GGGI Support to Members and Partners on NDC Enhancement, Long-term Low Emission and Resilient Development Strategies, and Green Recovery

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2020 GGGI Partners:









































































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2020 Was To Be The Year of Ambitions

There was much at stake in 2020 as Parties were set to update their Nationally Determined Contributions (NDCs) under the Paris Agreement. Evidence for the urgency of the climate crisis is mounting. Emerging stronger on the agenda, a surge of countries' committing to net-zero emission targets by mid-century seen toward the end of the year shows that countries are grappling with the reality that greenhouse gas (GHG) emissions must peak by 2030 to meet the Paris Agreement goal of keeping global warming below 2°C and close to 1.5°C below preindustrial levels. The 1.5°C target is vital to Small Island Developing States (SIDS), Least Developed Countries (LDCs), and most vulnerable communities. This requires fundamental changes to how we structure our economies and societies and how we use our resources.

GGGI Members and Partners among Frontrunners of NDC Revisions

The climate process in 2020 was disrupted by the COVID-19 pandemic. The COP26 was postponed to November 2021 and a subsequent delay to the much-awaited finalization of the Paris Agreement Rulebook. Many countries also pushed back the updating of NDCs. However, it is important to note that 2020 was not a lost year as work shifted to virtual engagements.

A total of 75 Parties to the Paris Agreement, including the 27 European Union (EU) member states, met the 2020 deadline for revised NDC submission. This represents 40% of all Parties and accounts for around 30% of global GHG emissions. Among these countries were 20 out of the 39 Members of the Global Green Growth Institute (GGGI) including EU Members Denmark and Hungary and Organisation of Eastern Caribbean States (OECS) member state Grenada. Additionally, five other GGGI partners submitted in 2020, and more are committed to submitting in 2021. The map below provides an overview of GGGI membership and submissions as of December 31, 2020, as well as which countries received GGGI support in the NDC enhancement process.



¹UNFCCC. 2021. Nationally Determined Contributions under the Paris Agreement. Synthesis Report by the Secretariat. 26 February 2020. Last accessed on May, 2021: https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nationally-determin

Urgent Call for Climate Action Acceleration through Green Resilient Recovery

Regardless of their economic structure, all GGGI Members and partners have the potential to steer their recovery stimulus toward green initiatives. Green resilient recovery plans and their corresponding projects seek to strengthen and accelerate the implementation of national development strategies as well as to ensure the achievement of both the NDCs and Sustainable Development Goals (SDGs). Green recovery plans that are highly aligned with the NDCs and synergetic with national economic goals can drive a more ambitious climate action.

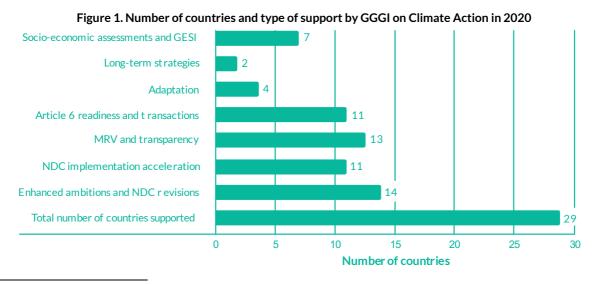
Many governments, however, have missed an opportunity of "building back better" with a transformative perspective that also enhances their climate action. For example, ING's Economic and Financial Analysis, shows that by August 2020 Thailand, Indonesia, and the Philippines had 0% in green spending against total COVID-19 stimulus.² The government's ability to stimulate a green economic recovery is hindered by the loss of government revenue leading to a severe budget deficit and constrain fiscal capacity. In particular cases, the development of green recovery packages is limited by the country's dependency on a high carbon economy based on fossil fuels. It is expected that, as countries evolve from immediate *relief response* to a medium to long-term *recovery* or *redesign*, they would revise its national development strategies to reflect lessons from the pandemic and align them as much as possible with their climate and sustainable development objectives.

A Need for Higher Ambitions

The United Nations Framework Convention on Climate Change (UNFCCC) Synthesis Report on NDCs submitted in 2020 shows the sum of GHG reductions "fall far short" of what is required to achieve the global climate goals. Although the 2020 Climate Ambition Summit ended the year on a high note with announced visions of net-zero mitigation by midcentury from a number of countries, including the United Kingdom, the Republic of Korea, Chile, Fiji, the EU, and China (by 2060), few have aligned their short-term NDCs with this long-term ambition and what the Paris Agreement goal requires. The regions and countries scheduled to submit new targets in 2021, including the world's largest net emitters—like the United States, China, and India—are expected to bring enhanced ambitions. Among high-emitting members that have submitted updated NDCs, several have increased their ambitions compared with the first NDCs. Others have failed to submit higher ambitions.

GGGI Support to Members' and Partners' NDC enhancements

GGGI has provided a range of services to a total of 29 Members and Partner countries in 2020 (Figure 1) which have directly and indirectly supported the NDC revision process.



² ING. 2020. Asia's lamentable green response to Covid-19. https://think.ing.com/uploads/reports/Asias_green_response_100820_AOT.pdf

³ UNFCCC. 2021. Nationally Determined Contributions under the Paris Agreement. Synthesis Report by the Secretariat. 26 February 2020. Last accessed on May, 2021: <a href="https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nationall

Support was provided primarily through the NDC Partnership Climate Action Enhancement Package (CAEP), the Pacific NDC Hub, SIDA, GCF Readiness, GGGI core funding, the Norwegian Ministry of Climate and Environment, and the Swedish Energy Agency on carbon pricing. International expert agencies, including GGGI, have coordinated and collaborated under umbrellas such as the CAEP to ensure that countries have benefited from the sum of all services provided.

Details on support provided are presented in the table below.

	Support provided	Countries
Enhanced ambition and NDC revision	 ☐ Sector-level planning and target setting ☐ NDC revision support ☐ Stakeholder engagement plans 	Antigua and Barbuda, Colombia, Lao PDR, Nepal, Papua New Guinea, Cambodia, Tonga, Samoa, St. Lucia, Burkina Faso, Senegal, Mongolia, Morocco, Myanmar
NDC implementation acceleration	 □ NDC implementation plans and NDC roadmaps; □ NDC financial plans and budget tracking tools □ Community Engagement 	Antigua and Barbuda, Indonesia, Kiribati, Fiji, Samoa, Tuvalu, Tonga, St. Lucia, Jordan, Marshall Island, Mexico
MRV and transparency	 ☐ GHG inventory and database management and peer reviews; ☐ National, subnational MRV systems; ☐ Sectoral and project level MRV system development; ☐ NDC MRV systems; ☐ Article 6 MRV systems; ☐ NC and BTR support 	Antigua and Barbuda, Grenada, Peru, Republic of Marshal Island, Solomon Island, Tonga, Fiji, Papua New Guinea, Vanuatu, Colombia, Burkina Faso, Ethiopia, Myanmar
Article 6 readiness and transactions	☐ Carbon pricing and transaction scoping and readiness; ☐ Development of policy approaches or projects for Article 6 transactions	Colombia, Indonesia, Mexico, Morocco, Peru, Senegal, Thailand, Viet Nam, Ethiopia, Nepal, Cambodia
Adaptation	National Adaptation Planning;Adaptation targetsAdaptation solutions	Antigua and Barbuda, Rwanda, Sri Lanka , Myanmar
Long-term strategies	 ☐ Stakeholders engagement and institutional structure; ☐ Vision building; ☐ Baseline assessment; ☐ Development of low emission development scenarios; ☐ Prioritization of actions; ☐ Implementation, finance and monitoring plans, 	Hungary, Tonga
Socio-economic co-benefits	 Assessment of employment potential under NDC targets SDG alignment Gender Equality and Social inclusion NDC support 	Antigua and Barbuda, Burkina Faso, Indonesia, Mexico, Rwanda

01. Enhanced Ambition and NDC Revision through Sector-Level Strategies and Target Setting

The **Royal Government of Cambodia** submitted an enhanced NDC committing to 42% emissions reductions below BAU by 2030 to the UNFCCC on December 31, 2020. This is up from 27% in the previous Intended Nationally Determined Contributions (INDC). With GGGI support, the Ministry of Industry, Science, Technology, and Innovation increased its ambitions in the NDC regarding energy efficiency in manufacturing and added new targets and actions relating to industrial waste management and wastewater management, fuelwood sourcing, and heat stress adaptation. The NDC makes the ambitious commitment of reducing emissions from the industrial sector (IPPU⁴) with 42% against BAU by 2030. GGGI is supporting the government in reaching its targets, with ongoing projects to promote clean energy in garment manufacturing and to set up a refuse-derived fuel facility for coal replacement in cement kilns.

The Government of Colombia has submitted the most ambitious NDC in the Latin America and Caribbean (LAC) Region to date. This updated NDC includes 148 mitigation actions that cover all IPCC sectors, including at least four measures

⁴ Industrial Processes and Product Use

for agriculture, forest, and land use (i.e. deforestation control, forest restoration, sustainable cattle ranching, and commercial tree plantations) with a joint potential to reduce near half of all the expected abatement. It also promotes diversification of the energy mix with more ambitious renewable energy targets (4.7-7.9Mt CO2eq abatement potential) and the use of up to 600,000 new electric vehicles (4 Mt CO2eq abatement potential). The new target, a 51% reduction in emissions compared to a 2030 business-as-usual scenario, is an increase from the previous 20% and is better aligned with a 2050 Net Neutrality commitment. The government also commits to reducing deforestation by 2030, i.e. no more than 50,000 ha/year, leaving room to achieve the 2030 net-zero deforestation target using international transactions under Paris Agreement's Article 6. GGGI is supporting the government to achieve this new target, particular with its deforestation reduction objectives (representing 33% of the country's abatement potential) through the creation of an enabling policy framework and capacity building for forest management and measurement, reporting, and verification (MRV), as well as promoting green financing lines to foster the forestry economy. Additionally, GGGI is supporting national and province-level institutions, developing pipelines of sustainable landscapes investment projects, and finance mobilization on sustainable cattle ranching, non-timber forest products, ecotourism, and forest economy. Finally, GGGI is also increasing its support to the government on the renewable energy transition, testing new technologies in off-grid areas.

The Government of Nepal has enhanced its NDC by including the sanitation sector. Untreated domestic wastewater and fecal sludge account for nearly 60% of GHG emissions from Nepal's waste sector through the production of methane and nitrogen dioxide. Essential also to adaptation, climate change is leading to rising precipitation extremes across the country, increasing the risk of natural hazards, such as floods and landslides. In addition, Nepal's sanitation sector is facing a budget gap of USD 970 million up to 2030, leaving many Nepali without access to adequate sanitation infrastructure and services. With funding support from the Bill and Melinda Gates Foundation, GGGI supported the government integrate sanitation targets into the NDC. This will enhance access to climate finance for low-emission, resilient sanitation infrastructure, and management. The NDC targets for sanitation were developed through GGGI's work with the Ministry of Water Supply, the Ministry of Forests and Environment, and other partners to assess and quantify GHG emissions in sanitation. As a member of the NDC drafting committee, GGGI supported the inclusion of the following targets: a) By 2025, 380 million liters/day of wastewater will be treated before discharge to natural courses, and 60,000 cubic meters/year of fecal sludge will be managed. These combined activities will lead to a reduction in carbon emissions of 258 gigagrams (Gg); b) By 2025, climate risk assessment mechanisms will be integrated into the water, sanitation, and hygiene (WASH) program's planning and implementation cycle.

Papua New Guinea (PNG) submitted its enhanced NDC to the UNFCCC on December 16, 2020. With GGGI and other development partners' support through the NDC Partnership (NDCP) to enhance the NDC, PNG has committed to a headline target of carbon neutrality within the energy industries' subsector. This will be achieved by increasing the share of installed capacity of renewable energy from 30% in 2015 to 78% in 2030, reducing energy demand through adoption and implementation of Minimum Energy Performance Standards and Labelling (MEPSL) regulations, enhancing public awareness of energy use and means of reducing energy use, and establishing a framework for fossil fuel emission off-setting and enhanced data collection. PNG has also committed to reducing 10,000 Gg of CO₂eq compared to 2030 levels and has included several adaptation targets into its NDC, the latter of which are measured by numbers of beneficiaries primarily in the agriculture and health sectors, and the value and number of assets for the transport and infrastructure sector. GGGI also supported the gender and youth engagement analysis within the forestry and energy sectors that were embedded in the enhanced NDC.

Lao PDR's Ministry of Natural Resources of Environment gave GGGI the lead role in supporting the first update of the country's NDC. The process included four formal rounds of consultations with Government agencies, development partners, and public and private sector actors. Compared with the first 2015 submission, the updated NDC enhances ambitions through the introduction of three national-level GHG emissions scenarios, i.e. a baseline emissions scenario, an unconditional mitigation scenario to 2030, as well as a more ambitious conditional mitigation scenario to 2030 towards achieving net-zero GHG emissions by 2050 and a 60% reduction below BAU by 2030. New sectors were added such as energy efficiency, e-mobility, and municipal solid waste. The 2020 NDC also sets forth increased transparency and consistency between quantitative targets, new short-term objectives for climate change adaptation towards a

⁵ Nepal's GHG Inventory, the Third National Communication to the UNFCCC. 2017.

strengthened MRV system, as well as the country's expression of interest to pursue voluntary cooperation to allow for higher ambition.

The **Government of Myanmar** submitted its NDC for internal review and approval by the end of 2020 and is expecting to submit it in early 2021. The draft 2020 NDC provides specific GHG emissions reduction targets promoting renewable energy for power generation and REDD+ (Reducing Emissions from Deforestation and Forest Degradation), which were previously outlined as activities to be implemented in the Intended Nationally Determined Contributions (INDC). In addition, this NDC sets new GHG emissions reduction targets in the agriculture sector for agroforestry and defines mitigation co-benefits from projects related to the development of renewable energy and energy efficiency. Due to Myanmar's vulnerability to climate change and its LDC status, the government has highlighted its priority to seek support for climate change adaptation. The draft NDC identifies the strategies and actions to be implemented as well as sources of climate finance under consideration. Over the course of 2019–2020, GGGI together with World Wildlife Fund (WWF) coled the Technical Advisory panel overseen by the Myanmar government's Environmental Conservation Department, which coordinated inputs for and drafted this NDC document. Additionally, GGGI provided direct technical support for the development of new GHG mitigation targets related to agriculture and energy efficiency for elaboration of climate change adaptation priorities and for transparency and climate financing mechanisms.

02. Mechanisms to Accelerate NDC Implementation

Ambitious climate action is not only guaranteed by NDC targets but also by the effectiveness of established implementation mechanisms including financial planning and readiness. The government of Saint Lucia, with support from GGGI, launched its NDC Climate Finance Strategy. Through the GCF Readiness Program, Mexico's Ministry of Finance and two national development banks enhanced the island nation's direct access to GCF resources. Moreover, the government of the United Arab Emirates launched its Sustainable Finance Framework. Such NDC finance strategies and mechanisms are crucial to align available international climate finance with national NDC priorities and to overcome barriers to attract private sector investments required to fill the finance gaps. GGGI also offers support on the capacity to navigate the complex financial ecosystem and to develop bankable projects.

In collaboration with Norway's Ministry of Climate and Environment and the Swedish Energy Agency, 11 GGGI Members and partners received technical support in 2020 to unlock access to carbon finance under Article 6 mechanisms. Two-thirds of all submitted NDCs consider the use of carbon pricing and/or market mechanisms to achieve their emission reduction targets. Moreover, according to the World Bank6, using carbon pricing approaches on a large scale to meet the emission reduction targets set in NDCs could reduce the cost of climate change mitigation by 32% by 2030. Consequently, GGGI's support in the development of carbon pricing policies, regulatory frameworks, and institutional strengthening to structure carbon transactions is highly valuable for facilitating and accelerating the achievement of the NDCs across its Members.

Work scheduled for completion in 2021 towards the same objectives includes the Government of Peru establishing its first Sovereign Green Bond with support from GGGI. The Government of Morocco is preparing its NDC Climate Finance Strategy, and Governments of Uganda, Guyana, Papua New Guinea, Fiji, and Paraguay enhancing their direct access to GCF resources. Mexico's financial regulators are establishing a green financial taxonomy and disclosure regulations, also with support from GGGI.

03. Enhanced MRV and Transparency

MRV systems and their updated versions under the Paris Agreement, the Enhanced Transparency Framework (ETF) systems are the backbones to all forms of climate mitigation and adaptation actions. With the Paris Agreement reporting requirements set to be kicking in soon, countries need to have well-functioning MRV/ETF systems in place by the end of 2022 to meet the more stringent reporting obligations by 2024. Inadequate MRV is a key challenge to NDC enhancement, implementation, and climate finance mobilization. In 2020, with the global focus on NDC revisions, GGGI rendered extensive support to Members and Partners in the revisions of their NDCs and continued to support them in building their MRV systems, which are necessary to track GHG emissions and removals as well as the actions they had included in their first INDCs/NDCs.

⁶ World Bank. 2016. *State and Trends of Carbon Princing*. Washington DC. October 2016. https://openknowledge.worldbank.org/bitstream/handle/10986/25160/9781464810015.pdf?sequence=7&isAllowed=y

For instance, in 2020, GGGI supported the **government of the Solomon Islands**, under the Pacific NDC Hub project, to create an NDC MRV system. The support included an assessment of the existing NDC and the activities the country had implemented to date, and discussions with key stakeholders to understand their data and information collection systems, providing the necessary information to the NDC coordinating agency at the time of NDC revision.

The **Kingdom of Morocco** had requested the NDC Partnership through their CAEP project to support the country in assessing MRV systems in the biomass sector. Based on current gap assessments on MRV systems conducted by other third parties and a review of a draft biomass energy strategy and other government policies, the systems required for MRV were further developed. This enables Morocco to identify mitigation opportunities within the biomass sector and help raise its ambition.

Through its core funding and the support of the Australian Volunteer Program, GGGI supported **Myanmar** in creating a Train the Trainer program through which staff of the Environmental Conservation Department were trained on the foundational principles of climate change, an orientation to the Paris Agreement, an overview of the components of Myanmar's expected NDC MRV system, and on Climate Diplomacy.

GGGI has continued to embed MRV systems and their requirements into projects and programs it is implementing. For example, GGGI is implementing a building energy efficiency project with funding from the Nationally Appropriate Mitigation Actions (NAMA) Facility in **Mongolia**. The GHG emissions that would be avoided from increasing the building insulation of several blocks were reassessed, improving the overall accuracy of projections.

GGGI has leveraged country experience on MRV through international forums, such as the 2020 Durban Forum and the OECD CCX.

04. Socioeconomic Co-benefits and Gender and Social Inclusion

According to the UNFCCC,⁷ the updated NDCs in 2020 have strengthened focus on socioeconomic co-benefits, which are important to drive political will and public demand for ambitious actions. Socioeconomic co-benefits are an important dimension of Member and partner government decision-making, and GGGI has supported the projections of the green employment potential of climate action.

At the request of the governments of Mexico, Indonesia, and Rwanda, GGGI conducted an employment study of green jobs potential under renewable energy NDC targets⁹. The analysis and employment modeling found that renewable energy sectors can generate two to six times more jobs per USD invested compared to the coal sector. Further, investments in solar and wind technology to meet countries' renewable energy targets specified in their NDCs and national energy plans will require 48–76% low- to medium-skilled workers and 24–52% high-skilled workers. GGGI is expanding its work on green jobs analysis by conducting a rapid assessment of the jobs creation potential of GGGI's member countries' NDC renewable energy and forestry targets.

Updated NDCs show an overall enhanced focus on **gender and social inclusion**, with 80% of all NDCs submitted in 2020 referencing gender, compared to 23% in the first round. Through the NDC CAEP project, the **government of Burkina Faso**, with support from GGGI, has successfully incorporated gender and social inclusion into the NDC revision processes. Key to the project was the development of gender-responsive sector-specific action plans and the involvement of NGOs and civil society organizations (CSOs). The project employed gender mainstreaming approaches from the beginning, starting with a rapid gender analysis of Burkina Faso's current NDC, which informed the rest of the activities. Deliberate efforts were made to ensure that the data collection was disaggregated by gender and provided a clear understanding of how women and men play different roles within the NDC sectors. A gender action plan per sector was developed, which guided the implementation. These actions resulted in the articulation of clear gender and social targets in Burkina Faso's NDC implementation plan.

⁷UNFCCC. 2021. Nationally Determined Contributions under the Paris Agreement. Synthesis Report by the Secretariat. 26 February 2020. Last accessed on Last accessed on May, 2021: <a href="https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nationally-determined-contribution

⁹ S. Grafakos, et al. 2020. Employment assessment of renewable energy: Power sector pathways compatible with NDCs and national energy plans. https://gggi.org/site/assets/uploads/2020/06/Employment-Assessment-of-Renewable-Energy Doublespread final.pdf

GGGI's Green Growth Index, which measures country performance in achieving SDGs including gender and other social inclusion indicators, shows improvement in achieving targets in many GGGI Members and partners from 2005 to 2019. Linked to the Green Growth Index is a Simulation Tool 11, which allows governments to project impacts of a range of policy options. Engagement with the tool will further enable GGGI to support the assessment of socio-economic co-benefits from NDC targets and is embedded also in GGGI's approaches to the development of Long Term Strategies.

05. National Adaptation Strategies

Adaptation in the 2020 NDCs is strengthened overall, with more focus on National Adaptation Plans and time-bound quantitative adaptation targets and associated indicator frameworks. Adaptation is frequently linked with the SDGs and more focus is given to the synergies between mitigation and adaptation.⁸

The **Government of Rwanda** (GoR) updated its NDC to contain climate change adaptation and mitigation measures to be implemented up to 2030, aimed at reducing 16% of emissions by 2030 compared with a BAU baseline (unconditional measures) and 38% subject to external finance (conditional measures). To support this initiative, the GoR, through the Rwanda Environment Management Authority-GCF National Designated Authority with support from GGGI as the delivery partner, is implementing the GCF NAP project on Building Flood Resilience Capacities in Rwanda. The Green Growth and Climate Resilient Strategy (GGCRS) significantly informed the revision process of the Rwanda NDC, and the GCF NAP project is mainly aligned with its priorities related to adaptation and is delivering on key interventions planned in Rwanda's NDC in water, agriculture, and human settlements sectors. The GoR envisages that the ongoing collaboration with GGGI on this project will pave the way to deliver on Rwanda NDC adaptation measures, including sustainable land management practices, stormwater management, improved irrigation and water management, disaster risk management, resource mobilization, and the overall goal to achieve urban resilience.

In Myanmar, GGGI has developed the 3Returns Framework as part of the MAVA supported Natural Capital Expert Group on the Green Growth Knowledge Platform (GGKP). This generated a case study on mangrove restoration in the Ayeyarwady Delta to demonstrate how a natural capital approach helps to estimate the return on investment in environment, social, human and financial capital, of which climate adaptation and resilience is a main benefit. The results of the pilot indicate that improved management of mangroves and green growth alternatives can enhance the wellbeing of the communities and that even limited investment in mangrove restoration provides high levels of benefits in the long term. The work has continued with the support of the World Bank Wealth Accounting and the Valuation of Ecosystem Services (WAVES) program.

06. Climate Diplomacy and LDC Leadership in UNFCCC processes

The LDC Initiative for Effective Adaptation and Resilience (LIFE-AR) program aims to develop an over-arching LDC vision for a climate-resilient future by 2050 firmly rooted in the principles for LDC-led and locally-based climate action. With International Institute for Environment and Development (IIED), GGGI is supporting LIFE-AR through the secondment of a Technical Lead. In 2020, support was provided to secure financing of the project from Ireland, Italy, and the UK. Technical support was provided to LDC Members and partners via UNFCCC LDC Group in the setup of the initiative through a Memorandum of Understanding (MOU) among Frontrunning countries, IIED, and the LDC Chair. Governance structures are also in place through the establishment of a Board and Technical Working Groups. A range of capacity-building sessions is ongoing on adaptation and establishment of National LIFE-AR Platforms for implementation. Furthermore, capacity building and knowledge sharing for LDC negotiators was organized along with the initiation of a scoping study on LDC practices.

Further support to LDC Members and Partner countries via the LDC Group and Chair through GGGI's contract with the United Nations Development Programme (UNDP) on the EU-supported Progressive Platform for Climate Actions. GGGI focuses on supporting LDC countries with capacity building for NDC mainstreaming, which in 2020 has been in the module

¹⁰ L.A. Acosta, et al. 2020. Green Growth Index 2020 – Measuring performance in achieving SDG targets, GGGI Technical Report No. 16. https://greengrowthindex.gggi.org/wp-content/uploads/2021/01/2020-Green-Growth-Index.pdf

¹¹L.A. Acosta, et al. 2021, Green Growth Simulation Tool Phase 1 – Concept, Methods and Applications, GGGI Technical Report No. 17. https://greengrowthindex.gggi.org/wp-content/uploads/2021/02/Acosta-et-al-2020 Technical-Report-Phase-1-Simulation-Tool.pdf

development stage and engagement in UNFCCC processes. The initiatives are in recognition that NDCs are diverse in nature, embedded in local contexts, and that policy solutions and implementation mechanisms need to be rooted in national and local processes to ensure ownership. Focus in 2020 was a shared LDC position on Article 6 and NDC technical support in negotiations during intersessions. Directly linked to climate negotiations, the platform also coordinated an LDC stance on Ambition and Common Timeframes. LIFE-AR also supports the finalization of the LDC Charter, which was approved by LDC Focal points in August 2020.

07. Green and Resilient Recovery Plans in Alignment with NDCs

An urgent priority in 2021 is on Green Resilient Recovery as a vehicle for NDC implementation and acceleration of green growth. This aligns with government priorities in the wake of the pandemic. GGGI and its Strategy 2030 was found to be well-positioned to mobilize innovative solutions and programmatic responses that fully consider the socio-economic impacts of COVID-19 on GGGI's Members and Partners.

Figure 2 below presents available Vivid Economics data on Greenness of Stimulus for some GGGI Members and partners. As observed, emerging economies, developing and some developed countries like Norway and Korea have failed to include green recovery initiatives and most have reinforced negative high carbon economic trends. However, as highlighted by vivid Economics "Regardless of the economic structure or past environmental performance, each country has the opportunity to steer its stimulus package to support nature and the climate" (Vivid Economics, 2020). Thus, to guide low and middle-income countries on suitable and financially viable ways to drive a green recovery, GGGI established a partnership with Vivid Economics on the use of the Greenness of Stimulus Index¹². Through this partnership, GGGI will assess the greenness of stimulus of its member countries and provide practical recommendations on how to move forward from rescue measures to long-term green recovery.

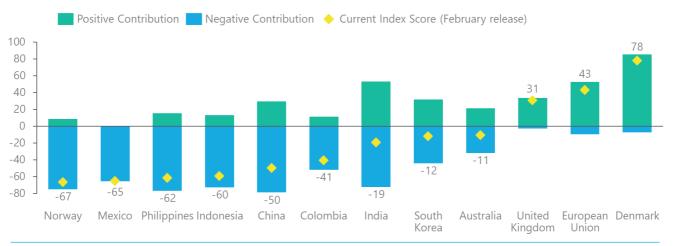


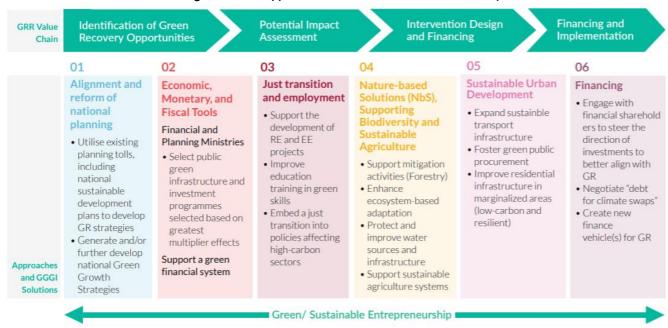
Figure 2. Vivid Economics data on Greenness of Stimulus for some GGGI Members and partners.

Moreover, based on GGGI's 2020 experience and research on the alignment of climate action and green transformation with recovery efforts¹³, GGGI has developed six approaches to support Members in achieving 10 priorities through green recovery. The priorities include maximizing job creation, increasing financing (including financing for green investments), accelerate climate action, develop and strengthen good policy frameworks, reduce poverty and promote social inclusion/equity, build sustainability through promoting sustainable urban development and green cities, sustainable mobility, and the deployment of renewable energy and energy efficiency solutions, increase food security through sustainable agriculture practices, and sustainably utilize national ecosystems. The approaches cover the complete value chain of sustainable project development, ranging from advisory for national planning and development of green recovery plans to mobilizing finance for green recovery projects (Figure 3).

¹² Vivid Economics (2020), Greenness of Stimulus Index. Last accessed on June 08, 2021: https://www.vivideconomics.com/casestudy/greenness-for-stimulus-index/#:~:text=The%20world's%20leading%20economies%20haye.%2C%20waste%2C%20energy%20and%20transport.

¹³ UNFCCC. 2021. "Nationally Determined Contributions under the Paris Agreement. Synthesis Report by the Secretariat." 26 February 2020. Last accessed on May, 2021: https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nationally-dete

Figure 3. GGGI approaches to Green and Resilient Recovery



Green recovery plans that are highly aligned with the NDCs and synergically with national economic goals can drive a more ambitious climate action because of three reasons. First, green recovery projects have a direct impact on reducing climate risks and social vulnerabilities by enhancing the productivity of human, social, physical, and natural capital. For example, by strengthening local supply chains of natural capital products. Second, green recovery projects can leverage the NDC development processes by reinforcing the engagement with key national and subnational stakeholders, facilitating the development of socio-economic and sectoral assessments, and strengthening the NDC implementation systems. Thirdly, private finance is leverage for projects with environmental, social, and governance considerations which promote sustainable and inclusive economic development.

As of March 2021, GGGI had 13 approved green recovery projects. These projects aimed to generate an impact by the end of 2021 through developing technical reports that can inform and incentivize governments' decisions to establish specific green sectoral stimulus for maximizing green job creation. (Figure 4).

Figure 4. Green and Resilient Recovery program portfolio

	National Planning	Economic, Monetary and Fiscal Tools	Just Transition/ Employment	NbS, Biodiversity, Agri	Sustainable Urban Development	Financing
Asia and the Pacific						
Fiji Green Tourism Recovery						
Lao PDR Resilient Recovery Rapid Readiness Support					Ø	
Mongolia Green Jobs from RE			Ø			
Africa and Europe						
Burkina Faso Greening National 5-yr Plan						
Cote d'Ivoire NDCP Economic Advisory Support				⊘	⊘	
Rwanda Green Jobs Affordable Housing						

		National Planning	Economic, Monetary and Fiscal Tools	Just Transition/ Employment	NbS, Biodiversity, Agri	Sustainable Urban Development	Financing
*	Senegal Green Recovery Sustainable Landscapes						
0	Uganda NDCP Economic Advisory Support	⊘					Ø
	Hungary Co-benefits of Green New Deal	Ø		⊘			
Latin	Latin America and Caribbean						
-	Columbia "Post-Coal" Green Jobs Strategy						
(-)	Mexico Subnational Green Recovery		⊘				
	OECS Assess Greening of Recovery						
(*)	Peru Green New Deal						

08. Long-term Low Emission Development Strategies

A long-term low emission development strategy (LT-LEDS) forms a strategic plan that aims to help countries shift their development path to a low-carbon economy and achieve sustainable development, based on the country's socio-economic and development priorities. LT-LEDS is the overarching long-term plan aiming to steer the NDC enhancement process toward ramping up the ambition to achieve climate neutrality by mid-century.

GGGI provides technical support to its Members and partners throughout the LT-LEDS process, including support for visioning and stakeholder engagement, policy assessment, scenario analysis and modeling, policy and project prioritization, document preparation, and identification project financing. GGGI conducts technical work collaboratively with in-country, sector-specific technical experts, public and private sector research institutions, and international technical experts.

The **government of Hungary**, with the support of GGGI, developed its long-term National Clean Development Strategy (NCDS), aiming to achieve climate neutrality by 2050. The NCDS is the result of extensive stakeholder consultations and robust modeling and analysis of future socioeconomic and technological low-emission pathways. The NCDS provides a clear and forward-looking vision of the transformation needed to meet the 2050 goals and reduce the risk of stranded assets while avoiding future lock-ins in high-emitting infrastructures. To achieve climate neutrality by 2050, by following the Early Action scenario, significant investments will be required in the coming decades. Based on the analysis, the full decarbonization of the Hungarian economy will also generate significant avoided costs and added economic benefits which outweigh the investment costs. Based on GGGI analysis, investing in the green transition will bring macroeconomic benefits that lead to a significant boost in economic growth, increased government revenues and create additional green jobs compared to the BAU scenario.

The government of the Kingdom of Tonga is developing its LT-LEDS with the support of GGGI and Climate Works Australia. The process of developing the LT-LEDS aims to strengthen and extend existing dialogue and governance processes, building capacity within Tonga's leadership for long-term planning across different sectors. The LT-LEDS will provide a vision and framework for other sectoral and national plans to align with over time. At the same time, as part of the LT-LEDS, GGGI provided support for the development of Tonga's enhanced NDC, which was submitted to the UNFCCC in December 2020. Developing the LT-LEDS and the NDC simultaneously ensures alignment between the long-term vision and pathways and short-term planning and investments.

By 2021, GGGI will support the governments of Burkina Faso, Ethiopia, Vanuatu, Myanmar, Solomon Islands (preparatory phase), and Cambodia (waste sector only) in the development of their LT-LEDS. GGGI is also developing an approach to systematically incorporate climate resilience in LT-LEDS, ensuring to meet particularly the priorities of LDCs and SIDS. Various models (e.g. Green Economy Model, Cost-Benefit Analysis, Green Growth Simulation Tool) will be applied to assess the socio-economic benefits from low emission reduction actions in these countries. GGGI's Simulation Tool will be used to assess the SDG co-benefits of policy measures and investments for the LT-LEDS in Burkina Faso and Ethiopia.

09. Korea Pledge and Campaign for Blue Skies and Net Zero 2050

In the lead-up to the announcement by Korean President Moon Jae-in on October 28, 2020, to commit to achieving carbon neutrality by 2050, GGGI and the Climate Change Center, an NGO based in Seoul, led the Campaign for Blue Skies & Net Zero 2050 in the Republic of Korea to support the government of Korea in meeting its target of carbon neutrality by 2050. The Campaign has attracted more than 40 partners, including LG Energy Solution, the Australian Chamber of Commerce, the European Chamber of Commerce, Pepper Savings Bank, Wind Mobility, and the embassies of Norway and Chile.

Since launching the Campaign in early 2020, the Campaign partners have co-organized a number of Climate Talk and Net Zero 2050 events with embassies in Korea to raise public awareness of the importance of climate action in the country and share the experiences of other countries in the transition to net-zero targets.

GGGI has strengthened its partnerships with non-GGGI Members and partners, including the United States, through cohosting climate talks with the US Embassy in Seoul to discuss the new direction the US will take on climate change and help businesses better understand the importance of supporting climate action and implementing net-zero targets by 2050.

In the lead-up to the P4G Seoul Summit, GGGI will co-organize a series of civil society and business events to help private sector companies understand the benefits of achieving net zero emissions by 2050 and dealing with an Environmental, Social, and Corporate Governance (ESG) strategy.

Looking Forward

The biggest challenge remains, particularly for countries with high emission growth rates, the ambition for mitigation and continued NDC enhancement and implementation support in 2021. For LDCs and SIDS increased climate resilience, enhanced adaptive capacity and access to adaptation finance remain the highest priorities regarding climate change. There are opportunities to use the added time ahead of COP26 to accelerate NDC enhancement and implementation, aligning medium-term targets of NDCs with long-term climate neutrality targets in LT-LEDS by utilizing MRV systems and unlocking climate and carbon finance.

Exploring and seizing the synergies between mitigation, adaptation and development objectives and actions could lead to improved efficiency in climate action planning and implementation and a systemic and transformative paradigm shift. It is vital to ensure that governments have developed solid and comprehensive long-term low emission and climate-resilient development plans and strategies to align climate mitigation and adaptation with socio-economic objectives and other development priorities, including SDGs. These strategies will help steer their shorter-term plans toward higher ambitions compatible with the goals of the Paris Agreement and identify the investment and capacity needs for mobilizing international and domestic resources.

Through the Green and Resilient Recovery program, GGGI will continue to support NDC alignment with green stimulus packages. This includes focusing on viable options for debt-ridden countries such as Debt for Climate and Nature Swaps. Additionally, GGGI will continue to support its member countries by breaching the main barriers hindering green recovery. GGGI will increase concessional and private finance mobilization towards green projects with a transformative potential through the "Green New Deal Fund" and other sources. ¹⁴ Equally, it will continue to support the countries' policy development and alignment with a particular focus on creating green jobs. Finally, it will work in collaboration with stakeholders to develop their internal capacities necessary for the successful implementation of green recovery plans.

¹⁴ S.Korea pledges bigger cuts to emissions, \$5 mln for new green deal fund | Reuters



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