



Global
Green Growth
Institute

C/2/6

**FY2013 BUDGET
BACKGROUND INFORMATION**

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GGGI management proposes an overall budget envelope of \$53 million in FY 2013, which represents the maximum amount that would be spent if all projects, both those currently underway and those for which scoping is in the early stages or has not yet begun, were fully implemented and fully disbursed by the end of the year. Given the likelihood that not all projects being scoped will proceed to implementation and that not all those being implemented will disburse at the maximum possible pace, the estimated actual expenditure budget for FY 2013 is \$47.1 million. This is in line with the amount that was projected for 2013 in GGGI's 2012-2014 Strategic Plan, which the Council approved at its first meeting.

The Green Growth Planning and Implementation (GGP&I) program accounts for \$33 million (\$27.1 million on an estimated actual expenditure basis), the Research program for \$6.9 million, the Public-Private Cooperation (PPC) program for \$3.3 million, the International Cooperation Department for \$4 million and Management and Administration for \$5.8 million. This breakdown of program resources across GGP&I (73%), Research (18%) and Public-Private Cooperation (9%) is in line with the guidelines established in GGGI's 2012 – 2014 Strategic Plan as well as the organization's commitment to focus on its core business of green growth planning and implementation in developing countries. Moreover, it should be noted that substantial shares of the Research (e.g., GGP modeling and toolkit development, GG Best Practice Initiative), PPC (e.g., investment planning and technology support) and International Cooperation (e.g., travel support for developing country participation in convenings involving policy dialogue and experience sharing) budgets contribute directly to this core function.

I. Green Growth Planning and Implementation Program

Green Growth Planning and Implementation Program

1. Brazil – \$0.5 million

From 2010 to 2012 GGGI worked with Brazil to help promote its green growth agenda, focusing on identifying low-carbon development opportunities, especially in key sector-specific reports. Last year we built on our broad national level strategic planning support to develop a sector-level GHG abatement plans for the transportation and mining sectors and to provide additional support and capacity building to the government in respect of the drafting of its strategy and strengthening of the underlying database.

Over the course of 2012, we also participated in the scoping of a green growth implementation project in the forestry sector, and this project is in the final set-up stages, and is expected to

launch in early 2013. The project will focus in particular on accelerating the growth of sustainable forest management, with the goal of promoting continued progress in reducing (and perhaps reversing) deforestation, while creating significant economic value. The project has been designed in coordination with key private sector actors, which are expected to contribute significantly to the overall cost of the project. With GGGI's commitment to supporting the work, the Brazilian government conducted a series of workshops with these private sector partners, and we are now in the process of finalizing their participation.

2. Cambodia – \$1.27 million

The Royal Government of Cambodia (RGC) and GGGI have managed successful partnership in planning and framing green growth agenda since March 2011, when signing the MOU expense report on green growth planning and policy implementation. The RGC and GGGI has been developing the draft of Cambodia's Green Growth Master Plan(GGMP) and prepared various major policy documents including the Rio+20 sustainable development national report of Cambodia. The establishment of a National Council on Green Growth (NCGG), which was established by the adoption of royal decree in November 2012 and will be opened officially in March 2013, is expected to act as a control tower to coordinate green growth policies across ministries as well as implement detailed policy recommendations in various sectors related to the issue of green growth.

In 2013, GGGI will focus on achieving the national development goals of Cambodia especially in identifying green growth priority issues and opportunities for cultivating its competitiveness, promoting job creation and improving the quality of peoples' lives.

GGGI will put priority on following tasks in collaboration with the RGC:

- Establishing solid structure for successful operation of established a green growth legal and institutional framework such as National Council on Green Growth (NCGG) and the General Secretariat of Green Growth (GSGG).
- Associating green growth strategies and policy agenda with Cambodia's National Strategic Development Plan(2014-2018) for effective implementation, including the adoption of green growth master plan and development of green growth investment plans
- Enhancing internal capacity of Cambodia through developing and finalizing detailed green growth master plan
- Increase public awareness to green growth which is critical to mobilize political support and successful implementation of green growth agenda

The General Secretariat of Green Growth (GSGG), which will be composed of the officials from various ministries under the NCGG, will play a pivotal role in planning and implementing green

growth strategy. GGGI will continue to support RGC's green growth initiative by sharing knowledge and providing resources.

GGGI will also focus on the pilot projects to show effectiveness of green growth in developing countries, such as renewable energy (advanced solar cooker), eco-tourism, waste management, etc. These projects also aim to promote local capacity, transfer adequate technology, and incubate small and medium-sized business in Cambodia. Through the partnership with GGGI, Cambodia is expected to be a leading country pioneering and diffusing a new model of growth in the Mekong sub-region. Cambodian government also shows strong political commitment to adopt green growth as its key policy agenda. A well-executed green growth plan in Cambodia can contribute to building strong momentum for other countries in the region.

3. China (Yunnan) – \$1.3 million

The scoping work for identifying green growth projects with potentially high impact on the Yunnan Province's path to green development has been completed in 2012, and selected projects will be executed in 2013 in collaboration with Yunnan counterparts. In addition, as a driving initiative for cooperation in green growth, an MOU between GGGI and the Yunnan Provincial Government (or the Yunnan Province Development and Reform Commission) will be pursued. The budget for the 2013 work program is \$1,300,000 and main projects are as follows¹:

a. Development of Green Growth Five-Year Action Plan and Local Capacity Building – \$200,000

The fundamental objective of this project is twofold: to develop a green growth action plan for the Yunnan Provincial Government to execute in the next five years and to provide capacity building for local partners and government officials. The Yunnan Academy of Economy (YAE) will be part of the project team, with another research institute/consultancy to be identified. The main activities of the project include:

- Review the existing green growth policies and framework in the Yunnan Province and align on the key national/provincial priorities (including 12th National Five-Year Plan and 12th Five-Year Plan of Yunnan Province)
- Develop a green growth five-year action plan for the Yunnan Province
- Provide capacity building and knowledge sharing to local partners and government officials

b. Low Carbon Transport Planning for Kunming City – \$250,000

The objective of this project is to develop a low emission transport development plan for Kunming City². The Energy Research Institute (ERI) under the National Development and

¹ These projects are subject to change or modification.

² The target area for the project could be changed to a new city near Kunming, which is being planned.

Reform Commission of China will lead the project with assistance of the Korea Transport Institute (KOTI) which has an extensive experience in identifying best practices in transport of Korea and the world. The main activities of the project include:

- Review transport development in Kunming by identifying key data on transport modes, energy uses, fleet, and emissions
- Identify key technology options for low carbon transport development planning based on best practices of other countries or cities in China
- Model and analyze energy and emission scenarios for transport systems in Kunming
- Identify policy options for low carbon transport development planning in Kunming

c. Pilot Project on Waste Classification and Modes of Disposal in Minrui Village – \$250,000

The main goal of the project is to promote sustainable and effective waste management policies/systems and to cultivate green infrastructure in Minrui Village and ultimately through the Yunnan Province. In particular, the project aims to improve the availability, quality, environment soundness, and financial viability of waste management services in Minrui Village. Rich experiences in garbage management systems of Korea and other international best practices will be shared. The main activities of the project include:

- Investigate the existing waste management system in Minrui Village
- Identify measures required to improve the existing waste management system
- Develop recommendations on regulations relevant to waste management
- Propose a waste classification system and modes of disposal
- Conduct training on waste management policies and systems

d. Developing NAMAs in Transport Sector for Mekong Sub-region – \$200,000

The goal of the project is to identify and develop transport NAMAs (Nationally Appropriate Mitigation Actions) and their MRV (Measurement, Reporting, and Verification) methods for three countries³ in the Mekong sub-region, China Yunnan, Cambodia, and Vietnam. A special focus will be on how to connect these NAMAs to the Green Climate Fund (GCF) that is being established to support mitigation and adaptation efforts of developing countries. The Korea Transport Institute (KOTI) could be considered as the leading consultancy for the project. The main activities of the project include:

- Review the current transport systems, plans, and policies in the target countries
- Identify transport sector projects that could apply for NAMA funding (i.e., NAMAs)
- Estimate the effects of the NAMAs

³ Depending on the availability of relevant data, the target countries could be reduced to China Yunnan only.

- Develop measurement, reporting, and verification (MRV) methods for NAMAs
- Propose financing schemes and institutional frameworks to implement NAMAs

e. Capacity Building and Knowledge Sharing – \$120,000

To effectively implement the projects above, the China Yunnan country program will also include green growth capacity building and knowledge sharing programs for government officials and experts of the Yunnan Province. The results of discussion and feedback from these capacity building and knowledge sharing programs will be reflected in the final outcomes of the projects.

4. Ethiopia – \$5.9 million

GGGI has been a key player in the development of Ethiopia’s Climate Resilient Green Economy (CRGE) Initiative. CRGE is a groundbreaking process to muster a coordinated national response to climate change. It commits Ethiopia to building a climate resilient middle-income economy by 2025, through zero carbon growth. In addition to supporting the design of the CRGE Initiative itself, GGGI also helped to develop the first major building block of the initiative – the Green Economy (GE) Strategy. The GE Strategy was launched in Durban in 2011.

GGGI has a continuous presence in Ethiopia, with a team based within the Environmental Protection Authority (EPA). Our aim is to act as a trusted and independent strategic adviser to the Ethiopian Government on green growth and climate policy. We have a memorandum of understanding (MOU) with the Ethiopian Development and Research Institute and are in discussions about signing a new MOU with EPA. Our planned activities in Ethiopia in 2013 will require a rapid scale up of our presence in country. In addition to the Ethiopian Government, we work closely with a range of technical partners including UNDP and CDKN.

a. CR Strategy (DFID) – \$0.5 million

The Climate Resilient (CR) Strategy aims to complement the existing GE Strategy. It will identify the high-level impacts of climate change on Ethiopia. It will help to quantify existing and future vulnerability and help to prioritize adaptation options. The CR Strategy has been developed through a co-production process between GCAP (consultants) and the Ethiopian Government, facilitated by GGGI. The CR Strategy is focused on the agriculture sector, though activities may be extended to other sectors in the future. The CR Strategy is on track for completion by April 2013, subject to the internal discussions and approval of the Ethiopian Government.

b. SRM Targets (BMU Component 1) – \$1.3 million

After the GE and CR Strategies, the next step in the CRGE Initiative is to develop a mechanism for reducing vulnerability and emissions. Termed the Sector Reduction Mechanism (SRM), this mechanism will not only identify actions on the ground, but match these actions to climate finance. GGGI has been asked by the Ethiopian Government to support the SRM Process – a comprehensive capacity building process to put in place reduction mechanisms in all key sectors. The end goal of the SRM will be to establish an integrated response to climate change which enables the blending of climate and development finance at a strategic level.

The first task for the Environmental Protection Authority (EPA) to establish the SRM is to set emissions and vulnerability targets for sectors. The sectors will then develop actions (investments) that will meet these targets. In 2013, GGGI will help EPA establish these sectoral targets in three steps. First, we will help to identify the baselines for emissions in each sector. This will draw on and validate the work already done for the GE and CR Strategies. Second, we will help EPA develop business as usual projections that forecast levels of emissions and vulnerability into the future. Third, we will work with both the EPA and sectors to establish realistic targets that shift Ethiopia away from business as usual and towards its goal of building a climate resilient economy.

c. SRM Coordination (Norway – \$4.1 million subject to final approval)

GGGI has also been asked by the Environmental Protection Authority (EPA) to provide support in the overarching coordination of the Sector Reduction Mechanism (SRM) Process. This includes the substantive task of supporting the sectors (through the EPA’s Environmental Units) to identify specific investments for accessing climate finance. The ultimate goal of the SRM Coordination project will be to build the institutional capacity of the Ethiopian Government to develop and implement climate policy. This includes strengthening (1) the Environmental Protection Authority’s ability to coordinate a national response to climate change (2) the Ministry of Finance and Economic Development’s ability to attract and handle climate finance (3) the Environmental Units within sectoral line ministries and (4) the Regional Environmental Protection Agencies located in regional governments. Capacity building is therefore at the heart of the SRM Coordination project and will be delivered through hybrid teams – consisting of Ethiopian Government staff working alongside GGGI advisers. The SRM Coordination project involves four components;

- Component 1 aims to strengthen coordination across the sectors, development partners, civil society and the private sector. First, GGGI will work with the Environmental Units (embedded within each line ministry) and the regional EPAs (embedded within the regional governments) to help each sector identify actions to respond to climate change. These actions will be cost so that they can be matched with climate investments. Second, GGGI will help

EPA play a convening role to bring together development partners to effectively deliver the CRGE Initiative. Third, GGGI will help EPA identify how best it can support civil society and private sector action on climate change.

- Component 2 aims to support the Ethiopian Government’s efforts to attract finance, establish robust measuring, reporting and verification (MRV) systems and improve knowledge management.
- Component 3 aims to strengthen the institutional capacity of the Environmental Protection Authority itself. This includes capacity building on project management, risk mitigation, process planning, strategic planning and policy formulation.
- Component 4 aims to better understand the political economy lessons emerging from GGGI’s experiences in Ethiopia and Indonesia. The aim of this work is to improve GGGI’s engagement in all its country programs. This component will be delivered in partnership with the Green Growth Best Practice (GGBP) program.

5. India – \$2.0 million

a. *Karnataka State Green Growth Plan – \$0.7 million*

In India, states have significant delegate responsibilities, and are able to drive a large proportion of the green growth agenda autonomously. GGGI was initially approached by a consortium of local research institutes (called BCCI–Karnataka) to collaborate in the creation of a robust state-level green growth plan. In the course of developing a project proposal, BCCI-Karnataka consulted with, and received endorsement from key stakeholders in the Karnataka government (including the Chief Secretary). GGGI and BCCI-Karnataka have now developed a collaborative plan for delivering this green growth plan, with GGGI leveraging its experience from similar work in other countries, and leading on the elaboration of a green growth financing plan for the state. The work was launched in the fall of 2012, and will be delivering throughout 2013. The key components of the work are in line with previous green growth plans conducted by GGGI, and will not be detailed here. In short, they include:

- *Green Economy Strategy*: Integrates GHG emissions reduction, other environmental goals, and social inclusion goals into the State’s “baseline” development plans.
- *Climate Resilient Strategy*: Integrates climate vulnerability and other environmental impacts (especially on poorer populations) into the State’s “baseline” development plans (NB: conducted simultaneously with the Green Economy Strategy)
- *Green Growth Financing Strategy*: Karnataka remains uncertain about how it will enable significant financial flows to launch its various green growth strategies. This work will

conduct an initial high-level study of the potential funding sources, and key actions (e.g. institutional set-up, etc.) necessary to mobilize them.

- *Stakeholder engagement and capability building:* As with all GGGI Green Growth Planning projects, there will be an integral process of engaging core stakeholders, and building core capabilities.

The partnership between GGGI and BCCI-Karnataka hopes to build on this Green Growth Plan, and develop similar plans across other states in the south of India, as well as moving forward with the state of Karnataka toward Green Growth implementation. The goal is to scope a new phase of work by the end of 2013.

b. Northern state plans and national policy recommendations – \$1.1 million

GGGI is in the process of scoping various projects in the northern states of India, and at a national level with a number of potential local partners. The lead partner identified is The Energy and Resource Institute (TERI), and we are now finalizing plans for collaboration beginning in early 2013. Located in Delhi, TERI is a strong partner for work both in the northern states, and at the national level. After various rounds of discussion, and engagement with state and national level policy makers, GGGI and TERI decided to develop a set of projects anchored in two state-level green growth analyses, which can then be drawn upon to create two national level green growth policy recommendations. In brief, the collaboration will include the following:

- *Green Growth Assessments in the States of Himachal Pradesh and Punjab:* These two northern states have shown an interest in pursuing a green growth approach to development, and have asked TERI and GGGI to support them in identifying the key opportunities for greening their existing development pathway. The scope of work for each state will be similar to that developed for Karnataka.
- *Urban Development and Green Growth:* This work will conduct a green growth assessment in two small cities (within the states of Himachal Pradesh and Punjab), as well as the larger cities of Ludhiana and potentially Delhi. It will look at the successes and challenges faced by the main national level program (The Jawaharlal Nehru National Urban Renewal Mission), and demonstrate how national, state and city level authorities can align policies for greatest impact.
- *Rural Development, Poverty Alleviation and Green Growth:* This work will examine the key opportunities for promoting rural development and poverty alleviation through the adoption of green growth policies, with a particular focus on technological and investment pathways that afford both environmental and social inclusion benefits. In particular, it will evaluate existing government policies which are designed to meet the objectives of poverty alleviation, and identify recommendations for maximizing the green growth benefits they afford.

- *Stakeholder engagement and capability building:* As with all GGGI Green Growth Planning projects, there will be an integral process of engaging core stakeholders, building core capabilities, and disseminating lessons learned nationally and internationally.

In addition to this work with TERI, GGGI is also in the process of scoping projects in collaboration with other national-level research institutes, including IRADE and NCAER. The goal in working with these additional local partners will be to expand the scale and depth of the state and city level work underway.

c. India Green Growth Manufacturing (w/UNIDO) – \$0.23 million

The project objective is to enable the Government of India to steer, stimulate and enable GG in manufacturing and related sectors, to achieve income and job creation, minimize Greenhouse Gas (GHG) and other emissions and wastes, improve resource productivity and reduce vulnerabilities to climate change. The outcome is adoption of appropriate and customized GG concepts, practices and/or instruments by the Department of Industry Policy and Promotion (DIPP), other relevant government entities at national, state, local and/or sector level, and, where appropriate, businesses and other stakeholders. Two main outputs are foreseen, each with their own dedicated work streams that mutually reinforce each other as follows.

Policy Implementation Support: Framework and operational proposals for efficient and effective implementation of NMP and related policies and strategies in manner that specifically fosters the greening of manufacturing and the development of (new) green industries

GG Policy Pilots: GG policy pilot projects that demonstrate resource efficiency, environmental conservation and economic potential of GG practices and techniques and conditions and requirements for their widespread uptake in cotton and industrial water sectors and for industrial MSME clusters.

6. Indonesia – \$3.7 million

GGGI's engagement with Indonesia in 2013 includes five major elements, which are, respectively, (1) mainstreaming green growth in the economic planning process; (2) supporting an accelerated REDD+ pilot program delivery mechanism; (3) provincial support to East Kalimantan; (4) provincial support to Central Kalimantan; and (5) scoping of green growth opportunities in Papua.

a. Mainstreaming green growth in the economic planning process (\$0.9 million)

The purpose of this component of support is to improve the understanding of the challenges of current plans for economic growth in Indonesia in terms of sustainability, and the potential for green growth opportunities, by bringing the concept of 'green growth' into core government

planning and operations. Central to this task will be to identify and explore in detail the most promising opportunities for green growth in the context of the existing plans (the MP3EI). The primary output of this work will be a series of sector and regional green growth strategies and investment plans for each set of prioritized opportunities within the selected corridors as defined in the MP3EI. It will look at the role of economic and fiscal policies at the provincial level, and the capacity of regional agencies to identify, explore and capture opportunities for green growth. It will then look at the planning process going forward and support government in ensuring that green growth becomes a main component of economic planning in the country.

b. Supporting an accelerated REDD+ pilot program delivery mechanism (\$0.9 million)

The Indonesia Government is now looking for innovative ways to catalyze and accelerate REDD+ activity across the country's 11 forested provinces in order to meet its emission reduction commitments through reducing deforestation and land use change. The REDD+ Task Force is exploring the possibility of carrying out a competitive selection process, in particular for project proposals submitted by provinces and districts. The funds to implement the selected projects could then be disbursed quickly to the field, with strong governance and safeguarding. This could be done through mechanisms such as FREDI, which are being developed.

This component therefore aims at helping to develop and implement an accelerated, effective mechanism to identify, assess, select and fund the highest-potential REDD+ project across the country's 11 forested provinces. It will look for innovative ways to catalyze and accelerate REDD+ activity in order to meet its emission reduction commitments through reducing deforestation and land use change and create common high standards for REDD+ projects across Indonesia.

c. Provincial support in East Kalimantan (\$0.6 million)

GGGI's previous work in East Kalimantan delivered Provincial Low Carbon Strategy based on the Green Growth Analysis in the province. The newly established DDPI (the Provincial Council on Climate Change) in East Kalimantan specifically offers a unique opportunity to build a 'one-stop shop' in the province to support projects in green growth and the REDD+ space. This requires the new agency to have the capacity to deliver such support, both institutionally and in terms of skills. The focus of the GGGI's activities in East Kalimantan is therefore on increasing DDPI's capacity, and supporting the development of the identified pilot projects in the context of the accelerated facility described above.

d. Provincial support in Central Kalimantan (\$0.6 million)

During 2011 GGGI supported the governor of Central Kalimantan, which was chosen as the pilot province for the REDD+ program, in assessing, modeling and developing a strategy around abatement and green growth opportunities more widely. The work was instrumental in laying out an agenda for action in Central Kalimantan. The analytical work carried out on GHG assessment,

land-use optimization and green growth strategy formed a core analytical basis to prioritize actions and plan implementation.

The next phase of work will focus on action and implementation, and this is the core of the program of work the Government of Central Kalimantan and GGGI intend to carry out together over.

e. Scoping of green growth challenges and opportunities in Papua (0.3 million)

- The project will focus on an upfront scoping phase, to develop the plan for a longer-term phase and to develop a comprehensive green growth strategy in the province. Following issues will be involved and assessed during the scoping phase:
- First, the political feasibility of a longer-term project to develop a green growth strategy and identify potential opportunities for investment.
- Secondly, initial work is needed to assess, at a high level, the potential for green growth, with a particular focus on forestry and land use.
- Thirdly, the scoping phase will assess the existing institutional capabilities and identify potential gaps

We envision this phase lasting for approximately 6 months. The successful completion of this phase would be a positive assessment of the political feasibility, and a high-level assessment of the opportunity with a prioritization of areas of particular interest carried out in consultation with the provincial government.

f. Indonesia Green Industry Mapping (GIMS) – \$0.4 million

The GIMS project is a component of the broader GGGI program of work in Indonesia. It aims at assessing the potential for cooperation between Indonesia and best practice countries to accelerate the development of high-potential green industry sectors in Indonesia. In particular, it will be a key input to the “Greening of the Masterplan” workstream of the GGGI Indonesia program and to explore potential measures to support the mitigation efforts of the Government of Indonesia in the context of the National Action Plan for GHG Emission Reduction, namely, RAN-GRK, GGGI Indonesia program will also kick off in early 2013.

There are two major elements involved in GIMS project: 1) Assessment of the potential for Green Industry in Indonesia; and 2) to identify best practice from GGGI partner countries, and map potential supply chain integration and technology transfer mechanisms between Indonesia and best practice countries.

Assessment of the potential for Green Industry in Indonesia: This assessment focus on three major green industry areas, including Renewable energy & Energy Storage, Energy Efficiency Products and Services, and Wastewater & Waste Management (in other words, Sustainable Consumption and Production or SC&P), and covers the entire value chain.

The outcome of the assessment will be recommendations on potential policies (e.g. Feed in Tariffs) to attract investment into these sectors, and the appropriate enabling structures and conditions (e.g. infrastructure investment) to facilitate the development of these areas from a private sector perspective. This component will also assess the broader economic and environmental impact of green industrial development through an analysis of “co-benefits” from a national perspective. This component aims to demonstrate the technical, social, economic and environmental feasibility of an integrated and sustainable model of growth in Indonesia.

Establishing the Green Industry cooperation between Indonesia and Best Practice countries through potential supply chain integration and technology transfer mechanisms: A green business “mapping strategy” will be established to identify win-win opportunities taking into account Indonesia and Best practice countries’ conditions (technological, commercial, environmental (only Indonesia), and political/regulatory) in regard to the selected sectors of green industry. The primary objective of this component is to identify a set of suitable options in terms of industrial development in the context of global supply chains and international partnerships. The GIMS will provide guidance to private sector companies and investors to help them understand the business potential in selected industrial sectors and sub-sectors of bi-lateral or multi-lateral cooperation in terms of technology and capital transfer.

Analysis will be conducted to provide evidence of how international partnerships between Indonesia and Best practice countries can stimulate accelerated green growth for Indonesia. The strategy will also catalyze cooperation between countries by serving as a mechanism for obtaining support, both from governments and industries for market creation and private sector implementation.

7. Jordan (BMU Component 3) – \$0.8 million

The Jordan project will focus on development of a National Green Growth Plan for the country and project duration will be 2013.1~2014.8.

The project covers activities within three work streams:

- (1) Policy framework & Implementation roadmap
- (2) Governance, stakeholder engagement and project management
- (3) Capacity building

In 2013, the Jordan project will start with establishing a common ground of data, setting up the project governance and building momentum for the project by aligning government stakeholders around a common vision for green growth. Deliverables are a Situation Analysis report, a Vision Statement report and a Stakeholder Analysis report. By mid-2013, the capacity building programme will begin with a need assessment to ensure that capacity building efforts reflect current requirements of government work.

At the heart of the Jordan project in 2013 will be the development of green growth policies. A set of sector specific methodologies will be developed that lays the analytical foundation for the policy making process.

A green growth strategy will integrate the result of the policy making process together with current Jordanian initiatives related to green growth into a set of strategies with clear policy objectives. The green growth strategy will provide the direction for the integration of specific policy initiatives in the National Green Growth Plan and for the development of a concrete action plan, or implementation roadmap. The implementation roadmap will, among others, suggest an institutional framework for green growth, funding sources for initiatives and implementation processes. A capacity building programme will support government officials in enhancing skills and knowledge required for the design of green growth policies.

2013 will observe a transition from set-up phase to development phase. To manage the transition, a PM and a PO will be newly hired on top of the current project team. (estimated budget: \$278,688).

While the Jordan project will work with at least one external service provider in 2013, no external parties have been contracted as per December 2012. An external service provider might be contracted in Q1, 2013 (estimated budget: \$331,500).

The 2013 Jordan Program will produce the following outcomes:

- (1) Green Growth Vision statement
- (2) National Green Growth Plan and Implementation roadmap
- (3) Capacity Building Program Report and Module for government officials

8. Mongolia – \$1.2 million

GGGI's Mongolia country program seeks to provide the policy framework that will allow for the achievement of continued economic development while preserving environmental integrity. GGGI will support Mongolian government, especially through close cooperation with the Ministry of Environment and Green Development (MEGD), in its effort to develop a national green growth plan, while also promoting green growth strategies in selected areas – transport and energy sectors, that are tailored to the specific needs of Mongolia. To maintain the projects in sustainable manner, Mongolia country program will include capacity building programs for government officials and experts in Mongolia.

The budget of the work program is \$1,300,000 in 2013 with the five main components: (1) Strategies for Green Public Transport in Mongolia, (2) Strategies for Development of Green Energy Systems in Mongolia, (3) Master Plan for the “Eco-Park” Development in Ulaanbaatar City (2nd phase of the transport sector project), (4) National Green Growth Plan for Mongolia, and (5) Capacity Building and Knowledge Sharing Program.

a. Strategies for Green Public Transport in Mongolia – \$92,000 (Carried over from 2012)

In collaboration with the Korea Transport Institute (KOTI), GGGI aims to promote green public transport system in Ulaanbaatar, and thereby contribute to reducing GHG emissions and to improving air quality. In a broad concept, the strategies for green public transport are investigated in terms of (1) reducing GHG emissions by fuel type conversion for public buses, (2) increasing ridership of the public transport system, (3) reducing traffic congestion by effective operation. The main activities of the project in 2013 include:

- Conduct a preliminary economic appraisal of the “Eco-Park” development project
- Conduct a capacity building and knowledge sharing program for stakeholders in Mongolia
- Develop green public transport initiatives for Mongolia

b. Strategies for Development of Green Energy Systems in Mongolia – \$125,000 (Carried over from 2012)

The main goal of the project is to develop strategies for promoting the implementation of green energy systems in Mongolia, and thereby to contribute to reducing GHG and other pollutant emissions while improving the country’s energy efficiency. GGGI and Stockholm Environment Institute-United States (SEI-US) will carry out the capacity-building and analytical tasks below, in concert with a local Mongolian counterpart, in order to lay the groundwork for development of green energy and green growth options in Mongolia. The main activities of the project include:

- Assess the current status of the Mongolian energy sector
- Review of previous work on Mongolia’s energy future
- Conduct capacity building on green growth/green energy approaches and on application of energy scenarios planning tools
- Identify, elaborate, and evaluate key energy scenarios for Mongolia
- Identify key green energy/green growth initiatives for Mongolia

c. Master Plan for the “Eco-Park” Development in Ulaanbaatar City – \$400,000

As an extension to the initial assessment and review on “Eco-Park” development from the 2012 sectoral project in transport (Strategies for Green Public Transport in Mongolia), this project aims to develop a full-scale master plan to build multi-modal transfer centers with the TOD (Transit-Oriented Development) concept at appropriate locations of the Ulaanbaatar city, which can serve as the basis for green transport systems integrating transport operations and urban planning. The main activities of the project include:

- Refine and prioritize the major required actions derived from the initial plan
- Analyze the potential impact scenarios
- Develop master plan for “Eco-Park” development

- Conduct economic appraisal for the master plan

d. National Green Growth Plan for Mongolia – \$500,000

GGGI supports emerging and developing countries that seek to develop rigorous green growth economic development strategies at the national or provincial level. In accordance with this GGGI's mission and vision, the Mongolia country program will seek to provide analytical and institutional support in the development of national green growth plan and its implementation. The main activities of the project include:

- Review the existing national economic development plans of Mongolia
- Analyze major green growth potential and initiatives by sectors
- Develop the national-level green growth vision, mission, and strategic plans
- Set up the institutional framework to support the national green growth plan
- Develop the national green growth plan for Mongolia

e. Capacity Building and Knowledge Sharing – \$120,000

To effectively implement the projects above, the Mongolia country program will also include green growth capacity building and knowledge sharing programs for government officials and experts of Mongolia. The results of discussion and feedback from these capacity building and knowledge sharing programs will be reflected in the final outcomes of the projects.

9. Peru (BMU Component 3) – \$1.1 million

We are currently in the set-up stage of the National Green Growth Implementation Plan for the Forest Sector in Peru, with an anticipated start date of January 2013. The project is being funded by the German Federal Environment Minister (BMU) through its International Climate Initiative (ICI), along with projects in Ethiopia, Jordan and Thailand. The project consists of two phases:

- *Supporting the Government of Peru in the development of a National Green Growth Implementation Plan in the Forest Sector:* A Master Plan that aligns the various existing forestry initiatives and clearly prioritizes policy interventions based on best data and quantitative analyses (including a quantification of costs and benefits), identifies implementation obstacles, designs solutions, and lays out a realistic roadmap for implementation over the next 5-10 years, with a definition of responsibilities and investment requirements.
- *Preparing detailed implementation plans for 2-4 policies prioritized by the Plan:* These implementation plans will include more detailed analysis and quantification of the priority policies, as well as policy designs. The plans will result in a set of proposed policy instruments ready for approval by the Government of Peru. The first of these detailed plans will be for the development of capabilities in science and technology innovation (SIT) in the

forest sector, while the remaining areas will be identified out of the planning work in the first phase. These details plans will allow the launch of implementation after government approval.

Two important objectives of the project are to strengthen green growth planning capabilities in forestry at the national and regional level and; to promote a South-South dialogue with countries engaged in similar efforts (e.g. Brazil, Costa Rica, and Indonesia) to transfer knowledge, including lessons learned and best practices.

The project is being led by an Inter-ministerial Committee that includes relevant national ministries in the forest sector (Agriculture, Environment, Economy and Finance, and Planning), as well as representation from regional governments. The private sector, NGOs, and academic institutions will also be engaged in the planning process. Project partners include the German Development Institute (DIE), who will conduct an evaluation of the country's SIT capabilities, as it relates to forests. The project will be conducted in close coordination with international donors engaged in related work in Peru (e.g. REDD+ and forest inventory), including the Inter-American Development Bank (IADB), USAID, GIZ, FAO, and KfW, among others.

10. Philippines – \$1.2 million

GGGI will continue to work with the Climate Change Commission (CCC) of the Philippines Government on the project “*Demonstration of Eco-town Framework project in the Municipality of San Vicente*” with its Local Government Unit (LGU), as this project was expected to last for 1.5 years since its inception in February 2012. Once the final output of this project, the Eco-town Management Plan, is finalized in September 2013, GGGI will continue working with the CCC and the LGU with the implementation of this Eco-Town Management Plan in the Municipality of San Vicente, Palawan, Philippines. The budget for the project is USD 1.174 million.

The main objective of the project is the development of a Local Green Growth Development Plan by demonstrating the implementation of NCCAP through the establishment of an eco-town that will enable the communities to be climate change resilient, ecologically sustainable and economically stable.

The following activities are within the work plan of the project to determine the feasibility of establishing an eco-town in the area:

- **Socio-ecological profiling** will look into the environment and socio-economic-related information of the area. It will consider the identified natural and climate-related hazards and economic development in the area.
- **Vulnerability Assessment** will be conducted for the project sites to determine the vulnerabilities risks of the ecosystems, communities, and infrastructure vis-à-vis the impacts

of climate change through various assessment methods.

- **Geographic Information System (GIS)** will be utilized as a tool for Vulnerability Assessment which will allow for the gathering of spatial and non-spatial information that will be the basis of developing an indicative eco-town management plan.
- **Ecosystems Valuation and Environment and Natural Resource (ENR) Accounting** will primarily involve the conduct of valuation study that will determine the total economic value of the different ecosystems in the project area and establish the ENR accounts at the provincial and eco-town level.

A climate proofed management plan will guide management of the area as an eco-town and will also include adaptation and mitigation measures with regard to effects of climate change. Institutional strengthening will initiate the integration of climate change adaptation into the political and development agenda at the national and local levels, fostering political will and increase and sustain governmental and financial support towards creating an enabled environment for climate change adaptation.

Preliminary list of financing schemes will also be identified and selected simultaneously while the final Eco-town Management Plan is being drafted. Based on this preliminary list, an appropriate financing plan and an implementation plan will be drafted to support the various adaptation measures of the Eco-Town Management Plan. Various consultation meetings with the CCC and the LGU will take place prior to the finalization of the Eco-Town Management Plan to ensure that the implementation phase will get a head start as soon as the planning phase is completed. In addition, the details of the financing or implementation plan will be contingent upon various discussion and consultation with the CCC and the LGU involved. The implementation phase of the project is expected to last for a period of a year, ending in September 2014.

11. Rwanda – \$0.5 million

The overarching goal of GGGI's Phase II project in Rwanda is to assist the Government of Rwanda to pursue its green growth pathway in the housing and urban sectors, particularly on the basis of the result of the Phase I work.

GGGI will provide technical advice and knowledge for the Rwandan Government to better identify opportunities and potentials for green housing and urban planning sector which correspond to national and local circumstances, by exploring the ways to promote sustainable building practices for low cost housing with a focus on Rwanda's major initiatives for the housing supply and urban planning.

This project is estimated to cost \$580,000 and will be implemented in three components: 1. Development of the National Urban Policy in Rwanda; 2. Development of a resource-efficient

and affordable incremental housing policy; and 3. Knowledge Sharing and dissemination of the project outcome.

GGGI's approach will be based on various and extensive interaction and close collaboration with stakeholders from Rwanda and international organizations, whereby the first two components will be conducted in collaboration with UN Habitat and World Bank.

a. Development of the National Urban Policy (in collaboration with UN Habitat)

- Following the request of the Ministry of Infrastructure, City of Kigali and UN Habitat, GGGI will participate in the development of the National Urban Policy of Rwanda. Currently, UN Habitat collaborates with RHA to support the country's urbanization and economic development processes. Their efforts are concentrated along 3 axes, at national, capital city and intermediate cities level such as: (1) Review of the National Urban Policy; (2) Support to intermediate cities development; and (3) Support to Kigali Master Plan Implementation.
- Among the above three interventions, GGGI's efforts, on the basis of the result of the Component 1 of Phase I, National Territorial Vision and Strategy for Green Growth, will be focalized in the review of the National Urban Policy, to support the creation of urban clusters and corridors through resource-efficient territorial connectivity and well-located and sustainable urban expansions. In collaboration with RHA and UN Habitat, GGGI will review the current territorial and urban planning system including national regulations, instruments, systems and institutions supporting urbanization and then provide technical assistance to support mainstreaming urban issues in existing national development and green growth strategies and investment plans.

b. Development of a Resource-Efficient and Affordable Incremental Housing Policy (in collaboration with World Bank)

- On the basis of the outcome of GGGI Phase I Project on Energy Efficient and Affordable Housing and the World Bank's suggestion, GGGI will participate in the resource-efficient and affordable incremental housing policy in developing countries.
- The way in which housing is constructed together with its design, placement, use and maintenance process urban greenhouse gases and can influence environmental sustainability. There are several reasons why deepening global knowledge in resource-efficient low-income housing, particularly in incremental housing, is important and necessary. First and foremost, the topic directly concerns the plight of the poor and second, it is related to the broader global issue of climate change. Strengthening the structure, quality and resource efficiency of low-income houses is a must-do and a pressing agenda for climate change adaptation and greater urban resilience.

- The project will include: (1) Background study for affordable and incremental housing policy following a toolkit template; (2) Ready-to-use toolkit development with pilot testing; and (3) Technical assistance to pilot cities. GGGI's intervention will be concentrated on the last phase, technical assistance to Kigali, as a pilot city.

c. Knowledge Sharing and dissemination of the outcome of the GGGI Phase I work

- This component consists in disseminating the result of the GGGI Phase I work in Rwanda, especially regarding the energy efficient and affordable housing. As final deliverables of the previous work in Rwanda, GGGI will suggest environmentally-friendly and cost-effective method of housing construction through the use of locally available alternative materials and technology in urban and rural area. During Phase II work, in collaboration with related stakeholders, GGGI will support its diffusion through business creation and capacity building program for public and private sector.

As of December 2012, the work scope for Phase II work in 2013 is being finalized based on discussions with the partner institutions including Rwandan Government, UN habitat and World Bank. Phase II work will be launched, as soon as Phase I work is finished in April 2013.

12. Thailand (BMU Component 3) – \$1.1 million

GGGI has been commissioned by the BMU through its International Climate Initiative (ICI) to engage with the Government of Thailand in order to develop a potential programme of cooperation in relation to green growth planning. Following discussions and consultation with various Thai stakeholders and BMU, GGGI has been preparing to support the Government of Thailand **to identify greenhouse gas emissions reduction targets and capacity of each sector by 2020 to support the implementation of “National Master Plan on Climate Change”** which is subject to cabinet approval as of December 2012.

Considering limited quantitative analysis to aid implementation of the target fixed by the National Master Plan on Climate Change, GGGI sets the fundamental objectives of this Thailand Country Program to provide assistance to the Government of Thailand to:

- Quantify current and expected GHG emissions in a robust manner
- Identify sectors with the most potential for emissions reductions, with the least cost impact and impact on economic measures such as GDP and Competitiveness
- Provide the evidence base for the Government of Thailand to choose an optimal emissions reduction target in the medium term (2020) and long term (2050)
- Consider which policies and interventions would be best placed to implement the agreed emission target

The potential work activities for this Thailand Programme are as follows:

a. Building GHG Inventory:

- Create a GHG inventory Development Plan to co-ordinate historical and ongoing work in the area and map out future work streams;
- Commission research on Thailand-specific emissions factors, best practice on emission, calculations methodologies, and harmonizing methodologies across each sector of the economy;
- Advice on quality assurance of emissions data

b. Emissions projections

- Review previous work on emissions projections and assess robustness and relevance of key assumptions and forecasting methodologies;
- Design robust forecasting methodologies
- Bring together previous work by updating data, improving methodologies to arrive at an internationally-credible Business As Usual(BAU) scenario for emissions

c. Identify emissions reductions measures and cost

- Identifying mitigation potential and cost by economic sector;
- Translating granular data on “bottom-up” abatement measures and costs into a useful output to support engagement with the private sector;
- Identifying policy measures that are the most cost-effective to reduce emissions in each sector;
- Conducting an economic assessment of the wider economic costs and benefits of the abatement measures

Once the above work activities (Phase I) are complete in 2013-2014, the following activities (Phase II) will be conducted in the next years.

d. Support decision making on GHG emissions target

- Creating a set of plausible emissions regulation scenarios (e.g. 20% emissions reduction on 2010 baseline by 2020, 40% emissions reduction from BAU scenario by 2030) with the expected economic impact on key metrics outlined. These metrics might include GDP growth, sectoral impacts, unemployment, exports etc.

e. Support implementation roadmap

- Transform the data collected as part of the MAC curve process into a National Technology Roadmap outlining which technologies can be used in which sectors and provinces in order to cost-effectively reduce emissions;
- Consider the timing and feasibility of implementation of individual measures (e.g. identify skills needs and constraints), identifying key implementation barriers and enablers;
- Assess incremental funding requirements, evaluate potential funding options

In terms of the project implementation structure, the major partner institutions for the project, ONEP (Office of Natural Resources and Environmental Policy and Planning), TGO (Thailand Greenhouse Gas Management Organization) and OCCC (Office of Climate Change Coordination), the national focal point for UNFCCC and for implementation of climate change strategy.

Also, there are a range of partners operating in Thailand who represent a rich source of opportunity for collaboration with such as GIZ, JICA, WRI, USAID/ICF, ADB, SIT, King Mongkuk University, World Bank, and so on.

As of December 2012, GGGI is finalizing the works cope in consultation with Thai stakeholders and BMU, before drafting the work proposal to be submitted to BMU for its final approval.

13. United Arab Emirates (UAE) and MENA – \$4.4 million

a. UAE Green Growth Initiative (incl. Abu Dhabi Office Operational Costs) – \$2.6 million:

The purpose of GGGI's program in the UAE is to work with the federal and emirate governments of the UAE to help develop a robust national Green Growth Plan (GGP) and strategies, and provide tailored support towards the governments in their efforts to implement such strategies at the national and local level. The GGP aims to integrate existing national policies and measures for climate change mitigation and adaptation and align them with economic development objectives of the UAE. The completed GGP will contain specific policy objectives, directions, recommendations and measures that are tailored for the UAE, and adequately reflect the strengths and weaknesses associated with implementing green growth policies and strategies. The envisioned GGP will be carried out over a three-year period in three phases:

- Phase I – GGGI set-up in the UAE (2011.3-2012.12)
 - Promote Green Growth Awareness among UAE stakeholders
 - Establishment of Project Governance Structure and its UAE Cabinet Approval
 - Development of Initial Studies : Situation Analysis and Benchmark Studies

- Phase II – Development of National Strategy for Green Growth and its UAE Cabinet Approval (2013. 1 to 2013.12)
 - Green Growth Policies Recommendations
 - Green Growth Roadmap (2014-2021-2030)
 - Implementation KPIs
 - Implementation Governance
- Phase III – Green Growth 5 year Action Plan (2014.1 to 2014.12).

During 2013, GGGI estimates its budget for UAE Green Growth Initiative to be \$2.6 million (not including MENA projects but including Abu Dhabi office costs). Under the overall framework of development of the green growth plan, GGGI will focus on the following three areas:

- *Policy & Governance*: Develop a Green Growth Plan tailored to the UAE’s socioeconomic and environmental conditions while building on the UAE’s existing green growth and climate change initiatives. The GGP shall include a National Strategy for Green Growth, Green Growth Roadmap, and 5-year Implementation Plan.
- *GHG Inventory*: Establish a national GHG inventory and its management system.
- *Capacity Building*: Develop and practice intensive capacity building programs for government officials and major stakeholders.

Phase I in 2013 will produce the following outcomes:

- World Future Energy Summit participation (Press Conference, Side Event, GGGI exhibition pavilion) in Jan. 2013
- National Green Growth Strategy across 7 sectors of Oil & Gas, Water& Electricity, Transport, Building, Waste, and Land Use & Biodiversity
- Green Growth Roadmap (2013-2021-2030)
- Implementation KPIs
- Implementation Governance
- Capacity Building Program Report and Module for government officials, policy practitioners and private sector decision makers in the UAE

The ultimate outcome of the Project will be a practical framework for policy, governance and data management to prepare public and private sectors for the implementation of green growth in the UAE. While preparing the green growth plans, the project will harvest low hanging fruits and materialize immediate opportunities for implementation of green growth such as renewable energy based microgrids project.

The project has been carried out with a projection of subsequent, progressing plans that will lead to long-term action for the UAE. The main approach is to create taskforces across seven sectors engaging main public and private stakeholders. Through stakeholder workshops, the project will identify main policies and actions to green the UAE economy at national, local and sectoral levels, covering all the major sectors incl. oil and gas, water and electricity, industry, transportation, building, waste and land use & biodiversity. The public and private stakeholders will have intensive capacity building sessions to better understand, and also articulate and practice green growth in daily operation of business. The project will be managed by a focused project team from GGGI and the UAE government. The UAE government steering group will be headed by H.E. Dr. Rashid Ahmed Bin Fahad, Minister of Environment & Water and also jointly governed by Prime Minister's Office and Ministry of Foreign Affairs of the UAE at the Federal level and Executive Affairs Authorities at the emirate level.

The existing contract to outsource external expertise to cover economic analysis, legal and institutional analysis, data management and GHG inventory and capacity building for the development of the UAE Green Growth Initiatives are (2012 carry over amount: USD 2.48m). These service contracts were originally made in 2012 and reflecting the project schedule adjustment and the UAE inter-ministerial deliberation, extended towards 2013 covering the full phase I of National Strategy Development without incurring additional payment. Accordingly, no additional outsourcing is planned for 2013.

The Initiative plans to operate all year along CB programs for the UAE government officials and private stakeholders minimum three times in March, May and August along with or back-to-back with stakeholder input workshop and validation workshop in February and September/October respectively, accordingly to the Business Plan jointly developed with the UAE MoFA and approved by the UAE cabinet. (estimated budget:\$280,000)

b. Abu Dhabi Office Operation – subsumed under the UAE Green Growth Initiative

Abu Dhabi Office has three goals for the year 2013: (1) creating best practice of GGP development from the UAE example which contributes to GGGI's core knowledge accumulation. (2) expanding CB programs for MENA region from the UAE (utilizing modules and programs from UAE; in collaboration with other offices)(3) developing implementation oriented programs such as green business models and smart regulation schemes for sustainable water & energy. To achieve these goals, Abu Dhabi Office puts priorities on (1) strengthening its internal capacity by increasing its members to minimum 16 of which 25% will be senior positions (especially for year-along CB program operation) (2) establishing an effective working environment that motivates its members.

Major expense items for Abu Dhabi Office operation consist of personnel cost (\$697,258) including new hire of a SPM and a UAE government secondee on top of the current members (1 Director, 1 Senior Fellow, 1 PM, 1 PO, 2 PA's as of Q4 2012) .

Major operational items for 2013 are travel expense (\$115,000), Rental expense of new office in Masdar City (\$300,000 until Q1 2014), Fit out expense for office space(including Capacity Building Training Room, Small Library and Creative Room for private sectors(\$400,000), and staff housing (\$360,000).

In Q1, around \$300,000 will be allocated to preparation of the World Future Energy Summit participation including a press conference, a side event and a GGGI pavilion construction and operation. Additional \$50,000 will be allocated to support GGGI Council Meeting in Abu Dhabi.

c. MENA Green Growth Capacity Building Program – \$964,290

Building on the successful outcomes from the UAE GGP development and Capacity Building Program Operation, Green Growth momentum will be strengthened across the MENA region by engaging/empowering regional stakeholders (focusing on GCC and North Africa) with Green Growth knowledge, technologies and best practices tailored for the regional challenges. Building on the outcomes and experience from the UAE Green Growth Capacity Building Program Development, the program operation will be mostly internalized. The estimated budget includes personnel costs for 1 SPM, 1 PM and 1 PO, new hires of 2013 (estimated budget of \$239,000).

However, local academic institute such as Masdar Institute of Science and Technology can be outsourced to develop/run partial curriculums specialized on clean energy. Also IRENA is currently under discussion to be a potential co-organizer/partner for the Program design and operation as well (estimated budget of \$100,000).

CB opportunities for MENA stakeholders will be tentatively lie on May 2013 October 2013 and December 2013 (three times) after taking into account of key milestones from the UAE GGP development and regional demographic characteristics such as Ramadan. The program can be operated as a subprogram of the HQ's Green Growth College Program. Each execute would require around \$180,000 per operation including invitation costs for trainees from least developed and OECD DAC countries in the MENA region (estimated budget of \$540,000 for the 2013).

MENA CB program operation in 2013 will produce the following outcomes:

Capacity Building Program Report and Module for government officials, policy practitioners and private sector decision makers in the MENA region across energy, transport, building, waste, biodiversity and industry sectors.

d. MENA GGP – \$456,767 (2013 budget)

Based on GGGI-UAE MOU, the two parties agreed to identify regional Green Growth dissemination opportunities by using the UAE funding to support MENA countries' Green

Growth. Morocco is one of the mutually agreed target countries and one additional MENA country will be selected for 2013.

UAE MoFA will play advisory role in the MENA projects. After desktop study on the existing national policies, including economic development plans, renewable energy policy and mitigation & adaptation policies, a draft project logframe will be developed. Then scoping (fact-finding) mission will be performed to understand current renewable energy projects on the grounds; the partner country's donor engagements; current policies and practices; finding key stakeholders in the government body; need assessment and stakeholder engagement. The scoping study will result in a Green Growth Potential Report. The project timeline for the scoping and set-up phase is about 12 months. Considering initial set-up requires intensive stakeholder inputs, minimum three times of stakeholder workshops are planned for 2013 (estimated budget: \$50,000).

The scoping study for one of the MENA countries also among the ODA eligibility countries) will be internalized building on the experience of BMU component II. One PM and one PO will be newly hired to manage and operate MENA projects (estimated budget: \$190,542).

However, considering language barrier and data challenges, a local research institute or government partner can be outsourced. (estimated budget: \$100,000).

MENA GGP program will produce the following outcomes:

Green Growth Potential Study Report for the selected country and initial GGGI-partner country government partnership set-up (e.g. MOU).

e. MENA Renewable Microgrids PPP – \$376,460

While the 2012 Phase I of the Microgrid Project focus on design and verification of a renewable energy powered micro-grid for research, the 2013 phase II of the project will move forward by developing near term implementation opportunities in the MENA region.

The 2012 Microgrid Project (Phase I) performed by MIST and RIST will demonstrate the technical and economic feasibility of renewable energy powered micro-grids as a primary source of power and operational control for a selected site in the UAE. Building on the Phase I results, the 2013 will focus on demonstration for near-term implementation opportunities in the MENA region by adapting the Phase I design for other localities in the region and by developing in-depth financial feasibility studies, which will be outsource by a tender. (estimated budget: \$300,000).

2013 project will produce the following outcomes:

- (1) Adapted grid design for selected target sites for dissemination in the MENA region
- (2) Financial feasibility studies and implementation schemes for selected sites

14. Vietnam – \$1.4 million

Since its economic reforms in 1986, Vietnam has been experiencing rapid economic growth and achieving development goals successfully. Vietnam has become a lower middle income country with per capita income of US \$1,130 by the end of 2010. Currently, however, environmental challenges and social inequality also occur as major issues to be tackled. In 2011, to deal with these issues through proper frameworks of policy coordination and implementation, the Vietnam Ministry of Planning and Investment (MPI) had officially announced its plan to develop “Vietnam Green Growth Strategy (VGGS),” which was finally approved by the government in November 2012. GGGI has been providing technical supports and intensive peer reviews for the Vietnamese government in the course of developing VGGS and concluded the MOU with MPI in August 2012.

In 2013, GGGI will scale up its program in Vietnam and focus on three objectives as follows:

- Support the Vietnamese government in implementing green growth strategy and action plan including investment plan, legal/institutional frameworks, and monitoring & evaluation tools/systems by providing rationale and analytical tools to prioritize national projects in relevance to green growth
- Collaborate with local government and other stakeholders to develop and implement green growth policy and draft investment framework to facilitate private investment at the local level
- Co-host capacity building programs and knowledge sharing platform on policy analysis, decision-making process, and leadership with identified governmental agencies, international donors, and research institutes

For this, GGGI elevate current close partnership with the MPI and Vietnam Academy of Social Sciences (VASS)—main government agencies to set the direction of long-term development plans and policy agenda—in developing implementable action/investment plans and conducting research projects together. The capacity building programs shall be implemented for effective execution of the strategy. These activities aim to invigorate political interest and public awareness on green growth nationwide and to expand such basis to actual policy implementation with tangible results.

To raise the public awareness on green growth and to disseminate the green growth initiatives nationwide, GGGI will develop the drafts of Green Growth led-City Development Strategy(GG-CDS) for local partner governments such as Ho Chi Minh City(HCMC) and Da Nang City. The GG-CDS will provide solid frameworks for implementing local level green growth projects in Vietnam. UN-HABITAT will join this initiative with GGGI as a major partner in implementing leadership programs and consultations with local institutes.

GGGI also plans to expand this green growth initiative in regional level including neighboring countries such as Cambodia, Laos, Myanmar, and China. GGGI had supported regional knowledge sharing program among the countries in Mekong region in 2012 and will promote this initiative as an annual region-wide forum in 2013.

15. Water Green Growth Planning – \$0.9 million

a. Aral Sea Basin – \$0.2 million

In Central Asia, water insecurity has become a significant factor ever since the demise of the USSR, which created political disputes, hindered growth, reduced opportunities for sustainable development, put ecosystems at risks and imposed economic costs. Although there were various programs funded by international financial institutions and northern countries for last two decades, the effectiveness of those programs can be evaluated rather low. Therefore, GGGI initiated a project for the Aral Sea Basin to help promote its green growth agenda, focusing on water security and paradigm shift of development cooperation towards green growth at the end of year 2012 and the Phase I is supposed to be ended in April 2013. At the Phase II, the budget spanning 2013-14 to develop master plans to increase water availability and establish balanced water allocation system through multi-stakeholder coordination at national and regional level and to provide additional support and capacity building to the riparian countries in respect of the drafting its strategy and developing guidelines to implement master plans. To help drive continued impact, GGGI will work together with international organizations and intergovernmental agencies in Central Asia on various fronts, all of which are options for our 2013 (and beyond) program of work. During the first period of performance, GGGI will continue to discuss further steps with the riparian countries, and expects to launch one or more projects in the summer. The potential options and estimated 2013-14 budget are elaborated below:

- Develop a strategy for water security and integrated water resources management in the context of green growth: According to the 4th World Water Development Report by UNESCO World Water Assessment Program in 2012, water underpins all aspects of development. In order to meet multiple goals, water needs to be an intrinsic element in decision-making with a coordinated approach across the whole development spectrum in the region. Effective and sustainable management of water requires cooperation and coordination with other sectors and jurisdictions, such a food, energy and the environment. Explicit trade-offs may be needed to implement integrated water resources management that maximize achievable benefits across a number of development sectors and enhance water security. Providing decision-makers with tools that show green growth and public-private cooperation of alternative ways forward will substantially contribute to better economy and potentially reduce adverse impacts. Given the urgency of work in these areas, GGGI may look to launch a project by the summer of 2013. It would need to be at least \$500,000.

- Support to clarify the implications of water allocation and the trade-offs from development framework for green economy: Water allocation between competing uses is generally accomplished by issuing entitlement taking into consideration objectives such as economic efficiency, social equity and ecological integrity. Over the first phase 2012-13, GGGI will find an appropriate framework to incorporate water security into green growth. At the second phase, GGGI will support develop hydro-economic models that can provide insight into the trade-offs of various water allocations, show the comparative advantages of riparian countries in Syr Darya and Amu Darya and the benefits that can be gained through cooperation. GGGI would need to discuss with riparian countries of the Aral Sea basin in more detail what role GGGI could play in reinforcing this effort. Towards a concrete action plan, GGGI should continue its work as soon as the first phase is finished, from May of 2013, and it would need to be at a reasonable scale, at least \$500,000.

Assuming we choose to push forward these proposed areas in 2013, we would expect to spend at least \$500,000 (for the one option) in 2013 and additional amounts in 2014 (for the other).

b. Mekong River Basin – \$0.2 million

The purpose of GGGI's Water Program in the Mekong River Basin is to promote a green growth in water management to enhance sustainable basin development, based on the foundation elaborated in the 'Mekong Spirit' and 'Mekong River Basin Vision', which promotes "an economically prosperous, socially just and environmentally sound Mekong River Basin." The program aims to advance knowledge and practice of green growth for better water resources management, in close collaboration with riparian governments along the Mekong River and regional/international organizations such as the Mekong River Commission (MRC). In this regard, as its scoping Phase I, GGGI is supposed to undertake a comprehensive research project and hold relevant workshops at national and regional level for establishing solid green growth framework and roadmap for sustainable water resources management and suggesting priority activities for the MRC and each National Mekong Committee member, which is tailored for each country. The completed program result will contain green growth framework, detailed roadmap, proposed activities at national and regional level such as high-level council for green growth, and the reports of the high-level workshops on water and green growth.

c. Water Resources Group – \$0.5 million

GGGI is entering into a partnership with the Water Resources Group, which is a public-private partnership administered by the World Bank Group's International Finance Corporation to advance water green growth planning in developing and emerging countries in order to preempt constraints on economic growth posed by national and regional trends in water quantity and quality. The partnership involves the IFC, the Swiss and Swedish

governments as well as a number of the world's leading corporations. Given the strong strategic alignment with GGGI's mission as well as the considerable overlap in terms of the locations of current and planned activities in developing countries, GGGI's engagement will consist of both cash and in-kind components in the form of the addition of a water sector dimension to one or more of the green growth planning and implementation projects in countries in which GGGI is already pursuing or planning to pursue.

16. Capacity Building and Portfolio Management – \$1.5 million

a. Global Green Growth Academy – \$0.6 million

Complementary to the “vertical” in-country capacity building that is an integral part of GGGI's approach in developing countries, the organization plans to establish a “horizontal” Global Green Growth Academy that offers educational modules and experience sharing in different aspects of green growth (e.g., modeling and planning, macroeconomic policy, structural/sectoral policy best practice, institutional design best practice, public-private partnerships, relevant technology and investment models, international assistance and policy, etc.) to policymakers and administrators at different locations throughout the year. The Academy will be developed in partnership with a few leading academic institutions and conduct training in potentially three locations, such as Seoul and Abu Dhabi. It would confer a certificate after the fulfillment of a requisite number of modules, which could be accomplished over a number of years so as to provide the necessary degree of flexibility for working government professionals. As per the 2012 – 2014 Strategic Plan, the goal is for the Academy to be operational by the end of 2013.

b. Portfolio Management Unit – \$0.4 million

In 2012, as GGGI's portfolio of country, provincial and city green growth planning and implementation projects grew and as a set of results-based management core operating processes were developed and implemented, a portfolio management unit was set up within the GGP&I program. This team has responsibility for supporting the DDG and Directors in their management of all aspects of the project portfolio, including the consistent and timely application of the RBM core operating processes. This team also has responsibility for supporting the development of GGGI's plans in 2013 to create a set of knowledge and experience sharing activities across the organization's partner country governments and internal project teams, the purpose of which is to generate a self-propelling South-South dynamic of cross-fertilization of learning as well as continuous improvement of GGGI's own green growth planning and implementation methodology. Finally, this budget item includes funds for the development in 2013 of a monitoring and evaluation function within the organization, an exercise that is being led by a secondee from DANIDA.

c. Cross-cutting Project Support and Internal Capacity Building – \$0.5 million

This budget item provides funds for global GGP&I team management and integration purposes, including training, team building, travel and joint review and scoping activities.

Scoping

1. Brazil – \$0.5 million

Over the next 2-3 months, GGGI will also continue to work with the Brazilian government to scope an additional green growth implementation project. Currently, the preferred option will be implementation support for green growth approaches to urban development, with an initial focus on waste management. Waste management is a high priority area in Brazil, and significant investment is expected in the next few years, thanks to a new national policy. The potential work being considered would look to ensure a green growth orientation to the implementation of new waste management investments.

2. Kazakhstan – \$0.4 million (excluding possible EBRD funding)

a. Kazakhstan National Green Growth Plan (KNGGP) and its two subtasks

The Kazakhstan water sector has suffered from severe underinvestment since the country's independence and series of reforms need to be undertaken to attract investors. The Government of Kazakhstan has expressed its readiness to promote the rational use of water resources as well as the efficient and sustainable provision of the municipal infrastructure services, thus strengthening security and reliability of the water supply services and improving industrial competitiveness in the country. A significant proportion of water supply utilities is still equipped with inefficient systems and requires major refurbishment. Furthermore, most of these assets are not making profits and unattractive to private sector for the time being. For this reason, the water sector reforms and commercialization/private sector participation have been lagging behind, and changes in the current regulatory framework and tariff methodologies are required to increase opportunities to attract investments. Unless actions are implemented in a timely manner there are risks that the current situation will hinder Kazakhstan's growth and economic diversification.

Most of the tasks under the Kazakhstan National Green Growth Plan (KNGGP) were completed in 2012, except for two components of the Water Sector Development Program: (1) Preparation of feasibility studies for the modernization of water supply and wastewater management system in a city; and (2) the finalization of concrete recommendations and action plan on water sector development. Out of the five components of the program these remaining two components will be carried over in 2013.

The first component aims to establish commercially viable business models and organizational structures with participation of the private investors, for the purpose of rehabilitation of the drinking water supply and waste water management systems of a certain city. Currently Uralsk City has been discussed as a potential candidate. The second component, on the other hand,

intends to introduce key reform measures and formulate an action plan in consultation with the main governmental sector stakeholders on the commercialization and financial sustainability of water investments to attract private sector participation based on the feedback from key stakeholders and the other three components of the program already conducted in 2012.

Currently the project period has been extended till April 2013 on the premise that an official engagement with Uralsk City for the feasibility study will be completed by the EBRD soon.

b. Support for Kazakhstan's Implementation of Green Economy Strategy (Tentatively named)

Based on its high dependence on abundant natural resources Kazakhstan has achieved significant economic development since 2000 with around 10% of its GDP growth till the global financial crisis. As a result, besides the tremendous economic growth trajectory the country's industry structure has remained unbalanced with the mining industry substantially contributing to the national GDP. Moreover while the environmental conditions are deteriorating, the country is also highly susceptible to the adverse impact of climate change due to its geographic and climate peculiarities brought by its central location in the Eurasian landmass. Against this backdrop, recognizing the rationale of pursuing green growth in Kazakhstan and global trends moving towards the direction of green growth, it has demonstrated its intention to join the global efforts to lead the trend by re-affirming its pledge on "Green Bridge Initiative" at the Rio+20 conference side event.

With this grand objective, the Ministry of Environment Protection of Kazakhstan Government is currently leading a project of formulating a "Green Economy Strategy". (The output of "Kazakhstan National Green Growth Plan" project ("KNGGP") has been re-branded as "Input for Kazakhstan's Transition to Green Economy"). The Ministry understood that putting the issue of green growth on every stakeholder's agenda requires innovative approaches to engage all that will work on policy development and make investment decisions. Thus now it managed to gain internal supports from the Prime Minister and other line ministries in drafting "Green Economy Strategy". The Ministry is planning to make the strategy socialized among the stakeholders including the parliament and take effect by September, 2013. The "Green Economy Strategy" is expected to include a clear roadmap and action plans for execution.

Under this circumstance, once the "Green Economy Strategy" is adopted by the Kazakhstan government officially, the Government will need to address other multi-faceted issues in executing the strategy. The most immediate steps to be taken will be institutional and legislative framework necessary in introducing a new legislation that will enable the stakeholders to further refine the action plans and execute them, as well as setting up a high level control tower, which oversees the activities through detailed planning, monitoring and evaluation processes. In line with this, the Ministry of Environment Protection is also planning to establish an international organization of "Green Bridge", benchmarking the case of GGGI. The Ministry envisages Green Bridge to play a role of bridge between Europe and Asia for green technology development and

technology transfer. However while it has such grand ambition, there is a considerable amount of work that is yet to be undertaken for institutionalization of the “Green Bridge”, including defining the institute’s vision, mission, and goals and objective.

In consideration of these needs, GGGI’s experiences of supporting governments in establishing a national level council or secretariat for green growth, and drafting a related legislation will be able to substantially further contribute to Kazakhstan’s transition to green economy after the KNGGP, in that (1) GGGI will support Kazakhstan government with legal and institutional framework for implementation of Green Economy strategy. GGGI will help establish a National Council of Green Economy (tentatively named) that will act as a “control tower as well as coordinator” to review comprehensive and sectoral green economy policies, devise appropriate legislation, and coordinate the green economy policies across ministries during the implementation, and (2) through consultation meetings with the Kazakhstan Government, GGGI will share its experiences of institutionalizing Global Green Growth Institute and support the Government’s efforts to establish the Green Bridge, maximizing the opportunities to further disseminate green growth in Central Asia.

This project is subject to “Green Economy Strategy” to be adopted by Kazakhstan Government next year. Other than this, there are a couple of more potential projects for GGGI’s follow-up activities in Kazakhstan that are under discussion; (1) a project of formulating a master plan for national water resource management and (2) a green technology transfer project that will help Kazakhstan Government demonstrate adaptation and development of green technologies on the occasion of Expo 2017 that Astana will host with the theme of “Future and Energy” in 2017.

3. Kenya and the East African Community – \$0.2 million

In 2012, GGGI has been undertaking work in cooperation with the Government of Rwanda in the area of sustainable urban network and resource efficient housing policy. Mr. Albert Nsengiyumva, Minister of Infrastructure in charge of urban development, energy, water and transport in Rwanda has already committed a strong support for the current GGGI-Rwanda collaboration and hopes to expand the collaboration into other areas. In addition, the Prime Minister of Kenya, Mr. Amolo Odinga suggested partnering with GGGI in the energy sector at the moment of his visit to GGGI headquarters in Seoul on 21 November, 2012.

On the basis of these existing discussions with Kenya and Rwanda, GGGI may explore opportunities for green growth planning in Kenya and the other partner states of the East African Community (EAC). The EAC is the regional intergovernmental organization of Burundi, Kenya, Rwanda, Tanzania, and Uganda. Working through EAC structures could provide exceptional opportunities to increase energy access in member states by taking advantage of the following:

- Considerable political commitment incorporating five heads of states and many high level leaders;
- Established mechanisms for regional cooperation and decision making;
- Economies of scale;
- Synergy and cross learning opportunities;
- Peer pressure among Partner States and some element of healthy competition

A potential project on the “*Potential for Renewable Energy and Green Growth in the East African Community*” is emphasizing key opportunities in the development of renewable energy resources as a way to promote sustainable development and contain the threat posed by climate change in the region. East African countries have abundant renewable energy resources, and could have significant economic, environmental and social benefits from increased use of these resources. While increased use of renewable energy has an important potential to stimulate green growth, this potential is not well understood by public and private sector decision makers and investors. As a result, renewable energy is often seen as a too costly, compared to a continued use of fossil fuels and traditional biomass. If, on the other side, it was possible to document the direct and the indirect (short and long term) benefits of investing in renewable energy, and demonstrate the important contribution to green growth, the position of public and private decision makers will change, leading to increased investments.

a. Objectives

Africa’s energy sector is best understood as three distinct regions. North Africa, which is heavily dependent on oil and gas, South Africa, which depends on coal and the rest of Sub-Saharan Africa, on biomass. The project will assist the partner states of the EAC, largely dependent on traditional biomass.

- The project could support the EAC partner states to review and develop forward looking renewable energy policies through providing a reliable analysis on the potential of renewable energy to contribute to green growth in the EAC.
- The project could also propose an implementation plan, which would address key barriers and identify options and sources for investment. In addition to a country based approach, the project would also analyze the potential for cross border and regional cooperation on renewable energy and green growth.

b. Work Activities

A potential project could be composed of two phases: Phase I for scoping and pilot survey (to be conducted in 2013); and Phase II for the main analysis on renewable energy resources in the EAC (to be conducted in 2014-2015).

Phase I scoping project would comprise: (1) an analytical background study on renewable energy resources and relevant policies in the EAC; (2) technical assistance to one pilot renewable energy

resource; (3) development of detailed work plan for other renewable energy resources survey to be conducted during the Phase II.

- *Component 1: Background study and policy recommendation:* The background study will focus on a descriptive assessment of the state of play of each renewable energy resource in the EAC. It consists of an in-depth analysis and reviews on the existing documents and database produced by the EAC partner states and various international organizations. A compilation of existing data will be also conducted to check the consistency among different sources of information. A regional action platform for efficient and coherent renewable energy resource exploitation such as Integrated Renewable Energy Resources Management System will be discussed on the basis of this assessment.
- *Component 2: Analysis on the pilot renewable energy resource:* The project will provide technical assistance for a pilot renewable energy. The analysis will be conducted about one renewable energy resource which will be selected during the initial stage of the project in a participatory way. The potential candidate resources include: hydropower, bioenergy, geothermal energy, ocean energy, solar energy and wind energy, among which the geothermal energy is the most probable one considering its numerous advantages over the other sources.
- *Component 3: Preparation of the Phase II:* A detailed scope for the Phase II will be finalized through Component 3. Experiences and knowledge acquired in partner states during the Component 2 work will be reflected into the detailed work plan of the Phase II project dedicated on other renewable energy resources.

c. Budget and Partners

The indicative budget for Phase I is estimated to be \$1.0 million over the 12 month period. GGGI would contribute \$200,000 as seed money. The project would then need to leverage additional funding support, potentially from the International Renewable Energy Agency (IRENA) which has the mission to promote the widespread and increased adoption and the sustainable use of all forms of renewable energy worldwide.

In terms of the project implementation structure in the EAC, the project would support the Regional Renewable Energy Efficiency and Conservation Centre in planning as a center of excellence for energy conservation and energy efficiency in the region. The steering committee of the project would include also representatives of each partner states from ministries in charge for energy and natural resources, such as Ministry of Energy and Mines (Burundi); Ministry of Energy (Kenya); Ministry of Infrastructure (Rwanda); Ministry of Energy & Minerals (Tanzania); and Ministry of Energy & Mineral Development (Uganda).

4. Mekong – \$ 0.5 million

Based on the results of the Phase I scoping work to be concluded this spring, the Institute could explore the possibility of expanding its activities in a Phase II as elaborated below:

- To establish a comprehensive basin-wide master plan in the Mekong River Basin, specifically focusing on the water sector, taking into account industrial demands and supply with an economic analysis, disaster resilience and management, public-private cooperation, etc.;
- To implement proposed policy options suggested by the preliminary bi-lateral projects between GGGI and each selected National Mekong Committee during the Phase I;
- To find a linkage between existing priority projects of each partner government and GGGI's Water Program, then support them to be conducted (e.g. Potential areas for cooperation with Lao PDR: strengthening of water resource procedures and guidelines; establishment of Lao National Basin Information System; Provide the benefits of hydropower development from the perspective of social, economic and environmental aspect with presence of climate change in Lao PDR, etc.);
- Hold high-level consultation workshops or a council meeting at national and regional level.

The ultimate outcome of the project will be a comprehensive green growth framework for policies and practical activities for sustainable water resources management in the Mekong River Basin, which could be applied to the strategies and action plans of the Mekong River Commission and each National Mekong Committee to be implemented. While preparing the green growth framework, roadmap, priority activities, etc., the project will harvest low hanging fruits and materialize immediate opportunities for implementation of green growth activities by supporting existing program or projects prepared by each National Mekong Committee. During the year of 2013, GGGI estimates its budget for Mekong Initiative to be \$1,250,000.

5. Mexico – \$0.7 million

We have been exploring potential areas of collaboration with the Mexican Government, through the National Institute of Ecology and Climate Change (INECC). As a result of this communication, we have identified two projects that could be jointly developed by GGGI and INECC in the short term:

- a. *Green growth planning at the sub-national (state) level, and*
- b. *Green growth innovation strategy and implementation in key sectors*

a. Sub-national Green Growth Planning

Mexico has made significant progress at the national level in terms of climate change mitigation and low-emissions development planning, and is now interested in advancing green growth planning at the state level. Action at the state level is important because many of the levers available for GHG mitigation and resource productivity are within the jurisdiction of state and municipal governments, such as public transportation, waste, water and wastewater management, building codes, and land use planning and zoning. We anticipate developing plans for 1-3 representative states that can be later replicated across Mexico or other sub-national jurisdictions in other Latin American countries.

b. Green Growth Innovation

GGGI will support INECC, in coordination with other relevant government entities, in the development of a national innovation plan tailored to green growth. This effort will attempt to answer the following questions:

- What policies of institutional support and human development, among others, can the government pursue to promote a robust innovation eco-system supporting green growth (and broader innovation)?
- What innovation programs and funding levels, should the government provide to increase the size and effectiveness of green growth innovation activities?
- In what specific technological and business innovation areas should the government focus its policies and programs, and how should it distribute its funding across the various options?
- What available technologies are not being adopted and could result in cost-effective ways to achieve a greener growth? What are the barriers to adoption?

6. Peru (water) – \$0.4 million

GGGI has been in communication with the Water Resource Group (WRG) to explore synergies and opportunities for collaboration in green growth planning in the water sector. Communications are underway that will lead to the preparation of a more detailed plan of action and the signing of an MOU specifying the commitments of each organization.

WRG has identified Peru as one of its focus countries and has conducted a scoping mission to the country. A WRG project in Peru could have synergies with ongoing GGGI work in the Peruvian forest sector. It is anticipated that a joint project in Peru could include an economic analysis of the benefits of water for various sectors (which is important due to conflicts arising from different users) and the development of economic tools (e.g. a marginal cost curve for water initiatives) for the use of decision-makers. This work would be conducted in coordination with other international agencies (e.g. IADB) involved in water sector work to identify complementary areas, and will help create a platform for public-private dialogue.

7. South America Amazon Basin – \$0.5 million

In 2012, GGGI funded the preparation of a report on Supporting South America's Green Growth Economy, in response to a request from the 2011 Pro Tempore President of UNASUR. As part of this effort, an analysis of opportunities for national, regional and international action to support the development of the green economy across South America's twelve independent nations was conducted, identifying the priority areas of forests and renewable energy. A supplement to this report was then prepared recommending: (1) develop a financing scheme to unlock pledged international climate finance, modeled after the Payment for Ecosystem Services (PES) agreements successfully implemented by Guyana and Brazil with Norway, and; (2) identify priority green growth investments to deliver GHG mitigation and other green growth objectives, to be partly funded with the proceeds of the PES scheme.

In 2013 GGGI intends to engage with 2 South American countries (e.g. Colombia, Peru, Suriname and/or Paraguay) and Annex I countries (tentatively Norway, Germany and Australia), interested in exploring an international agreement for the establishment of a PES scheme. This effort would consist of two main elements:

- Supporting the development of green growth plans in participating South American countries that (1) lay out a national strategy for the multi-sectorial transition to a green economy, (2) support the preparation of the JCN via quantitative analyses; (3) fulfill conditions of the JCN, as necessary; and (4) develop a green growth investment plan and identify funding sources, including international funds from the PES mechanisms.
- Supporting participating countries in the development of a partnership with Annex I countries for green growth financing via a PES mechanism, including:
 - (1) Development of an MOU establishing the principles for an international agreement and the intended commitments by each country
 - (2) Development of a Joint Concept Note (JCN) that specifies terms and conditions of a binding financing arrangement

8. South Africa – \$0.6 million

GGGI has conducted a scoping exercise in 2012 to identify areas of potential collaboration with the Government of South Africa on green growth planning. The scoping exercise was concluded in December 2012. The main recommendations were to start designing a project in Q1 according to the following principles:

- *Work Closely with the Task Force.* Focus the support on the on-going activities of the Government of South Africa's, inter-departmental Task Force on Green Growth that includes the Department of Trade and Industry, the National Treasury and the Department of Trade and Industry.

- *Focus on the issue of Competitiveness.* The competitiveness issue is relevant across the whole of South Africa's economy. However, it is especially contentious in the mining sector and for the energy intensive corporates, such as Sasol, both because of their high level of take off from the grid, and (in the case of mining) their importance to South Africa's export earnings (circa 60%). Greening South Africa's energy system and improving energy efficiency across what is currently a carbon-intensive energy system are the two most significant green growth pathways. What is preventing such a shift is the fear of a loss of economic competitiveness, and the resulting stranding of billions of dollars of what are current productive if carbon-intensive assets, with associated employment and livelihood effects. Despite the availability of government programs to support, for example, energy efficiency measures, a more robust approach requires greater clarity and consensus on competitiveness impacts.
- *Involve local stakeholders in the analysis.* GGGI will undertake this work in close cooperation with the relevant government stakeholders and by drawing on its internal expertise and relevant international associates and contractors. The mobilized team would include South African-based researcher(s), the selection of which would be made in discussion with the Task Force

The project, which will be designed and launched in Q1, will be the first phase in a wider, longer-term work stream exploring the impact of greening the energy system on South Africa's international competitiveness. We aim at establishing a long-term in-country engagement, driven by focused, value adding work streams. To secure the right balance between these two time horizons and approaches, the Institute will drive the former through dedicated, internal senior leadership, whilst addressing specific technical work by drawing in the best people available internationally. A more detailed programming of the work will be undertaken, and a full proposal developed in close cooperation with the Task Force in January 2013.

Green Growth Research Program

1. Green Growth Modeling and Methodology – \$0.9 million

Green Growth Modeling (GGM) initiative aims to enhance GGGI's in-house capacity and improve green growth planning by establishing an in-house capacity for green growth analysis and modeling and developing an integrated modeling system for green growth planning. To this end, it will enter into a partnership with the World Bank to establish an open source platform to enhance worldwide access to and the continuous peer-review and refinement of various green growth modeling tools. In 2012, GGGI launched the software of LEAP and cooperation with leading research institutes, particularly with Stockholm Environment Institute (SEI) who will provide technical capacity related to the LEAP and WEAP models. The major functions for Green Growth Modeling in 2013 include;

- Launch and management of an Open Source Platform for green growth analysis and modeling in partnership with the World Bank: Long range Energy Alternatives Planning System (LEAP), Water Evaluation And Planning system (WEAP), and a global-scale assessment model;
- Development of an integrated modeling system for green growth planning: Preliminary studies to develop integrated methodology for the 'LEAP-Macro' model and modular structure for green growth modeling system; and
- Development and management of models and tools related materials and activities to enhance GGGI's in-house analytical capacity for green growth planning and assessment: Develop modeling analysis user guide, training programs, and country datasets for project countries

In order to provide the necessary immediate tools to analyze and develop quality contents, GGM will conduct survey for required tools and models for GGGI country programs. Moreover, GGM will conduct training workshops in cooperation with developers of the tools and models to take forward GGGI's in-house analytical capacity on green growth planning.

Most of developing countries have a difficulty in developing their own development plans & strategies, mainly due to the lack of analytical capabilities and tools/models for planning. Green Growth Planning methodology project, directly contribute to support the development of low-income countries in a sustainable manner by developing methodological framework for green growth planning and analysis, and developing measures for monitoring green growth performance and evaluating programs/projects.

GGP methodology has the following general objectives:

- Developing a methodological framework for green growth planning and analysis to advancing green growth planning and implementation
- Expanding GGGI's partnerships with leading research institutes to share knowledge and develop methodologies for green growth planning
- Developing measures for monitoring green growth performance and evaluation programs/projects

To achieve a successful outcome of GGP methodology, the following activities may be executed through the budget allocated based on management review and approval:

a. Green Growth Analysis

- Publish **Green Growth Planning (GGP) Handbook Series**; Energy & mitigation (SEI), climate & adaptation, natural capital management (Columbia University) and methodology
- Draft a reference paper on **growth analysis**; TFP, industrial competitiveness analysis, green industry & job
- Draft a concept note on green **fiscal analysis**; Green tax/fiscal reform, national wealth accounting

b. Green Growth Indicators

- Develop **GGGI sets of indicators**; revise diagnostic indicators, green growth planning (GGP) indicators, and monitoring and evaluation indicator structure
- Publish a **GGGI Indicator report**
- Draft a paper and attend international conferences on **joint paper with OECD, UNEP and WB** on Green Economy/Green Growth Indicators
- Draft a concept notes on the **development policy making and information needs**- uses and roles of indicators

c. Green Growth Assessment

- Draft concept notes on incorporating **environment assessments (EIA. SEA. SA)** into green growth planning process
- Develop a framework for the '**Green Assessment System**'.

To ensure significant and productive research results regarding methodological framework and measurement to monitor green growth performance and planning programs/projects, involvement from experts of leading research institutions, such as Stockholm Environment Institute (SEI), US DOE's Pacific Northeast National Laboratory (PNNL), and the Earth Institute of Columbia University, will be sought. This research collaboration will be in the

form of participation by affiliated experts in drafting research papers, workshops and other related activities of the research work.

2. Green Growth Best Practice Initiative (GGBP) – \$0.86 million

The Green Growth Best Practice initiative aims to synthesize experiences about green growth planning and implementation from around the world, ensure learnings are taken up in key communities of practice, and ultimately improve Green Growth policy making around the world.

In 2012 GGGI has taken key steps to setup an assessment process that enables experienced green growth practitioners to jointly review and synthesize lessons learnt. Key progress includes:

- Developed a comprehensive Project Plan that was welcomed and approved by the Steering Committee of the GGBP.
- Raised co-funding for the implementation of the project from, the European Climate Foundation, the Climate and Development Knowledge Network, and the International Climate Initiative of the Federal Ministry for Nature Conservation and Nuclear Safety of Germany.
- Appointed the GGBP Project Team.
- Consulted 100+ Green Growth practitioners to define topics for the GGBP assessment.
- Developed partnerships with 20+ development and environment cooperation organizations that will support the GGBP with data, case studies and in outreach activities.
- Selected authors to lead the development of the content.

In 2013 the GGBP team will fill this process with life. In three workstreams 50+ authors will produce an assessment report of approximately 200 pages that summarizes lessons in key topic areas. Additionally to ensure the relevance of findings the content of the report will be re-packaged into tailored products for crucial audiences and presented at policy dialogues.

a. GGBP Assessment

Between Jan 2013 and Nov 2013 nine author teams will assess practices in green growth planning and implementation. Ecofys, ECN and the GGGI project office will each coordinate joint writing in the following workstreams.

- **Planning and Coordination:** focused on planning and facilitation of green growth policy making the workstream will provide insights such as: how to engage multiple stakeholders into policy making, how monitoring and evaluation facilitates institutional learning, and how to scale up sub-national activities on the national level.
- **Analysis and Framing:** the goal of the workstream is to review analytical tools and identify those most effectively used in different national circumstances. What are methodologies used to evaluate the potential for job creation? How to evaluate and decide between different

technological pathways? What are effective tools to define baselines and goals?

- Policies and Programs: focused on policymakers and their advisors the workstream will identify best practice for different policy and programme packages: What are cross-sectoral policy tools most effectively implemented? How can the public sector secure private sector leadership? What role does public finance and policy making have in financing the transition to the green economy?

b. Targeted Outreach to Key Audiences

As of May 2013 the GGBP will share early results with the wider community of practice to ensure the relevance of the assessment and get broad buy in for its results.

- Policy Dialogues: Taking advantage of ongoing activities of partners the GGBP will consult with practitioners, especially from developing countries. The GGBP will present draft results for example at the GGKP annual conference, the LEADS Global Partnership's regional workshops, establish cooperation with the AfDB, and many more.
- Tailored Products: The synthesis report summarizing all learnings of the assessment is the main output of the GGBP. Together with an editor, the GGBP project office will take the content and tailor products to key audiences. For example policy briefing papers, videos or training material will focus on key multipliers to enhance the impact of the report.

Key Project Partners include the following: Climate and Development Knowledge Network (CDKN), Children Investment Fund Foundation (CIFF), ClimateWorks Foundation/European Climate Foundation (ECF), Global Green Growth Institute (GGGI), Organization for Economic Cooperation and Development (OECD), United Nations Development Program (UNDP), United Nations Environment Program (UNEP), World Bank, and will be implemented as an 'affiliated program' of the GGKP. The GGBP aims to foster learning and improve green growth planning by establishing an assessment process to identify best practices in support of green growth policy planning and implementation.

3. Green Growth Knowledge Platform – \$0.6 million

The Green Growth Knowledge Platform (GGKP) is a partnership between the World Bank, OECD, UNEP and GGGI. Through fostering broad consultation and facilitating world-class research, GGKP aims to provide practitioners and policymakers with better tools to embrace green growth, thereby helping countries to design and implement policies for a transition to a balanced and inclusive green economy.

Following the recruitment of a Secretariat Manager earlier in 2012, the GGKP will now move forward quickly on launching the GGKP IT Platform and initial research programs (on Green Growth Metrics and Indicators, Trade and Innovation).

The Swiss Government has recently made a generous offer to host the GGKP Secretariat in Geneva and provide substantial funding. This will contribute to the pursuit of GGKP's ambitious 2013-2015 strategy although a further fundraising effort is still required. GGGI's contribution in 2013 is crucial both in terms of upfront funding and in-kind resources in order to get the GGKP off the ground. (Swiss funding will largely be used to fund additional resource for the Secretariat from Q3/4 2013).

GGGI's contribution will be used as up front funding, primarily to facilitate the launch of an IT platform. GGGI will contract with external IT consultants in order to develop and maintain a Platform with functionality including; a database of green growth projects, a global library of technical and policy resources from leading institutions and experts, a repository of green growth tools and data, a comprehensive synthesis of existing knowledge and data, an expert response / knowledge brokering mechanism.

GGKP will also hold its second annual conference, hosted by the OECD in April 2013. This will be an opportunity to showcase the first joint research project under the GGKP on Green Growth Indicators and Metrics. In addition to identifying key gaps to be addressed in 2013 -2014.

GGGI will also dedicate 75% Program Manager time primarily to lead the Knowledge Management strand of the GGKP and oversee the launch of the Platform. GGGI will continue to engage at senior level through the GGKP Council and to share responsibility for the Secretariat with UNEP.

4. New Industrial Revolution – \$1.16 million

Funding for the second phase of the research cooperation with Grantham Research Institute – London School of Economics

In the first phase of the program, a number of leading researchers from top institutions from developing and developed countries were consulted in the scoping phase to further explore research questions and develop a project plan for each research topic. Strong key hires were also made for each of the 4 projects.

In addition, 10 top global economists have been approached to write papers on green growth and the new industrial revolution. The papers are expected by June 2013

This second phase of the project in 2013 will continue to see progress on the four interconnected research projects on the following topics constitute the core of the programme:

- Macroeconomics and green growth: the interaction of business cycles, macroeconomic imbalances and green growth, and the implications for job creation and poverty reductions, and other key macroeconomic variables

- Evidence from the impact of innovation policies to promote the diffusion of low-carbon and ‘green’ technology solutions: the impact will be assessed on both environmental outcomes and economic variables such as employment, investment and productivity growth
- Evidence from economic history about the sources of growth and the role of policy during past waves of innovation: it will investigate both the potential for innovation spillovers on overall growth, as well as the performance of public policies to overcome market failures and unleash growth
- Growth and adaptation to climate change: how adapting to climate change will affect growth in the longer run, with particular reference to less developed economies and impact on poverty and inequality

GRI will also pursue a dissemination and communication strategy building on the London School of Economics and GRI’s established track record, leveraging existing channels and exploring new potential formats (blogs, web portals, open-source platforms, etc.). The programme includes an inaugural conference in 2013 building on the high-level papers commissioned, a series of working papers for each research topic, which would be submitted to top journals, a series of workshops for each research topic and a large academic research conference at the end of the programme. All of the above are going to be developed with GGGI and co-branded GGGI/LSE-GRI.

The overall funding will also support 50% Program Manager’s time within GGGI to oversee coordination across the program and with GGGI colleagues. This will ensure that GGGI can most effectively benefit from the project outputs and from ongoing engagement with the GRI team.

5. Resource Efficiency – \$0.75 million

There is an opportunity for GGGI to help catalyze a shift to a more resource-efficient growth path by addressing core information failures. Many countries (particularly developing countries) lack information on (1) the value at stake from these resource trends (including the resource productivity potential); and (2) the most important resource productivity opportunities available to the country to mitigate these risks and capture the upside. There is an opportunity to improve significantly access to relevant information by developing a set of natural resource indicators that have the power to influence policy makers’ behaviors and decisions, as well as investment decisions by the private sector.

GGGI is scoping a research collaboration beginning in 2013 focused on identifying and quantifying ‘game-changer’ indicators related to resource efficiency and productivity, initially in some key countries where GGGI or its partners have deep expertise. The program could unfold in phases: Phase 0 will involve a series of discussions with global investors to understand what

indicators would be most powerful to influence decision-making. Phase 1, covering 12 months, would be the “proof of concept”, involving a first high-level assessment of the resource productivity opportunity for 6-8 countries where GGGI or its partners have deep expertise. This phase would define a set of potential indicators (building on the insights of Phase 0) and an action plan to support the necessary data gathering. Phase 2 would involve gathering the necessary data to support regular monitoring of the chosen indicators, and to support the integration of the indicators into government and investor decision-making. The final phase, Phase 3, which could be parallel to phase 2, would involve developing a global index on resource productivity, which similar to other indices such as the World Bank Doing Business index, could be used to create transparency on resource productivity performance across countries and help to spur action.

GGGI will need the support of other institutions to successfully implement this initiative, and roles for key partner organizations such as the World Resources Institute are under consideration.

6. Sustainable Energy Trade – \$0.2 million

In 2012, GGGI engaged in a research partnership with the Peterson Institute for International Economics and International Center for Trade and Sustainable Development for the purpose of examining the key policy issues and options relevant to the establishment of a preferential trading arrangement for certain renewable energy products and services. The volume will be published by the three institutes in the winter of 2013, and there is already considerable interest in it within the intergovernmental and international business communities. The budgeted funds are intended to support follow-up research into topics that the volume did not fully explore but which the policymaking community has an interest as well as to support dissemination and discussion in the trade policy, civil society and expert communities.

7. Green Growth Innovation and Technology Diffusion in Developing Countries – \$0.4 million

In 2012, GGGI conducted a successful research partnership with the Brookings Institution to assess the state of international cooperation in support of green growth innovation, research and development in the developing world, and propose options for an international research, development and dissemination (RD&D) architecture that would scale up reach and impact.

In 2013, GGGI plans to expand on this work with a particular focus on the four potential areas our first phase of research suggested would offer the most likely value for a renewed international initiative to support green growth innovation in developing countries:

- A program to catalyze capacity building to develop innovation ecosystems in least developed countries;

- Significantly scaled-up investment via competitive grants to fund R&D in least developed countries, which would build networks and capacity while yielding innovation results;
- Investment in networks of business incubators to spur entrepreneurship and link innovation to market demand and financing opportunities;
- Dedicated funds to de-risk entrepreneurial investments and stimulate the sharing of intellectual property.

8. GGGI-UNIDO Joint Project “Impact of Green Industrial Investment on Employment” – \$0.4 million⁴

The purpose of this research project is to examine the relationship between green industrial investment and global employment generation: whether current ‘green growth’ efforts towards low-carbon resource-efficient industrial development will lead to the sustained generation of new jobs.

During the period from July 2012 to October 2013, among the whole Project period, the joint research between GGGI and UNIDO will examine current worldwide ‘green’ technological trends in five selected countries (Brazil, Germany, Indonesia, South Africa and South Korea) and discuss what constitutes green investments and green jobs, how can they be identified in the context of developing countries and through which mechanism they have an impact on employment. The key questions addressed in the joint Research Project are:

- Will current ‘green growth’ efforts towards low-carbon resource-efficient industrial development lead to the sustained generation of new jobs?
- How to build a green global economy that is also a high-productivity economy?
- Through which paths will the building of a green economy also create an abundance of decent employment opportunities

Moreover, specific research questions will also be directed to the selected countries (Brazil, Germany, Indonesia, South Africa and South Korea) for this research project. The overall scope of the study will, in the final instance, depend on data availability and the extent of resources dedicated to collecting data in those countries where data is not accessible internationally. Presentation of the Research findings to the representatives of the stakeholders will be in November 2013.

⁴ Dec. 19th 2012 exchange rate of EUR130,000 from www.oanda.com

9. South Africa/BRICS New Development Bank – \$0.14 million

GGGI is part of an on-going collaboration with the G24 in exploring the possibility of the formation of a new BRICS-lead financial institution, the findings of which are to be presented in March 2013.

GGGI's specific mandate is to look at the role in which a new institution may be able to close the current infrastructure funding gap faced in the developing and emerging world by absorbing part of the up-front risk and finance key bottlenecks in the project pipeline. The main deliverable is a comprehensive report based on a series of papers providing analytical background on a number of key topics.

The specific objectives of the project are:

- To explore how a potential new institution could contribute to reduce and absorb part of the up-front risk, finance key bottlenecks in the project pipeline, and generate sufficient knowledge and reputation through scale.
- To explore what new financial instruments will be needed to supply investment flows in early stages and unlock investment opportunities in later stages.
- To support the government of South Africa in the syndication needed to closely involve the private sector and other public institutions, such as development banks and sovereign wealth funds.

GGGI will have overall responsibility for the project workplan – responsible for ensuring that the papers are delivered within the agreed upon period. The overall budget for the program is mainly driven by personnel costs, subcontracts / outsourcing of some of the work to content experts and travel to present findings to stakeholders.

10. Green Growth International Academic Journal – \$0.25 million

In 2013, GGGI plans to scope the establishment of an international journal focusing on green growth-related theoretical, empirical and policy research, building on the Green Growth Knowledge Platform's and LSE New Industrial Revolution project's networks and institutional relationships.

11. Social Inclusion and Poverty Reduction Aspects of Green Growth – \$0.3 million

In 2013, GGGI plans to scope a new, ongoing body of research to improve understanding of the nature and potential responses to distributional aspects of green growth economic transformations, focusing in particular on employment and poverty reduction challenges and opportunities.

12. Finance: G20 and other – \$0.3 million

In 2012, GGGI co-organized a G20 Development Working Group workshop in Seoul which had an important influence on the agenda and deliverables set by the group. As a result, GGGI and the IFC have been asked to provide analytical support to the G20 Development Working Group's green growth activity in 2013, whose scope is still being determined but will include work on financing for poor country green growth strategies. In addition, it is possible that GGGI will be called upon to provide some technical input into the process for setting up the UN Global Climate Fund, which will be headquartered in the Republic of Korea.

13. Research Management and Internal Capacity Building – \$0.6 million

In order to strengthen GGGI's research portfolio management and its relations with and influence on other leading centers of green growth research, recruitment of a research director or equivalent and two additional sectoral experts is planned.

Public-Private Cooperation

1. Public-Private Cooperation

a. Public-Private Partnerships – \$0.5 million

GGGI in 2012 developed two PPPs on (1) Development and up-take of global industrial energy efficiency indicators (motor-systems) with UNIDO, IEA and IPEEC, and (2) Power System Transformation with NREL/CEM. Both of these PPPs were launched at 3GF2012. On both these PPPs a detailed implementation and outreach work program with milestones will be developed in 2013.

In 2013 the 2-3 new GGGI-led PPPs will be scoped. Two initial opportunities have been identified on Resource Efficiency Indicators and Energy Efficiency & Buildings. These opportunities build on the ongoing collaboration with the UNIDO and consultations with a.o. the Global Buildings Performance Network (GBPN). Both opportunities will be global PPPs and represent great resource efficiency gains and green-growth potentials. GGGI will seek to advance and focus on the particular relevance of these PPPs for developing countries – which in return is partly is accommodated in the initial suggestions for key partners (the UNIDO and GBPN).

As for a 3rd. PPP, the CPH Office should be able to pursue relevant and new PPP emerging during 2013 in ongoing dialogues with private sector partners, the 3GF steering committee and other international public and private partners to GGGI.

b. Public-Private Cooperation program development and management – \$0.8 million

The broader outreach activities towards private sector engagement in the green-growth agenda and potential partnerships with GGGI (beside the 3GF associated PPP work) has partly been undertaken out of the CPH Office, partly out of Seoul. The outreach activities and private sector contacts has mainly been pursued in relation to 3GF2012 with particular focus on existing private sector partners to GGGI and potential new partners interested in supporting GGGI's strategic vision in general and its PPC and Research work in particular. This has stimulated some very interesting contacts both in relation to financing of GGP-implementation, but also on enhanced engagement of the private sector at 3GF, and discussions are underway to create a community of partner companies. These relationships and content and value proposition underlying them will be developed further during 2013, in part by building the team out from its current, limited state.

c. Global Green Growth Forum (3GF) – \$0.9 million

The Global Green Growth Forum (3GF) enjoys the partnership of Denmark, Mexico, Rep. of Korea, China, Qatar and Kenya – with the 3GF secretariat hosted at the Danish Ministry of Foreign Affairs in Copenhagen. The 3GF is building new longer-term strategy to be adopted early January 2013 covering the period 2013-2016. The GGGI-3GF partnership will be renewed and updated in the light of this new 3GF strategy. The 3GF has participation from countries/ministers, CEOs, researchers and civil society organization totaling around 280 participants with 50-50 balance between developed and developing countries' representatives.

The 3GF constitutes a unique opportunity on the international scene for GGGI to both present its results and outcomes in all areas of the GGGI delivery model (in-country GGP&I, R&D and PPP) as well as to build new and enhanced partnerships with countries and private sector partners and investors in support of GGGI's work.

As for the past two 3GF (2011 & 2012) the GGGI has provided strategic guidance and design input for the 3GF, as well as leadership in the development and facilitation of concrete PPP strategy sessions. The GGGI related 3GF activities includes liaison with the 3GF secretariat, participation in 3GF steering committee meetings, facilitation of PPP development with PPP/strategy session owners (like a.o City of Copenhagen, the IISD, Novozymes, UNIDO, Institute for Industrial Productivity) and overall design and strategic input, as well as analytical support.

In return, the 3GF has provided new opportunities for GGGI to present its ongoing projects and outcomes as well as gain opportunities for new private sector partnerships – particular in relation to GGP&I and R&D.

The GGGI-3GF partnership should continue and be enhanced during 2013 with targeted engagement of the CPH Office. A **GGGI PPC strategy** will be developed to embrace the PPP, 3GF-GGGI partnership and PPC outreach work of GGGI. The strategy should also clarify the work division between primarily CPH and Seoul on these activities and identify key public and private sector partners for GGGI engagement, as well as outline the 3GF platform in relation to other international green growth related platforms. This will in return help shape and prioritize GGGI's objectives and profile on other international green growth related fora.

It will be a priority for a new Assistant DG to have such a strategy developed and adopted during Q1-Q2 of 2013.

d. Green Growth and Cities – \$0.25 million

Due to the proximity to City of Copenhagen leading the C40 green growth network, and in conjunction with the first city-session at 3GF2012, the CPH Office in launched a study with the

LSE/ICLEI/The Climate Centre on green growth and cities compiling green-growth best-practice solutions from cities around the world for 3GF2012.

The CPH Office will take GGGI's engagement in the urbanisation and green growth agenda to the next level by developing a **GGGI green growth cities' strategy and work-program**. The strategy may be in support of the C40 green growth network's program but may also include smart-cities development, adaptation cost-curves for cities and green growth opportunities, city planning and transportation or more local/bottom-up approaches to green-growth in cities. The strategy will focus on best-practice solutions and north-south city partnerships, and will pay special attention to the development of generic instruments and analysis that can feed into the GGP&I work conducted in GGGI partner countries.

e. Finance and Technology: Private Sector Engagement in GGP Implementation – \$0.6 million

A top priority for GGGI's PPC program is to stimulate private sector engagement in the implementation of governments' green growth strategies through the scaled application of the most appropriate sources of finance and technology. In 2013, GGGI plans to initiate its research and facilitation in this area, building upon its current work in supporting the G20 Development Working Group's Public-Private Dialogue Platform on Green Investment, the BRICS' new sustainable infrastructure development bank and making itself available to respond to potential requests for cooperation or assistance from the new Green Climate Fund that will be headquartered in nearby Songdo, Incheon, Republic of Korea.

f. World Economic Forum/G20 Green Growth Action Alliance – \$0.25 million

In early 2011, GGGI entered into a two-year partnership with the World Economic Forum to support cooperation between the new Institute and the Forum's climate change and water initiatives. The partnership was useful in leveraging GGGI's then-limited capacity to build the program of 3GF, help shape the green growth track of the B20, engage in the Friends of Rio+20 initiative at the UN Rio+20 conference and beyond, and engage in the Water Resources Group partnership as it converted from a Forum initiative to a broader partnership with intergovernmental participation. The Forum coordinates and GGGI is a board member of the G20 Green Growth Action Alliance (G2A2) initiative launched at the Los Cabos G20 Summit and for which President Calderson serves as chair. GGGI plans to consider renewing the partnership in 2013 subject to discussions on a revised terms of reference related in part to the G2A2's planned activities.

2. GGGI Copenhagen Office – \$0.3 million

The following program components and project activities will be developed and managed out of the GGGI Copenhagen Office (CPH) in 2013 in line with the GGGI “delivery model” consisting of (1) in-country analysis and green-growth planning and implementation (GGP&I), (2) research and development (R&D) and (3) public-private cooperation (PPC).

The CPH Office is mainly focused on PPC and PPP work but conducts a few research related activities as well. The CPH Office will in its development and scoping of all its activities focus on developing countries’ relevance in line with ODA eligibility criteria. As for PPC/PPP activities this is suggested framed in a new PPC (&PPP) strategy to be developed in 2013.

a. Green Growth Best Practices from Denmark

Being one of the leading countries in proving that green and growth is possible in different areas of the Danish economy, the CPH Office has in 2012 worked with the Low Carbon Transition Unit at the Danish Energy Agency and developed a best-practice (“toolbox”) publication on policies & measures in the wind power sector in Denmark. The overall objective of this toolbox series of publications is to derive generic best-practice experiences (and lessons-learned) from Denmark and to be used by developing and emerging economies facing similar opportunities and barriers.

The CPH Office will continue to support this work by supporting additional “toolbox” publications within the energy sector in Denmark (most probably energy efficiency and combined heat and power – CHP) and potentially also look to broaden the scope to other sectors of the economy and look at experiences from the Northern European countries.

The collaboration with the LCTU at the DEA additionally offers an opportunity for GGGI to make use of the latest NAMA and LCDs baseline methodologies qua the LCTUs engagement in this work within various for attached to the UNFCCC regime (a.o. the OECD expert group on baseline setting). These methodologies will be highly relevant should GGGI seek closer collaboration with the financing instruments at the GCF now located in Korea.

b. EU-China Water Partnership

Denmark is leading the EU-China water partnership at the Danish Ministry of Environment. China wants to adopt the EU water framework directive. The Danish Minister for Environment has expressed interest in GGGI’s involvement in implementation of this strategic water partnership. The CPH Office will during 2013 pursue and elaborate the potential role of GGGI in this comprehensive water partnership. It provides an opportunity to enhance the on-going GGGI work in China as well as constitute China’s 3GF partnership.

c. Green procurement and green growth

The CPH Office has during 2012 conducted a dialogue with the International Institute for Sustainable Development (IISD) on development of a program on green procurement as part of green growth planning in GGGI partner countries. The basic logic is that green public (and private) procurement at a certain “tipping point” volume will spur green jobs and innovation. The IISD is at the moment doing a “test case” on capacity building on green procurement in the UAE that could emerge into a strategic MOU with GGGI on inclusion of green procurement as part of GGP&I. The CPH Office will continue its engagement in building a generic capacity building package with the IISD around the very strong instrument of green public and private procurement.

d. Private sector engagement on green growth in Mexico

The GGGI CPH office will develop a package with suggestions for private sector engagement in green growth programs/projects in Mexico.

e. New office and partnership opportunities

- **UN City:** By spring 2013 the Copenhagen Office will move its new premises to the UN City in Copenhagen. The UN City will host 7 UN institutions based in Copenhagen (see: <http://un.dk/en/node/16>). The UN City will most probably host the Energy Efficiency secretariat of the UNSG’s initiative on Sustainable Energy for All (SE4All) and the Climate Technology Centre and Network (CTCN) led by UNEP.

The CPH Office will during 2013 be the natural anchor for GGGI liaison, development and engagement with these UN institutions and initiatives, in particular the **SE4All and the CTCN**.

- **Administration and set-up:** With new location, staff expansion and IO-administrative challenges the CPH office will strengthen its management of the office with a full time office manager to undertake day-to-day administrative tasks and liaison with GGGI HQ on these matters. External support and advice on recruitment, IO-conversion and salary administration and tax-payments and employers’ contribution will also be needed for the CPH Office. In addition, assistance to the new Chairman of the Council will for 50% be conducted out of the CPH Office. A new recruit for this position is expected by January/February 2013.

Projected Head Count – Copenhagen Office – 2013

1. PPP & PPC	2-3 employees
2. R&D	1 employee (and 1 consultancy contract)
3. Cities program	1 employee
4. SE4All, CTC&N	1 employee
5. 3GF incl. PPC strategy	1 employee
6. Assistant to the Chairman	½ -1 employee
7. Office manager	1 employee
SUM	7-8 employee

International Cooperation

International Cooperation – \$4 million

The International Cooperation Department (ICD) budget includes governance and Council support, capital raising, donor relations, event planning and management including Council meetings, policy outreach, media and communications, as well as specific follow-up responsibilities in relation to GGGI's conversion into an international organization.

GGGI's 2013 budget request includes approximately:

- \$1.1 million to support Council activities, including Secretariat staff with significant responsibilities to support the Chairman and Council and preparations for upcoming sessions of the Council;
- \$1.1 million for resource mobilization and member relations, including advisory support and follow-up engagements with member countries with regard to the negotiation and approval of international organization privileges and immunities;
- \$0.7 million for the event management team and the funding of travel support for expert participants, particularly from developing countries, in relation to GGGI convenings, international conferences and major policy forums for decision-makers;
- \$0.5 million for the Global Green Growth Summit, GGGI's flagship conference to be held in May/June in Korea, with a likely focus on the future of financing for green growth plan implementation, including the GCF, from the perspective of developing country governments and experts;
- \$0.6 million for media and communications, including production of the GGGI's annual report, upgrading the GGGI's external website to support improved disclosure and transparency.

The primary responsibility in the ICD department is the consistent support of the new governance demands of the GGGI as an international organization, including supporting the Office of the Chairman; preparing for and supporting Council meetings and follow-up; serving as a principle point of contact for Council members; and ensuring that the decisions of the Council are properly recorded and disclosed.

The secondary responsibility of the ICD is establishing and managing relations with external parties including current and prospective donors. For this reason, the major budget item in the

ICD budget following salaries is travel expenses, which are expected to be incurred to meet with donor representatives in their respective countries.

The ICD team also facilitates and manages the Donor Consultative Group, which will hold its first meeting in early 2013 in Seoul, bringing together technical level donor representatives as a way to ensure that GGGI is aware of donor goals and requirements and executes its programs accordingly. The ICD team also has lead responsibility for the development of environmental and social safeguards, which is a specific donor requirement.

The proposed budget for the ICD – which covers governance support, event planning, policy outreach and communications, as well as remaining international organization conversion activities – includes 12 FTEs. Based on experience, this is the minimum number necessary to perform these responsibilities in a consistent and sustainable manner. Each ICD team member has multiple, complementary responsibilities in order to maximize efficiency and minimize costs.

The overall budget proposal is in line with the level projected in the GGGI's strategic plan, except that it includes increased expenditure on the GGGS (which was previously almost entirely financed by the Government of the Republic of Korea under the current administration) and increased support for Council members, particularly representatives from participating countries, in upcoming Council events.

The budget includes mission costs for the seconded senior adviser related to the development and implementation of GGGI's donor consultation and reporting framework. Costs associated with follow-up activities that are required as a result of international conversion, including advisory support for privileges and immunities in GGGI member countries, are also included.

Management and Administration

Management and Administration – \$5.8 million

The budget includes overall management and administrative functions delivered out of the headquarters in Seoul. The total budget envelope is estimated at about \$5.8 million. This includes the following services: Human Resources (\$1,487,655); Information System (\$576,166); Finance, Budget & Procurement (\$1,900,917 including Internal Auditor and ERP related consulting fees); Legal Council (\$544,927); Director General's Office (\$849,758); Office Rental & Maintenance (\$471,979). Through these services, the headquarters in Seoul ensures that GGGI has the necessary administrative policies and procedures, human assets and technical infrastructure in place to deliver its strategic plan objectives in the short, medium and long term.

Strengthening the capacity of the headquarters in Seoul remains the top priority in terms of management and administration in 2013. GGGI needs more focused budget planning, the rollout of results-based management methodologies and tools, the development of a full-fledged internal control system, and regular and systematic monitoring and evaluation practices. In this context, talents will be hired for key positions including a procurement manager, an ERP expert and an internal auditor, all of whom are based in the headquarters in Seoul.

GGGI will also review and rationalize its work flow and related delegation of authorities in line with international benchmarks and best practices to balance control of administrative authorities of the headquarters in Seoul and empowerment of end users across the organization. This prepares for the implementation of an Enterprise Resource Planning system (ERP) to consolidate the administrative management of all financial, human and physical resources under a single integrated system for the entire organization.

The investment required for ERP will be proposed in two steps. The first step focuses on development and documentation of policies and procedures and capacity building for ERP technology and vendor selection. This cost is made of consulting fees estimated at \$340,000 and included in Management and Administration budget. The second step relates to ERP implementation, the cost of which will be further analyzed and proposed at the subsequent Council meetings through a capital budget.

The headquarters in Seoul represents the Director-General on management and administrative matters. In light of this function, the headquarters in Seoul is responsible for maintaining close liaison with host country authorities and donors on all substantive aspects of financial, budgetary, human resources and common support services. These common support services are reflected in Director General's Office and other related functional services budgets.

Satellite Offices

GGGI operates three satellite offices in Abu Dhabi, Copenhagen and London in line with the purposes and activities approved in the context of the 2012 – 2014 Strategic Plan. Information on the administrative aspects of the Abu Dhabi office is included above in the GGP&I UAE section of this document given the central role that it plays in delivering the important UAE green growth planning project. Information on the administrative aspects of the Copenhagen office is included above in the Public-Private Cooperation section of this document given the central role that it plays in delivering GGGI's PPC program. Following is information on the administrative aspects of the London office.

1. Elements of the GGGI-LON plan in 2013

The London office of GGGI plays an integral part to GGGI's global delivery program. Overtime, GGGI-LON's activities will focus on research and on integrating the output of research into GGGI's GGP&I program. In 2013 the office will contribute to GGGI along the following lines:

- (1) Be a hub of GGGI's research program;
- (2) Contribute to GGGI's global GGP&I delivery;
- (3) Contribute to GGGI's public-private cooperation, with a focus on finance.

a. Research

The GGGI-LON Office will, during 2013 and beyond, become an important hub for GGGI's research program. Already in 2012, GGGI-LON has initiated a 2-year collaboration with the London School of Economics – Grantham Research Institute as well as playing a coordinating role in a number of research activities linked to the GGKP and GGBP platforms. Going forward, GGGI-LON will contribute to GGGI's research activities along three interconnected elements:

- *Research cooperation:* GGGI-LON will continue to play a leading role in important research collaborations related with a number of different institutes. The research program with the LSE-GRI will continue to play an key role in this context. During 2013 we expect the delivery of some of the key outputs, such as policy and research papers and international symposia. Furthermore, we expect that the 'eminent economists' papers on green growth, a collection of pieces by a collection of some of the most interesting economists across the developed and developing world, will be finalized. These two sets of papers will constitute not only an important deliverable of the collaboration, but will serve as an important input to shape GGGI's future research agenda. Besides the work with the LSE, GGGI-LON will also lead on other collaborations, such as a planned cooperation with the World Resource

Institute on resource productivity, as well as continuing important cooperation with existing partners (e.g. Brookings, World Bank, UNIDO, TERI, etc).

- *Integrating research outputs into GGP&I projects:* During 2013 GGGI-LON will strengthen its research capabilities to contribute directly to the GGP&I program. First, as indicated in the previous paragraph, GGGI-LON will continue to be a hub of research topics that are highly relevant and to the GGP&I program and will need to be deployed across the different countries. Second, we expect that a number of highly skilled professionals will be joining GGGI in areas that are crucial to strengthen the GGP&I program. In particular we expect that GGGI-LON will be playing an important role in the following areas:
 - (1) macro-economics of green growth;
 - (2) political economy of green growth;
 - (3) project-finance;
 - (4) sector-specific assessment of green-growth opportunities and costs.
- *Green Growth Best Practice network and Green Growth Knowledge Platform:* GGGI-LON will continue to host the Secretariat of the GGBP, and will remain involved in the research topics managed through this program. The first outputs of the GGBP will be delivered in 2013. GGGI-LON will play a key role in ensuring that these are well coordinated both with the rest of GGGI's research program, as well as be made available to relevant GGP&I projects. Furthermore, GGGI-LON will be central to the GGKP Secretariat, its research activities and its affiliated programs. In particular it is expected that GGGI will play an active role in implementing the GGKP-affiliated 'open-source tools' program, in cooperation with the World Bank. The 2nd GGKP conference, planned for April 2013, will offer an important opportunity to take stock of the early research outputs of the Platform and to integrate them into the Institute's activities.

b. Contribution to GGP&I program

GGGI-LON will continue to play an important role in supporting the HQ in delivering the GGP&I program. During 2012, GGGI-LON helped create an important pool of skills which proved to be central to the delivery of the GGP&I program. Much of these resources were deployed directly in the relevant countries, with staff permanently located in Mexico, Ethiopia, Indonesia. Going forward, we expect this trend to continue, as GGGI's model of delivery focuses more and more on deploying skilled personnel in the key GGP&I countries. GGGI-LON will continue to play a role in this sense, by helping to attract highly skilled staff and deploying it 'in-country' and by continuing to manage some country projects. In particular in 2013 we expect GGGI-LON to have a strong link to several country projects in Latin America, Africa and South and East Asia. GGGI-LON will also continue to play an important role in scoping GGP&I programs in this region according to the current strategy of the institute. Additionally, as laid out

in the previous section, we expect that GGGI-LON will be central to ensuring that research outputs, tools, datasets, methods are available and integrated in the GGP&I program.

c. Contribution to PPP and PPC program

GGGI-LON, thanks to its vicinity to the financial markets (including markets related to carbon credits and to sustainability) in the city of London, will be in an advantageous position to play a supporting role to the GGGI-HQ and to GGGI-CPH in the context of public-private cooperation and partnerships. We expect that during 2013 GGGI-LON will develop an increasingly strong network with the London-based finance community, in particular with respect to financing of green growth projects in its partner countries. The focus will be on ensuring that GGGI develops a set of capabilities related to project preparation and project-finance, as often this is a bottleneck in ensuring sufficient private financial flows to projects related to green growth. This work will be important particularly in terms of ensuring that GGGI has the right skills to play a complementary role to both financing mechanisms emerging in some of its GGP&I countries (such as FREDI in Indonesia or CRGE-facility in Ethiopia) as well as in the context of the Green Climate Fund.

2. Administration and setup

As agreed by the Council, GGGI-LON will be moving into its permanent space, Brettenham House, in early 2013. This space will be sufficient to host 20-25 desks and a large meeting space and is located in close proximity to the London School of Economics, to maximize the benefit of the existing research cooperation. This space will be secured, to start with, for 3 years with the option to extend the lease for a further 2 years depending on needs. With new location, staff expansion and IO-administrative challenges, GGGI-LON office has started strengthening its management of the office with a full time office manager and a team assistant to undertake day-to-day administrative tasks and liaison with GGGI HQ and other offices.

Already in 2012, the GGGI temporary office in London relied on external support and advice on recruitment, IO-conversion and salary administration and tax-payments and employers' contribution. This set up, developed in close collaboration with the M&A, Finance and HR departments, will continue in 2013. We expect that, once the full P&I will be agreed with the UK government and the IO-GGGI administration and finance systems will be fully set up, the administrative requirements for GGGI-LON will be managed by a small integrated team in London and Seoul.

In February 2013 a conference on green growth, focused on competitiveness, will be hosted at Chatham House in London in collaboration with GGGI. This conference will be used as an opportunity to inaugurate the London Office.

3. Projected headcount in 2013

Over 2012, GGGI-LON office recruited 12 employees based in London. A further 7 employees were hired to support the GGP&I delivery based in country, strengthening GGGI's local mode of delivery. Going forward, London-based staff will grow only moderately, with a number of new and existing employees moving to key GGP&I countries to strengthen the integration of skills of London-recruited staff in the global GGP&I program, in line with GGGI's strategy. The chart below summarizes the projected growth of the office.

The following principles will guide the hiring strategy for 2013:

- Hiring for country programs will be even more heavily geared toward in-country staff, with local hiring whenever possible;
- Hiring will also continue to be geared toward bringing on professionals with deep green growth analytical expertise as well as a strong track record of delivery – we will look to create a balanced set of team capabilities covering most green growth topics;
- Hiring will also shift more toward project contract staff, allowing greater flexibility to increase or decrease staff levels, and to evaluate potential candidates before making a permanent hire.

