable, and considerate of its people.

To achieve these two strategic goals, Strategy 2030 prioritizes GGGI's operations through the implementation of **eight Global Operational Priorities (GOPs)**, presented in Figure 2.

**FIGURE 1**  
GGGI's six Strategic Outcomes



**FIGURE 2**  
GGGI Global Operational Priorities under Strategy 2030



The programmatic GOPs (1-5) represent specific focal areas of programmatic solutions that have potential for impact at scale and where GGGI can support the NDCs and SDGs ambitions of Member and partner countries. The non-programmatic GOPs (6-8) focus on the effectiveness and efficiency of internal control and the delivery of its services to Members.

The **5-Year Roadmap** is essentially an action plan to guide the implementation of Strategy 2030 for the first phase, covering the period 2021-2025. The key features of the Roadmap are that it:

- Outlines the growth and expansion path for GGGI with clear direction of the scenarios and phases of country program development.
- Defines the impact targets that GGGI aims to deliver in terms of green investments and for each SOs, both attributed and contributed.
- Identifies programmatic solutions that country programs currently focus on and the planned scaling up of these solutions across country programs.

- Determines the projections of funding needed for GGGI's operations to deliver results.
- Provides the key steps, milestones, and timelines for the three key phases with key action items organized under 10 workstreams. The three phases are: preparatory/transition phase in 2020; implementation of Strategy 2030 over the period 2021-2025; and impacts assessment.

The Roadmap 2021-2025 translates the five programmatic GOPs from Strategy 2030 into **10 corresponding Programmatic Solutions (PS)**, complemented by an **11<sup>th</sup> PS - Carbon Pricing**, adopted in the **Strategy 2030 Addendum** (Figure 3). The 11 PS are key priority areas where GGGI expects to make its most impactful interventions in support of the transformation of its Member and partner countries' economies toward a green growth economic development model.

**FIGURE 3**  
GGGI's Global Operational Priorities and Programmatic Solutions

GLOBAL OPERATIONAL PRIORITIES	PROGRAMMATIC SOLUTIONS
<b>GOP 1</b> Catalyzing and accelerating access to climate finance / green investments for Members' public and private sectors	<b>PS 1 Green Investments</b> (green bankable projects, investment proposals, national financing vehicles, green and climate instruments, carbon-focused engagements)
<b>GOP 2</b> Supporting our Members in strengthening policy, planning, and regulatory frameworks, and institutional capacity to achieve green growth outcomes	<b>PS 2 Climate Action</b> (inclusive green growth plans, LT-LEDS, NDC support, MRV system design, climate diplomacy)
<b>GOP 3</b> Achieving a sustainable and circular bioeconomy while securing healthy natural systems	<b>PS 3 Climate Resilient Agriculture</b> (solar irrigation, renewable energy application in agri-value chain, resilient cropping practices, resource conservation) <b>PS 4 Sustainable Forests</b> (REDD+, landscapes financing mechanisms, innovation of natural capital markets) <b>PS 5 Coastal Resilience</b> (mangroves as ecosystem for livelihoods, aquaculture, marine issues fisheries, flood protection and pollution)
<b>GOP 4</b> Making cities and communities sustainable, liveable, and resilient, supported through green jobs, services and green infrastructure capital markets innovations	<b>PS 6 Waste Management</b> (circular economies, urban and agricultural waste, wastewater, FSM, waste to resource) <b>PS 7 Sustainable Mobility</b> (e-mobility, non-motorized transport) <b>PS 8 Green Buildings</b> (green urban infrastructure norms/standards/policies, energy efficiency in residential & commercial buildings) <b>PS 9 Solar PV</b> (energy transaction access and productive use solar water pumping, solar PV auctions, rooftop, utility scale plants, storage) <b>PS 10 Green Industries</b> (green industrial parks, green supply chains, energy efficiency in SMEs, labelling and standards)
<b>GOP 5</b> Accelerating progress in our country programs in poverty eradication and gender equality	<b>Cross-cutting</b> in all programmatic solutions

**PS 11 Carbon Pricing**  
(Article 6 readiness, policy design, transaction and trading)

# 2

## GGGI MEMBERS AND OPERATIONS

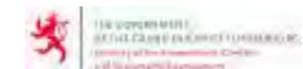
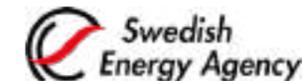


Headquartered in Seoul, Republic of Korea, GGGI has **43 Members** with operations in **37 countries**.



# 3

## 2021 RESOURCE PARTNERS



# 4

## 2021 HIGHLIGHTS FROM GGGI: RESULTS AND FINANCE

### HIGHLIGHTS FROM GGGI | GGGI RESULTS OVERVIEW

**56** COMPLETED ADVISORY OUTPUTS that inform development of green growth investments

**USD5.1 billion** in green investments for its Members

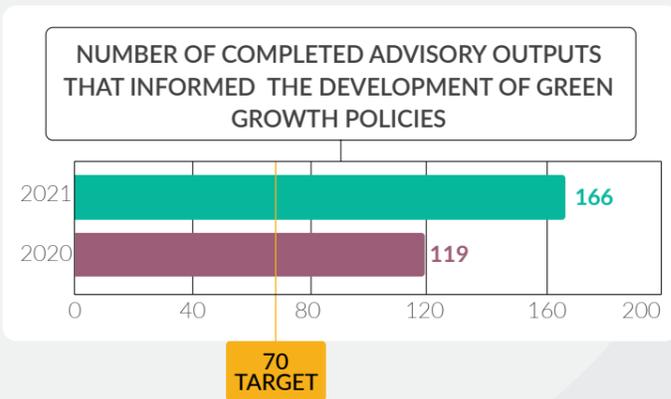
**76** GREEN GROWTH POLICIES adopted by 18 Members with GGGI's support

**11.9 million** tCO<sub>2</sub>e emissions reduction

**50,000** new green jobs created

**13,000** hectares of forests protected

### 2021 ATTRIBUTED STRATEGIC OUTCOMES



In 2021, GGGI delivered **166 COMPLETED ADVISORY OUTPUTS** that informed the development of green growth policies against **A TARGET OF 70**

### GGGI Intermediate Outcome 1 | Catalyzing green investments

**Colombia**  
**USD276 million**

The successful securing of **USD276 million for the deployment of 30,000 distributed PV systems across Bavaria's stores in rural Colombia.** GGGI will support the project developer, Colibri Energy, to advance technical and commercial structuring of the project with financial assistance from the UK PACT (Partnering for Accelerated Climate Transitions) program in Colombia.

**Mongolia**  
**EUR18 million**

The GGGI Mongolia NAMA project will enable the scaling up of residential building retrofits that will save energy, reduce GHG emissions (**4 million tCO<sub>2</sub>e over the project lifetime**), and improve thermal **comfort of apartments for 78,000 people.** The project mobilized EUR18 million from the NAMA Facility and is co-financed by the Ministry of Construction and Urban Development (USD9 million), and the Municipality of Ulaanbaatar (EUR6.5 million).

**Peru**  
**USD4.37 billion**

The Peru country program supported the development of a sustainable and social bonds framework, which led to the issuance of **Peru's first sovereign sustainability and social bonds for a total of USD4.37 billion.**

**28 COUNTRIES** that submitted revised NDCs to the UNFCCC prior to COP26 with GGGI support

### GGGI Intermediate Outcome 2 | Developing green growth and national policy frameworks



### GGGI Intermediate Outcome 3 | Knowledge sharing and capacity building

**321** Capacity building activities

**15,865** Participants

**155** Knowledge products delivered

### GGGI Technical Reports



### GGGI Insight Brief



# HIGHLIGHTS FROM GGGI | GGGI FINANCE OVERVIEW

**INCREASED TOTAL REVENUE**  
**USD54.1 million**  
 An increase of:  
 → USD12.8 million or **31%** over 2020  
 → USD23.5 million or **77%** over 2017

**OPERATING SURPLUS**  
**USD3.1 million**  
 GGGI was able to maintain its reserves days at 144 days

**GGGI signed a total of USD58.7 million of new earmarked project commitments in 2021**  
**As a result,** the forecast for 2022 is a strong increase in total revenues demonstrated by a total:  
**OPERATING BUDGET USD72 million**

**INCREASED EARMARKED FUNDING**  
**USD10.7 million or 45%**

**EARMARKED FUNDING INCREASED** to **72%** of GGGI total 2021 revenue & funded **72%** of expenditures  
 This means that core funded 28% of activities down from 84% in 2017.

GGGI REMAINED IN A STRONG & STABLE FINANCIAL POSITION AT THE END OF 2021.

	2017 (USD)	2018 (USD)	2019 (USD)	2020 (USD)	2021 (USD)
Core contribution	23,157	24,151	32,724	17,051	17,187
Program Earmarked					2,584
Project Earmarked	6,864	11,529	14,850	23,475	34,155
Investment income/ finance costs	576	350	213	745	219
<b>Total income</b>	<b>30,597</b>	<b>36,030</b>	<b>47,787</b>	<b>41,271</b>	<b>54,145</b>
<b>Gross Expenditures</b>	<b>44,117</b>	<b>49,679</b>	<b>46,598</b>	<b>42,947</b>	<b>50,981</b>
<b>Total surplus/(deficit)</b>	<b>(13,520)</b>	<b>(13,649)</b>	<b>1,189</b>	<b>(1,676)</b>	<b>3,164</b>

## Audit opinion

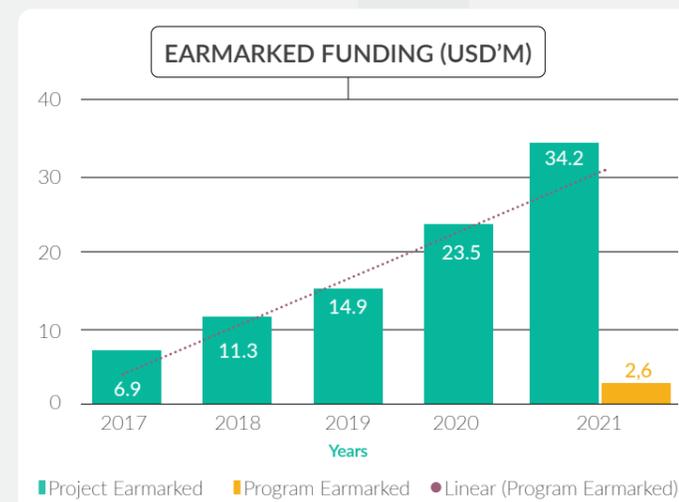
GGGI received an unqualified audit opinion on its 2021 Financial Statements from its external auditors PwC. **The complete audited financial statements can be found on the 2021 Annual Report website: [report.gggi.org/2021](http://report.gggi.org/2021)**

In 2021, GGGI had a new category of earmarked funding, namely program earmarked funding. Program earmarked funding differs from project earmarked funding in the degree of flexibility in its use, with the use of program earmarked being more flexible. Program earmarked funding usually refers to funds given for a specific program or region. Use of these funds within the attributed program or region is generally unconstrained. In 2021 program earmarked funding amounted to USD 2.6 million.

**PROGRAM EARMARKED FUNDING** of USD 2.6 million received for the 1<sup>st</sup> time.

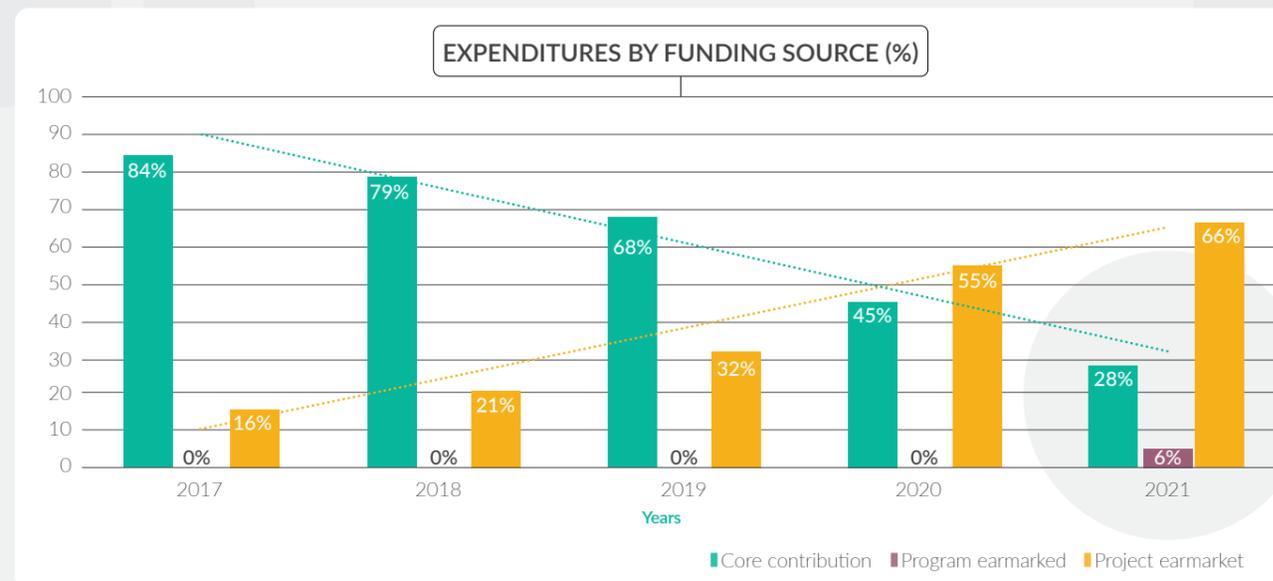
## Evolution of Earmarked Funding at GGGI 2017-2021:

a 340% growth in 5 years and diversification from 3 to 25 donors.



## GGGI Expenditures 2017-2021:

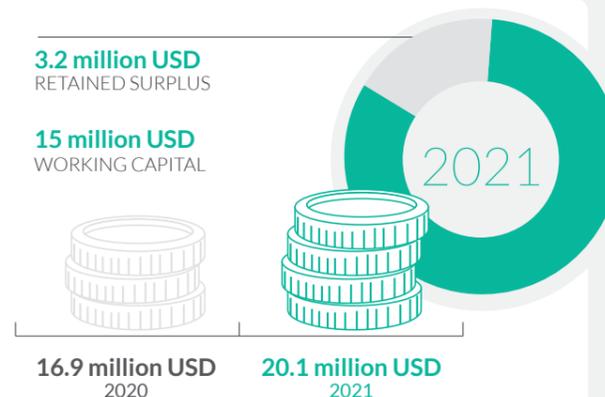
2021 expenditures funded 66% by project earmarked and 6% program earmarked funding with core funding 28%. This is a decrease from 84% in 2017.



## Reserves

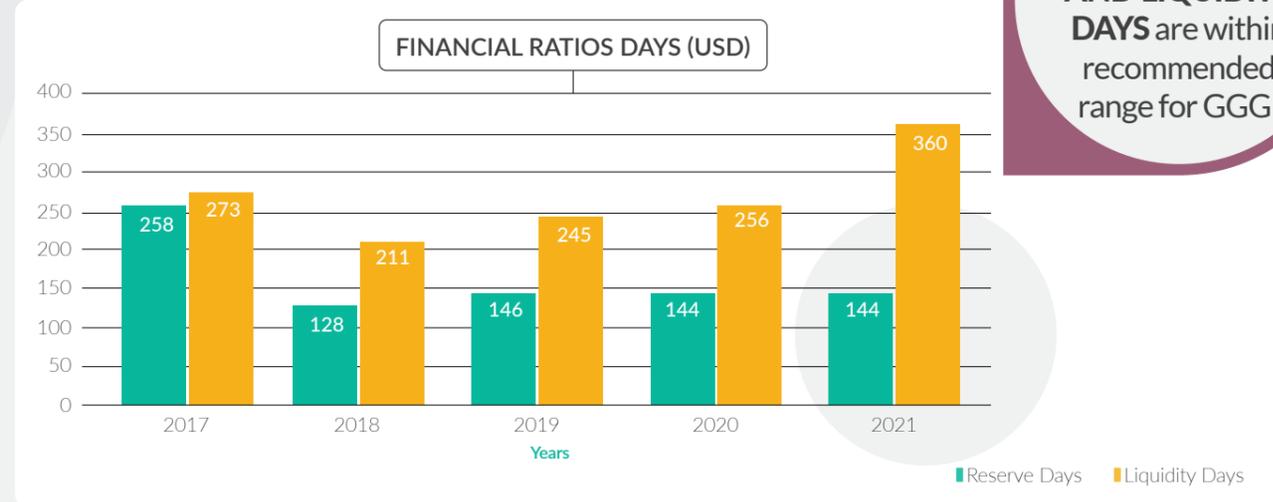
Total reserves at the end of 2021 were USD 20.1 million (2020: USD 16.9 million) comprising USD 15 million in working capital and USD 3.2 million in retained surplus.

GGGI's reserve days at the 31 December 2021 were 144 days (2020: 144 days). This is compared to a commonly used reserve day goal is 3-6 months of expenses i.e. 90 - 180 days of operating expenditures.



## Cash Balances/ Liquidity Ratio

GGGI had a total of USD 50.3 million in cash and short term investments at 31 December 2021. GGGI's liquidity ratio at 31 December 2020 was 360 days (2020: 256 days). A liquidity ratio in the range of 120 - 180 days is considered to be adequate.



Both **Financial Ratios, RESERVE DAYS AND LIQUIDITY DAYS** are within recommended range for GGGI

# 5

## 2021 OVERVIEW ON RESULTS

### 5.1 Alignment of 2021 Projects with Strategic Outcomes and Programmatic Solutions

GGGI implemented 186 projects in 2021 in alignment with the six Strategic Outcomes (SOs) of GGGI. As in previous years, most of the projects (74%) aligned with reducing GHG emissions (SO1). Nevertheless, an increasing number of projects targeted other areas of focus, including a 40% increase in projects that created green jobs (SO2), and a 32% increase in projects that enhanced adaptation to climate change (SO6).

GGGI's projects also aligned with the 10 Programmatic Solutions (PS) defined in the 5-Year Roadmap 2021-2025. In particular, green investment mobilization (PS1) and climate action (PS2) represented core areas of GGGI's support to its Member and partner countries. In 2021, the number of projects targeting climate action increased with 104 projects. This was a result of the strong emphasis placed by GGGI on climate policymaking in the run up to COP26, and increased programming on NDC enhancement, long-term low emission development strategy (LT-LEDS), monitoring, reporting, and verification, and carbon pricing.

### 5.2 2021 Corporate Results and Impacts

Despite the difficulties and challenges of the ongoing COVID-19 pandemic, GGGI delivered its best performance to date, outperforming in most of the Corporate Results Framework (CRF) 2021-2025 targets for 2021. These results included advisory outputs that inform green growth investment and investment committed, completed advisory outputs informing green growth policy and policy adopted by governments, institutional capacity development and knowledge sharing, and poverty reduction and social inclusion. Furthermore, GGGI signed new earmarked funding in 2021 amounting to USD58.7 million, and introduced a more flexible category of earmarked funding – the program earmarked funding. GGGI also reported growing attribution and contribution SO ex-ante impacts.

- Overall, GGGI's performance during 2021 reflected the organization's ability to grow and deliver solid results through effective measures, ensuring sound

financial performance and significant results and impacts.

- Number of completed advisory outputs that inform the development of government green growth policies = 166 outputs delivered in 2021 in 27 countries (2021 target = 70)
  - o 2020 results = 119 (target 60)
  - o 2019 results = 69
- Number of green growth policies adopted by governments with GGGI's support = 76 green growth policies adopted by 18 Members with GGGI's support (2021 target = 25)
  - o 2020 results = 54 (target 20)
  - o 2019 results = 21

Under Intermediate Outcome 1 (IO1) of the new CRF 2021-2025, GGGI accelerated access and secured climate finance/green investments for Members from both the public and private sectors. As the result of the impressive work done by GGGI teams, GGGI successfully supported the securing of a cumulative total of USD7.2 billion in green investments since 2015, with USD5.1 billion committed in 13 country programs in 2021 alone. Eighty-one percent of the commitments came from the private sector, and the greatest share of the 2021 commitments was of the amount USD4.37 billion, issued through Peru's first sovereign sustainability and social bonds, which were supported by the Peru country program.

Under Intermediate Outcome 2 (IO2), GGGI strengthened Members and partners' policy, planning, regulatory, financing, and institutional frameworks to achieve green growth outcomes. In 2021, GGGI assisted the adoption of 76 green growth policies by 18 Member governments, surpassing its 2021 target of 25 green growth policies. Furthermore, GGGI achieved a record 166 completed policy advisory outputs, informing the development of governments' green growth policies in 27 countries. These, once adopted by governments, will directly impact the decisions and policy actions of Members and partners to advance their green growth.

Under Intermediate Outcome 3 (IO3), GGGI delivered 321 capacity building activities, benefitting a total of 15,865 participants, including government officials, partners, and stakeholder representatives. Compared to the previous year, more activities were organized in 2021 with a lower number of participants. This was due to the continuing pandemic, which meant many of these activities had to be organized virtually. In addition, 154 green growth knowledge products were delivered, exceeding the 2021 target of 30 knowledge products.

Overall, GGGI outperformed its ambitions in the first year of implementation of Strategy 2030 and CRF 2021-2025, showing that GGGI is well positioned and can very well scale its work in the coming years.

#### Social Inclusion and Gender Mainstreaming

Under Intermediate Outcome 4 (IO4), GGGI tracked how its projects support Member and partner countries in reducing poverty and achieving gender equality. In 2021, 35 (57%) out of the 61 new projects reported to have addressed poverty reduction and inclusiveness, while 34 (56%) reported to be delivering on gender equality, against a target of 75% each. Moreover, 113 out of 321 capacity building

activities had at least 1/3 of female speakers, not including chairs and moderators. Also, 111 capacity building activities ensured representation of relevant stakeholder groups, and of countries from low- and middle-income groups and Small Island Developing States. GGGI's commitment in mainstreaming social inclusion and gender across its operations and programs remains strong, and continually strives to improve the tracking and measurement of these targets.

#### Green Climate Fund

The Green Climate Fund (GCF) has become an important source of climate finance. GGGI has become one of GCF's major readiness delivery partners. GGGI assists developing countries' National Designated Authorities in developing and implementing the GCF Readiness Programme, which aims to develop policies, strategies, and mechanisms for low-emission, climate-resilient investments. GGGI also helps to expand funding windows for developing countries to directly access GCF funds by supporting the accreditation of national entities and developing concept notes, as well as full proposals, for GCF funding. Currently, GGGI is implementing readiness projects in 26 countries, and 29 countries have requested GGGI as a readiness delivery partner since 2017. In 2021, GCF also implemented a GCF PPF grant, together with the Korea Development Bank.

To date, GGGI has supported 5 full proposals with a total value of USD247 million and is supporting the development of projects in the GCF pipeline for Peru, Indonesia, and Southeast Asia – Cambodia, Laos, Thailand, Philippines, and Viet Nam. GGGI has also supported the development of concept notes for Burkina Faso, Cote d'Ivoire, Fiji, Guyana, Indonesia, Jordan, Lao PDR, Mexico, Nepal, Philippines, Rwanda, and Vanuatu. In most of these projects, GGGI works with national direct access entities. The total value of these projects is over USD 1 billion.

### 5.3 2021 Strategic Outcome Ex-Ante Impacts

Ex-ante impact estimates demonstrate the scale of GGGI's impact in support of Members and partners' green growth transformation. SO impacts are submitted by countries through the Country Program Results Reports.

Overall in 2021, GGGI helped avoid an estimated 11.9 million tCO<sub>2</sub>e emissions, created 50,000 new green jobs, and protected 13,000 hectares of forests. The methodology for measuring SO4 (Air Quality) was updated and improved in 2021 to PM2.5 emissions reduced or avoided, and will be used from 2022.

The reported attribution impacts are estimated ex-ante resulting exclusively from completed GGGI's activities that have direct causal links to the SOs. These include the development of bankable projects and investment proposals for which GGGI has received investor commitment, and the design and implementation of national financing vehicles for the mobilization of green investments. Contribution impacts capture the level of impacts that GGGI activities contribute to achieving its Members and partners' NDC and SDG targets.

The SO impact contribution of each region and country can be accessed through the [Regional Results Scorecards](#) and [Country Results Scorecards](#), respectively. Regional scorecards were introduced for the first time as part of the 2021 results reporting and country scorecards present visual enhancements. The scorecards provide a snapshot of key results and performance for each region and country program.

Generally, GGGI is making steady progress toward cumulative attributed impact targets. The 2021 SO impacts reported show that GGGI can further raise its target ambitions in the coming years.

## 5.4 About GGGI Strategic Framework & 2021–2022 Work Program and Budget

GGGI's 2021 corporate results were delivered within the priorities outlined in Strategy 2030, Roadmap 2021–2025, and Work Program and Budget (WPB) 2021–2022 through its Results-Based Management Framework.

GGGI targets its interventions at its six SOs, which are areas of high-level and long-term impacts of direct relevance to countries' NDC and SDG commitments. The six SOs are end goals that GGGI aims to achieve through its activities in support of Member and partner countries' green growth transition.

To measure its performance, GGGI's CRF introduces a set of indicators based on its Theory of Change and linking the impact of its activities to its Intermediate Outcomes (IOs). In alignment with GGGI's Global Operational Priorities (GOPs), IOs encompass four programmatic priorities and one non-programmatic priority, as follows:

- IO1 – Accelerated access and secured climate finance/green investments for Members from both public and private sectors.
- IO2 – GGGI Members have strengthened policy, planning, regulatory, financing, and institutional frameworks to achieve green growth outcomes.
- IO3 – National, regional, and global capacity to drive and expand green growth ambitions is enhanced.
- IO4 – Green growth solutions support Member and partner countries in reducing poverty and achieving gender equality.
- IO5 – Sustainable financial growth supports quality delivery of GGGI commitments to Member and partner countries.

GGGI's programs are designed to deliver one or more of these IOs under GOPs and PS with outputs, outcomes, and impacts. These are reported annually through the end-of-year results reporting

process.

GGGI started the implementation of Strategy 2030 in January 2021, with 2021 being the second year GGGI reports on its SO impact results at the country program level. Country and regional scorecards provide a snapshot of key results and performance for the country programs and regions, respectively. GGGI uses methodologies that have progressively improved since 2017 to measure its outputs, outcomes, and impacts. The same is true for results reported at the country program level using the Country Program Results Report format.

The WPB 2021–2022 is GGGI's primary programming and budgeting tool to operationalize its strategic priorities and directions, and implement GGGI's Strategy 2030 during the 2021–2022 period.

The WPB 2021–2022 has three components: i) a strategic framework with objectives and operational priorities; ii) an indicative budget resource allocation for 2021–2022 for programmatic and non-programmatic activities; and iii) business plans that outline planned programs and projects and indicative budgets for the next biennium in line with GGGI's strategic framework. The WPB lays out planning directions and strategic goals cascading from Country Planning Frameworks and Country Business Plans, aligned with national priorities, that GGGI pursues during the biennium, shaping the programs and projects to be implemented and the allocation of resources.

The WPB 2021–2022 was approved in 2020 by GGGI's Council and is being implemented under an indicative envelope allocation method. As such, budget envelopes were allocated to each country, comprising a mix of indicative core and earmarked funding.

# 6 GREEN BONDS

## 6.1 Key Takeaways

- In 2021, GGGI assisted its Member countries in issuing green, social, and sustainability bonds, mobilizing USD4.7 billion from domestic and international capital markets for climate change mitigation, adaptation, and green economic recovery.
- 2021 highlights from GGGI's green bond activities include collaborating with the Government of Peru to issue the country's first sustainability bond for USD3.25 billion, and first social bond for EUR1 billion; and collaborating with NAFIN – Mexico's second largest development bank – to issue the bank's first sustainability bond for USD371 million.
- A key contribution from GGGI is the development of Green Bond Frameworks, which define the issuer's processes, methodology, and governance framework that regulate: i) the use of the bond proceeds; ii) process for project identification, evaluation, and selection; iii) management of proceeds; and iv) monitoring and reporting.
- All GGGI-led Green Bond Frameworks have received positive Second-Party Opinions from an external verifier, confirming their alignment with NDC targets, principles of the International Capital Market Association (ICMA), and international best practices.
- GGGI's 2021 achievements include:
  - Largest-ever sustainability bond issued by a sovereign government at the end of 2021
  - Largest-ever sustainability bond issued from Latin America at the end of 2021
  - First-ever EUR-denominated social bond issued from Latin America
  - First environmental, social, and governance (ESG) bond with digital focus in Mexico

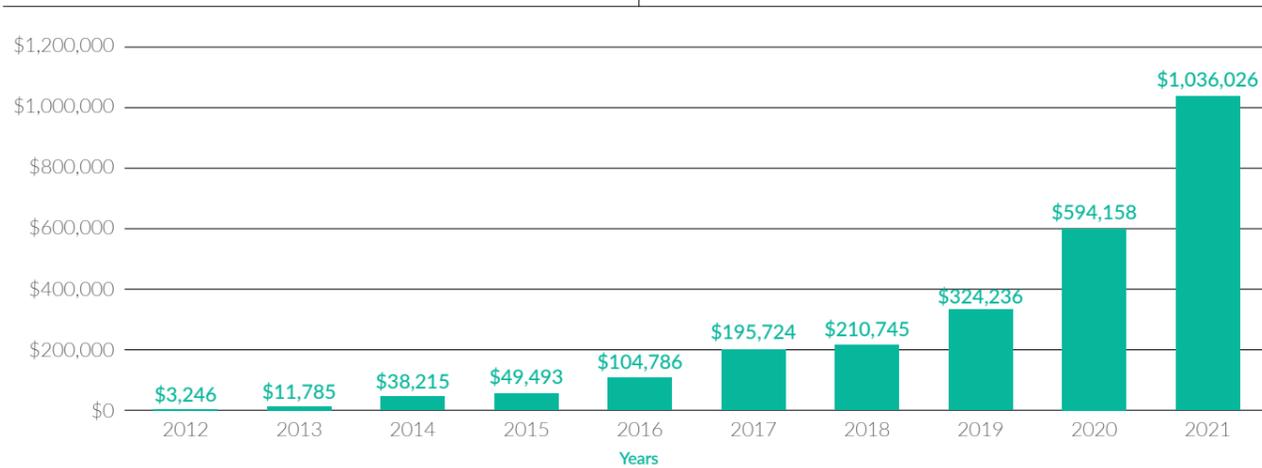


- GGGI’s expertise in this field is highly valued and recognized by donors and Member governments, with the number of active green bond initiatives growing from 2 in 2019 to more than 10 in 2022.
- The main beneficiaries of GGGI’s technical assistance include national and subnational governments, national development banks, local financial institutions, and stock exchanges.
- The main funders of GGGI’s green bond technical assistance are the Green Climate Fund, the Government of the Republic of Korea, the Government of Luxembourg, and the Government of the UK.
- GGGI-partner issuers report several financial and non-financial benefits of the issuance of green bonds, including reduced interest rates, increased investors diversification, enhanced coordination between finance and sustainability teams, improved visibility, increased flow of private sector finance to mitigation and adaptation projects, and many more.

## 6.2 Overview of Green Bonds in 2021

The financial sector offers a largely unexploited potential to promote climate change mitigation and adaptation, by directing investments toward low-carbon and resilient projects and initiatives. One of the ways that GGGI supports Members to transition to an environmentally sustainable and socially inclusive economic model is through the financial sector’s leverage and capital allocation decisions. Bond markets are a good example of this: with an estimated global capitalization of USD129.3 trillion<sup>1</sup> as of 2021, bonds represent the main source of capital for the majority of sovereign governments and public and private financial institutions. Integrating environmental and/or social considerations into bonds can increase the flow of finance to NDC- and SDG-aligned projects and initiatives, thereby incentivizing policymakers and project developers to integrate climate, social inclusion, and green recovery considerations into project design. Yet, to date, green bonds represent less than 1% of total issuances.

**FIGURE 4**  
Green bond issuances (USD million)



Source: Environmental Finance Bond Database.

<sup>1</sup> ICMA, "Bond Market Size," <https://www.icmagroup.org/market-practice-and-regulatory-policy/secondary-markets/bond-market-size/>.

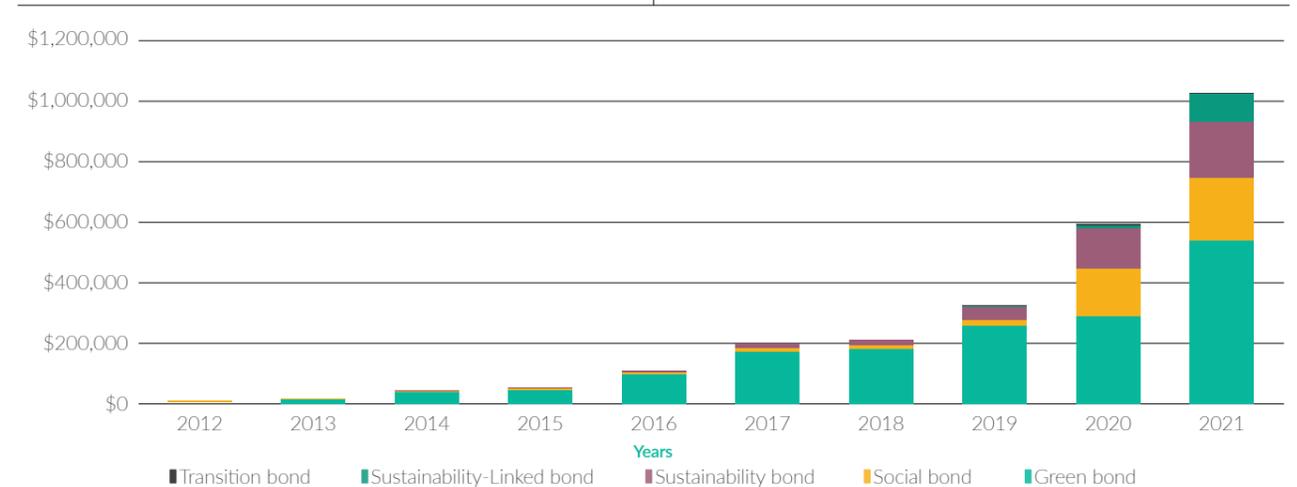
### BOX 1: WHAT ARE THEMATIC BONDS AND GREEN BONDS?

A thematic bond is a type of fixed-income instrument, where proceeds (or the equivalent amount) are earmarked to finance or re-finance, in part or in full, new and/or existing eligible projects for climate change, health, food, education, access to financial services, and other NDC and SDG targets.

Thematic bonds can be issued in different structural forms, including revenue bonds, project bonds, and securitized bonds. The most commonly-issued thematic bond is the "use of proceeds" bond, defined by ICMA as, "a standard recourse to the issuer debt obligation", meaning that these bonds are typically backed by the issuing entity’s balance sheet (general obligation bonds), so they usually carry the same credit rating as their issuers’ other debt obligations.

Green bonds are one type of thematic bond; others include sustainability bonds, social bonds, and blue bonds, among many others. Today, green bonds account for the majority of thematic bond issuances. Hence, for the sake of simplicity, in this report we utilize the term "green bonds" as a generic label encompassing all thematic labels aligned with NDC and SDG targets.

**FIGURE 5**  
The evolution of thematic labels



Source: Environmental Finance Bond Database.

## 6.3 Overview of GGGI’s Green Bond Programs in 2021

GGGI has strong expertise and a growing portfolio of green bond initiatives across geographies and issuer categories. Recent and ongoing initiatives across Latin America and the Caribbean and Asia are summarized below.

### Latin America and the Caribbean

In **Peru**, through financing from the UK PACT (Partnering for Accelerated Climate Transitions) Green Recovery Challenge Fund (2021–2022), GGGI delivered technical assistance to the

Government of Peru to develop the capacity and systems to issue the country’s first sovereign sustainability and social bonds. GGGI assisted the Ministry of Economy and Finance in defining the issuance strategy and objectives, formalizing the sustainability bond governance structure, and developing the government’s Sustainable Bond Framework. The Framework defined the use of proceeds, the project selection process, the management of proceeds, and the reporting methodologies, indicators, and commitments. Peru’s Sustainable Bond Framework received a positive Second Party Opinion from Sustainalytics and was officially adopted as a sovereign debt instrument on July 2021 via Ministerial Decree No. 221-2021-EF/52. In October 2021, the Government of Peru issued its first-ever sovereign sustainability bond for USD3.2 billion, followed a few weeks later by the country’s first social bond issuance for EUR1 billion. GGGI continues to provide support to define the underlying projects portfolio, and measure and report its environmental and social impact.

In **Mexico**, GGGI is delivering technical assistance to Nacional Financiera (NAFIN), Mexico's second largest national development bank, to issue the bank's first sustainability bond. GGGI worked with the bank's treasury department to develop a diagnostic of the bank's sustainability bond readiness, which resulted in the development of an eight-month action plan defining the step-by-step issuance process. GGGI supported NAFIN teams in the implementation of the action plan, starting with a week-long awareness raising and capacity building bootcamp to NAFIN's divisions and departments involved in the issuance process. Having built sufficient ownership and awareness across key areas, GGGI initiated the development of the Sustainability Bond Framework, defining the issuance's objectives, processes, categories, criteria, and reporting commitments. GGGI provided further advisory support to NAFIN in its engagement with bookrunners and institutional investors, and with Sustainability to receive an official Second Party Opinion. The action plan was successfully completed on November 18 with the issuance of NAFIN's first-ever sustainability bond for MXN7.8 billion (USD371 million).

In **Saint Lucia**, through GCF Readiness and Preparatory Support resources, GGGI is working with the Department of Economic Development and Department of Finance to strengthen the government's capacity and systems to issue a sovereign and/or regional bond to finance the country's NDC financing strategy.

In **Ecuador**, through funding from the Andean Finance Corporation (CAF), GGGI is providing technical assistance to the Ministry of Economy and Finance to issue a green bond to finance conservation activities in Galapagos and the rest of the country, and to assess the viability of a debt-for-climate swap transaction.

In addition, GGGI is working closely with CAF to deliver technical assistance to the national development banks of Peru (COFIDE) and Ecuador (BanEcuador), which will allow them to issue green bonds and capitalize credit lines for smallholder farmers in the dry forest region that spans the border. To date, the initiative has secured GEF funding to guarantee the national development banks' green bond issuances.

### Southeast Asia

In **Viet Nam**, through funding from the Government of Luxembourg, GGGI is working with the Ministry of Finance and other key public/private stakeholders on the Viet Nam Green Bond Readiness Program. This is a multi-year program for the long-term development of a green bond market in Viet Nam through: i) an enhanced regulatory framework for green bond development; ii) improved capacity and knowledge of government officials and market participants in green bond issuance; and iii) increased green investments through a pilot issuance. As part of the program, guidelines are being drafted on behalf of the Ministry of Finance for the issuance of green bonds from the private sector, as well as from local municipalities. Capacity building workshops for the "green bond ecosystem" participants have been conducted in partnership with the Luxembourg Stock Exchange/Luxembourg Green Exchange, Climate Bonds Initiative, and ICMA. With the ecosystem being primed, the pilot green bond issuance is expected to be launched in 2022, thus kickstarting the green bond market in one of the fastest growing economies in Southeast Asia.

In **Indonesia**, GGGI is providing technical assistance to the Government of Indonesia by conceptualizing new green bonds structures to meet the government's specific needs and supporting the disbursement of already issued green bonds. During 2019–2020, GGGI engaged with the Ministry of Environment and Forestry and Ministry of Finance to develop a peat-bond structure that enables mobilization of large-scale financing for peatland restoration. In 2021, GGGI supported the identification of forestry projects that qualify to receive funding from the proceeds of previously issued bonds. GGGI's support led to the identification of a project pipeline of USD93 million for green bond financing.

## BOX 2: THE PROCESS OF ISSUING A SOVEREIGN GREEN BOND

### 1. Stakeholder Engagement

Collaboration between government and external stakeholders is key to the green bond issuance process. This includes:

- **Goal setting** involving the Ministry of Finance, Ministry of Environment, and relevant line ministries;
- **Setting roles and responsibilities** with the establishment of a Green Bond Committee, led traditionally by the ministry of finance;
- **Engaging external stakeholders**, including capital market players. Engagement can include roundtables, bilateral dialogues, and/or the establishment of a Green Bond Advisory Council.

### 2. Establish a Green Bond Framework

The Green Bond Framework is a publicly available document providing interested parties with information on the processes and characteristics of a given green bond. In the Framework:

- **Use of proceeds** defines eligibility criteria, eligible sectors, projects, and expenditures;
- **Process for project evaluation and selection** communicates to investors the environmental sustainability objectives of the issuance, the project identification process, and relevant eligibility and exclusion criteria;
- **Management of proceeds** ensures the proceeds are tracked and linked to investment operations, including the identification of an entity responsible and accountable for the management of proceeds;
- **Reporting** describes the establishment of an internal process to monitor the allocation and environmental and social impact of proceeds, and make relevant information available to investors.

### 3. Identify Eligible Green Projects

The Green Bond Committee identifies eligible assets by considering the following:

- **The assets size** must be equal to or greater than the size of the bond to upsize the issuance, as well as prepare for future issuances;
- **Designated projects** should provide environmental benefits and be aligned with the issuer's Framework, NDCs, and wider policies.

### 4. Independent Review

A credible independent review of the Green Bond Framework provides investors with assurance of the green credentials of the bond. Options include:

- **Second-party opinion** from a certified verifier to ensure alignment with ICMA's Green Bond Principles;
- **Third-party certification** against the science-based Climate Bonds Standard.

### 5. Issue the Green Bond

- **Select participants and structuring.** The issuer selects the bond counsel and the financial advisor/underwriter;
- **Prepare supporting material** including a green bond prospectus, an investor presentation, and an FAQ on green bonds;
- **Organize investor roadshows** to promote the issuance among institutional investors;
- **Create marketing material** to promote the issuance, highlighting the projects, Green Bond Framework, and alignment with the government strategy.

### 6. Monitoring and Reporting

This typically occurs on an annual basis and includes a statement of the proceeds being used for the projects and assets identified.

- **Impact Reporting** should be aligned with the environmental and social objectives of the Green Bond Framework, and quantify the environmental and social benefits achieved.
- **Allocating Reporting** tracks and discloses the use of proceeds, beneficiary projects, and expenditures.

### 7. Repeat

Once the Green Bond Framework is set up, issuers can return to market with reduced costs.

- **A programmatic approach**, entails issuing green bonds on an ongoing basis leveraging an existing Green Bond Framework. This approach allows the issuance of green bonds at a reduced cost and in a shorter timeframe.

## 6.4 Outlook Beyond 2021

With 43 Members and a track record of over USD7 billion mobilized since 2015, GGGI's technical assistance is sought by governments, national development banks, local financial

institutions, stock exchanges, and non-financial corporations to strengthen their capacity and systems to enter the green bond market. The recent wave of commitments from financial actors to align their investment portfolio with NDC and SDG targets has led to a significant increase in the demand for green bonds and other thematic fixed-income instruments. The number and volume of green bond issuances have not kept up with increased demand from investors, with the bid-to-cover ratio of recent

issuances reaching 12-15 times.<sup>2</sup> Excess demand for green labeled bonds has led to some of the cheapest bond issuances in history (e.g., Chile's 2020,<sup>3</sup> Colombia's 2021,<sup>4</sup> UK's 2021,<sup>5</sup> and Denmark's 2021<sup>6</sup> green bond issuances, among others). This

creates an opportunity for issuers in developing and emerging economies to raise long-term finance, at more affordable rates, to finance their NDCs, SDGs, and green recovery ambitions.

**BOX 3: WHY ISSUE A GREEN BOND? – FINANCIAL AND NON-FINANCIAL BENEFITS**

**1. Strategic coordination**

A green bond signals the issuer's commitment to its sustainable, low-carbon development strategies. Internal collaboration between different departments (traditionally, treasury and sustainability) is one of the positive spillovers of issuing a green bond. By going through the exercise of identifying eligible assets and projects to include in a green bond program, the issuer can improve its awareness of the alignment between its balance sheets and climate ambitions.

**2. New and diverse investors**

Green bond issuers have reported a diversification of their investor base: the deal attracts new socially and environmentally responsible investors and asset managers with green investment mandates. This is reflected in the high bid-to-cover ratio registered by green bond issuers, with a 15-times peak increase recorded in recent operations.

**3. Pricing advantages**

Driven by high demand and increasingly diversified investor base, several issuers have reported better pricing of their green bonds compared to past issuances of vanilla bonds. The Governments of Chile, Colombia, Denmark, France, and UK are some of the issuers to have secured a greenium through the issuance of green bonds, with a growing number of green issuances pricing below yield curves of comparable non-green obligations.

**4. Visibility**

Reputational benefit is one of the gains issuers look for in a green bond issuance. The issuer can use the green bond issuance as a promotional tool, to reinforce its sustainability agenda, or signal a policy shift to show its commitment to a more diversified economy and the future development of low-carbon sectors.

**5. Capital mobilization**

It is abundantly clear that public funds will not be enough to cover the challenges posed by climate change and infrastructure demand over the next 15 years. Mobilizing private capital toward the "right" investments will be paramount. Growing green bond markets can contribute to mobilize private capital toward infrastructure investments, connecting green projects with investor demand, and raising awareness around green project pipelines.

**6. International leadership**

Green bonds provide a unique way for issuers to signal their commitment to green finance and engage in cross-border collaborations. Sharing experiences and encouraging cross-border capital flows are part of growing and connected green bond markets. Green bond markets in developing countries can facilitate foreign investments into the development of local low-carbon industries by attracting the demand for green projects and yield from institutional investors in Europe, Japan, the United States, and elsewhere. An active bond market can help reduce the cost of debt by enabling the refinancing of bank loans for infrastructure projects once the projects enter the operational phase and become less risky.

<sup>2</sup> Greg Ritchie, "U.K. Green Bond Smashes Records in Blockbuster Market Debut," Bloomberg, September 21, 2021, <https://www.bloomberg.com/news/articles/2021-09-21/u-k-s-big-green-bond-debut-to-spur-ethical-market-in-sterling>; and Financial Times, "UK's debut 'green gilt' sale draws blockbuster demand," September 21, 2021, <https://www.ft.com/content/94d604a9-50b9-49f1-b377-a7b6e4083d01>.

<sup>3</sup> Chile Reports, "Chile Obtains Record Rate on Issuance of Green Bonds in Dollars," January 30, 2020, <https://chilereports.cl/en/news/2020/01/30/chile-obtains-record-rate-on-issuance-of-green-bonds-in-dollars>.

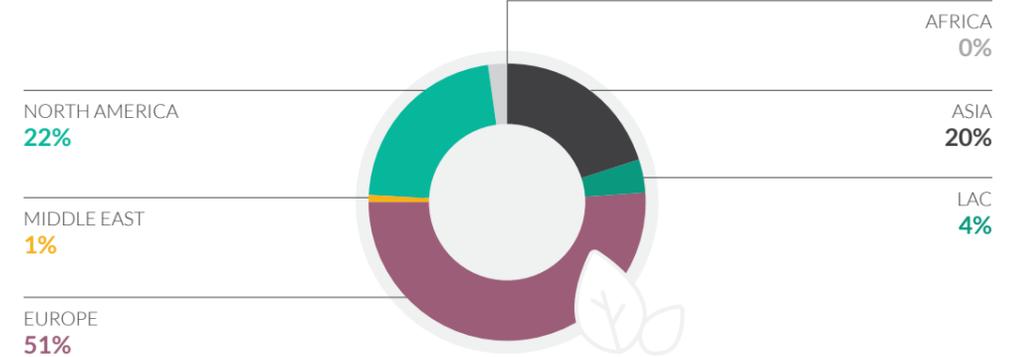
<sup>4</sup> Oliver West, "Colombia harvests 7bp greenium on first green bond," Global Capital, September 30, 2021, <https://www.globalcapital.com/article/294j2occ3jvq08jr1kwsh/emerging-markets/em-latam/colombia-harvests-7bp-greenium-on-first-green-bond>.

<sup>5</sup> Jill Ward, "U.K. Sells World's Longest Green Bond to Grab Pension Fund Cash," Bloomberg, October 21, 2021, <https://www.bloomberg.com/news/articles/2021-10-21/world-s-longest-green-bond-by-u-k-aims-to-grab-pension-funds>.

<sup>6</sup> Environmental Finance, "Historic greenium for debut Denmark green bond," <https://www.environmental-finance.com/content/news/historic-greenium-for-debut-denmark-green-bond.html>.

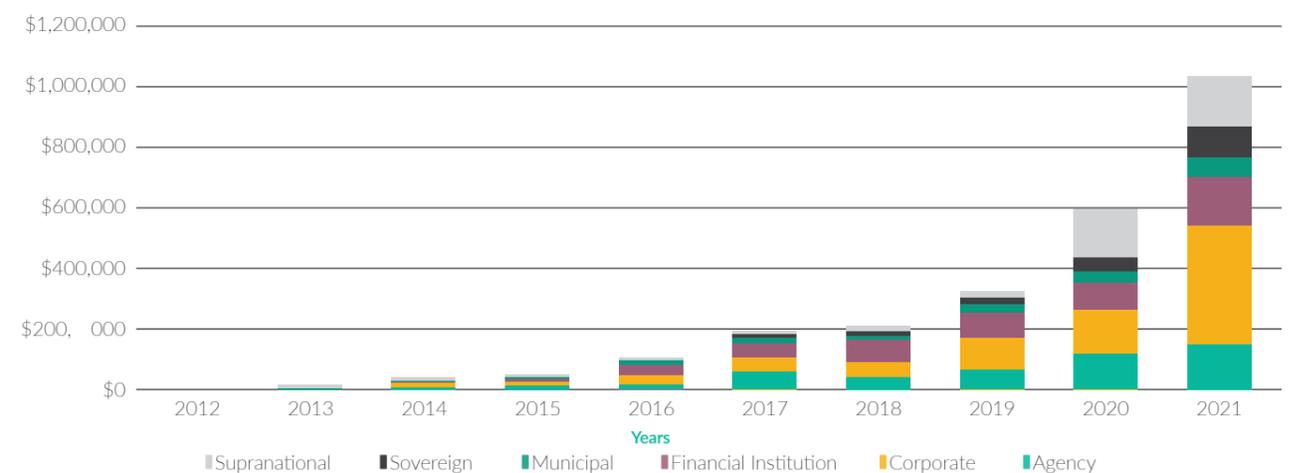
<sup>7</sup> Climate Bonds Initiative, «Green Bond Pricing in the Primary Market: January - June 2021» September 2021, [https://www.climatebonds.net/files/reports/cbi\\_pricing\\_h1\\_2021\\_03b.pdf](https://www.climatebonds.net/files/reports/cbi_pricing_h1_2021_03b.pdf).

**FIGURE 6**  
Green bond issuance by region



Source: Environmental Finance Bond Database.

**FIGURE 7**  
Green bond issuances by issuer category (USD million)



Source: Environmental Finance Bond Database.



### Latin America and the Caribbean (LAC)

The Latin American region accounts for approximately 3.5% of global green bond issuances, while the Caribbean accounts for only 0.4%. Despite the low volume of issuances, the LAC's green bond market recorded the fastest year-over-year (YoY) growth among the world's regions, reaching USD16.3 billion in 2020, an 82% YoY increase from USD8.9 billion in 2019.<sup>8</sup> A deeper look, however, reveals that the market is still in its infancy. By the end of 2020, the number of cumulative issuers in LAC was 132, while in the Asia-Pacific region, the number was 1,218. Within LAC, Brazil and Chile account for approximately 60% of issuances, with Chile, Colombia, Mexico, and Peru being the only countries to have issued sovereign green bonds. With economies beginning to pick up again, and pledges for green recoveries implemented across the region, there are significant opportunities for sustainable finance to grow in LAC. GGGI has received requests for technical assistance in sustainable finance from multiple governments (including Dominican Republic, Ecuador, Guyana, Mexico, Peru, and Saint Lucia), national development banks (including BanEcuador, COFIDE, FINAGRO, FIRA, NADB, NAFIN, Saint Lucia Development Bank, and others), stock exchanges (including the Asuncion Stock Exchange, Colombia Stock Exchange, Lima Stock Exchange, and others), and prospective private sector issuers. Requests for green bond support mostly refer to blue, sustainability-linked, and sustainability and resilience labels, which are characterized by a higher degree of innovation than traditional green bonds.

**TABLE 1**  
GGGI Ongoing Green Bond Collaborations  
in Latin America and the Caribbean

	Country	Issuer	Label	Status	Funding
1	Mexico	FIRA	Blue / SLB	Active	Earmarked
2	Ecuador	BanEcuador	Green	Active	Earmarked
3	Ecuador	Sovereign	Blue	Concept	Earmarked
4	Peru	COFIDE	Green	Active	Earmarked
5	Saint Lucia	Sovereign/ NDB	Green	Active	Earmarked
6	Dominican Republic	Sovereign/ NDB	Green	Concept	Earmarked
7	Mexico-USA	NADB	Sustainability	Active	Earmarked
8	Regional	Private sector	Various	Concept	Earmarked

<sup>8</sup> Climate Bonds Initiative, "Latin America & Caribbean: Sustainable Finance State of the Market 2021," September 2021, [https://greenfinancelac.org/wp-content/uploads/2021/09/cbi\\_lac\\_2021\\_EN.pdf](https://greenfinancelac.org/wp-content/uploads/2021/09/cbi_lac_2021_EN.pdf).

### Southeast Asia

With a combined GDP of USD3.11 trillion in 2020, the Southeast Asian region has achieved an average GDP growth of 5% since 2015. It is among the fastest growing regions in the world. Compared to 2019, green bonds issuance saw an increase of 11% in 2020 and reached a record high of USD12.8 billion. Despite the rapid growth, social and sustainability bonds account for a small share of the global bond market. That segment contributed to only 5% of Asia-Pacific and 1% of the global bond issuances in 2020. More specifically, there have been no sustainability or social-labelled local issuances from Cambodia, Lao PDR, or Viet Nam to date. Given the increasing share of the local currency bond market in 2021, there is a significant opportunity to increase the share of green bond issuances from Southeast Asia.

GGGI is present in almost all Southeast Asian countries, including Cambodia, Indonesia, Lao PDR, Philippines, Thailand, and Viet Nam, and has projects in other countries of the Asian region. In addition to the partnership with the Government of Viet Nam, the ongoing dialogue with GGGI's Members in the region indicates a strong interest in working with GGGI on scaling up green bonds, including sustainability bonds. GGGI will leverage ongoing cooperation with the Asian Development Bank, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), central banks of the region, Climate Bonds Initiative, the ASEAN Secretariat, and other partners to advance this work.

**TABLE 2**  
GGGI Ongoing Green Bond Collaborations  
in Southeast Asia

	Country	Issuer	Label	Status	Funding
1	Viet Nam	confidential	Green	Active	Earmarked
2	Indonesia	TBD	Impact Bond	Concept	Core

### Africa

The green bond market in Africa is at a nascent stage, with cumulative issuances accounting for less than 1% of the global green bond market. Morocco, Nigeria, and South Africa are the initial movers from this region with Namibia and Seychelles following them. Recently, the West African Development Bank (BOAD) issued the first-ever sustainability bond in Africa. With cumulative green bonds issuance of just USD4.3 billion from Africa, there is a significant opportunity for this region to tap into the broader sustainable finance market. GGGI is engaged with its Members in Africa, particularly Côte d'Ivoire, Rwanda, Senegal, and Uganda, which have shown keen interest in issuing sovereign green bonds. In the African region, GGGI has ongoing work with a number of strategic partners. For example, GGGI is currently working with the African Finance Corporation, BOAD, and ECOWAS Bank for Investment and Development toward capitalizing a number of blended finance facilities targeting the climate mitigation and adaptation sectors in Africa. GGGI is also assisting the Government of Senegal to issue sovereign green bonds to finance investments toward meeting the country's NDC targets.



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## 6.5

### Global Program on Sustainable Finance Instruments: Scaling Up the Bond Markets in Developing and Emerging Economies

The objective of the Global Program on Sustainable Finance Instruments proposed by GGGI is to deliver demand-driven capacity building and technical assistance to GGGI Members for entering the green bond market to raise long-term climate finance aligned with NDC, SDG, and green recovery targets. GGGI envisions a four-year, USD5.5 million program leading to at least 10 bond issuances through pre- and post-issuance technical assistance, with a cumulative issuance volume of USD2 billion. According to GGGI's preliminary estimates, the program will result in about 100MtCO<sub>2</sub>e reduction and climate adaptation benefits to about a million people (50% women). The rationale for a global approach is to promote economies of scale, efficiency, and consistency, and facilitate collaboration across countries and knowledge sharing across regions.

GGGI is well-positioned to deliver this program given its unique in-country presence and its role as a neutral and trusted advisor to its Member country governments. With presence in the ministries of finance and capital markets authorities of Member countries, GGGI can readily identify and formalize collaborations with prospective public and private issuers, identify and address capacity and system gaps, and deliver technical assistance and on-the-job training leading to ambitious bond issuances.

The program objective will be achieved through four complementary workstreams:

**1. Enhancing national policy frameworks leading to increased volume and ambition of green bond issuances:** The program will deliver technical assistance to the ministry of finance and/or relevant regulatory authorities of selected countries, to adapt existing internationally-accepted guidelines to the local context. GGGI will support the development of relevant regulatory frameworks and guidance documents necessary to mitigate policy risks and lift barriers to issuance. The guidelines and policy frameworks will provide reference information and guidance to market actors on eligible categories and criteria, reporting standards, governance frameworks, management of proceeds, and other pre- and post-issuance considerations.

**2. Strengthening the capacity and systems of public and private actors to participate and contribute to the global green bond market:** The program will leverage its global scope by combining country-level capacity building with international learning networks. GGGI will collaborate with local stock exchanges and regulators to organize awareness raising and capacity building webinars. Capacity building will be tailored to the audience: regulators, stock exchanges, and issuers. Capacity building webinars will be followed by virtual on-the-job learning sessions for issuers consisting of sessions dedicated to the development of specific pre- or post-issuance processes, documentation, or systems. GGGI will establish international learning networks to provide a platform for issuers, regulators, and stock exchanges across geographies to receive training specific to their mandate, share lessons learned, identify bottlenecks and market failures, and develop recommendations for other actors.

**3. Supporting first-time green bond issuers to raise USD2 billion from national and international capital markets:** GGGI will support issuers to define their issuance strategy, develop Green Bond Frameworks aligned with NDC and SDG targets, design transparent processes for project selection and evaluation, and successfully execute budget tagging, impact reporting, and management of bond proceeds. In addition, GGGI will assist prospective issuers in building a portfolio of eligible projects to be funded with the proceeds and obtain a Second Party Opinion to certify the alignment of the issuance with NDC targets and international standards. Finally, GGGI will support issuers to prepare annual impact and allocation reports to quantify and report environmental and social benefits.

**4. Collecting and sharing knowledge at global, regional, and local levels:** The program will facilitate the participation of the program's beneficiaries in national, regional, and international events as speakers and resource persons to share their experience, progress, and results with the aim of incentivizing others to enter the green bond market, promote best practices, and increase global ambitions.

The program is currently at a concept note stage and is being reviewed by interested donors.

## 6.6

### Success Story: Peru's First Sustainability and Social Bonds

#### Highlights

- **Volume and market-making potential:** The Government of Peru's 2021 Sustainability Bond issuance was the largest-ever sustainability bond from Latin America and the Caribbean, and the largest-ever sustainability bond from a sovereign issuer in the world. In addition to its record-breaking value, this bond issuance will help build the confidence of future thematic bond issuers and investors in a region that has traditionally lagged behind the rest of the world in terms of green bond volumes.
- **Post-COVID recovery potential:** The USD3.25 billion bond proceeds will provide resources to fuel Peru's economic recovery from the COVID-19 pandemic. It will also help build a greener, more inclusive, and resilient country. The Sustainability Bond Framework was drafted in line with ICMA's Sustainability Bond Guidelines. Remarkably, the Framework outlines the direct link between eligible categories and Peru's NDC actions with a high level of granularity. Sustainalytics, a second-party opinion provider, certified that the Framework is aligned with ICMA's principles, is coherent with Peru's wider NDC and SDG strategies, and will "provide a robust contribution to sustainability".

The COVID-19 pandemic had a severe impact on Peru's economy. By April 2021, the country's economy recorded a 40% contraction (year-on-year). In this context, the Government of Peru sought the support from GGGI to accelerate the country's access to innovative financing mechanisms, in order to raise capital, which was urgently needed to promote a green, resilient recovery while maintaining its climate ambitions and improving the livelihoods of vulnerable groups.

In 2020, GGGI had provided support to the Ministry of Environment (MINAM) to develop the country's Green Bond Roadmap. This official document identified thematic bonds as a catalyst for emission reduction, as well as the promotion of equitable access and use of green practices and technologies. The Green Bond Roadmap identified several barriers to issuance, including:



- Limited institutional capacity within the Ministry of Economy and Finance to design a thematic bond instrument;
- Lack of a governance body responsible for the overall guidance and oversight of the thematic issuance and reporting processes;
- Absence of a consensus-driven methodology, with broad government ownership, for project selection and evaluation;
- Lack of a science-based approach to define the use of thematic bond proceeds with effective impact on emission reduction and positive socioeconomic impact for vulnerable groups;
- Lack of a methodology for transparent impact reporting;
- Limited capacity to conduct and comply with thematic bond pre- and post-emission processes and requirements, as mandated by international standards.

During 2021, the General Directorate of the Treasury at the Ministry of Economy and Finance, with technical support from GGGI, and generous funding from the UK PACT Green Recovery Challenge Fund, embarked on an ambitious process of capacity building, sustainability bond target setting, Sustainability Bond Framework development, validation, and investor communication. This effort resulted in the issuance of Peru's first-ever sustainability and social bonds. GGGI's technical assistance for this project can be summarized by its three main components:

1. Establishment and capacity building of a sustainability bond governance structure, led by the Ministry of Economy and Finance with support from MINAM, and participation of key relevant ministries. This governance structure is responsible for the overall guidance and oversight of the issuance process, to guarantee broad government ownership and maximize social co-benefits.
2. Development, adoption, and certification of the Government of Peru's Sustainability Bond Framework. The Framework provides clear definition of the processes, methodologies, and systems regulating the pre- and post-issuance process, including:
  - o The Use of Proceeds, defining eligibility criteria, eligible sectors, projects and expenses;
  - o The Process for projects evaluation and selection, defining the decision-making process to identify and select the underlying pipeline of green and social projects;
  - o The Management of Proceeds, defining the use and management of proceeds; and,
  - o The Monitoring and Reporting commitments to investors and stakeholders, to ensure transparency in the management of proceeds.
3. Establishment of monitoring and reporting processes and indicators, for the accurate reporting of environmental, economic, and social impact of bonds proceeds against Peru's NDC and SDG targets.

To build ownership of the bond among the public and interested parties, GGGI led a highly consultative process characterized by regular webinars and announcements. For instance, on April 22, 2021 (Earth Day), GGGI delivered an online seminar with the participation of Peru's Minister of Finance, the UK's Ambassador to Peru, and Mr. Ban Ki-Moon, GGGI President and Chair and 8<sup>th</sup> Secretary-General of the United Nations, to outline the expected environmental and social impact of Peru's green bond strategy to Peru's citizens and interested groups. On September 23, 2021, the Sustainability Bond Framework was presented and discussed with students and youth during a webinar hosted by ESAN Business School.

The development process of the Framework emphasized gender and social inclusion. Notably, 75% of the Directorate of the Treasury's team, leading the development of the Framework, were women. The definition of the Framework's Use of Proceeds was guided by Peru's National Development and Social Inclusion Policy, National Gender Equality Strategy, and National Social Inclusion Policy, among others. As a result, the Framework emphasizes spending for vulnerable and marginalized groups identified in Peru's national methodology for socioeconomic categorization (Ministerial Decree No. 184-2019-MIDIS). This is a methodology providing a transparent and traceable categorization process based on household income, vehicle ownership, electricity expenditure, and insurance status. Subsequently, the Framework prioritized spending to environmentally sustainable projects, with the added benefits of: i) providing support to vulnerable groups and people in vulnerable groups; ii) facilitating access to affordable housing, education, and essential health services; and iii) supporting micro, small, and medium-sized enterprises (MSMEs) and social programs to alleviate and/or prevent unemployment.

The sustainability bond was officially issued on November 12, 2021, on the Luxembourg Stock Exchange for USD3.25 billion. The issuance attracted demand from more than 250 international and local investors. The distribution of demand by region was 57% from investor accounts in the Americas, and 31% from Eastern Europe and Africa. The distribution by type of investor was 56% asset managers, 19% hedge funds, and 4.6% insurance companies, among others. The Government of Peru's sustainability bond issuance, with a volume of USD 3.25 billion, marks the largest-ever sustainability issuance by a sovereign government, and the largest ever sustainability issuance from the Latin American and the Caribbean region. Shortly after, the Government of Peru issued its first-ever social bond on the Luxembourg Stock Exchange for EUR1 billion.

## 6.7 Success Story: NAFIN's First Sustainability Bond

### Highlights

The GGGI-led Sustainability Bond Framework was the foundation for the development of the Bond Prospectus and the issuance of NAFIN's first sustainability bond in November 2021, which had a volume of MXN7.8 billion (USD371 million).

Efforts to strengthen NAFIN's ESG integration and disclosure is enhancing NAFIN's capacity to contribute to Mexico's NDC and SDG targets, mitigate greenwashing risks, and send a positive signal to the market. All this strengthens NAFIN's green credentials and increases investors' confidence in other thematic bond issuances.

Throughout 2022, GGGI will provide continued support to NAFIN to develop and publish the Sustainable Bond Impact Report, outlining the environmental and social impact of the portfolio of projects financed with the bond proceeds.

NAFIN is Mexico's second largest national development bank. NAFIN's mandate is to contribute to the economic development of Mexico by facilitating access to finance for MSMEs, and to promote innovation, productivity, and job creation. NAFIN operates mainly as a second-tier bank, offering credits to MSMEs through a network of financial intermediaries.

NAFIN has a solid market position, strong economic fundamentals, and the explicit guarantee of the Mexican Federal Government supporting all its financial obligations, which earns it an AAA credit rating on its national debt securities. NAFIN plays a key role in the implementation of the Government of Mexico's climate agenda and low-carbon transition, and holds the record of being the first financial institution in Mexico to have issued green bonds (in 2015). Since then, despite its early mover efforts, NAFIN's internal processes and systems have not kept up with new thematic bond market developments and standards. In 2021, when considering the issuance of an innovative sustainability bond, NAFIN's management team faced the following barriers:

- Lack of internal processes to guarantee the transparent and objective identification and selection of eligible green and social projects;



- Lack of internal processes to monitor, track, and report the environmental and social impact of bond proceeds;
- Lack of agreed-upon reporting indicators to facilitate the development and publication of impact reports related to green or thematic bonds;
- Limited capacity to develop a Sustainability Bond Framework and seek an official second-party opinion.

GGGI delivered two complementary technical assistance workstreams:

- 1. Pre- and post-bond issuance support:** GGGI delivered capacity building to NAFIN's internal units on pre- and post-issuance processes and requirements, led the development of NAFIN's Sustainability Bond Framework, Second Party Opinion certification process, and supported the investor roadshows process. The GGGI-led Sustainability Bond Framework was the foundation for the development of the Bond Prospectus and the issuance of NAFIN's first sustainability bond in November 2021, which had a volume of MXN\$ 7.8 billion (~USD 371 million). The Framework was released by NAFIN ahead of the bond issuance to provide investors, banks, underwriters, placement agents, and other interested parties with a clear understanding of the processes and characteristics of the underlying projects. The Framework details the process for evaluation and selection of eligible projects, monitoring and reporting commitments and indicators, and how the issuance aligned with the Sustainability Bond Guidelines, Green Bond Principles, and Social Bond Principles.
- 2. Integration of ESG standards into the bank's processes and systems:** During 2021–2022, GGGI has been providing support to NAFIN to integrate ESG factors in its systems, portfolio, decision-making, and reporting processes. GGGI will develop recommendations for short-term actions to be implemented by NAFIN, which will help align their operations with international best practices, methodologies, and frameworks, such as the Principles for Responsible Banking, the Sustainability Accounting Standards Board, and the Task Force on Climate-Related Financial Disclosures. Additionally, the team will assist NAFIN develop an ESG platform to communicate and disclose the impact of its green, social, and sustainability bonds and its progress against ESG targets with the public. Strengthening NAFIN's ESG integration and disclosure will enhance NAFIN's capacity to contribute to Mexico's NDC and SDG targets, mitigate greenwashing risks, and send a positive signal to the market. All this will strengthen NAFIN's green credentials and increase investors' confidence in other thematic bond issuances.

NAFIN's first sustainability bond was issued in November 2021, which had a volume of MXN7.8 billion (USD371 million).

## 6.8 Implications for GGGI Results and Targets Setting

GGGI's Strategy 2030 sets the goal of "catalyzing and accelerating access to climate finance/green investments for Members' public and private sectors" with a target of USD16 billion over the period 2017–2030, with a 15:1 ratio of green investments mobilized for every US dollar spent on GGGI operations.

In alignment with our core values of Boldness and Excellence, the organization has already successfully mobilized an excess of USD7 billion by 2022, that is nearly half of the 2030 target. GGGI also largely exceeded its target of a 15:1 ratio of green investment commitments secured for every US dollar spent on GGGI operations. In 2021, GGGI raised USD102 for every dollar spent on its operations.

In the spirit of raising our ambitions to drive even bolder results, during 2022, GGGI will embark on a review process of its green investment targets and reporting methods. This process is expected to lead to three important outputs:

- 1. Updated reporting methodology:** Recognizing the increasing scope of collaboration with financial institutions and sovereign governments to deploy innovative financing instruments and leverage a large volume of finance on a programmatic level, GGGI will develop a methodology to distinguish project-level and program-level investment results.
- 2. Review of global green investment target:** The Strategy and Green Investment Services teams will embark on a review process of the existing pipeline of green investment projects across GGGI Member countries to assess the viability of increasing our green investment mobilization ambitions.
- 3. Review of country-level investment targets:** The country-level target setting exercise will be enhanced to link investment mobilization targets to the economic fundamentals, demographics, and trends across GGGI Member countries.

## 7.1 30 Ambitious NDCs and 15 Green Recovery Plans Developed

### 30 Members and partners received support from GGGI on NDC enhancement

The NDC synthesis report published by UNFCCC before COP26 in 2021 clearly indicated that the ambitions included in the NDCs were not enough to reach the 2°C target, let alone a 1.5°C target of limiting global temperature increase by 2100. Governments have made commitments to net-zero emission by mid-century. However, the NDCs do not reflect the actions toward these commitments. For developing countries, the NDCs must align with their development strategies and help alleviate poverty. Yet, there are limited technical, human, and financial resources available in these countries to plan and implement climate actions. These countries also have limited climate-related data and information systems to make more informed choices.

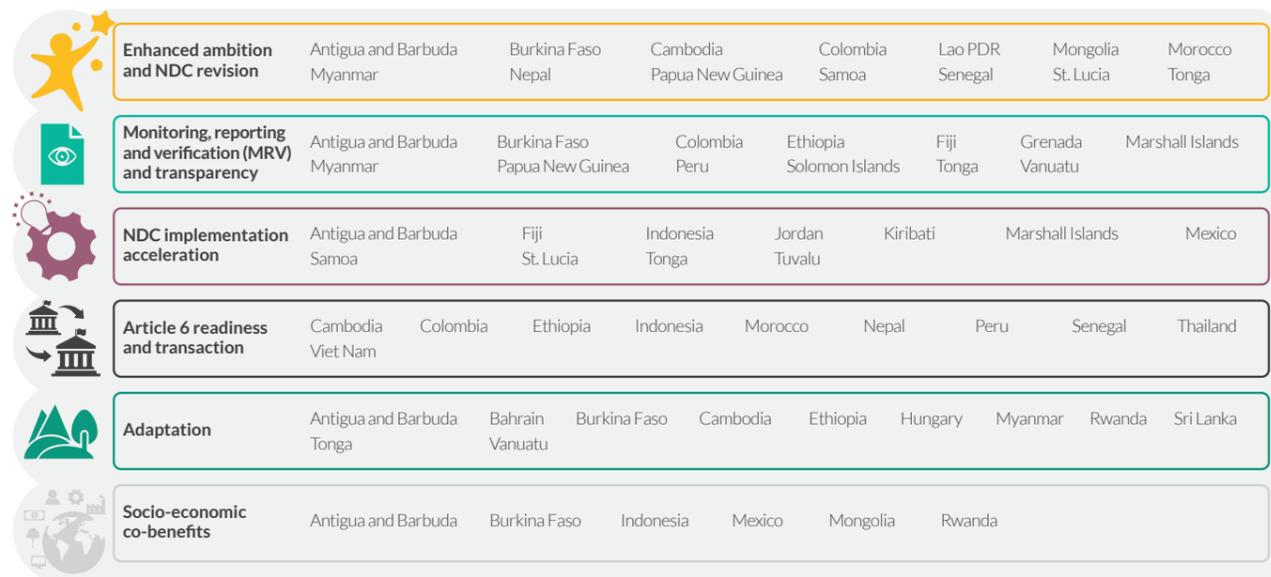
The NDC enhancement work implemented by GGGI in its Member and partner countries has aimed to support Member and partner countries mitigation and adaptation targets, identify policy measures and bankable projects, implementation roadmaps, and, in other ways, build an enabling environment for required flows of finance, technology, and capacity building. GGGI has also provided pivotal support to countries on MRV and Transparency to improve readiness for the implementation of the Enhanced Transparency Framework. A whole of government and whole of society approach helps ensure stakeholder identification and institutional readiness for mainstreaming of NDC targets, while also building the political will and public demand for ambitious climate action that also helps achieve SDGs.

The complex process of updating and enhancing the NDCs involved extensive stakeholder consultations and detailed planning. Much of the work was undertaken on the NDC Partnership platform, and other NDC-related work was embedded in other GGGI core and earmarked-funded projects. GGGI leveraged its embedded-in-governments approach to bring the right kind of knowledge and expertise to the table.

# 2021 KEY ACHIEVEMENTS AND ACCOMPLISHMENTS



**FIGURE 8**  
Types of support provided by GGGI to Members and partners



**15 green recovery plans assessed to accelerate low-carbon and climate-resilient green growth**

A key priority for GGGI in 2021 was the provision of support to Member and partner countries in the development of green recovery plans that are aligned with the NDCs and accelerated green growth.

This was identified as a priority because in 2020, most recovery assessments were focused on developed and OECD countries. Few studies discussed how least developed countries, small island developing states, and non-OECD developing countries could “green” their recovery efforts to support the achievement of their NDCs, SDGs and long-term climate goals. Moreover, few policy recommendations were provided to developing countries on how to utilize their recovery to shift toward a sustainable development pathway with inclusivity and green jobs creation at its heart.

GGGI, in collaboration with Vivid Economics, developed the Sustainable Recovery Index, a tool to assess the nature, climate and social recovery measures of developing countries. GGGI assessed 15 of its Members covering all regions and developing stages (i.e., Burkina Faso, Colombia, Côte d’Ivoire, Fiji, India, Lao PDR, Mexico, Mongolia, Peru, Philippines, Rwanda, Senegal, Thailand, Viet Nam, and members of the Organization of Eastern Caribbean States: Anguilla, Antigua and Barbuda, Dominica, Grenada, St. Kitt and Nevis, St. Lucia, Monserrat, St. Vincent, and the Grenadines).

The results of the assessment identified:

- Best practices to plan, finance, and implement a green recovery in developing countries.
- Six specific actions to mainstream green recovery in developing countries and how to better align them with their NDCs.
- Policy recommendations to utilize green recovery to support long-term climate plans, such as Net Zero Targets in developing countries.

The results were discussed in multiple green recovery workshops such as the “GEC Global Meeting 2021: Code Red for People and Planet – Top Solutions for Scaling a Green and Fair COVID Recovery”. A complete results report will be published in mid-2022. The Sustainable Recovery Index Tool is available for any GGGI Member wishing to measure the sustainability of its recovery efforts and compare its performance against its peers.

To further drive an economic recovery centered on a just transition for all, GGGI supported more than five countries in the development of green recovery projects aiming to maximize the creation of green jobs. Certain projects were focused on specific economic sectors, such as forestry in Colombia and energy generation in Mongolia, while others informed national and subnational governments on which economic sectors have the highest potential for green jobs creation under a green recovery pathway, e.g., Mexico and Peru.

GGGI will continue to support a green recovery. For instance, in 2022, GGGI will support Indonesia’s G20 Presidency in research on enhancing and financing G20 green recovery measures.

## 7.2 LT-LEDS Light the Path Toward Accelerated and Equitable Climate Action

UNFCCC Synthesis Report of NDC ambitions<sup>9</sup> ahead of COP26 raised and concluded that although NDCs were enhanced, they are not yet ambitious enough to achieve the Paris Agreement targets. In fact, the IPCC reports conclude we are on track for 2.4 degrees Celsius warming. However, a positive trend in 2021 was the emergence of mid-century carbon neutrality targets, which if implemented would set us on track for 1.8 degrees warming by 2100, as per International Energy Agency estimates.<sup>10</sup> The Long-Term Low Emission Development Strategy (LT-LEDS) is a long term planning framework that translates commitments into plans for low-emission and climate resilient development. With proper implementation, the LT-LEDS provides opportunities for technology transfer, innovation, and economic diversification that result in social co-benefits such as job creation, avoidance of air pollution, reduced public health risk, improved access to services, promotion of gender equality, and alleviation of poverty. In addition, LT-LEDS can guide the Nationally Determined Contributions (NDCs) to become more ambitious, actionable, and aligned with national development objectives.

GGGI provides technical and advisory support for developing LT-LEDS fully customized to the national context of countries’ needs and specificities. GGGI’s comprehensive, cross-sectoral, and inclusive approach helps take countries through the entire LT-LEDS process, from visioning, stakeholder engagement, policy interventions assessment, scenario analysis and modeling, climate finance planning, LT-LEDS document preparation and approval, to implementation, and monitoring and evaluation. Depending on the availability of data and resources and the needs and capacity of the countries, the analytical support GGGI provides could be more quantitative or qualitative. GGGI, although utilizes a customized approach to LT-LEDS, at the same time follows the principles of country ownership, inclusivity and enhanced capacity on the ground, sound analysis, integrated and comprehensive approach, inclusion of development objectives and co-benefits, and establishment of strategic partnerships.

GGGI supported Tonga, Hungary, and Cambodia in developing their LT-LEDS, approved and submitted to UNFCCC in 2021. The approach, methodologies, and good practices adopted in these countries are being used or customized in other countries to support the development of LT-LEDS, including in **Burkina Faso** and **Ethiopia**.

### Tonga’s Low Emission Development Strategy 2021-2050

Tonga is a small island developing state in the Pacific region that is highly vulnerable to the impacts of climate change, including

cyclones, coral bleaching, and changing rainfall patterns. Despite Tonga’s negligible GHG emissions, its leadership demonstrates strong ambition and commitment to **accelerate action** toward the goals of the Paris Agreement and the UNFCCC.

**The LT-LEDS was developed in a participatory manner, grounded in Tonga’s culture and values and ‘Talanga’, an interactive dialogue with communities.** The LT-LEDS development process and workshops organized across sectors and communities combined traditional culture and knowledge with technical analyses to strengthen resilience and capacities to address climate change challenges in a collaborative way.

**The LT-LEDS was approved by the Cabinet on November 5, 2021 and submitted to UNFCCC on November 11, 2021.** Tonga’s LT-LEDS is guided by five interrelated sector pathways for: i) energy, ii) transport, iii) agriculture, forestry and other land use, and fisheries, iv) waste, and v) human settlements – each with a series of actions. Recognizing the importance of working across sectors for successful reduction in GHG emissions, cross-sectoral measures are also considered as part of the LT-LEDS to build synergies and avoid duplications while addressing issues of climate resilience.

The development of Tonga’s LT-LEDS was funded by the New Zealand Government with technical assistance and support from GGGI, ClimateWorks Australia, and Relative Creative.

### Hungary’s National Clean Development Strategy 2020–2050

In 2020, the Hungarian parliament adopted a law to achieve climate neutrality by 2050 – this means achieving a state of net-zero GHG emissions. Achieving this goal will not be easy and a strategy for doing so was needed.



<sup>9</sup> <https://unfccc.int/documents/306848>

<sup>10</sup> <https://www.iea.org/commentaries/cop26-climate-pledges-could-help-limit-global-warming-to-1-8-c-but-implementing-them-will-be-the-key>

GGGI was invited by the Ministry for Innovation and Technology to support the development of its LT-LEDS entitled, the National Clean Development Strategy (NCDS), to steer long-term climate policy and action across sectors and achieve the climate target set.

GGGI formed and led a consortium of national and international experts to model and assess the economic, financial, social, and environmental impacts of emission reduction trajectories of the energy, industrial, agricultural, forestry, and waste sectors in Hungary.

**Such an integrated, cross-sectoral, and consultative approach has not been applied in Hungary before.** The NCDS was based on an integrated modeling approach to explore the emission trajectories of key sectors, as well as the system-wide and cross-sectoral dynamics of the decarbonization process. GGGI deployed a systematic and structured process to involve, consult, and learn from a wide range of relevant stakeholders from the public and private sector and the general public.

This novel approach not only helped to reveal direct impacts, such as investment costs and GHG emission reductions, but also indirect benefits and avoided costs of the decarbonization process, such as employment creation, GDP growth, government revenues, avoided energy costs, and avoided social costs of carbon. Additionally, the incorporation of a comprehensive financial plan for the identified sectoral low-carbon interventions based on an analysis of financial gaps and needs of decarbonization was an important element of the NCDS.

The findings and recommendations in the NCDS will help the country achieve its climate neutrality, energy efficiency, renewable energy, afforestation, and circular economy targets. Discussions are currently underway to develop sectoral roadmaps for decarbonization in line with the NCDS.

**According to GGGI's analysis, the implementation of the NCDS could generate 180 thousand more jobs compared to the business-as-usual scenario and lead to 2.9 annual GDP growth by 2050.**

**Hungary's NCDS received the highest score ahead of Poland, Slovakia, and Czechia** in an assessment conducted by WiseEuropa, an independent think-tank, which compared the decarbonization strategies of Central European countries.

### Cambodia's Long-Term Strategy for Carbon Neutrality

Cambodia ranks among the countries most vulnerable to climate change. The Ministry of Environment projects that climate change, if unchecked, could reduce absolute GDP by almost 10% by 2050. Reaffirming its commitment to climate action and defining a pathway to carbon neutrality by 2050, the Government of Cambodia submitted its LT-LEDS to UNFCCC in December 2021. It was developed upon the direct request of the Prime Minister ahead of COP26. While Cambodia is a small emitter today, long-term planning can avoid the developing countries of today becoming the big polluters of tomorrow.

**At the time of submission in December 2021, Cambodia was the third least developed country to submit an LT-LEDS.** Titled the Long-Term Strategy for Carbon Neutrality (LTS4CN), GGGI supported the Ministry of Environment by leading the development of the waste section, in partnership with UNDP. This involved developing a list of costed actions, modeling the carbon emissions, testing the proposed actions through consultation with the relevant government partners, and drafting the waste chapter of the LTS4CN.

**The waste-related solutions identified are balanced and offer a realistic pathway to lower emissions in Cambodia, while decreasing pollution and reducing risks to human health.** The LTS4CN proposes to progressively introduce proven best practice technologies in Cambodia, such as landfill gas extraction and organic waste processing, while improving existing practices to minimize waste, increase waste collection and separation, and reduce open burning. Actions are also outlined on improving the management of wastewater treatment plants and decentralized systems in rural areas.

Despite the short deadline in completing this exercise by COP26, the high-level political buy-in and strong coordination among development partners and government enabled the successful completion of the LTS4CN process in less than a year. In normal circumstances, such processes can often take two to three years for similar results. The experience of updating the NDC with support from GGGI, UNDP and others, also helped inform the LTS4CN exercise.

**The implementation of the LTS4CN pathway is expected to create 499,000 additional jobs and deliver an additional 2.8% of annual GDP growth by 2050 for Cambodia.**

## 7.3 Mobilizing Financing from the NAMA Facility to Support Our Member Countries to Take Climate Action

The Nationally Appropriate Mitigation Action (NAMA) Facility finances innovative projects that tackle local challenges to reduce emissions in sectors and countries. In 2019, GGGI successfully supported the Government of Mongolia in securing EUR355,000 from the NAMA Facility for the development of a EUR18 million project to increase energy efficiency in old, energy-intensive residential buildings. Building on this success, GGGI has once again been able to support the Government of Nepal in securing EUR382,563 for the development of a EUR18 million e-mobility project, which is expected to begin implementation in 2023.

### Mongolia

Perched 1,350m above sea level on the edge of the steppes of Mongolia, Ulaanbaatar is the world's coldest national capital with temperatures falling below -30°C in winter. For about 20% of Ulaanbaatar's residents living in aging, poorly-insulated precast buildings, they must tolerate the cold, while the public utility faces inefficiencies due to high building heat losses. Although the Government of Mongolia committed to improving energy efficiency in the building sector, including insulation improvement of precast apartment buildings – also called “thermo-technical retrofitting” – they were unable to overcome the barriers to scale up investment to reduce heat losses in these buildings. Barriers include subsidized, non-consumption based heat tariffs, and the lack of affordability of thermo-technical retrofitting for apartment owners.

**GGGI developed an innovative financing mechanism to overcome some of the barriers – a revolving energy efficiency fund** that covers the upfront cost of the retrofitting works and is replenished by monthly on-bill repayment by the residents and monetized energy savings from the public heat supply company.

**GGGI mobilized USD20.4 million from the NAMA Facility, USD9 million from the Ministry of Construction and Urban Development, and USD7.4 million from the Municipality of Ulaanbaatar** to establish the revolving energy efficiency fund to jumpstart thermo-technical retrofitting of apartment buildings in Ulaanbaatar, and at the same time, create market conditions to scale up investment in improving the energy efficiency of buildings.

Project partners include the Municipality of Ulaanbaatar City, Ministry of Construction and Urban Development, Utility Authority of Ulaanbaatar City, construction companies, ICLEI, and GIZ as the NAMA support organization.

**Building on its success, GGGI aims to replicate this project at the subnational level in cities of other provinces.** Subnational governments

of Orkhon, Darkhan-Uul, and Selenge provinces have confirmed the need for such project and have committed to cooperate.

**Over 14,000 households in 375 precast building blocks will directly benefit from the five-year project through improved thermal comfort, indoor air quality, and increased value and lifespan of the buildings.** There is commitment to retrofit a total of 1,075 building blocks benefiting 48,000 households beyond the life of the project using the revolving fund energy efficiency fund.

As a result of the project, the retrofitted buildings' energy efficiency will increase by up to 50%, resulting in an estimated 2.1MtCO<sub>2</sub>e of direct and 2MtCO<sub>2</sub>e of indirect GHG emission reductions over the 30-year lifespan of the technology. Also, an estimated 750 green jobs will be created each year in the construction sector.

### Nepal

In Nepal, the government is determined to switch to electric vehicles. Its NDC targets in the transport sector include electric vehicles constituting 90% of the private passenger fleet and 60% of public passenger vehicles sales by 2030. However, the sector is faced with significant challenges in the transition to electric vehicles. Private operators of public transport and banks perceive electric vehicle technologies as high risk, due to limited understanding, performance data, and track record, as well as mixed policy signals from the government, especially on electric vehicle import duties. The high upfront cost of electric minibuses, which may cost as much as 265% more than a diesel equivalent vehicle, reduces operators' appetite to purchase electric minibuses. Moreover, the high interest rates and additional collateral requirements in transport sector lending further discourages investment.

**In response to these challenges and to promote access to electric vehicle financing, GGGI is designing a leasing facility using a pay-as-you-save model through which the private operators of public transport will be able to lease electric minibuses with monthly payments only, without advance CAPEX requirements.** Through this model, high down payments will not be needed and the ownership of the vehicle is expected to be transferred from the leasing company to the operators in about 10 years. The leasing companies will only be able to lease vehicles with standard minimum specifications, addressing operator and financiers' concerns on quality of electric minibuses.

**The project is also looking to establish a Loan Guarantee Fund to build local banks' confidence in lending to public transport operators purchasing electric minibuses.** The Loan Guarantee Fund will be managed by a handling bank and is designed to cover 5% of possible loan defaults on pre-approved vehicles sold from the second year of the project. In addition to this, the project aims to establish a secondary market for electric vehicles, to reduce the need for collaterals for loan and leasing

**The project will build the capacity of relevant parties, ensuring**





**adequate representation of women in all processes.** There are various trainings planned under the project. The training will be delivered to an estimated 2,500 public transport operators and 10 electric vehicle distributors to enhance their understanding on minimum standards as well as operation of vehicles. Capacity of financial institutions will also be built to implement funding modalities under the NAMA Support Project. The project will ensure at least 33% representation of women in decision-making, ownership, operation of electric minibuses, training, and capacity building activities.

The project is being implemented by GGGI and GIZ with support from the Ministry of Physical Infrastructure and Transport, Ministry of Forests and Environment, Ministry of Finance, Ministry of Labour, Employment and Transport of Bagmati Province, Nepal Electricity Authority, public transport operators, electric vehicle suppliers, and local financial institutions.

*The Nepal Electricity Authority indicated that this is a timely project as the country is set to see an increase in supply of hydroelectricity.*

**The project will have significant positive impact on the environment, increase access to sustainable transport services, and contribute to creation of green jobs in Nepal.** It is estimated that the project will reduce 3.08 million tCO<sub>2</sub>e over the vehicle lifetime directly from the replacement of diesel-based minibuses with electric minibuses, and indirectly from the replacement of other fossil fuel-based vehicles with electric vehicles. In addition, 22.7% of the newly-sold minibuses will be electric by the end of project implementation, compared to 0.39% in the business-as-usual scenario. The provision of sustainable electric minibus services will benefit around 84,000 passengers daily, an increase by 98% compared to the baseline value. Also, 6,342 green jobs will be created through introduction of 3,020 new electric minibuses.

## 7.4 Public-Private Partnerships in Developing Sustainable Energy Solutions Bridge Gaps in Colombians' Access to Electricity

### Challenges

Two-third of the territory in Colombia is not served by the national grid with over 500,000 households lacking access to electricity. In the National Development Plan 2018-2022, the government committed to provide sustainable electricity services to 100,000 households by 2022. However, progress has been slow due to several challenges, including limited private sector investments in the sector, and its reliance on public funding that has been severely impacted by COVID-19. For those living off-grid, the high cost of electricity and unreliability of its supply increases the hardship of daily activities and threaten business operations.

### Highlights

The Ministry of Mines and Energy (MME) and the Institute for Planning and Promotion of Energy Solutions for Non-Interconnected Areas (IPSE) sought GGGI's assistance to design and bring to market bankable rural electrification solutions and attract private sector investments in rural electrification.

*"I applaud UK PACT and the forward-looking approach by the Government of Colombia to prioritize the use of renewable energy solutions to provide affordable and clean energy to rural and vulnerable communities. This initiative fully embodies the rationale behind the SDGs with governments, international organizations, and private sector working together to coordinate transfer of technology and financing to support the most vulnerable."*

Ban Ki-Moon, President and Chair, GGGI

GGGI, supported by the UK Partnership for Accelerated Climate Transitions (UK PACT), partnered with Colombian developers to design and implement reliable, affordable, and sustainable rural electrification business models targeting four main beneficiary groups: i) rural stores, ii) off-grid inhabitants, iii) telecommunications towers, and iv) off-grid agriculture processing plants.

The projects were selected by the team precisely for their impact on isolated and vulnerable rural communities



located in areas outside of the interconnected network (ZNI) or in Colombia's post-conflict zones – PDET and/or ZOMAC. GGGI ensured that project developers integrated gender equality and social inclusion considerations in these rural electrification projects.

### Impacts

Innovative business model for deploying rooftop PV systems across 30,000 rural stores with a cumulative installed capacity of 300MWp will contribute to the creation of 1,000 green jobs, avoid the emission of 39,600tCO<sub>2</sub>eq per year, and reduce rural stores' electricity bills by up to 41%.

GGGI partnered with Colombian developer, Colibri Energy, to design an innovative energy-as-a-service scheme bringing solar PV systems to women-led rural stores throughout Colombia. The project is designed around the value chain of large food & beverages companies – whose products are distributed across rural stores throughout the country.

The project consists of a long-term energy sales contract scheme between a special purpose vehicle (SPV) and the store, backed by a third-party portfolio guarantee. The SPV will manage the investment, design, acquisition, and installation of the solar systems to ultimately supply electricity to the store at a lower price than what they currently pay. The SPV's investment and operations will be backed by a portfolio guarantee scheme from the food & beverage company, leveraging its pre-existing commercial relation with the beneficiary stores. This project was showcased during Colombia's largest climate finance event and secured a USD276 million Letter of Intent for deploying the solution over a five-year period.

**A sustainable energy solution for Inirida – an enclave in the Amazon jungle that is completely detached from the country's main grid – will meet 90% of the population's electricity consumption, generate 150 green jobs, and avoid the consumption of 1 million gallons of diesel and the emission of 10,360 tons of CO<sub>2</sub> per year.**

In Inirida, a remote territory without any land connection to the rest of the country, its 31,514 inhabitants depend on diesel generators for electricity with daily blackouts and high electricity prices. In response, GGGI collaborated with a consortium of local developers, SDI, to design a reliable, affordable, and sustainable energy solution consisting of a 12.3 MWp solar PV plant and a 33MWh battery storage system (the largest in the country). The construction phase has an estimated duration of eight months, with operations expected to start in 2023.

**Green telecommunication towers will generate an investment of USD20 million over the next three years, avoid the emission of 6,639tCO<sub>2</sub>eq per year, create 300 new jobs, and reduce mobile network operators' electricity costs by 31%.**

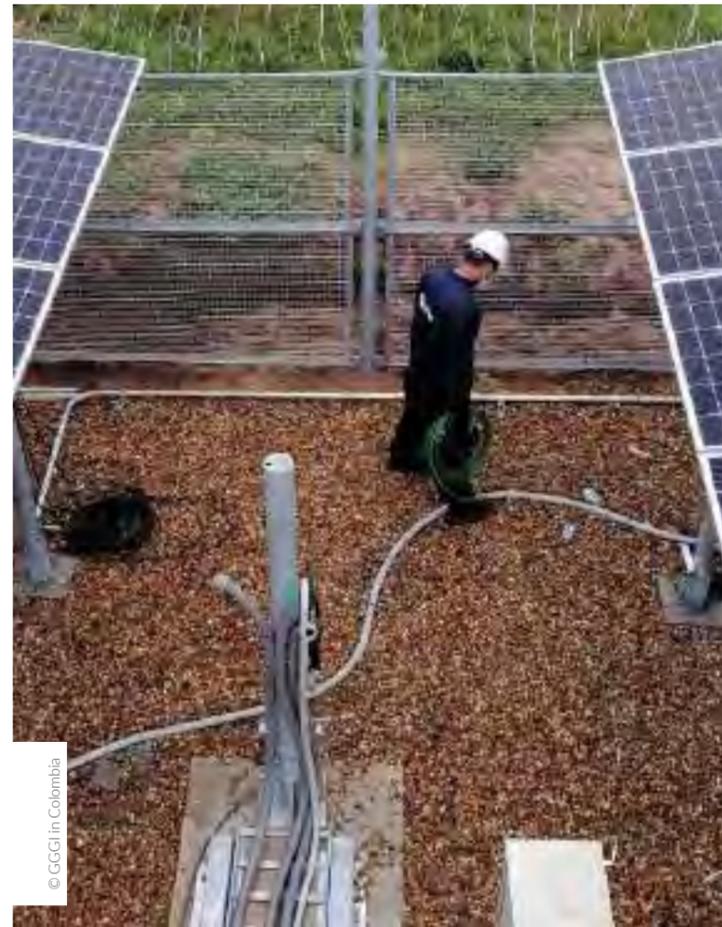
Approximately 1,000 telecommunications (telco) towers in Colombia are in remote, off-grid areas, relying on diesel

generators to meet their energy demand. GGGI partnered with developer, Innova Solar Colombia, to structure an energy service company solution capable of deploying solar energy and storage solutions to 300 telco towers through 10-year energy service contracts. The solution is already operational across 10 sites with 100 new sites expected to become operational during 2022.

**GGGI and partners help to realize the untapped potential of palm oil mill effluent for sustainable and clean rural electrification.**

Colombia is the largest palm oil producer in Latin America and, while the industry has undergone rapid expansion, advances in the valorization and utilization of palm oil mill effluent (POME) for electricity generation have not kept pace. At present, less than 2% of mills in Colombia produce electricity from POME. GGGI partnered with local developer, NECO Power, to demonstrate the attractiveness of POME to energy solutions by complementing the generation of biogas with the production and sale of humus as an organic fertilizer.

GGGI-NECO completed the technical feasibility of the solution, identified the optimal technological solution, and assessed the financial viability of its applicability across five palm oil mills in Colombia. The project is in advanced negotiation with a local palm oil mill to deploy a 1,000KW system to treat organic residues from 220,000 tons of palm oil fruit annually. In a display of public-private knowledge sharing, NECO and GICON led sessions with IPSE to discuss and identify biogas applications for rural electrification. GGGI also delivered identification and characterization of potential beneficiaries for this project to NECO.



© GGGI in Colombia

## 7.5 Fiji Strengthens Capacity and Cooperation to Implement its Climate Change Act

### Challenges

Fiji has been experiencing the impacts of climate change for many years now. More intense and frequent extreme weather events and sea-level rise have wiped away villages and are exposing vulnerable populations to acute food and water insecurity. A comprehensive blueprint for tackling climate change, including rapid and ambitious transformation toward net-zero emissions, was urgently needed.

**On September 23, 2021, a milestone was achieved with the passing of the Fiji Climate Change Act.** One of the key challenges now is its implementation in a cooperative, inclusive, and cost-effective manner.

### Highlights

GGGI was instrumental in the adoption of the Climate Change Act through projects supported by the **Regional Pacific NDC Hub** and the **New Zealand Government**.

Through the Regional Pacific NDC Hub project, of which GGGI is an implementation partner, GGGI provided timely critical support to align the draft Climate Change Bill with the revised Fiji Forest Bill. Recognizing forests as one of Fiji's largest quantifiable natural sinks, this alignment ensured that the two national legislations complement each other. Following this key intervention, the Climate Change Bill was adopted by the Fijian Government as the Fiji Climate Change Act.

As a natural next step to initializing implementation of the Climate Change Act, GGGI commenced early implementation of key measures encapsulated within the Act through the Low Emission Climate Resilient Development project, which is supported by the New Zealand Government.

### Impacts

Paving the way for more streamlined and coordinated implementation of the Climate Change Act, GGGI pioneered a series of interventions in Fiji.

**To enable Fiji to better engage with and benefit from carbon markets, GGGI ensured that the Climate Change Bill was well aligned with the revised Fiji Forest Bill.** For the first time in Fiji, carbon sequestration property rights were incorporated into national legislation.



© GGGI in Fiji



GGGI worked with the building and construction sector to review the building code and integrate climate resilience and resource efficiency aspects. A follow-up phase will involve the development of implementation tools and capacity building to ensure improved resilience and resource efficiency in the sector.

**The voluntary reporting of GHG emissions was piloted involving large carbon-emitting companies from the cement, forestry, mining, steel, and iron industries, as well as green entrepreneurs.** The Ministry of Economy plans to scale up this effort to reach the ambitious goal of 15,000 companies reporting voluntarily to government on a regular basis. GGGI has prepared guidelines for the Ministry of Economy to use moving forward.

**GGGI strengthened the capacity of the Fiji Bureau of Statistics in carbon accounting and GHG emissions data management and reporting.**

*The Ministry of Economy's Climate Change and International Cooperation Division conveyed their appreciation for an improved relationship with the Fiji Bureau of Statistics thanks to the capacity building process to improve carbon accounting, which created a new communication channel for the implementation of the Climate Change Act.*

## 7.6 Lao PDR Adopts 10-year Strategy and Action Plan to Achieve a Clean, Green, and Livable Vientiane

### Challenges

Illegal dumping of waste and open burning are affecting Vientiane, Lao PDR's capital, and its residents, causing significant health threats. Only about one-third of the waste in the city is collected, and the lack of proper waste treatment capacity contributes to pollution and GHG emissions. Moreover, valuable materials from the municipal waste are not being recovered, resulting in missed opportunities for economic gain.

**"Solid waste management is one of the most pressing issues in Vientiane. I am very pleased that a 10-year strategy for sustainable solid waste management for Vientiane has been developed and ready for endorsement. I will ensure political support for endorsement and enforcement of this strategy to realize a clean, green, and livable Vientiane."**

Phoukhong Bannavong, Vice Mayor of Vientiane, Lao PDR at the multi-stakeholder consultation in June 2020

### Highlights

GGGI, with financial support from the Korea International Cooperation Agency, provided technical support to the Government of Lao PDR, particularly the Vientiane City Office for Management and Service (VCOMS), in developing the **Sustainable Solid Waste Management Strategy and Action Plan for Vientiane 2021-2030**. The strategy was endorsed by the Mayor of Vientiane on October 11, 2021.

The strategy presents six strategic outcomes, which include achieving 100% waste collection rate and maximizing waste-to-resource opportunities, such as the establishment of an **Integrated Resource Recovery Centre**, the first city government-led facility to convert organic waste into quality compost. The strategy also aims to achieve 40% recycling rates and ensure that 80% of waste disposed at landfill is properly treated.

**"The 10-year strategy is the first policy document for the city government of Vientiane Capital in sustainable solid waste management. It fully reflects the vision and strategic outcomes that the city government aims to achieve by 2030 in increasing the waste collection rate, waste treatment capacity, and waste-to-resource opportunities. It's very rewarding to be part of the whole journey from development to endorsement of the strategy. VCOMS and the city government have demonstrated great ownership and leadership in the development and promotion of this strategy."**

Shomi Kim, Lead Waste Community of Practice and Specialist, GGGI

### Impacts

There is strong commitment from multiple stakeholders to implement the strategy and action plan thanks to close **consultation** with them from the very start. Through the waste situation assessment and household survey led by GGGI in 2018 and 2020, in close coordination with VCOMS, relevant data was collected and fed into the development of the strategy and action plan. A series

of meetings, workshops, and **multi-stakeholder consultations** was carried out in the process. GGGI has also been promoting **private sector engagement** and public-private partnerships, and leveraging private sectors' innovation and technology solutions in sustainable solid waste management. The potential investment to be mobilized for large waste treatment facility through public-private partnership is expected to increase Vientiane's waste treatment capacity to process 500 tons/day of waste disposed at the landfill.



## 7.7 Peru's Leadership Promotes Inclusion in the NAP Process Toward a Climate-Resilient Future

### Challenges

Peru has demonstrated strong leadership in climate action and has been working collaboratively with international partners, including GGGI, under the framework of the Climate Action Enhancement Package to improve the NDC update process and strengthen NDC implementation, through the development of Peru's National Adaptation Plan (NAP).

### Highlights

GGGI provided technical assistance to the Government of Peru in a variety of key adaptation sectors to support the development of the NAP in two major areas: i) development of NAP indicators and reporting processes; and ii) climate scenarios for prioritizing NAP implementation areas.

**NAP indicators and reporting processes** were developed in partnership with:

- **Ministry of Production and Ministry of Health.** GGGI supported the development of indicators in the health and fishing sectors, as well as the reporting process between the ministries of Health and Production with the Ministry of Environment, involving over 10 different directorates between ministries.
- **Ministry of Energy and Mines and the National Water Authority.** GGGI supported the development of indicators between both agencies for water as it is used by the population nationwide.
- **National Forest and Wildlife Authority.** The application of the indicators developed for the forest sector to the Ministry of Environment's online reporting platform was piloted. This required the development of the reporting process, as well as the programming of the indicators and processes in the reporting platform.
- **Ministry of Housing and Construction.** GGGI supported the development of the specific high-level NDC implementation roadmap for this sector.

**The climate scenarios for NAP implementation prioritization** involved the development of indicators and spatial analysis to identify vulnerable areas and match them with proposed activities, as well as the conduct of a high-level costing exercise for the NAP. All these outputs were validated in a stakeholder consultation process with **35** ministries and government agencies This included:

Mapping vulnerability indicators such as rainfall, temperature, and other climate phenomena in representative political regions of coast,

mountains, and jungle, and matching them with a prioritization of NAP activities in water, agriculture, fisheries, and health;

Detailing the role of early warning systems, communications networks, and climate insurance to mitigate climate shocks;

Undertaking a high-level costing exercise of the priority interventions and systems.

These key documents and processes were co-designed with relevant national and subnational government authorities, and developed in a participatory manner. As a result, national and subnational authorities gained crucial technical knowledge.

### Impacts

**The development of the NAP was a participatory process across multiple sectors, levels and actors that garnered over 450 recommendations from public, private, and civil society stakeholders.** More than 10 physical sessions and 11 virtual sessions were organized, with support from GGGI.

**The NAP was presented to the UNFCCC, and approved by the Government of Peru in June 2021.** GGGI is recognized by the Ministry of Environment as a key and trusted partner in helping Peru achieve their NDC targets and climate ambition.



## 7.8 Green Enterprises in Papua New Guinea Get Better Access to Finance

### Challenges

Green entrepreneurial growth lies at the heart of countries' green recovery and transition to a green economy, with the potential to create innovative solutions and accelerate the creation of green jobs. Yet, green enterprises' biggest constraint is their inability to access credit due to insufficient collateral.

### Highlights

In response, GGGI supported the establishment of a Credit Guarantee Corporation (CGC), a national financing vehicle to improve credit access for MSMEs, particularly those in sustainable industries.

**The CGC was launched by the Government of Papua New Guinea on March 29, 2022, with an initial capital of PGK50 million (USD 15 million).**

At the launch, the Prime Minister, Honorable James Marape, attested that the CGC will benefit "at least 5 new jobs for every MSME in Papua New Guinea, with a target of 100,000 MSMEs".

The CGC provides partial loan guarantees to local financial institutions, thereby reducing the need for collateral and increasing MSMEs' access to credit.

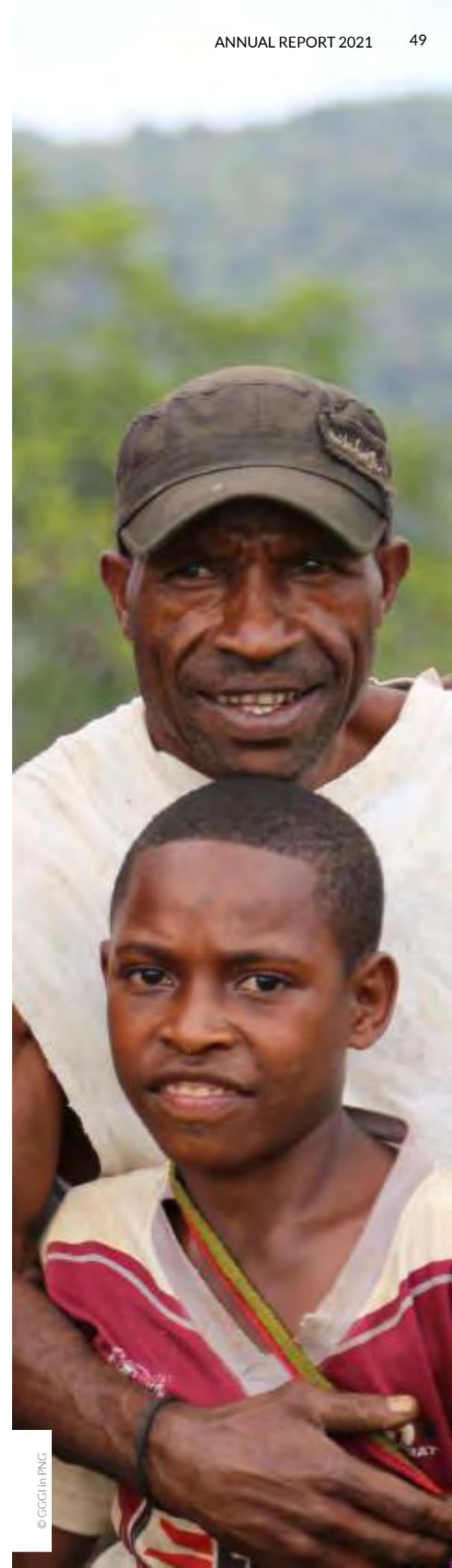
This initiative is part of the **Climate-Resilient Green Growth Project** funded by the Australian Government. The initiative was successful through partnerships with the Central Bank of Papua New Guinea (BPNG), MSMEs, financial institutions in Papua New Guinea and international organizations.

**The initiative adopted an inclusive approach which ensured the engagement of women-led enterprises in policy and market analyses, despite the multiple challenges faced.** One of the biggest challenges was the conduct of in-depth interviews with local MSMEs during the COVID-19 outbreak with questions that delved deep into their financials. Working closely with the MSMEs to understand the gaps and barriers from their point of view (including gender and social inclusion gaps and barriers) contributed significantly to the design of the CGC's business model and its operationalization.

### Impacts

**The Government of Papua New Guinea is targeting 100,000 MSMEs to benefit from the CGC between now and 2030. Of these, 40% are women-led MSMEs.**

The CGC will offer a service that is available to MSMEs in other countries but is new in Papua New Guinea. An online loan referral platform will be developed to allow MSMEs to search for loan products that best match their needs and, conditions permitting, be directed to a loan officer. MSMEs will also be able to search for non-financial advisory services offered by local and international organizations. The platform will ensure that women-led operators are prioritized and supported.



## 7.9 Rwanda Builds the Resilience of the Most Vulnerable Living in Cities to Tackle Rising Incidences of Flood and Landslide

### Challenges

Rwanda is urbanizing at a rapid rate. While cities have promoted economic growth, they have also affected the safety and security of those most vulnerable, particularly those living in unplanned and informal settlements that are highly prone to disasters like floods and landslides. The impact of urbanization is felt beyond cities, affecting agricultural productivity and farmers, particularly women farmers, as the reduction of permeable surfaces increases runoffs and damages soils.

*“As citizens upstream keep on building, the increased stormwater lacks the capacity to infiltrate into the soil. Farmers that cultivate various crops like rice and maize require water but not the excess water flow, which carries mud, sand and other objects like plastic that damage the soil.”*

**Francois Manzi, HORECO Agronomist, Huye District, Rwanda**

*“Not all members of our farmers’ group are affected the same way. There are more women working in the wetland and when a woman cultivates, it is her only source of income. So, when the crops are destroyed by the flood, the woman remains with nothing to take to her home.”*

**Francoise Uwimbabazi, Farmer from Rwabayanga Wetland, Huye District, Rwanda**

Climate change is magnifying these threats with more frequent and intense rainfall. Rwanda has witnessed disasters that have culminated in the loss of lives and assets and large-scale displacement, jeopardizing development gains achieved over the past years.

### Highlights

As part of the **National Adaptation Plan Readiness and Preparatory Support for Building Flood Resilience Capacities in Rwanda**, funded by the Green Climate Fund, GGGI supported the Government of Rwanda in enhancing capacity for integrated flood and landslide management in the most vulnerable urban zones – in **Rusizi District** in the Western Province, **Huye** and **Kamonyi Districts** in the Southern Province, and the **City of Kigali**.

Technical studies to reduce flood and landslide risks were conducted in these high-risk areas for the development of climate financing strategies and bankable projects. A **Gender Equality and Social Inclusion Assessment** was also conducted and the

recommendations were incorporated into an action plan to fill the identified gaps while sustaining the good practices.

This assessment is in line with Rwanda’s National Urbanization Policy in which social inclusion is one of the guiding principles, setting the scene for people-centered and gender-sensitive urbanization. Recognizing that urbanization needs to take disaster management and resilience into account, the policy highlights the role of the community. It recommends understanding specific vulnerabilities through conducting community risk assessments.

The Gender Equality and Social Inclusion Assessment highlighted how women and men differ in how they experience, respond to, and recover from disasters. Women and people from disadvantaged backgrounds living in the project sites are the most affected by floods and landslides. For example, in Rusizi District, the stormwater floods houses located downstream where the poorest live, and women live in constant fear for their children who are at risk of being washed away by stormwater.

### Impacts

**The project identified and assessed nature-based solutions to reduce communities’ risks to floods and landslides.** Using flood risk models created for selected urban watersheds, the application of various nature-based solutions to reduce flood and landslide risks in different urban contexts was simulated. At the household level, nature-based solutions included permeable pavements, green roofs and urban trees that could contribute up to 40% reduction in peak runoff. At the community level, nature-based solutions such as detention basins, swales and storage tanks could further reduce peak runoff.

**The technical studies and the Runoff Reduction Guidelines developed were widely disseminated across Rwanda to inform future urban projects.**



© GGGI in Rwanda

## 7.10 Senegal Sets to Transform the Problem of Waste from Electrical and Electronic Equipment into Opportunity

### Challenges

Like many countries on the African continent, waste from electrical and electronic equipment (WEEE), such as computers, mobile phones, televisions, refrigerators, and fans, is piling up in Senegal. Unregulated handling of WEEE, predominantly by the informal sector, has created jobs, but is exposing workers to hazardous substances. WEEE is also causing adverse environmental effects.

There is therefore an urgent need to improve the regulatory and institutional structure for managing WEEE, as well as training and investment in WEEE management technology, to create green jobs with reduced health risks. Technologies are already available that can turn waste into resources and valuable end products. The key challenges are in raising awareness and developing sustainable business models for circular economy enterprises.

### Highlights

**GGGI supported the Ministry of Environment and Sustainable Development in updating the decree on WEEE Management.** A final draft of the decree is being endorsed by the Government of Senegal.

**The Ministry of Environment and Sustainable Development and GGGI set up a WEEE Strategic Committee to update the decree and engage with numerous stakeholders in knowledge exchange, technical validation, and drafting of the decree.** Stakeholders engaged in the process included the private sector (e.g., Settic, Dieda Dreda, Africa Recycling Services), workers from the informal sector of Mbeubeuss and Reubeuss – the main areas for dismantling WEEE in Dakar, associations and civil society organizations (e.g., New Will for the Environment, Association ZéroDéchets), state information technology agencies under the Ministry of Digital Economy and Telecommunications, sectoral ministries, and researchers.

These multi-stakeholder engagements were critical in addressing the challenges and barriers to the endorsement of the decree, such as clarification on the main institutional owner of the decree. The engagements also incorporated advocacy and awareness raising about the importance of safe and green WEEE management, as it involved a significant shift in the approach to tackling waste – from a linear economic system in which we make, use, and then dispose of products, to a more sustainable and circular system involving recovery and recycling.

The decree recommends:

- Formation of a new entity within the Ministry of Environment and Sustainable Development to be co-managed with other competent organizations to regulate and monitor WEEE practices.
- Establishment of a Deposit and Consignment Fund to finance the treatment of WEEE.
- Development of governance tools such as registers of producers and operators.

To support the implementation of the decree on WEEE management, GGGI delivered a **training program** on waste dismantling techniques for WEEE.

These initiatives are being implemented as part of a **GGGI project** that focuses on wastewater, plastic waste, and WEEE management in Senegal’s cities, and the development of an innovative business model for recycling and waste valorization. The project is supported by the Government of Luxembourg.

### Impacts

GGGI is recognized by the Ministry of Environment and Sustainable Development as a trusted partner in the management of the legal provisions for WEEE collection, transport, and treatment.

A North-South partnership between Senegal and the Government of Luxembourg is planned to support the installation of a WEEE recovery system in Senegal.

The designation of an annual WEEE Day in Senegal is also planned to raise awareness about the importance of safe and green WEEE management.



© GGGI in Senegal

## 7.11 Tonga Steps Up Again to Achieve Clean Energy Targets

### Challenges

The [Tonga Energy Road Map \(2010–2020\)](#) was instrumental in reducing Tonga's dependence on fossil fuels and increasing energy access and affordability. In line with the road map, the Government of Tonga, development partners, civil society, and the private sector joined hands to implement several renewable energy projects and made substantial improvements to the network infrastructure. Today, all four island systems of Tonga operate with significant renewable energy and reliability.

Building on this decade of experience in transforming the energy sector, Tonga has been gearing up again to achieve even more ambitious energy targets, including commitments to 70% and 100% renewable energy sources by 2030 and 2035, respectively. Achieving these energy targets will require technology upgrades in almost every area, capacity building to develop the skills of those who control, maintain, and regulate this increasingly dynamic network, and many more interventions that will require multi-stakeholder coordination and collaboration.

### Highlights

**Tonga, with GGGI's support, developed the Tonga Energy Road Map 2021–2035 (TERMPLUS) Framework since 2020, which was launched in April 2021.** The TERMPLUS Framework is designed to be a living document that will provide the foundation for the TERMPLUS, which is expected to be completed in 2022.

The TERMPLUS Framework was developed in a participatory manner, led by the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communication (MEIDECC), and involving energy stakeholders such as Tonga Power Limited and the Ministry of Infrastructure. The process resulted in the inclusion of a diverse range of ideas, innovations, and opportunities for collaboration in the TERMPLUS Framework, especially in the areas of renewable energy, energy efficiency, sustainable transport, climate adaptation and resilience, and gender and social inclusion. These inputs will be key in guiding the formulation of TERMPLUS.

This project is part of the New Zealand Government funded Low Emissions Climate Resilient Development Program, a regional endeavor that works with Pacific islands countries to transition to inclusive, low emissions, and climate resilient development.

### Impacts

In line with the TERMPLUS Framework, GGGI, together with other development partners, is supporting the Ministry of MEIDECC and Tonga energy stakeholders in developing the TERMPLUS, including the establishment of an Energy Taskforce to help reorganize and streamline MEIDECC's Department of Energy for the implementation of TERMPLUS.

The TERMPLUS Framework sets in motion GGGI's future work with Tonga in building an investment plan and a pipeline of energy-related projects. The TERMPLUS Framework will also provide the basis for Tonga's National Energy Policy for the next 15 years.

## 7.12 United Arab Emirates Sets the Pathway Toward a Circular Economy

### Challenges

The prevailing linear economic system where resources are extracted from the earth, manufactured, used or consumed and eventually thrown is degenerative, polluting and leads to unsustainable levels of consumption and production. The United Arab Emirates (UAE) recognizes the wastefulness and unsustainability of this system and consequently has made transforming its economy from a linear into a Circular Economy one of its top priorities.

In a circular economy, resources are not used up and thrown away but are optimized and circulated to be used again and again, waste and pollution are “designed out” of the system, and nature is not only preserved but thrives. Biological materials or nutrients (soil, plants, animals) are consumed and regenerated through natural biological processes while technical nutrients (plastics, synthetics, metal, etc.) are designed to be restored through repair, reuse, refurbishment, and recycling (as a last resort).

### Highlights

In January 2021, the UAE launched its [Circular Economy Policy 2021- 2031](#) which was developed with support of the GGGI UAE country office in Abu Dhabi. The objectives of the new policy are to:

- Achieve sustainable management of the economy and efficient use of natural resources
- Promote circular economy and sustainable consumption production patterns that reduce environmental stress and meet basic needs
- Encourage the private sector to shift to cleaner industrial production methods and techniques, including the use of Artificial Intelligence

The Policy targets four priority sectors (Manufacturing, Infrastructure, Transport, and Food) and identifies eight overarching enabling priorities related to:

- Setting a clear direction
- Data
- Technology, Innovation, and R&D
- Building awareness and capacity
- Partnerships and collaboration
- Finance
- Procurement policy; and
- Waste management

### Impacts

Transitioning to a circular economy is expected to lead to a number of environmental, social, and economic benefits including: increased disposable income through the reduced cost of products and services and greater productivity; reduced demand for virgin materials; reduction in CO<sub>2</sub> emissions and other pollutants; increased employment and business opportunities; and improved quality of life through the creation of cleaner, healthier, and more livable cities that have better access to goods and services and healthier, more nutritious food.



## 8

## KEY DEVELOPMENTS FOR GGGI



## 8.1 Overview of Major 2021 Developments for GGGI

2021 was a year of major expansion for GGGI. After signing a record volume of earmarked project contracts (over USD60 million) in 2020, GGGI's 2021 plans called for recruitment of 100 new staff and a 40% increase of activities on earmarked projects, while many of its Members were still in the middle of the pandemic with offices and borders closed. The inability to recruit staff in a timely manner, and underperformance in the delivery of the earmarked project portfolio (which would have resulted in a deficit, as revenues would not have been realized) was the major risk GGGI management identified at the start of the year. This risk was managed proactively by the Management Team through monthly reviews of recruitment status and careful monitoring of project delivery. Thanks to strong performances by GGGI staff and management at all levels, 2021 turned out to be a stellar year for GGGI. A total of 110 new staff and 121 full-time equivalent consultants were recruited during the year, and the delivery of earmarked projects increased by 57% over 2020. With this strong performance, GGGI realized a surplus of USD3.1 million on its operations, putting it in a strong financial position for continued growth and increased ability to deal with future risks.

In terms of results, 2021 was the breakthrough year for GGGI's efforts to support its Members to issue green bonds. This was a new activity under its green investment services that started with two activities in 2019. In 2021, this led to the issuance of over USD4 billion in sovereign sustainability and social bonds by the Government of Peru, and the issuance of a first sustainability bond that raised USD371 million by NAFIN, the second largest development bank in Mexico. This form of green finance is growing exponentially in developed countries, and slowly taking off for emerging markets. GGGI's efforts to support these novel instruments for developing countries can bring large volumes of private sector finance to the implementation of green growth in GGGI Member countries and is likely to grow as an activity for GGGI. At the end of 2021, GGGI had green bond-related projects in the pipeline for a dozen Members. The very high level of green finance mobilized in 2021 also far exceeded GGGI's target for 2021, after several years of below-target delivery. As green bonds and related financial instruments are quite different from green infrastructure projects that form the other key component of GGGI's green investment services, GGGI will assess in 2022 whether separate targets for these different categories of green finance mobilization are needed.

After several years in which GGGI's investment mobilization did not meet its ambitious targets (revised upwards several times), and an investment project pipeline that remained at about USD1 billion rather than growing, GGGI management launched the Large Project Challenge to address the situation in May 2021. This action focused on stimulating origination of investment projects with a value of more than USD50 million through allocation of extra-budgetary Project Preparation Funding, made possible through an increased 2021 core allocation to GGGI by the Republic of Korea, making up a shortfall in 2020. GGGI staff responded positively to the challenge and identified a large number of sizeable investment opportunities prioritized by its Members to which GGGI could contribute positively. While most of these projects started in 2021 with a target to deliver results in 2022, an early result funded through this initiative was the NAFIN sustainability bond for USD371 million issued late in 2021. The Large Project Challenge managed to increase the size of the GGGI investment project pipeline from about USD1 billion to USD5 billion. The Large Project Challenge was also issued in anticipation of the newly created Korea Green New Deal Fund (KGNDP), a new trust fund established by the Republic of Korea at GGGI, which will continue to support large investment Project Preparatory Funds for the coming five years.

## 8.2 Republic of Korea-related Important Developments

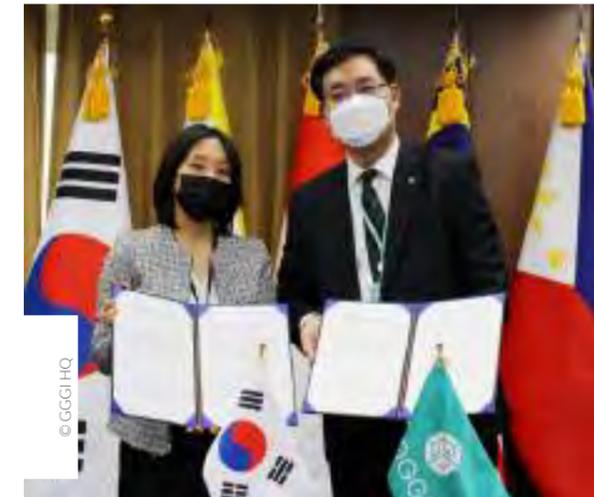
### Greening ODA

Although the Republic of Korea has invested only 19.6% of its official development assistance (ODA) budget for climate- and green-related projects, which is lower than that of the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD DAC) average of 28.1%, the Korean government has recently taken bold steps to expand its contribution toward greening ODA.

In 2020, the Korean government announced the Green New Deal to achieve a carbon-neutral society by 2050, with plans to invest 3.8% of its GDP on Green New Deal projects by 2025. During the 2021 P4G Seoul Summit, the Korean government declared an increase in climate- and green-related ODA to support developing countries in need of green recovery and accelerate their green growth policies. The Republic of Korea plans to increase its ODA budget for climate- and green-related ODAs to 28% until 2025 to the level of the OECD DAC average.

### GGGI increased relations with Korean ministries

In line with the Republic of Korea's direction toward greening ODA, GGGI has actively engaged with the Korean ministries and ODA agencies to enhance the strategic partnership in 2021. In October 2021, the amendment to the Memorandum of Understanding (MOU) between GGGI and the Korea International Cooperation Agency was signed. GGGI also signed MOUs with the Ministry of Environment and its affiliated organizations – Korea Environmental Industry and Technology Institute and Korea Water Resources Corporation – during COP26 in Glasgow. In addition, GGGI signed an MOU with the Ministry



of Foreign Affairs on the BIMP-EAGA Korea Cooperation Fund (BKCF) to support and expedite efforts of countries in the Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area (BIMP-EAGA) in responding to climate change with the Republic of Korea through trilateral cooperation.

In early 2021, the Ministry of Economy and Finance (MOEF) expressed interest in establishing the KGNDF at GGGI in pursuit of its Digital and Green New Deal Policy. The MOEF formally established the KGNDF at GGGI following the signing of the Administration Agreement on March 17, 2022. Under this agreement, KRW6 billion will be disbursed to GGGI annually for five consecutive years starting in 2022.

GGGI has partnered with the International Contractors Association of Korea (ICAK) to accelerate the transition to sustainable transport for low-carbon city development in developing countries. ICAK is designated as an ODA managing agency by the Korean Ministry of Land, Infrastructure, and Transport. GGGI plans to support ICAK's bilateral and multilateral cooperation programs and projects as a designated partner through joint field missions, pre-feasibility studies, feasibility studies, and implementation.

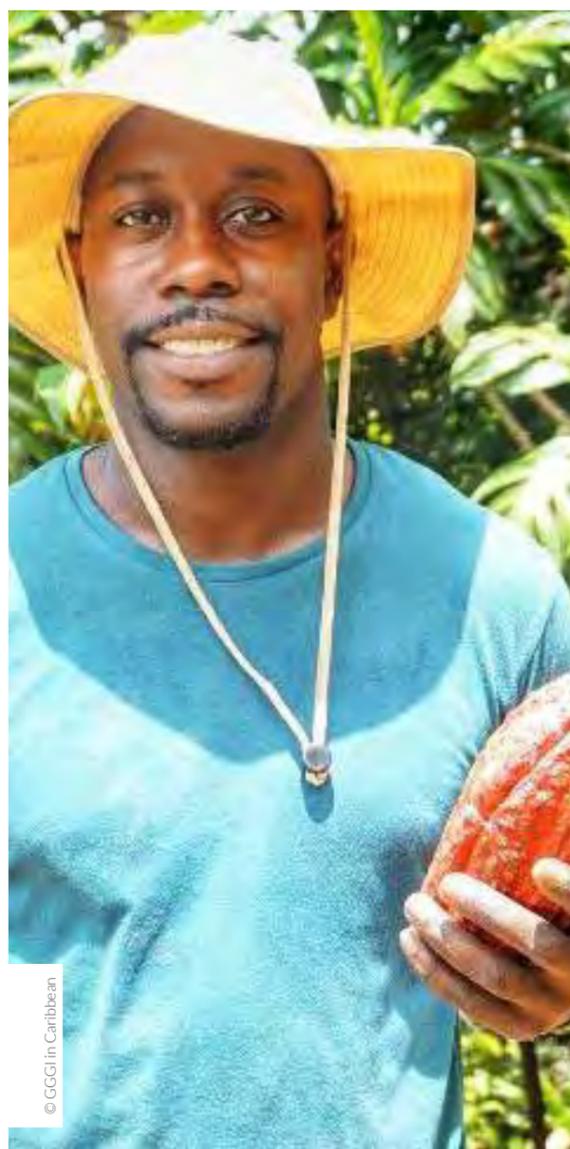
GGGI is developing a partnership with the Korean Institute for the Advancement of Technology (KIAT) in green hydrogen. KIAT was founded to enable industrial technology innovation through research and development, policy development, and support for the commercialization of innovative products and technologies in the Republic of Korea and internationally. KIAT will support the Government of Indonesia by enabling GGGI and its private sector partners to establish a green hydrogen pilot in North Sumatra. This pilot will help demonstrate the viability of green hydrogen production in the province for domestic use and potentially export to other countries.

### 8.3 Program Earmarked Funding in GGGI's Portfolio

Program earmarked funding is a new funding source for GGGI that is more flexible than project earmarked funding, while being more aligned with donor's policy objectives than core funds. As core funding is declining for GGGI, and for many donors as a general trend, programmatic funding may take over some of the functions of core funding to ensure GGGI has a coherent program of work. The first two countries that provided program earmarked funding to GGGI were Denmark and New Zealand. Denmark and GGGI negotiated a three-year support agreement that was characterized by a declining volume of core resources, but an additional volume of earmarked resources linked to two Danish policy objectives. The combined volume of core and programmatic earmarked resources resulted in an increased level of financing from Denmark to GGGI, as opposed to an expected reduction, based on core funding alone. The two earmarks provided were: i) solar irrigation in three African countries (Burkina Faso, Ethiopia, and Uganda); and ii) Bio-CNG in three Danish Climate Frontier countries in Asia (India, Indonesia, and Thailand). The first grant GGGI received from New Zealand was geographically earmarked to the Pacific and programmatically earmarked to green growth policy-related activities.



© GGGI in PNG



© GGGI in Caribbean

The second form of program earmarked funding is the establishment of trust funds at GGGI. Trust funds are widely used by multilateral organizations and generally involve establishing a fund to which donors make annual contributions and agreements to allocate funding to specific purposes identified in the Administration Agreement that establishes the fund. The purpose of the trust funds can vary widely but the KGNDF is a good example of a trust fund that provides program earmarked funding to GGGI.

## 8.4 Trust Funds

### Green Innovation Fund

The Green Innovation Fund was established in July 2020 in accordance with GGGI's financial regulation. The Qatar Fund for Development provided initial funding for the first two regional Greenpreneurs programs aligned with the Green Innovation Fund. The fund's objective is to enable entrepreneurs and startups to contribute to green growth. The fund addresses financial and non-financial constraints by providing seed capital, business plan development, financial management, hands-on coaching, and access to investor networks. GGGI is currently implementing two green entrepreneurship initiatives aligned with the Green Innovation Fund to directly support climate resilience and green COVID-19 recovery in 12 Small Island Developing States in the Pacific and the Eastern Caribbean regions. The programs enhance local innovation and entrepreneurship in green industries, leading to increased green job outcomes. Funds are deployed to provide the required seed funding and reimbursable grants to green entrepreneurs and MSMEs. Currently, available grant funding is USD1.3 million for the Eastern Caribbean and USD1.1 million for the Pacific region. Activities under the fund include the following:

- The Pacific Greenpreneurs Incubator Program completed training for 39 early-stage enterprises, and, in 2021, the Pacific Green Entrepreneurs Network successfully organized the Business Plan Competition in which 18 enterprises from five countries were announced as recipients of seed grant funding of USD5,000 each, which will be awarded in March 2022.

- The Eastern Caribbean Greenpreneurs Incubator Program provided training for 20 early-stage green enterprises and produced a detailed operations manual for the overall program during 2021. The participating enterprises will complete 12 course modules by February 2022, culminating in a Business Plan Competition in which 10 enterprises will be awarded seed funding of USD10,000 each in April 2022. In parallel, the reimbursable grant program, part of the accelerator program targeting growth-stage green businesses in the region, will be launched in February 2022, with the first grants scheduled to be disbursed in the third quarter of 2022.

### Korea Green New Deal Fund

The KGNDF will provide program earmarked funding of KRW6 billion annually for five consecutive years starting in 2022. The Korean MOEF identified projects under three funding windows for the KGNDF: i) large bankable or sustainable project development; ii) Green Climate Fund project or its equivalent project development; and iii) policy and regulatory framework and capacity building.

For the development of a pipeline of projects for KGNDF, GGGI issued a call for project submission in October–November 2021. In December, the submissions were reviewed and those selected were further enhanced for final submission. In January 2022, a set of 22 projects will be recommended for funding by GGGI to MOEF.

### BIMP-EAGA Korea Cooperation Fund

The BKCF, established in 2021, aims to contribute to ASEAN connectivity and promote inclusive and balanced growth in the Southeast Asian region by strengthening the partnership between the BIMP-EAGA and the Republic of Korea.

It also aims to support the BIMP-EAGA's Vision 2025 of a "resilient, inclusive, sustainable, and economically competitive BIMP-EAGA to narrow development gap". Three strategic thrusts listed in the BIMP-EAGA's Vision 2025, namely, Connectivity, Environment, and Tourism, were selected as the priorities for BKCF-funded projects during the meeting between BIMP-EAGA and the Republic of Korea in July 2021.

The BKCF will provide grants for individual Member countries or subregional programs and projects to address strategic country needs and priorities of BIMP-EAGA. GGGI has been designated as a depository of the BKCF and will manage the BKCF.

# 9

## TESTIMONIALS

from Council Members,  
Beneficiaries, Government  
Counterparts, and Staff



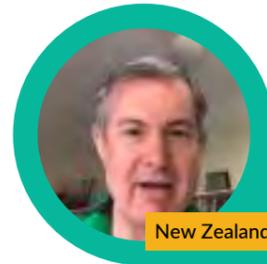
### 9.1 Members and Partners



Denmark

**Karin Poulsen**, Director for Green Diplomacy and Climate, Ministry of Foreign Affairs, Government of Denmark

"Alongside our core contribution, Denmark introduced programmatic earmarked funding to GGGI in 2020. We see this programmatic grant as a good modality for ensuring positive change for vulnerable communities in developing countries while maintaining organizational efficiency."



New Zealand

**Jonathan Curr**, Former New Zealand High Commissioner to Fiji

"Inclusive and ambitious planning is required to generate the longer-term impacts necessary to mitigate and adapt to climate change. ... New Zealand is pleased to support the initiatives led by the Government of Fiji to reduce emissions and implement the Climate Change Bill."



Lao PDR

**Bounchanh Keosithamma**, Director General of Vientiane City Office for Management and Service

"I am very grateful to the technical support provided by GGGI on development of this Strategy. I was very impressed by the positive feedback we received and active participation both from the national and municipal governments in reviewing the Strategy. We will further request GGGI's support on development of new regulations on solid waste management in Vientiane Capital in line with the Strategy."



Mongolia

**T. Gantumur**, General Manager of Ulaanbaatar and Head of the Mayor's Office, Ulaanbaatar

"Establishing a financing mechanism for thermo-technical retrofitting is important and we are supportive of this project, which is developing sustainable mechanisms for retrofitting."



Government of Peru

**Rosa Morales**, former Director General of the General Directorate of Climate Change and Desertification, Ministry of Environment

"This [National Adaptation Plan] achievement would not have been possible without your valuable technical and financial assistance, as well as your constant support during the formulation process, which involved a significant deployment of our team through a broad participatory process, with the aim of making this instrument an opportunity for well-being and development for all Peruvians."



Rwanda

**Ms. Juliet Kabera**, Director General, Rwanda Environment Management Authority,

"With GGGI as our implementing partner for the GCF NAP project has been of great support to Rwanda because the GCF project supports Rwanda to achieve our low emission and climate resilient development, by funding project proposal submitted to GCF clearly indicating how they will contribute to climate resilient development goals."



Kingdom of Tonga

**Dr. Tevita Tukunga**, Director of Energy, Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications,

"The launch of the Tonga Energy Roadmap (TERM Plus 2021-2035) framework provides a blueprint for the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications for the development and eventual implementation of the roadmap. The Framework will be used to advance a series of conversations with national stakeholders, investors and development partners to generate history-making trajectories that are relevant and in line with best practices to achieve Tonga's energy targets. The Framework therefore represents the next step in energy sector road mapping for Tonga, following the initial TERM 2010-2020."

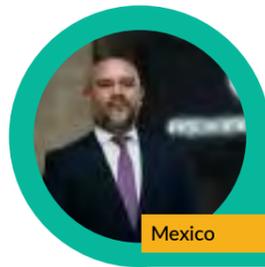


United Kingdom

**Graham Knight**, Head of Economic, Climate and Science, British Embassy Colombia

"I would like to thank GGGI, a very important ally, not only for the UK Embassy in Colombia, but also for the UK government. We are convinced that clean energy must be accessible for everyone. This project, financed by the UK, has contributed to the efforts of the Colombian government to reach non-interconnected areas, which has the goal of reaching 100,000 rural households with sustainable and accessible solutions."

## 9.2 Green Bonds



**Ivan Vicente Cornejo Villalva**, Director of International Financial Organizations, NAFIN, Government of Mexico

Mexico

The technical assistance received from GGGI will support NAFIN's efforts to determine the use of the resources derived from the bond issuance, the project selection and evaluation process, and the management, reporting and monitoring of the resources and their impact. Their valuable support led to the first issuance of a sustainable bond by NAFIN in November 2021, which mobilized MXN7.8 billion.

The Sustainable Bond Framework is a significant achievement that drives compliance with Mexico's Nationally Determined Contributions and the Sustainable Development Goals. In addition, it clearly establishes the promotion of economic recovery with environmental and social impact, aimed especially at serving micro, small, and medium-sized enterprises and vulnerable groups.



**Betty Sotelo Bazan**, Director, General Directorate of the Treasury, Ministry of Economy and Finance, Government of Peru

Peru

"The technical assistance provided by the UK PACT program with the support of GGGI has allowed the development of the Government of Peru Sustainable Bond Framework, which contains the guidelines and procedures for the evaluation and selection of projects, resource management, and resource allocation and impact reports, in line with the criteria established by the International Capital Markets Association – ICMA. Within the framework of this document, the Republic of Peru successfully implemented the issuance of two sustainable bonds and a social bond for an amount of USD3,250 million and EUR1,000 million, respectively, which are associated with green and social expenditures up to the total amount issued."



**Luis Marino Nava**, General Director of Environmental Economics and Financing, Ministry of Environment, Government of Peru

Peru

"The technical assistance contributions received from GGGI have allowed for the development, approval, and publication of the framework document for the Sovereign Sustainable Bond (Ministerial Resolution No. 221-2021-EF/52). This framework document is a significant achievement as it includes guidelines that promote the fulfillment of the Nationally Determined Contributions of Peru and the Sustainable Development Goals. In addition, it clearly establishes the promotion of economic recovery with environmental and social impacts, especially aimed at serving the most vulnerable groups."

## 9.3 Beneficiary



**Resident of a retrofitted building**, Ulaanbaatar

Mongolia

"The thermo-technical retrofitting resulted in improved indoor air quality and overall health of ours. The comfort is now comparable to new buildings and properties have improved the esthetics and valuations."

## 9.4 Staff



**Karolien Casaer-Diez**, Country Representative, GGGI Cambodia

Cambodia

"Increasingly, climate commitments are not approached as a burden, but as an opportunity. A chance to leverage Cambodia's position as a small emitter to trade carbon credits. A chance to boost the recovery of the tourism sector through green projects like the introduction of electric buses in Siem Reap being pushed by the Ministry of Public Works and Transport. A chance to re-think costly power generation plans. Early October 2021, the government announced it would no longer approve new coal-fired power projects. Setting targets is easy. What we're seeing of late in Cambodia, is action."



**Aaron Drayer**, Head of Partnerships (Former Country Representative, GGGI Peru), GGGI

Peru

"The leadership of the Directorate of Climate Change and Desertification at the Ministry of Environment was instrumental in helping us engage with the diverse political sectors that were part of the NDC update process. The Directorate staff also assisted in facilitating all work related to building capacities of diverse stakeholders."



# 10

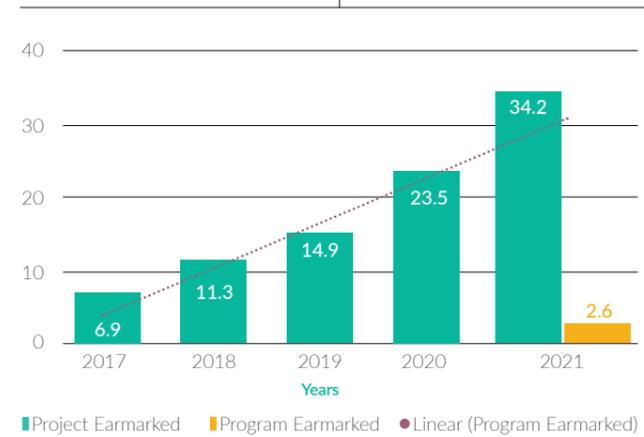
## KEY TRENDS AND ORGANIZATIONAL EFFECTIVENESS AND EFFICIENCY



### 10.1 GGGI's Financial Sustainability

In the early years of GGGI, the Institute was primarily funded with core together with some earmarked funding from two key donors – Norway and the UAE. Core funding on average amounted between 80% - 90% of total funding for the period up to 2016. Beginning in 2017, however, GGGI saw large decreases in its core funding in terms of the share of overall GGGI revenue, due to growth in overall revenue and a reduction in core funding. This was in line with global funding trends where many donors preferred to earmark their contributions. At that time, GGGI did not yet have a large earmarked funding base, and in response, developed a long-term strategy to replace lost core funding with new earmarked funding. Recognizing the relatively long lead time in raising new earmarked funding, GGGI funded this strategy by drawing heavily on reserves during 2017 and 2018. This enabled GGGI to build capacity at its country offices and prepare and submit funding proposals. The strategy proved successful as demonstrated by the remarkable fivefold growth in earmarked funding over the period 2017–2021.

FIGURE 9  
Earmarked Funding (USD'M)



In addition to increasing the amount of earmarked funding, GGGI solidified its funding base by obtaining **program earmarked funding** for the first time in 2021. Program earmarked funding differs from project earmarked funding in its flexibility, with the use of program earmarked being more flexible. Program earmarked funding usually refers to funds given for a specific program or region, and use of these funds within the attributed program or region is generally unconstrained. In 2021 program earmarked funding amounted to USD 2.6 million.

Program earmarked funding can be established through grant agreements, quite similar to the agreements used for core funding in the case of, for example, Denmark's support of GGGI, or it can take the form of trust funds. GGGI initiated the establishment of **trust funds** in 2020, which allows GGGI to manage funds on behalf of a donor or a group of donors. The trust fund can receive contributions from either a single or multiple partners. The trust fund then allocates resources to support specific national, regional, or global development priorities as agreed with the donor(s). The trust fund may transfer funds to implementing entities on behalf of the donor(s) (so-called on-granting), utilize GGGI as the implementing entity, or it can be a combination of the two. GGGI has three active trust funds: i) the GGGI Innovation Fund established in 2020 and funded by Qatar Fund for Development; ii) the BIMP-EAGA Korea Cooperation Fund established in 2021; and iii) the Korean

Green New Deal Fund established in early 2022 – the latter two funded by the Government of Korea.

New program earmarked funding and the establishment of trust funds, as well as the increase in project earmarked funding have enabled GGGI to significantly expand programmatic activities. Going forward, GGGI aims to increase the share of program earmarked funding to keep pace with the expected decrease in core funding and maintain the combined share of core funding and program earmarked funding at above 30-35%.

### 10.2 Balancing Program Allocations for Least Developed Countries and Middle-Income Countries

The overall programmatic spending (core plus earmarked) to LDCs increased by 58% during the period 2017- 2021.

GGGI has a Council approved target of allocating 50% of its core programmatic resources to Least Developed Countries (LDCs) and 60% to vulnerable countries (LDCs, Small Island Developing States, and landlocked developing countries). In 2021, GGGI was unable to meet either of those targets. Core programmatic expenditures in LDCs were 32%, and 47% for vulnerable countries last year, against a budget of 36% and 48%, respectively. The rationale for the establishment of the targets was, in the view of GGGI management, to ensure that when allocation of core resources was the primary budget tool for GGGI, there would be a balance between core spending in LDCs and other countries (initially), and a majority in vulnerable countries (subsequently).

The changes in business model for GGGI imply that circumstances have changed significantly, and the value of these targets has decreased as a management tool. While the allocation of core resources to LDCs and vulnerable countries has declined, as the core resources have taken on other roles, the programmatic spend in LDCs and vulnerable countries has increased significantly, because earmarked donors also prioritize LDCs and vulnerable countries, and GGGI has prioritized the development of earmarked project proposals for LDCs and vulnerable countries. GGGI will present a more thorough evaluation and recommendations going forward to its Management and Programs Sub-Committee in 2022.

**TABLE 3**  
Allocation of Budget between country categories (2020–2021)

	2020	2021
% of Core Budget allocated to LDCs	48%	32%
% of annual (Core + Earmarked) budget allocated to LDCs	41%	39%
Percentage of Core budget allocated to vulnerable countries (UNOHRLLS definition)	51%	47%
Percentage of annual (Core + Earmarked) budget allocated to vulnerable countries (UNOHRLLS definition)	43%	57%
Percentage of annual (Core + Earmarked) budget allocated to in-country programs	80%	83%
Percentage of annual budget allocated on Management & Administration	16%	15%

### 10.3 Improving Business Processes

GGGI continues to make concerted efforts to improve its business processes through the Innovation for Green Growth (iGROW) business reform group. This is because it is fundamental to provide corporate support for improved delivery of programmatic and operational priorities and strengthen transparency and integrity. The aim is to ensure that GGGI's business model is geared toward the delivery of its IO and SO impacts and the development into a more agile and attractive place to work. The 2021 iGROW action plan was formulated following an iGROW survey undertaken to gather staff responses to the available business processes and tools and to obtain their feedback on usability and areas for improvement. In 2021, major actions taken included: the launch of a Results-Based Management Guideline and subsequent training; a review of the implementation and effectiveness of the People Planner; the continuing review and strengthening of the Project Cycle Management (PCM) process, including modification of PCM 1 and 2 Manuals; and the rollout of continuous training modules on all of GGGI's policies and processes including PCM, constituent relationship management and enterprise resource planning systems, and GGGI Online.

### 10.4 Enhancing Efficiency

In the not-for-profit sector, a primary measure of efficiency is the ratio of non-programmatic costs as a percentage of programmatic costs. The lower the percentage, the greater the efficiency of the organization. Over the past number of years, GGGI has taken specific actions to reduce the share of non-programmatic costs to 15%, in line with global standards. Non-programmatic expenditure has been reduced from 32% in 2016 to 22% in 2019, 16% in 2020, and 15% in 2021. This is ahead of the target agreed with GGGI Council to bring non-programmatic costs down to 15% by 2023.

Actions undertaken in recent years include restructuring the Operating Enabling Division (Finance, HR, Procurement, IT, Administrative services) to reduce headcount and thereby costs. This has largely been achieved by using technology to automate and streamline GGGI's business functions. In addition, restructuring of the Office of the Director General, which includes Strategy, Partnerships, Communications, and Governance, was undertaken again with a reduction in headcount.

## 10.5 Strengthening Evaluation Efforts

Evaluations support GGGI to improve the design and implementation of programs and projects to bring about transformational change, strengthen transparency and accountability of GGGI's programs and projects to Members and partners (including resource partners), and build a credible evidence base for green growth. Evaluations are conducted by GGGI's Impact and Evaluation Unit (IEU) and by GGGI's resource partners.

In the first half of 2021, IEU finalized the *Special Review of Strategic Plan 2015–20*,<sup>11</sup> and in the second half of the 2021 commenced the *Evaluation of Sustainable Landscape Programming* and *Evaluation of the Rwanda Country Program*, with both to be completed in the first half of 2022. These three evaluations were part of *GGGI's 2021 Annual Evaluation Workplan*.<sup>12</sup> Beyond evaluations, IEU supported efforts to strengthen GGGI's impact agenda. During the first half of 2021, IEU supported the Strategy and Results Unit to review 26 Country Program Results Reports as part of GGGI's new results reporting requirements for greater transparency and accountability to the MPSC and Council. IEU trained programmatic teams on applying SO impact estimation in November 2021 and provided direct support to 12 country programs to strengthen their monitoring, evaluation, reporting, and improvement frameworks.

Outside of *GGGI's 2021 Annual Evaluation Workplan*, the Burkina Faso Country Program commissioned an evaluation of the Sida-funded project *Development of the Monitoring, Reporting, and Verification System in Burkina Faso (BF05)*, and the Norwegian Agency for Development Cooperation (Norad) commenced a project evaluation of the Norwegian and core-funded *Indonesia Green Growth Program Phase II (ID1)*. These two project evaluations will be published during the first half of 2022.

IEU created an [Impact and Evaluation page](#) on GGGI's website to strengthen the accessibility of all evaluation reports – both those produced by IEU and by resource partners. Each evaluation report has a dedicated page with a summary of its objective, scope, evaluation questions, findings, and recommendations, and are tagged to the relevant country program. More details on evaluations are available in the [IEU 2021 Annual Evaluation Activity Report](#).

<sup>11</sup> <https://gggi.org/report/special-review-of-strategic-plan-2015-2020-commitments-delivered-and-key-results/>

<sup>12</sup> <https://gggi.org/report/2021-annual-evaluation-workplan/>





© GGGI in Burkina Faso



© GGGI in Ethiopia

## 10.6 Strengthening Funding Base

GGGI has considerably strengthened its funding base by expanding it both in terms of number of donors and the geographic spread of countries for which funding is received.

In 2017, GGGI's expenditures were 84% funded with core funding and 16% with project earmarked funding. There were five core fund donors, and two donors (one of which was also a core fund donor) contributed 92% of the project earmarked funding. Thus, 99% of GGGI's programs were effectively funded by six key donors.

In contrast in 2021, GGGI had 27 different donors contributing core funding (amounting to 28% of total funds), project earmarked funding (66%), and program earmarked funding (6%). Project earmarked funding continued to increase year-on-year with 2021 funding of USD34.2 million. This represented a fivefold increase over 2017 funding of USD6.9 million. Of note is that 92% of the total earmarked expenditure in 2017, provided by two resource partners (Norway and UAE), had decreased to 26% of the total earmarked expenditure in 2021.

In addition to increasing its project earmarked funding base, and as noted earlier in the report, GGGI is actively expanding its program earmarked funding, including the establishment of trust funds. In 2021, GGGI received program earmarked funding from two key donors (Denmark and New Zealand) amounting to USD 2.6 million for the first time.

## 10.7 Improving Transparency and Accountability

GGGI is committed to operating in a transparent and accountable manner. This commitment is recognized in Article 13 (Disclosure) of the [Agreement on the Establishment of the GGGI](#). It is further affirmed in GGGI's [Disclosure Policy](#). The policy acknowledges that public access to information on GGGI's management and programming is a key component of effectively engaging stakeholders and will increase understanding and support of GGGI's mission. The policy includes the guiding principles for transparency and the obligation to report on the annual implementation of the policy and establish a review of the policy at least once every five years.

## 10.8 Managing Risks

GGGI has in place external project-level results reports that include information on outputs and outcomes against project log frames. GGGI also began publishing its projects data set on the International Aid Transparency Initiative Registry since December 2018.

GGGI's [Compliance Review Mechanism](#) allows redress by external parties that feel they have been adversely affected by GGGI's non-compliance with its regulations, rules, policies, and procedures. GGGI has an online reporting mechanism that is available on GGGI's website.

GGGI has a [Risk Management Framework](#) designed to systematically identify high and significant risks, and put in place controls for managing those risks to minimize their occurrence to the extent possible or minimize their impact on the ongoing operations of GGGI should they occur.

GGGI manages its risks under seven risk headings. These are: Organizational Structure and Governance; Operational Program and Portfolio Management; Financial Management; Information Technology, Data, and Asset Management; Legal Management; Human Resources; and Work Environment.

Under each heading, specific risks are identified. Each identified risk is then evaluated as to the likelihood of it occurring; the likely impact should the event come to pass; mitigation measures in place to control the risk; any residual risk; and the manager responsible for managing those risks. The likelihood of occurrence and likely impact of each identified risk are scored on a scale of low, medium, or high.

Management considers that the Risk Management Framework is robust and does systematically identify all high and significant risks, and that the controls in place for managing all identified risks are adequate.



© GGGI in Uzbekistan

## 10.9 Ensuring Integrity

Integrity is one of GGGI's core values. The organization expects all staff to follow the highest moral and ethical principles in all aspects of their lives. Staff integrity extends to all areas of professional work such as decision-making, interacting with colleagues, taking responsibility, having a strong work ethic, producing high-quality work, and consistently demonstrating reliability and trustworthiness. GGGI's systems and policies are designed to promote the highest integrity standards in staff. Policies include an Institutional Code of Conduct; Rules on Preventing Sexual Exploitation, Abuse and Harassment; Rules on Child Protection; Guidelines for Health and Safety; and Sustainability and Safeguards Rules. In addition, GGGI has a Respectful Workplace Framework in place supported by respectful workplace advisers.

## 11

WORKING  
DURING THE  
PANDEMIC,  
EMPOWERING  
OUR PEOPLE

## 11.1 Our People and Culture

We are committed to continuously **supporting and developing our talent** and our organization's capacity to take on the immense climate challenges in support of our Members and partners. We do this in several ways. Firstly, by ensuring that we are effectively resourced. In 2021, we successfully recruited and deployed 110 positions, primarily in our country offices. We continued to operate our Internal Mobility Program that seeks to create and retain a highly-skilled and agile workforce, foster exchange of knowledge, and manage skill gaps, all which support career development, a key driver of employee engagement. In 2021, 11 staff benefited from the International Staff Rotation and Special Assignments program. Lastly, we believe that feedback is key to an individual's development and their role in leading and managing people. For our Annual Performance Review 2021, 74 people managers took part in the 360 process to obtain feedback from their direct reports and other stakeholders.

We know that an **engaged workforce** is positively related to high organizational performance, therefore, our Annual Staff Engagement Survey is an important tool to assess the pulse of GGGI. We have seen our engagement score and participation rate improve year on year with 81% of staff in 2021 agreeing that GGGI enables them to make a positive contribution. What is also encouraging is that 79% of staff agreed that their manager cares about their well-being, which is of key importance in supporting physical and psychological well-being especially in the pandemic times.

To further enhance **our employee value proposition**, GGGI took several steps to act on the feedback obtained through the survey, taking action at corporate and divisional levels to address areas for improvement. The Staff Council was actively involved in monitoring the implementation of the survey action plans through quarterly reporting at the Management Team meetings. At the GGGI-wide level, we focused on a few key areas in 2021: rolled out a learning and development budget to support individual learning needs; ran training on our project cycle management and online system; updated guidance on performance management, promotions and performance reward; undertook a comprehensive salary benchmarking exercise for international and HQ-based national positions; reviewed the flexible working policy; and promoted our respectful workplace policies and mechanisms. Work also commenced on the development of a People Strategy, which will be finalized in 2022.

## 11.2 Diversity and Inclusion

GGGI's value of 'inclusive' underpins our commitment to ensuring diversity, inclusion, and mutual respect in the workplace. We have more than 67 nationalities representing all parts of the world with a 46%/54% split of female and male staff, respectively. We are close to achieving our aim of a 50/50 gender balance within the next five years, in line with the 2021-2025 Gender Equality and Social Inclusion Strategy. GGGI continues to pay special attention to workforce diversity and gender balance especially at professional and executive appointments, and managers are required to take diversity considerations in their selection decisions. In addition, we offer a variety of benefits to support the differing needs of staff, and these include flexible working, maternity, paternity, and adoption leaves, generous holidays, and childcare support.

## 11.3 Our People Stats

TABLE 4  
Headcount - Overall

	2019	2020	2021
Staff	328	328	410
Consultants (full-time equivalent, FTE)	51	100	121
Interns (FTE)	23	23	44

TABLE 5  
Headcount - Gender

	2019	2020	2021
Female	48%	46%	46%
Male	52%	54%	54%

TABLE 6  
Headcount - Country Office vs HQ

	2019	2020	2021
Country Office	65%	68%	76%
HQ	35%	32%	24%



© GGGI in Colombia



## 11.4 Staff Testimonials

In 2021, GGGI recruited more than 100 staff. We asked 3 staff deployed to our country programs to share their thoughts on their motivation for joining GGGI, the challenges they faced in taking up new jobs under pandemic conditions, and what enabled them to manage the transition and onboarding more effectively.



**Rajnil Prasad, Senior Climate Smart Agriculture Project Management Officer, Kiribati**  
Joined GGGI in April 2021

Duty Station: Kiribati

- I am passionate about agriculture and climate smart techniques that can create sustainable impact on the lives of farming communities in the Pacific. Kiribati is one of the most vulnerable countries in the world and I saw this role as a great opportunity to share my knowledge and experience and leave a meaningful impact on Kiribati's agriculture sector.
- Due to the prolonged impact of COVID-19 and travel restrictions, I was not able to travel to my duty station in Kiribati. As a result, I have been delivering the project from our Suva office with the support of in-country staff in Kiribati. At first it was difficult to work remotely, given challenges such as poor connectivity and government officials' preference for face-to-face meetings. With a lot of patience and support from in-country staff, we were able to establish good working relationship with stakeholders in Kiribati.
- I feel lucky to have an amazing team in Fiji and Kiribati supporting me with my project and helping me adjust to the new working environment. No question was a wrong question, which was really helpful. This support structure has been very important to me, and I feel I am part of a family. I think the Pacific culture in the office has really helped me blend in, and I have thoroughly enjoyed working with such dynamic and exciting people.



**Karolina Lopez Velasquez, Regional Senior Associate, Colombia Country Program**  
Joined GGGI in July 2021

Duty Station: Meta, Colombia

Joining GGGI gave me the opportunity to return to my home country and at the same time allowed me to contribute in the areas of green growth and sustainable production. Adjusting to a new workplace and getting to know colleagues, partners and actors during the pandemic was a challenge, especially since the work at GGGI extends beyond the country, and involves regional and global aspects. I am pleased to have joined a strong and organized team at GGGI Colombia, and my supervisor and colleagues from different departments helped ease the transition and enabled me to quickly understand and connect with others.



**Dr. Sonali Senaratna Sellamuttu, Country Representative, Sri Lanka and Team Lead, GCF National Adaptation Plan Readiness Support Project**  
Joined GGGI in August 2021

Duty station: Colombo, Sri Lanka

After experiencing the COVID-19 pandemic and a military coup in Myanmar in 2021, I felt the need for a change. I was looking for a new challenge, one where I could effectively use the skills and experiences I had garnered over ten plus years of being based in Southeast Asia, and at the same time, work at the international level back in my home country. The GGGI opportunity in Sri Lanka to work on climate change adaptation and the country's broader green growth agenda, looked like the perfect fit!

Taking up a new position during a global pandemic has its own set of unique challenges. Given that we were a new GGGI team onboarding in Sri Lanka and working in a virtual setting, it was important to communicate frequently and have regular staff meetings. To get to know each other on a more informal basis, we held an introductory team building exercise. To master the various GGGI procedures and processes, we were lucky to have colleagues from HQ who were very professional and there to guide us and share their knowledge. It is also fantastic to share experiences and learn more about what we do across GGGI through events such as the All-Staff Meetings.

## 11.5 List of Government Counterparts

### Africa

#### Burkina Faso

- Ministry of the Environment, Green Economy and Climate Change
- Ministry of Economy, Finance and Development
- Ministry of Youth, Training and Professional Integration Ministry of Infrastructure
- Ministry of Animal and Fisheries Resources
- Ministry of Trade, Industry and Crafts
- Ministry of Water and Sanitation
- Ministry of Urbanism, Housing and City
- Ministry of Energy, Mines and Quarries
- Ministry of Transport, Urban Mobility and Road Safety
- Ministry of Agriculture, Hydro-Agricultural Development and Mechanization
- Ministry of Higher Education, Scientific Research and Innovation
- Ministry of Woman, National Solidarity and Family
- Office of the Prime Minister

#### Côte d'Ivoire

- Office of Prime Minister
- Ministry of Environment and Sustainable Development
- Ministry of Economy and Finance
- Ministry of Agriculture and Rural Development
- Ministry of Planning and Development
- Ministry of Transport
- Ministry of Mining, Oil, and Energy
- Ministry of Construction, Housing and Urban Planning
- Autonomous District of Abidjan
- National Bank of Investment (BNI)
- Interprofessional Fund for Agriculture Research and Counsel (FIRCA)

#### Ethiopia

- Environment, Forest and Climate Change Commission
- Ministry of Finance Industrial Parks Development Cooperation
- Ministry of Water, Irrigation and Energy Ministry of Agriculture
- Ministry of Urban and Housing
- Addis Ababa City Government Transport Bureau
- Hawassa University

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**Morocco**

- Ministry of Interior
- Ministry of Agriculture, Maritime Fisheries, Rural Development, Water and Forests
- Ministry of Energy Transition & Sustainable Development
- Ministry of Equipment, and Water
- Ministry of Transport & Logistics
- Ministry of Industry & Trade
- General Directorate of Territorial Collectivities (DGCT)

**Mozambique**

- Ministry of Mineral Resources and Energy
- Ministry of Land and Environment
- Ministry of Economy and Finance
- Ministry of Agriculture and Rural Development

**Rwanda**

- Ministry of Infrastructure
- Ministry of Environment
- Ministry of Finance and Economic Planning
- Ministry of Local Government
- Ministry of Youth and ICT
- Rwanda Environment Management Authority (REMA)
- Rwanda Housing Authority (RHA)
- Rwanda Green Fund (FONERWA)
- Rwanda Development Board (RDB)
- Rwanda Land Use and Management Authority (RLMUA)
- Rwanda Water Resources Board (RWB)
- Local Administrative Entities Development Agency (LODA)
- City of Kigali & Six Secondary Cities (Muhanga, Rubavu, Musanze, Rusizi, Huye, Nyagatare)

**Senegal**

- Ministry of Environment and Sustainable Development
- Ministry of Urbanization, Housing & Public Hygiene
- Ministry of Water and Sanitation
- Ministry of Petroleum and Energies
- Ministry of Agriculture & Rural Equipment
- Ministry of Economy and Sustainable Development
- Ministry of Finance and Planning
- National Society for the Development and Exploitation of the Land of the Senegal River Valley (SAED)
- National Sanitation Office of Senegal (ONAS)
- Senegal Sovereign Fund for Strategic Investments (FONSIS)
- Solid Waste Coordination Unit (UCG)
- State Information Technology Agency (ADIE)
- Municipality of Touba

- Municipality of Tivaouane
- Municipality of Kaolack
- Municipality of Kolda

**Togo**

- Ministry of Environment and Forestry Resources
- Ministry of Planning and Cooperation
- Ministry of Environment, Sustainable Development and Protection of Nature

**Uganda**

- Ministry of Finance, Planning and Economic Development (MoFPED) including the National Designated Authority (NDA)
- Ministry of Lands, Housing and Urban Development (MLHUD)
- Ministry of Energy and Mineral Development (MEMD)
- Ministry of Water and Environment (MWE) including the Climate Change Department (CCD) as a key counterpart
- National Planning Authority (NPA)
- Kampala Capital City Authority (KCCA)
- Ministry of Local Government (MLG)
- Uganda Free Zones Authority (UFZA)
- Uganda Investment Authority (UIA)
- Ministry of Trade Cooperatives and Industry (MoTCI)
- National Environment Management Authority (NEMA)
- Uganda Development Bank Limited (UDBL or UDB)
- District and municipal governments (Mbarara, Gulu, Soroti, Jinja, Arua)
- Ministry of Works and Transport (MoWT)
- Makerere University
- Uganda Green Building Council

**Asia****Cambodia**

- Ministry of Economy and Finance
- National Council for Sustainable Development
- Ministry of Interior
- Ministry of Public Works and Transport
- Ministry of Industry, Science, Technology and Innovation
- Municipalities of Phnom Penh, Kep, Sihanoukville, Suong, Bavet, Battambang, Siem Reap and Kampong Cham

**India**

- Ministry of Environment, Forest and Climate Change (MoEF&CC)
- Ministry of New and Renewable Energy (MNRE)

- Ministry of Petroleum & Natural Gas (MoPNG)
- Ministry of Rural Development (MoRD)
- Ministry of Commerce & Industry (MoC&I)
- NITI Aayog
- Tea Board India
- Maharashtra State Road Development Corporation (MSRDC)
- State governments of Assam, West Bengal, Karnataka, Punjab and Himachal Pradesh
- State Innovation and Transformation Aayog (SITA), Assam
- New and Renewable Energy Dept., Govt of Madhya Pradesh (MPNRED)
- New and Renewable Energy Development Corporation of Andhra Pradesh (NEDCAP)

**Indonesia**

- Ministry of National Development Planning (BAPPENAS)
- Ministry of Environment and Forestry (MoEF)
- National Council for Special Economic Zones under Coordinating Ministry for Economic Affairs (CMEA)
- Ministry of Energy and Mineral Resources (MoEMR)
- National Institute of Public Administration (LAN)
- Fiscal Policy Agency under Ministry of Finance (MoF)
- Provincial Government of Central Kalimantan
- Provincial Government of East Kalimantan
- Provincial Government of North Kalimantan
- Provincial Government of South Kalimantan
- Provincial Government of Papua
- Provincial Government of West Papua

**Kyrgyz Republic**

- Ministry of Economy and Commerce
- Ministry of Natural Resources, Ecology and Technical Supervision

**Lao PDR**

- Ministry of Planning and Investment (MPI)
- National Institute for Economic Research Ministry of Natural Resource and Environment (MONRE)
- Ministry of Public Works and Transport (MPWT)
- Ministry of Energy and Mines (MEM)
- Ministry of Industry and Commerce (MOIC)
- Lao National Chamber of Commerce and Industry (LNCCI)
- Vientiane City Office for Management and Service (VCOMS)
- Pakse City Operation and Maintenance Service (PCOMS)
- Champasak Provincial Government
- Vang Vieng Provincial Government

**Mongolia**

- Ministry of Environment and Tourism (MET)
- Ministry of Energy (MoE)
- Ministry of Construction and Urban Development (MCUD)
- Energy Regulatory Commission (ERC)
- Municipality of Ulaanbaatar City (MUB)

**Myanmar**

- Ministry of Natural Resources and Environmental Conservation
- Ministry of Agriculture, Livestock and Irrigation
- Nay Pyi Taw Development Committee
- Shan State Government
- Bago Region Government
- Ayeyarwady Region Government

**Nepal**

- Ministry of Forests and Environment
- Ministry of Water Supply
- Ministry of Physical Infrastructure and Transport
- Town Development Fund
- Alternative Energy Promotion Center
- Bagmati Provincial Government
- Metropolitan and municipal governments

**Philippines**

- Department of Foreign Affairs (DFA)
- Department of Trade and Industry (DTI)
- National Economic and Development Authority (NEDA)
- Provincial Government of Oriental Mindoro (PGOM)
- Provincial Government of Bataan
- Department of Finance (DOF)
- LandBank Philippines
- Climate Change Commission (CCC)
- Department of Energy (DOE)

**Sri Lanka**

- Ministry of Environment
- Ministry of Transport

**Thailand**

- Office of Natural Resources and Environmental Policy and Planning (ONEP)
- Ministry of Natural Resources and Environment

**Uzbekistan**

- State Committee for Ecology and Environment Protection
- Council of Ministers of the Republic of Karakalpakstan
- District Governments of Chimbay, Karauzyak, Bozatow, Kegeli
- Ministry of Investments and Foreign Trade

- Ministry of Water Resources
- State Committee for Forestry
- Ministry of Innovation
- Ministry of Agriculture
- Ministry of Health
- Ministry of Labor
- Ministry of Economic Development and Poverty Reduction
- Ministry of Finance

#### Viet Nam

- Ministry of Agriculture and Rural Development (MARD)
- Ministry of Planning and Investment (MPI)
- Ministry of Industry and Trade (MOIT)
- Ministry of Construction (MOC)
- Ministry of Natural Resources and Environment (MONRE)
- Ministry of Finance (MOF)
- City People's Committees (CPC)
- SME Development Fund
- Vietnam Institute for Urban and Rural Planning (VIUP)
- Institute of Labor Science and Social affairs (ILSSA)
- Small and Medium Enterprise Development Fund (SMEDF)

#### Europe

##### Hungary

- Ministry for Innovation and Technology, Government of Hungary

#### Latin America & Caribbean

##### Eastern Caribbean

- OECS (Organisation of Eastern Caribbean States)

##### Antigua & Barbuda

- Department of Environment
- Ministry of Foreign Affairs

##### Dominica

- Ministry of Planning, Economic Development, Climate Resilience, Sustainable Development, and Renewable Energy
- Ministry of Trade, Commerce, Entrepreneurship, Business, and Export Development
- Climate Resilient Execution Agency of Dominica

##### Grenada

- Ministry of Tourism, Civil Aviation, Climate Resilience & the Environment
- Ministry of Finance, Economic Development, Physical Development, Public Utilities and Energy

##### Saint Lucia

- Department of Sustainable Development

- Department of Economic Development, Transport, and Civil Aviation
- Department of Infrastructure, Ports and Transport
- Ministry of Commerce, Manufacturing, Business Development, Cooperatives and Consumer Affairs

##### Saint Kitts & Nevis

- Ministry of ICT, Entrepreneurship, Entertainment and Talent Development

##### Saint Vincent and the Grenadines

- Ministry of Finance, Economic Planning, Sustainable Development and Information Technology

##### Colombia

- National Planning Department (DNP)
- Ministry of Environment and Sustainable Development (MADS)
- Ministry of Finance and Public Credit Ministry of Agriculture and Rural Development (MADR)
- Ministry of Mining and Energy (Minenergía)
- Institute of Hydrology, Meteorology and Environmental Studies (IDEAM)
- National Training Service (SENA)
- Institute for Planning and Promotion of Energy Solutions for Non-Interconnected Zones (IPSE)
- National Mining Agency (ANM)
- Finagro
- - Subnational Governments of Antioquia, Guaviare, Meta and Nariño
- Regional Environmental Authorities – Corpoamazonía and Corantioquia
- Presidential Agency for Cooperation (APC)
- RAP Pacífico
- Ministry of Science, Technology and Innovation (Minciencias)
- District Secretary of Environment

##### Guyana

- Department of Environment and Climate Change (DECC)
- Guyana Energy Agency (GEA)

##### Mexico

- Secretariat of Environment and Natural Resources (SEMARNAT)
- National Institute of Ecology and Climate Change (INECC)
- Secretariat of Finance and Public Credit (SHCP)
- Nacional Financiera (NAFIN)
- Banco Nacional de Obras y Servicios Públicos (BANOBRAS)
- Comisión Nacional Bancaria y de Valores (CNBV)
- Fideicomisos Relacionados con la Agricultura (FIRA)
- Secretariat of Foreign Affairs (SRE)

- Agencia Mexicana de Cooperación Internacional para el Desarrollo (AMEXCID)
- Government of Sonora Government of Hermosillo
- State Government of Sonora
- State Government of Oaxaca
- State Government of Puebla
- Metrobús (Mexico City Public Transport Authority)

##### Peru

- Ministry of Economy and Finance (MEF)
- Ministry of Environment (MINAM)
- Ministry of Agricultural Development and Irrigation (MIDAGRI)
- Lima Municipality (MML)
- Regional Government of San Martin (GOESAM)
- Regional Government of Loreto (GOREL)
- Regional Government of Amazonas (GOREAM)
- Supervisory Agency for Forest Resources and Wildlife (OSINFOR)

#### Middle East

##### Bahrain

- Ministry of Foreign Affairs
- Supreme Council of Environment of Bahrain

##### Jordan

- Ministry of Environment (MoENV)
- Ministry of Planning and International Cooperation (MoPIC)
- Ministry of Energy and Mineral Resources (MEMR)
- Ministry of Finance (MoF)
- Cities and Villages Development Bank (CVDB)
- Petra Development and Tourism Region Authority (PDTRA)
- Ministry of Tourism and Antiquates
- Ministry of Transportation
- Ministry of Agriculture
- Ministry of Local Administration

##### Qatar

- Ministry of Environment and Climate Change (MoECC)
- Ministry of Foreign Affairs (MoFA)
- Qatar Fund for Development (QFFD)

##### United Arab Emirates

- Ministry of Climate Change and Environment (MOCCAEC)
- Ministry of Foreign Affairs and International Cooperation (MOFAIC)

#### Pacific

##### Fiji

- Ministry of Economy
- Climate Change and International Cooperation Division
- Budget and Planning Division
- Ministry of Infrastructure and Meteorological Services
- Department of Energy
- Ministry of Commerce, Trade, Tourism and Transport
- Department of Transport
- Department of Tourism

##### Kiribati

- Ministry of Environment, Lands and Agricultural Development (MELAD)
- Office of the President
- Ministry of Public Works and Utilities (MPWU)

##### Papua New Guinea

- Climate Change and Development Authority
- Department of National Planning and Monitoring
- Enga Provincial Administration; Milne Bay Provincial Administration & New Ireland Provincial Administration
- Department of Provincial and Local Government Affairs

##### Tonga

- Ministry of Meteorology, Energy, Information, Disaster Management, Climate Change and Communication
- Department of Energy
- Department of Climate Change

##### Vanuatu

- Ministry of Lands and Natural Resources
- Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management
- Department of Energy
- Department of Water Resources

# 12

## SUMMARY OF FINANCIAL STATEMENT



### 12.1 2021 Financial Highlights

**Total revenue increased.** In 2021, GGGI achieved a 31% annual increase in revenue amounting to USD54.1 million, and a 77% increase since 2017.

**Operating surplus generated.** GGGI generated an operating surplus of USD3.1 million, enabling the maintenance of 144 reserve days.

**Program earmarked funding received.** GGGI received program earmarked funding of USD2.6 million for the first time.

**Earmarked funding continued to increase.** Project earmarked funding reached a record high of USD34 million in 2021, with a 45% increase from 2020.

**Earmarked income increased.** Earmarked funding comprised 72% of GGGI's total 2021 revenue and funded 72% of expenditures, while core funding contributed to 28% of activities (down from 84% in 2017).

**USD58.7 million of new earmarked commitments signed.** This contributed to a significant operating budget of USD72 million for 2022.

**Overall, GGGI remained in a strong and stable financial position at the end of 2021.**

### 12.2 GGGI Operating Results for 2017-2021

In 2017-2018, GGGI spent down its excess reserves to finance growth, as directed by the GGGI Council.

TABLE 7  
GGGI Operating Results, 2017-2021

	2017	2018	2019	2020	2021
(USD thousand)					
Core contribution	23,157	24,151	32,724	17,051	17,187
Program earmarked					2,584
Project earmarked	6,864	11,529	14,850	23,475	34,155
Investment income/finance costs	576	350	213	745	219
<b>Total income</b>	<b>30,597</b>	<b>36,030</b>	<b>47,787</b>	<b>41,271</b>	<b>54,145</b>
<b>Gross expenditures</b>	<b>44,117</b>	<b>49,679</b>	<b>46,598</b>	<b>42,947</b>	<b>50,981</b>
<b>Total surplus/(deficit)</b>	<b>(13,520)</b>	<b>(13,649)</b>	<b>1,189</b>	<b>(1,676)</b>	<b>3,164</b>

### 12.3 Audit Opinion

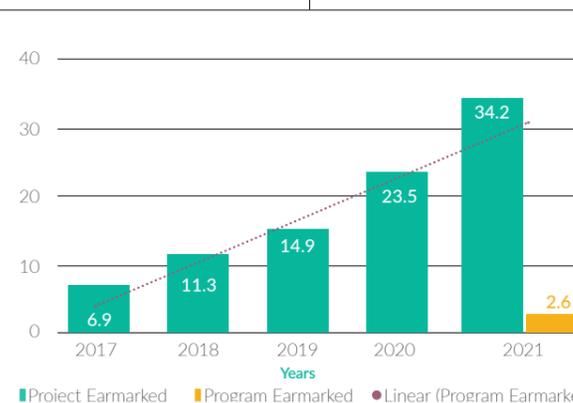
GGGI received an unqualified audit opinion on its 2021 Financial Statements from its external auditors, PwC.

### 12.4 Program Earmarked Funding

In 2021, GGGI received program earmarked funding of USD2.6 million for the first time.

**Evolution of Earmarked Funding at GGGI, 2017-2021: A 340% growth in 5 years, and diversification from 3 to 25 donors.**

FIGURE 10  
Earmarked Funding (USD'M)



**GGGI Expenditures, 2017-2021: 2021 expenditures were 66% from project earmarked funds, 6% program earmarked funds, and 28% core contribution.**



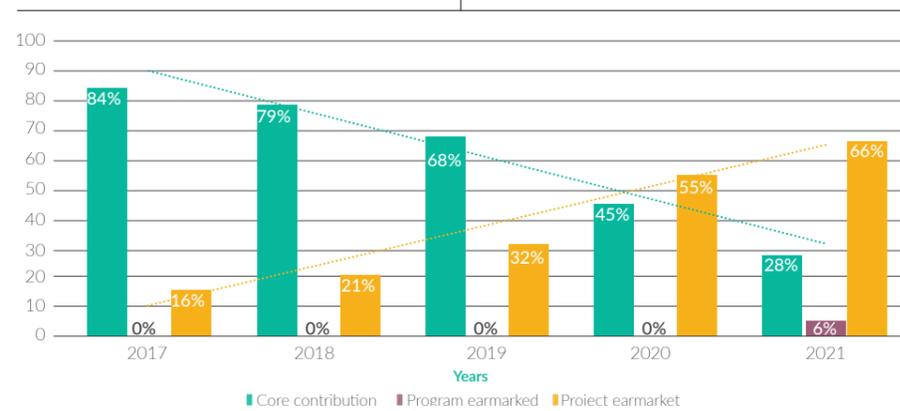


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**FIGURE 11**  
Expenditures by funding source



## 12.5 Reserves

Total reserves at the end of 2021 were USD20.1 million (2020: USD16.9 million) comprising USD15 million in working capital and USD3.2 million in retained surplus. GGGI's reserve days as of December 31, 2021 were 144 days (2020: 144 days). This is comparable to a commonly-used reserve day goal of 90-180 days of operating expenditures.

## 12.6 Cash Balances/Liquidity Ratio

GGGI had a total of USD50.3 million in cash and short-term investments as of December 31, 2021. GGGI's liquidity ratio as of December 31, 2021 was 360 days (2020: 256 days). A liquidity ratio in the range of 120-180 days is considered adequate.

**The financial ratios, reserve days, and liquidity days are within the recommended range for GGGI.**

**FIGURE 12**  
Financial Ratios Days



# GREENING GGGI

In 2021, GGGI continued its effort to make its operation greener and more sustainable, even during the COVID-19 pandemic. GGGI offices worldwide continued their efforts to promote and practice sustainable operations by encouraging GGGI partners and communities to build a more sustainable future.

Key accomplishments from 2021 include GGGI's continued journey toward NetZero through its commitment to offset carbon emissions and permanently reduce travel volume by implementing carbon emission-reducing travel policies.

**GGGI reduced its GHG emissions per employee by 76% compared to 2015 baseline.**

## 13.1 Air Travel and Facility Operations

Using the ICAO Carbon Emissions Calculator Methodology and Greenhouse Gas Protocol Methodology, GGGI evaluated its carbon emissions from Air Travel and Facility Operations in offices worldwide.



© GGGI in Cambodia

**TABLE 8**  
GGGI Carbon Emissions from Air Travel  
and Facility Operations, 2016-2021

2021 Carbon Emissions Overview		2021	2020	2019	2018	2017	2016
Air Travel	Total Carbon Emissions from Air Travel (tCO <sub>2</sub> )	175	248	990	1,493	1,611	1,407
	Total Number of Flights	362	356	1,307	1,794	1,620	1,254
	Class of Travel						
	PREMIUM	-	12	204	425	380	306
	ECONOMY	362	344	1,103	1,369	1,240	948
Facilities	Total Carbon Emissions from Facilities (tCO <sub>2</sub> )	327	310	409	372	312	221
	Emissions from Seoul HQ	254	258	245	249	208	206
	Emissions from Songdo Office	6	8	36	36	37	15
	Emissions from Country Offices	67	44	128	88	66	N/A
<b>Total Carbon Emissions (tCO<sub>2</sub>)</b>		<b>502</b>	<b>558</b>	<b>1,399</b>	<b>1,865</b>	<b>1,923</b>	<b>1,628</b>
<b>Total Number of Personnel</b>		<b>575</b>	<b>451</b>	<b>402</b>	<b>353</b>	<b>348</b>	<b>327</b>
<b>Total Carbon Emissions Per Capita (tCO<sub>2</sub>) – Air Travel</b>		<b>0.30</b>	<b>0.55</b>	<b>3.02</b>	<b>4.23</b>	<b>4.63</b>	<b>4.30</b>
<b>Total Carbon Emissions Per Capita (tCO<sub>2</sub>) – Facilities</b>		<b>0.57</b>	<b>0.69</b>	<b>1.25</b>	<b>1.05</b>	<b>0.90</b>	<b>0.68</b>
<b>Total Carbon Emissions Per Capita (tCO<sub>2</sub>)</b>		<b>0.87</b>	<b>1.24</b>	<b>4.26</b>	<b>5.28</b>	<b>5.53</b>	<b>4.98</b>

**TABLE 9**  
Share of Total Emissions, 2015-2021

Share of Total Emissions	2021	2020	2019	2018	2017	2016	2015
Air Travel	35%	44%	71%	80%	84%	86%	75%
Facilities	65%	56%	29%	20%	16%	14%	25%
Other Travel	-	-	-	-	-	-	-

In 2021, GGGI emitted a total of 502 tons of CO<sub>2</sub> (tCO<sub>2</sub>), decreasing its total emissions by 10.0% compared to the previous year. Air Travel and Facility Operations emissions stood at 175tCO<sub>2</sub> and 327tCO<sub>2</sub>, respectively. Air Travel emissions decreased by 29.4% from previous year with a marginal increase in the total number of flights. Facilities emissions increased by 5.5% from previous year as emissions from country offices increased slightly, mainly due to the number of country offices returning to work as lockdown measures ease.

## 13.2 Per Capita Carbon Emissions

GGGI was able to maintain a very low per capita emission for 2021. Set out below is a comparison with United Nations entities. The latest available data taken from the United Nations' *Greening the Blue Report 2021* is for 2020. For this reason, the 2020 GGGI figure is also included.

**TABLE 10**  
Per Capita Carbon Emissions  
Comparison with other UN Entities

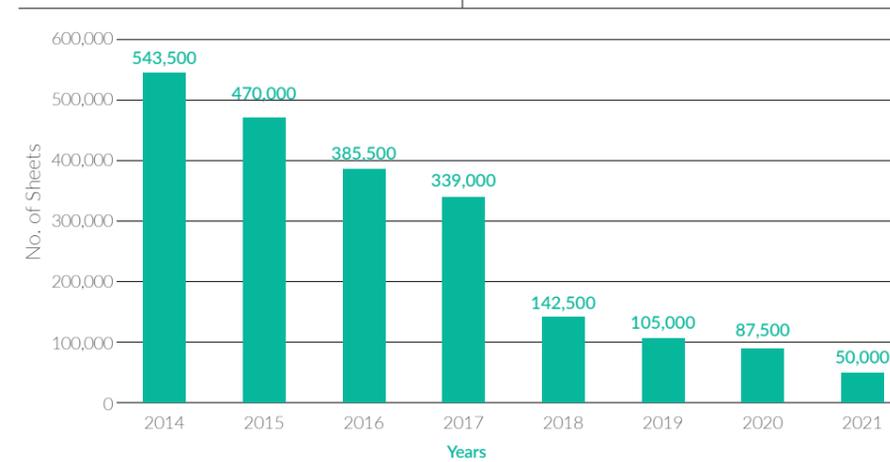
Comparison with UN Entities	Per Capita Emissions (tCO <sub>2</sub> /personnel)
GGGI (2021)	0.87
GGGI (2020)	1.24
GCF (2020)*	2.00
UNFCCC (2020)*	0.80
UNHQ (2020)*	3.20
World Bank (2020)*	8.40
UN System Overall (2020)*	4.70

\* Source: United Nations Environment Programme, Greening the Blue Report 2021 (2021), which covers environmental impact data from 2020.

## 13.3 Additional Efforts to Reduce

GGGI HQ managed to further reduce its paper consumption from previous year by 42.9%, effectively reducing the annual consumption by 90.8% compared to when it first started measuring and began its efforts to reduce paper usage in 2014.

**FIGURE 13**  
Annual Paper Consumption at Seoul HQ



## 13.4 Looking Ahead

In 2022, GGGI will continue to reduce GHG emissions by greening its internal operations through various greening exercises and reducing travel volume to below pre-COVID level.



# 14

## ANNEXES

- 2021 Country and Regional Score Cards
- Corporate Results Framework 2021-2025
- Completed Green Growth Advisory Outputs
- Adopted Green Growth Policies
- Updated Status of Green Investments 2017-2020
- Completed 2021 Financial Statement





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