Global Green Growth Institute

Pro-poor, Inclusive Green Growth:
Experience and a New Agenda

iied

green economy coalition

Global Green Growth Institute

Pro-poor, Inclusive Green Growth:
Experience and a New Agenda

iied

green economy coalition

Table of Contents

List of Figures

List of Tables

List of Boxes

List of Abbreviations

ACCA	Asian Coalition for Community Action
BNetzA	Federal Network Agency
BRICS	Brazil, Russia, India, China and South Africa
CSO	civil society organization
FAO	Food and Agriculture Organization
GDP	gross domestic product
GE	green economy
GEC	Green Economy Coalition
GG	green growth
GGGI	Global Green Growth Institute
GHG	greenhouse gas
IGG	inclusive green growth
IIED	International Institute for Environment and Development
LDC	least developed country
MCPP	Municipal Climate Protection Programme
MDB	multilateral development bank
MDG	Millennium Development Goal
MIC	middle-income country
NGO	non-governmental organization
NGP	Philippines National Greening Program
OECD	Organisation for Economic Co-operation and Development
PES	payments for ecosystem services
PPP	purchasing power parity
REDD+	reducing emissions from deforestation and forest degradation
SD	sustainable development
SDG	Sustainable Development Goal
SE4ALL	Sustainable Energy for All
SIDS	Small Island Developing States
SMME	small, medium and micro-sized enterprises
UN	United Nations
UN-PAGE	United Nations Partnership for Action on Green Economy
USA	United States of America
WFGW	Well-being of Future Generations (Wales)

Foreword

Both Least Developed Countries and Middle Income Countries have huge potential to transition toward a green growth pathway.

Natural capital makes up a high proportion of the portfolio of assets available for national development – on average, ten times the proportion compared to high income countries. But it is also true that a higher proportion of the population is dependent on natural capital than in richer countries: the social capital related to farming, forests, water resources and urban communities is as important as the natural capital. Social capital is tied very closely to natural assets, and has extensive knowledge and labor to make use of them sustainably.

GGGI understands that growth needs to be both green and inclusive. An inclusive approach is consistently more effective in circumstances where poor women and men are dependent on natural resources and vulnerable to environmental hazards. An inclusive approach should also have scale advantages: involving large numbers of poor people as both producers and consumers in green growth will help generate large "bottom of the pyramid" markets. And inclusion could potentially result in lower costs and risks: the social problems resulting from poverty can be reduced if people are engaged in green growth activities that also provide jobs or social protection.

We realize that a pro-poor inclusive approach is not automatic but needs to be identified and nurtured. It is a matter of dialogue, through understanding the political economy context and promoting participation, as much as of technology and finance.

GGGI is pleased to partner with IIED for strengthening its pro-poor, inclusive approach to green growth. An earlier version of this exploratory paper excited the interest of GGGI member countries and partners, and we believe is of wider interest – hence this joint publication. For GGGI staff and country programs, it will be supplemented by an operational guide to finding the right focus, activities and partners for inclusive green growth.

Mr Yvo de Boer, Director-General, GGGI

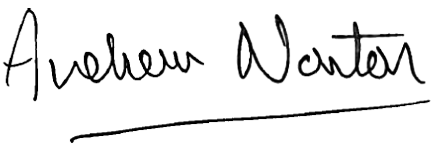
Preface

IIED has researched and promoted sustainable development for over four decades, ever since our founder, Dame Barbara Ward, first used the term. It has never been easy for countries to give balanced attention to the interwoven strands of sustainable development – environmental, social and economic. The 1992 Rio Summit focused on the environmental strand: biodiversity and climate change conventions. The 2002 Johannesburg Summit emphasized the social strand: a poverty focus and subsequent Millennium Development Goals. We have seen glimpses of sustainable development, but not a broad new landscape. Progress has always been limited by prevailing economic rules.

This is why we cautiously welcomed the post-2008 work on green growth. It has attracted the interests of ministers of finance and CEOs of major businesses in how the conservation, restoration and management of environmental assets can generate growth and jobs. We were impressed by the rapid growth in GGGI as a new intergovernmental body – filling a contemporary need for an institution that takes a highly integrated view of sustainable development, and that is not stuck in historical silos.

Yet high-level leadership – of the type that GGGI, its members and supporters have exercised – needs to be complemented by broad-based societal demand. Green growth that is driven by, participated in, and indeed owned by just a few players will rarely lead to the kind of universal and transformative change that is envisioned by the Sustainable Development Goals. Green growth needs to become a human agenda if it is to mobilize the energies, creativity and assets of the majority of people. Green growth can and should engage people where they are – in small businesses, on farms and in informal economies – and not just in the major formal sectors. It should address the pressing problems which hold people back from better use of environmental and other assets – notably poverty and inequality. This is especially so in developing countries.

We know this because, with the Green Economy Coalition, IIED has been applying our experience in multi-stakeholder dialogue and diagnosis to help ten countries assess their progress and potentials for green growth, and to scope their visions for green growth. The conclusions in all ten countries: green growth should and can be poverty-reducing, inclusive and empowering. It will be more than a technical and financial exercise, but will require governance change and broad societal support. Driven by demands in-country, green growth progress will need to draw on many international partners. IIED is pleased to be able to share some of this experience with GGGI. We hope that this document will help GGGI in developing its role as a knowledge-based, collaborative institution in support of the needs of poor countries and poor people.



Dr Andrew Norton, Director, IIED

Pro-Poor, Inclusive Green Growth

Executive Summary

Inclusive green growth (IGG) offers a route out of multiple related crises — in the economy, the environment and society. Most green growth efforts to date have placed the economy and environment front and centre. Yet for green growth to really fulfil its promise, it also needs to focus on people — to tackle the poverty, inequality and exclusion that constrain both growth and environmental sustainability, to realize women and men's aspirations, and to gain broad societal support. Without this broader support, stand-alone green growth projects and investments will not lead to real transformation. Bringing about real transformation towards IGG will require leadership — to generate societal demand, including by poor women and men, and to supply supportive governance reforms.

This paper focuses on inclusion and poverty reduction, rather than all aspects of green growth. In middle- and low-income countries, the "poor" and "excluded" can add up to a significant part of the population — half or more. They are not merely a few marginalized groups, but the many who have been failed by the current economic system. Therefore inclusive green growth is not merely a question of bringing in small marginal groups; it has a very significant societal dimension — reshaping the economy to make better and more sustainable use of the environment to meet society's needs more broadly.

Factors Driving Attention to Poverty Reduction, Inequality and Social Inclusion

Although there has been significant progress in reducing poverty in the last decade, with dividends in countries such as China, economic growth in Africa in particular has not brought about proportionate poverty reduction. The remaining poor women and men will now be harder to reach — they are people in more remote rural areas, often on poor-quality land, far from formal markets, and they are politically marginalized, whether refugees or slum-dwellers with few rights to land and trade. Those who are excluded from formal economic activity rely heavily on work within very large informal markets. The informal economy can be larger than the formal economy in many developing countries, and certainly involves more people. But it is "invisible", and only a tailored and inclusive approach will succeed in reaching the people concerned.

Inequality also remains a major challenge. While the gap in average income is narrowing between countries, given particularly rapid growth in emerging economies, within most countries wealth is increasingly concentrated among a few people at the top. Rising wealth inequality is often accompanied by wide differences in education, health and mobility outcomes, which exacerbates power imbalances, and generates social unrest and further exclusion. Countries with high inequality suffer from slower growth rates than countries where incomes are distributed more equally (UNDP, 2013).

The benefits of improving inclusion include:

1. Effectiveness: Well-managed green growth activities can create significant economic and social resilience, particularly for poor people.
2. Market size: Involving poor people in green growth can stimulate large "bottom of the pyramid" markets.
3. Safety and security: Green growth activities can also provide jobs or social protection.
4. Motivation for least developed countries (LDCs): Green growth can create, at low cost, livelihoods for millions of people entering the labor force each year in LDCs.

The risks of ignoring poverty and exclusion are that, at best, green growth is viewed as an external imposition and, at worst, green economies become "owned" by a few, with escalating social tensions.

Progress and Barriers

Innovations in policy, instruments, projects and investments are already being pursued, and much can be learned from developing country examples:

- Policy: Indonesia has led the world in its policy of inclusive fossil fuel subsidy removal, introducing direct social

welfare policies to support its poorest citizens while pursuing a green energy policy.
- Instruments: Rwanda has improved the ecotourism revenue-sharing model, directing it to local communities as an inclusive incentive to manage biodiversity.
- Projects: South Africa's "Working for…" programs combine environmental improvement with job schemes for disadvantaged women and men.
- Investments: The Philippines' National Greening Program has shown that a targeted investment of US$650 million in sustainable forestry can deliver effective forest rehabilitation alongside more secure livelihoods for marginalized indigenous communities.

However, few countries have been bold enough to transform economic and financial governance in support of inclusive green growth. The main barriers to a transformative approach include:
- weak governance, institutional "silos", policy incoherence and limited capacity
- lack of power, access and agency among poor groups and small/informal business
- skewed distribution of the costs of change
- lack of broader societal ownership of the IGG agenda
- infrastructure biased against the economic agency of the poor and best use of their assets.

Policy Recommendations for the Inclusive Green Growth Transformation

We identify four outcomes needed to achieve the goal of IGG transformation, with the activities needed to achieve each one:

Outcome 1. Governance that is inclusive, nationally owned and transformative
- multi-stakeholder dialogue and diagnosis — driving demand for IGG
- government coordination and leadership — making the policy space for change
- integrated governance frameworks — institutions becoming better linked and working together
- international policy — development finance as a catalyst to wider change, combined with sustainable consumption and production in richer countries.

Outcome 2. Strengthened livelihoods, rights, capital assets and empowerment for poor women and men
- a participatory transition process owned by excluded and poor women and men themselves
- poor and excluded groups' knowledge deployed and supported in IGG
- local government's role in supporting poor women and men at the heart of effective IGG strategy
- poor women and men's capital assets recognized, protected and strengthened — so that they can attract external capital at scale
- informal labor and production markets recognized for green growth — and, where necessary, formalized in inclusive ways
- natural resource rights and control secured for excluded and poor women and men
- green growth technologies screened and promoted for how they benefit poor and excluded women and men.

Outcome 3. Inclusive finance
- reforms to financial markets start to drive investment in inclusive green growth
- new commitments made to inclusive green growth by emerging market finance institutions
- poor women and men come to be recognized among the wide range of investors required for the IGG transition
- local government provides important channels for inclusive finance
- microfinance, local funds and social protection schemes provide instruments for finance to reach those who need it most
- financial mechanisms start to prioritize the informal economy and small, medium and micro-sized enterprises (SMMEs)
- natural resource revenues are carefully managed to benefit the poor and sustain future flows — bringing about a resource "blessing" rather than a resource "curse".

Outcome 4. Metrics for inclusive green growth
- agreed metrics for inclusive green growth through the Sustainable Development Goals (SDGs) — improving decision makers' confidence to make changes
- aligning multiple sustainable development (SD) with green growth (GG) metrics — ensuring consistency and clarity for IGG.

To succeed, these activities should be based on four principles:

Principle 1. Start with where people already are and build on existing progress
Build on the livelihoods of poor women and men, their (informal) economic activities, and their forms of organization; build on progress already made for inclusion and poverty — exploring and adding to what already works well within resource constraints.

Principle 2. Ensure IGG strategy is transparent, demand-driven and participatory
Make the green growth process and information accessible and accountable to all, with participation throughout — making deliberate provision for inclusion, ensuring stakeholders' access to full and effective involvement, and supporting their agency, driven by those affected at all levels, with leaders responding to bottom-up demand/movements.

Principle 3. Support social justice and embrace diversity
Respect people's rights, cultural and social diversity, and meet diverse human needs and social goals fairly; supporting diversity as a precondition for resilience, deploying specialist skills, encouraging partnerships and being clear about responsibilities.

Principle 4. Plan for the long term
Support the poor through the transformational societal and economic changes needed; and look out for future generations' needs.

Practical Steps

Finally, we offer some practical steps towards inclusive green growth strategies.

Explore and assess…
- progress made to date towards IGG outcomes
- what drivers, protagonists, enabling conditions, initiatives and mechanisms enabled this progress
- barriers to further progress — institutional, political economy, knowledge, resource and other constraints
- where people currently are — the assets that people manage and invest in, the institutional, policy and economic context
- expertise — the possible partners to engage with if planning and implementation is to be properly inclusive.

Dialogue…
- with social groups to identify IGG opportunities and threats
- with authorities separately — to identify IGG opportunities and threats
- bringing social groups and authorities together — towards consensus on situation, problem, vision and possible solutions
- balancing drivers of societal demand for real IGG, with political leadership to enable it.

Formulate and plan…
- identifying locations, sectors and enterprise/livelihood types where the excluded and poor have most need and/or potential
- assessing distributional impacts of green growth options and ways to improve them
- integrating into existing development, economic, social and/or spatial plans as appropriate — mainstreaming IGG.

Implement, mobilize and build…
- investment and finance mechanisms that best reach marginalized groups and the poor, and can be influenced by them
- resources of key organizations shown to be effective or promising for green growth process, building capacity and planning reform where needed
- marginalized groups in, for instance, the informal economy; building capacity and empowering them where needed through the green growth process.

Monitor, learn and review…
- agree project key-performance indicators on inclusion and poverty reduction
- support government monitoring and consideration of new metrics
- organize in-country fora to learn from IGG progress, connected to existing government machinery, such as national development planning processes and statistics
- international collaboration in learning and defining IGG best practice.

Our recommendations emphasize tackling the structural issues that have constrained people-centred economic progress in developing countries to date, by supporting innovations in governance, metrics, empowerment and finance. This may appear more challenging in the short run than stand-alone green growth projects. But such a short-term approach will not achieve lasting transformation. The attention to enabling conditions and structural reforms could unleash the potential of all partners — particularly those of low-income countries, and of poor women and men themselves.

1. Introduction to Inclusive Green Growth

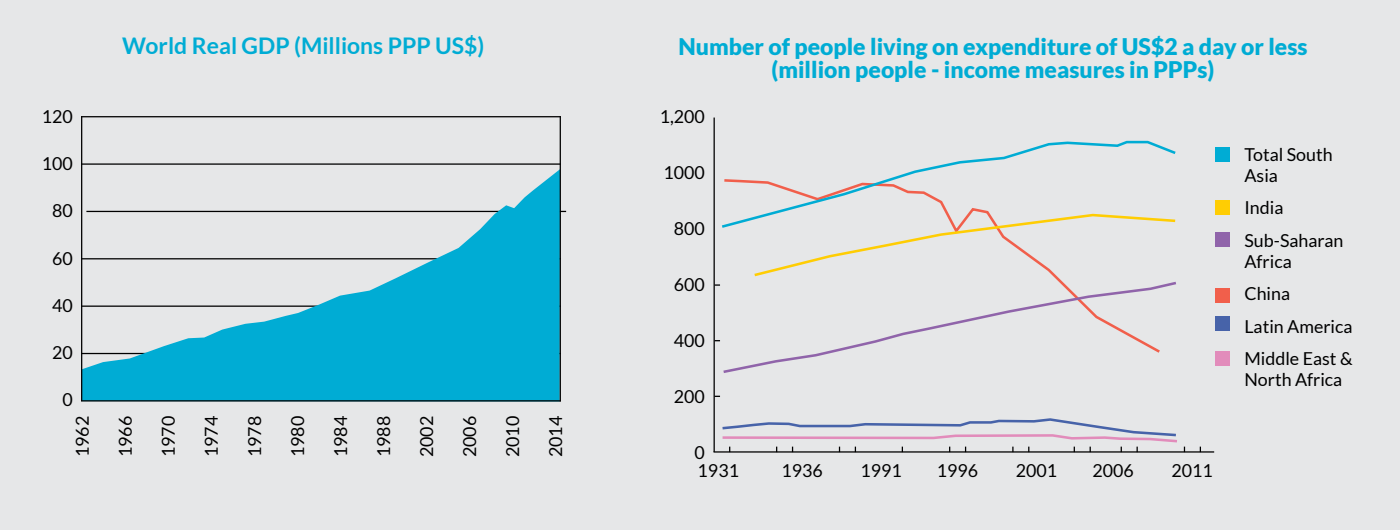
"The success of the Durban Climate Change Strategy will depend on how inclusive the process is, so that all voices of our city are represented and heard" — James Nxumalo, Mayor of Durban, South Africa.

Section 1 introduces the purpose and scope of this paper, reviews current trends for poverty, exclusion and environment, and presents a framework for assessing inclusive green growth. It asks: What factors are focusing attention on poverty reduction and social inclusion? What are the benefits of addressing these concerns, and the risks of ignoring them?

1.1 Purpose and Scope of this Paper

This paper attempts to answer the important question: How can pro-poor, inclusive green growth become a reality? The Global Green Growth Institute (GGGI) has identified an important paradox: for many countries, economic success in terms of gross domestic product (GDP) growth contrasts sharply with the persistence of poverty, and sometimes the increase of inequality — as well as environmental damage, which has been well documented (see e.g. Figure 1.1). This persistent poverty has structural causes, not just weak performance at the level of individual policies, projects and investments.

Figure 1.1 Paradox of global GDP growth alongside persistent poverty



Sources: Left-hand figure — Tani (2015), based on World Economics Global GDP database and IMF WEO database; right-hand figure — Chen and Ravallion (2012), based on World Bank PovcalNet

One clear example of structural constraints on poverty reduction and greater equality is the continuing discrimination and inequality faced by women and girls. The employment gender gap persists, with a 24.8 percent difference between men and women in the employment-to-population ratio in 2012. Countries with available data show that women spend at least twice as much time as men on unpaid domestic and care work. In political representation, there have been modest improvements: in 2013, 21.8 percent of parliamentarians were women in single or lower houses and 19.4 percent of senate or upper houses, double the levels in 1997 (IPU, 2014). However other indicators, such as estimates of female infanticide, gender-based violence and child marriages indicate that women and girls remain seriously excluded in many countries.

This paper seeks to highlight how the structural problems behind inequality (including gender inequality), poverty and exclusion must be tackled, in order to sustain economic growth and the environmental assets on which growth depends. The paper addresses these issues at a range of levels, from global to local. It identifies the excluded groups, and the nature

of their poverty as it relates to the environment. It draws on what developing countries have been saying about their vision for inclusive green growth, and the "glimpses" of success that are emerging at project level. But it also highlights the policy and institutional frameworks needed that are critical to achieving inclusive green growth (IGG) at scale.

Our focus is squarely on the "inclusion" and "poverty reduction" aspects of green growth, rather than the entire green growth challenge. Nevertheless, many people find these terms vague, so we offer the following definitions:

- By inclusion we mean providing ways for poor women and men, and those excluded in any country, to find a voice and influence in setting the green growth agenda — with a focus on the least developed countries (LDCs) and other low-income countries. The "excluded" covers those marginalized by poverty, gender, age, disability, ethnicity, caste and other structural factors. The disadvantage they face is not only limited representation in the political sphere, but also policies that ignore their assets, rights and needs. The process of inclusion involves recognition, consultation and decision-making, involvement in production and consumption, and in equitably sharing the costs, benefits and risks of any change.
- By poverty reduction we mean reduction of absolute and relative poverty in its multiple dimensions — not just income poverty but also non-income deprivations, such as lack of access to education, formal labor and credit markets; maternal and infant healthcare; as well as environmental assets such as fertile soils and clean water; and exposure to environmental health hazards.

No country has yet been through an inclusive green growth process. The evidence available to us is therefore more like a patchwork of "glimpses" of successful approaches at different levels, rather than a systemic picture. We are not yet in a position to offer definitive answers, but we can offer a consolidation of current evidence and ideas, in order to stimulate debate; propose practical policy recommendations where the evidence and consensus are clear; and explore follow-up research and debate where it is less clear.

Our principal methodology has been a review of both the green growth and inclusion literature. There is a particular focus on case studies (see appendices), which draw on recent information, some of it as yet unpublished. In the spirit of the topic, the paper itself is the result of an inclusive process led by IIED, drawing on the insights of the Green Economy Coalition (GEC), GGGI staff and IIED research partners.

1.2 Poverty, Inclusion and Environmental Trends in Relation to Economic Growth

At a global level, absolute poverty has fallen over the past 15 years, with the Millennium Development Goal (MDG) target of halving extreme income poverty achieved five years ahead of time. This has been driven predominately by the growth of the global economy, which has averaged 2 percent in developed economies and 8 percent in developing economies, per annum, over the last decade. China has played the biggest part in achieving this global goal, which — due to its great size — masks underperformance elsewhere.

Thus, despite this growth, at least a billion people — about 20 percent of the population in developing regions — still live on less than US$1.25 per day (UN, 2014b). This benchmark is itself an inadequate measure of real poverty, as it reflects neither the financial costs of basic needs in some parts of the world, nor important non-income deprivations.

The recent decline in poverty levels has benefitted those poor people who are most accessible. But the remaining poor women and men will be harder to reach — they are people in remote rural areas, often on poor-quality land, far from formal markets, and they are politically invisible, whether refugees or slum-dwellers with no rights to land or trade. Only a deliberately inclusive approach will succeed in reaching them.

Moreover, there remain hundreds of millions of people who now live above official poverty lines, but are highly vulnerable to slipping back into poverty — as the 2008 global financial crisis demonstrated — with no safety nets or job security due to global market instability, and enduring rickety social and physical infrastructure.

The geography of poverty is also changing. While the highest poverty rates are still in the least developed countries (see Box 1.1) — many of them facing social conflict and climate stress — the majority of the world's poor people are now in middle-income countries, such as in the more remote areas of China, India and Indonesia. This is again likely to change over the next twenty years as middle-income countries grow, leaving the bulk of the poor in fragile LDCs. And while poverty remains primarily rural, urban poverty has increased to 28 percent of the total poor, in part due to rural-urban migration, with up to 80 percent of the population in some cities living in slums.

Meanwhile, the cultural values that shape aspirations are changing, and with them notions of "poverty". There are both

positive and negative trends in relation to, for instance, gender, consumption and notions of how best to earn a dignified and rewarding living. Yet, too many social structures are breaking down in some countries, especially those that have nurtured public goods such as environmental quality. Income remains the main indicator used to assess progress. There are trends towards multi-dimensional poverty measures, some of which recognize environmental deprivations, but these are not yet mainstream.

Box 1.1 Spotlight on least developed countries

Poverty < US$1,035 income per capita.

Structural persistence — very few countries have "graduated" from LDC status over many years.

Central economic challenge — to create productive jobs and livelihoods for the millions of people entering the labor force each year.

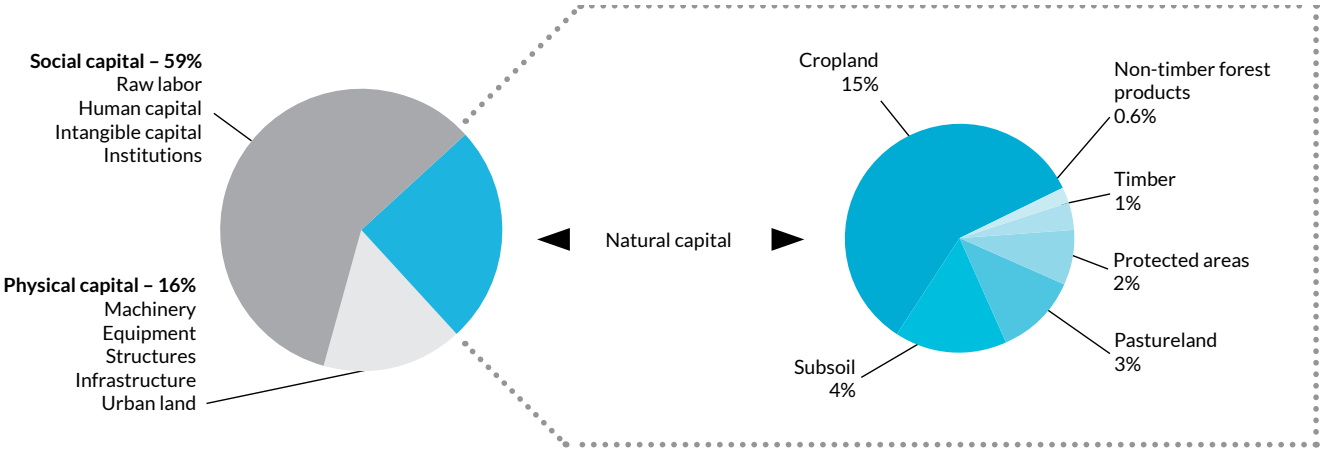
Most people in LDCs — have few savings, few alternative livelihood opportunities and no insurance, many are close to or below the poverty line. Despite rapid urbanization, poverty will still be predominantly rural.

Vulnerabilities — many communities in LDCs also live in particularly vulnerable areas. In cities, informal illegal settlements commonly occupy land on floodplains or in polluted areas.

Climate change — Bangladesh, Cambodia, DR Congo, Ethiopia, Guinea Bissau, Haiti, Nigeria, Philippines, Sierra Leone and South Sudan are expected to be among the most affected countries.

Economic growth has not reduced our dependence on environmental services, such as clean air, water, food and materials. On the contrary, prevailing patterns of growth have increased this dependence — even at a global level — given our need for a stable climate. Our awareness of this has improved, but not always our action. Four of nine "planetary boundaries" have been exceeded, notably the two underlying boundaries of biosphere integrity and climate change (Steffen et al., 2015).[1] Meanwhile, natural capital remains critically important to developing countries (Figure 1.2).

Figure 1.2 Composition of total wealth in low-income countries



Source: World Bank (2006)

Climate change has now become almost universally recognized as a massive short-term threat to societies and economies. The discourse has shifted from impacts on future generations to a realization that climate change is already having impacts now: increasing the intensity and frequency of natural disasters and the economic damages which exceeded US$380 billion in 2011 alone. While the financial impacts of this are greater in emerging economies, the human toll hits LDCs and small states hardest (World Bank, 2012a). Given this, climate change is increasingly no longer "merely" an environmental policy priority. It is moving to the heart of government, with greater understanding of why it matters in ministries of finance and planning. Yet fiscal incentives are still stacked in favor of fossil fuel use, and consequently global carbon dioxide emissions have increased by 35 percent from 2000 to 2011, significantly faster than the 10 percent growth from 1990 to 2000 (UN, 2014a). The effect of climate change in undermining poverty reduction efforts is less well recognized in policy, and there are some who still favor a "grow first and clean up later" response to climate change.

1 Nine planetary boundaries have been identified as relating to human-induced changes to the environment. These boundaries, when crossed, disrupt the Earth's systems in ways that impose costs on human populations in both rich and poor countries (Steffen et al., 2015).

The environmental issues that are most important to poor people show mixed trends. Access to improved water supplies and sanitation has improved, but deaths from air pollution have increased. In 2012, 89 percent of the world's population had access to an improved drinking water source, up from 76 percent in 1990, although this still leaves almost 750 million people exposed to unsafe water sources (UNDP, 2014). Sanitation coverage increased from 49 percent in 1990 to 64 percent in 2012, although this still leaves almost 2.5 billion without improved sanitation, including one billion who have to resort to open defecation (UNDP, 2014). Moreover, these water and sanitation metrics are inadequate, with "improved" water sources and sanitation types not reflecting real needs — an indication of the failure to include people in defining the targets.

In 2012 around 7 million people died as a result of air pollution: 4.3 million from indoor air pollution in households cooking with biomass; and 3.7 million from outdoor air pollution (with 1 million deaths resulting from both) (WHO, 2014). This death toll is considerably higher than estimates in 2004, but this is largely due to new data on health risks, as exposure to air pollution has stayed relatively level. Women and girls who spend more time in the kitchen are particularly affected by morbidity and mortality associated with indoor air pollution, known as the "killer in the kitchen".

By 2012, the proportion of people living in slums had fallen from 40 percent of urban residents in developing regions to 33 percent. Despite this relative fall, the rapid rate of urban population growth means that the total number of people in slums has risen considerably, from 650 million in 1990, to 760 million in 2000, reaching 863 million in 2012 (UNDP, 2014).

While the potential power and influence exercised by the poor have increased in some respects — for example through their "tele-connectedness" (smartphones were introduced in 2006, and are already owned by a quarter of the global population) poor people's power is still trumped by local elites and the influence of distant economies. Poor people's land, once primarily of value for local production, is now also valued by others for large-scale export crops such as animal feed and biofuels. It is recorded that 900 environmental and land-rights activists were murdered from 2001 to 2013 (Global Witness, 2014). But there are also examples of areas that are protected for carbon and biodiversity having negative social impacts, by restricting poor people's access to land and imposing other costs, such as damage by wildlife to humans and crops.

Marginalized producers in micro/small enterprise and the informal economy remain the backbone of economic activity in many developing countries. Smallholder agriculture is still the main employer in many countries, with women often the main source of agricultural labor. Meanwhile the non-agricultural informal economy continues to grow and accounts for 82 percent of total non-agricultural employment in South Asia, 66 percent in sub-Saharan Africa, and 51 percent in Latin America (ILO, 2014). Much innovation is taking place in the informal economy — especially in energy, water, sanitation and transport provision. These innovations hold promise for sustainable solutions accessible to the poor (particularly women) as citizens, as well as producers and consumers.

Informality has proved to be a resilient and dynamic feature of modernization, especially for women and youth and in natural resource sectors, where there are many opportunities for citizen-led basic needs provision. While informality may reproduce "brown" development (for example, artisanal gold mining is responsible for one third of all mercury pollution) and is often driven to illegality, it may also have smaller ecological footprints than its formal counterparts and provide social protection. The result depends in large part on how informal players are formalized, in food chains, waste management, mining and so on.

Finally, there remains the tough challenge of tackling relative poverty and widespread inequality. While wealth is spreading between countries (with rapid growth in the emerging economies), within most countries wealth is becoming increasingly concentrated in the hands of a few hugely wealthy individuals. Oxfam makes the point starkly by claiming that 85 individuals own more than the 3.5 billion "bottom half" of the global population (Oxfam, 2014). Rising inequality is often accompanied by polarized education, health and mobility outcomes, exacerbating power imbalances and exclusion still further — all of this being at the cost of future economic growth. The 2013 Human Development Report found that countries with high inequality suffer from slower growth rates than countries where incomes are distributed more equally (UNDP, 2013).

1.3 A New Political Context: The Sustainable Development Goals

Progress in poverty, environment and growth has been driven largely separately. The fact that these areas are linked at the level of their causes and solutions is now partly recognized in the Sustainable Development Goals (SDGs), formally agreed and launched by all countries at the United Nations (UN) General Assembly in September 2015. The SDGs (see Box 1.2) provide a touchstone for joint action on poverty reduction, inclusivity and environmental sustainability, based on a high degree of consensus between countries and stakeholders. The 17 goals and 169 indicators may be complex,

but sustainable development (SD) is inevitably a multi-dimensional endeavour — especially when applied to all countries and all people. Usefully, equity and inclusion are integral to half of the goals, and the SDGs commit countries to ending extreme absolute poverty by 2030: a global commitment that would have seemed naïve even a decade ago. We anticipate that pursuit of the SDGs will increasingly drive national economic policy in most developing countries — and potentially in all countries, since the SDGs are a universal agenda applying equally to countries in the global North and South.

1.4 The Parameters of Inclusive Green Growth: A Suggested Framework

What will make green growth attractive to both leaders and the public in developing countries? Since 2010, IIED has been facilitating national multi-stakeholder dialogues in several developing countries on what kind of "green economy" people believe is needed and is possible in their country. The consensus in every country was that green economies would be most attractive if they are inclusive. The said green economies should aim at: job creation, especially for poor people; starting with the informal economy, where most poor people find their livelihoods; social sectors and the security of basic environmental services, such as water and sanitation for poor groups; as well as natural resource-based enterprise that can drive economic growth at rates of 5 to 10 percent. Indeed, there was a strong sense that green growth will not take off unless it is inclusive (Bass, 2013).

International organizations involved with green growth are also increasingly emphasizing "inclusion", often using the word interchangeably with equity, fairness and justice; a recent international meeting at IIED concluded that there is little substantive difference between these terms when used by international development organizations (Franks, 2015).

But it is worth trying to be a little more specific. A framework to guide inclusion might have three dimensions: 1) possible purposes of inclusion or addressing poverty reduction in green growth; 2) the level at which inclusion is focused, from the global level downwards; and 3) the entry points for inclusion in the change cycle affecting a country, sector or initiative.

1.4.1 Purposes of Inclusion in Green Growth

It is important to be aware of the wide variety of purposes for which green growth might need to prioritize inclusion and equity. The ethical case is often made most loudly, but there are other sound reasons that need to be explored, so that the chosen approach serves the needs of a broad range of stakeholders:

Effectiveness

- Market size: Inclusion increases the number and type of people involved in green activity — as more producers/consumers are engaged, and forward-backward economic links are developed.
- Real livelihoods: Inclusion focuses on jobs for the many, and on the informal economy — which is where a majority of people find themselves, and where innovation often emerges.
- Addressing root causes: Structural and political exclusion of large majorities has meant that powerful economic interests remain entrenched, often linked to "brown" incumbents — green growth brings many players into a process that complements and challenges elites.
- Big picture: An effective approach to inclusion allows a "strong whole" to be developed and appreciated by many — but conversely, a poorly designed approach to inclusion may feed fragmentation.

Box 1.2 SDGs as drivers of IGG success

SDGs will drive some aspects of IGG success, notably:

SDG 1: End poverty in all its forms everywhere.

SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

SDG 5: Achieve gender equality and empower all women and girls.

SDG 6: Ensure availability and sustainable management of water and sanitation for all.

SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all.

SDG 8: Promote sustained, inclusive and sustainable economic growth.

SDG 10: Reduce inequality within and among countries.

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

SDG 16: Promote peaceful and inclusive societies for sustainable development.

Efficiency

- Competition: Shifting from privileged suppliers of green solutions to others who can assure long-term, pro-poor green outcomes increases competition and innovation.
- Productivity and total welfare: Economic diversification, as well as optimizing the social co-benefits of green growth, will improve the total productivity and developmental impact.

Sustainability

- Economic and social resilience: A diversity of actors offers improved potential for economic diversification, and the kinds of collective action needed to: 1) manage and use environmental assets more sustainably; and 2) build new, integrated institutions that can serve linked environmental, social and economic goals.
- Safety and security: The significant costs of the many social problems resulting from exclusion (loss of trust, unemployment, crime, migration, social structure breakdown) can be reduced by investing in the social and human capital that can drive inclusive green growth activity.
- Public support for green growth: Including more people in policy debate, decisions and implementation will improve awareness of IGG and the likelihood that a full and system-wide transition will be made.

Ethics

- Justice: Inclusion brings into the picture precisely those people who have been most failed by the current "brown" and "unjust" economy. By improving recognition of poor and marginalized groups and their rights, offering access to consultation and decision-making procedures, we can redress biases in the distribution of costs and benefits against them. We can ensure that economies serve people, rather than people serving the economy.

Actively embracing these purposes of inclusion will certainly improve the political legitimacy and attractiveness of green growth work, as they cover mainstream concerns like job creation.

Focus on poverty reduction:
Including poor groups as above will usually improve the prospects of green growth reducing poverty. But there are more specific reasons to address poverty reduction in green growth:

- Effectiveness: A majority of the poor are disproportionately dependent on natural resources in rural areas, and vulnerable to environmental hazards, especially in urban areas. Well-managed green growth activities can create jobs, support small enterprises and offer incentives like payments to smallholders or communities to manage ecosystem services, and reduce environmental damage.
- Market size: Poor people are increasingly active in the market economy; their large number stimulates "bottom of pyramid" markets; these have the potential to add value to natural resources, and deliver environmental services and goods for poor consumers, and thereby broaden the base for growth.
- Safety and security: Green economic activities have particular potentials to reduce the social costs resulting from poverty. Joint social/environmental protection from work schemes in environmental management, or payments for environmental services, are increasingly common. But there is also scope for more ambitious schemes, such as providing a basic income from redistributing the economic values of national natural resources.

It should be clear that none of these purposes can be achieved overnight, through either top-down or popular action alone. Recalling John Stuart Mills' "tension between participation and efficiency", shortages of time and resources mean it can be tempting to structure green growth plans around a few major players and investment projects and hope for trickle-down effects. But these supply-driven solutions will soon run up against the lack of enabling conditions that sustain them, notably societal demand. A review of the experience of Germany's Energiewende (energy transition) suggested that the two overriding success attributes were policy leadership and societal demand (Appendix G). The level at which green growth activity is addressed is clearly important, as set out below.

1.4.2 Levels for Tackling Inclusive Green Growth

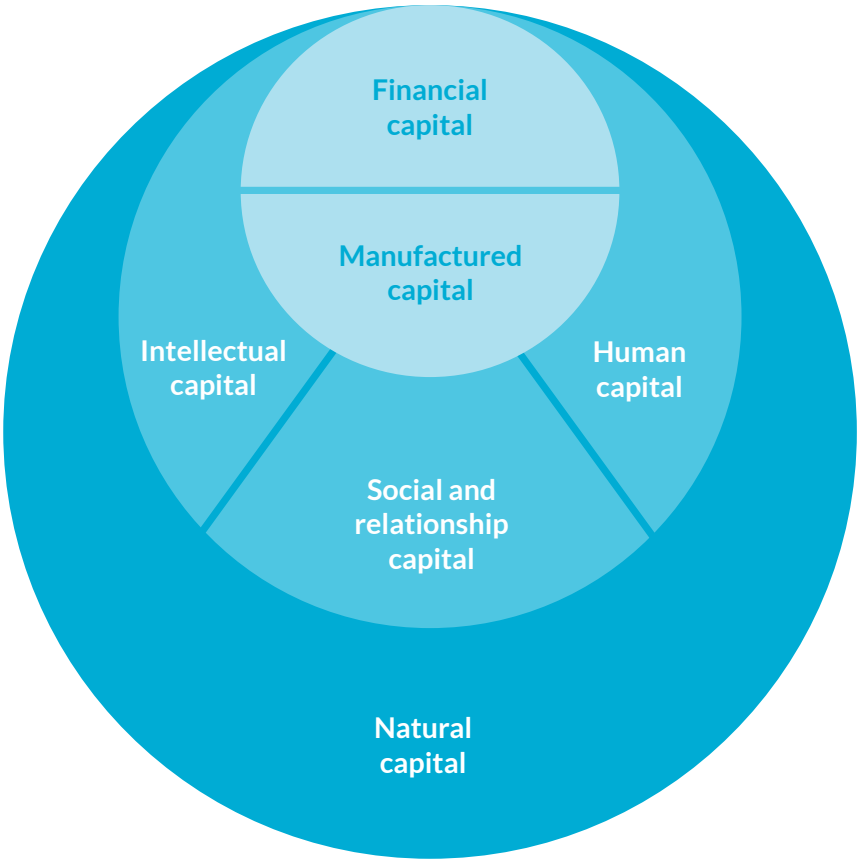
Inclusion and poverty reduction can be focused at five levels, from the individual to the global. The levels are both nested and interdependent:

1. The individual person: Complex in its dimensions (given that all seven billion-plus people on this planet are unique), diversity at this level has been expressed with various well-being frameworks focusing on needs, livelihoods and available capitals. Green growth activities that do not address the individual — especially the many non-financial dimensions of poverty beyond US$1.25/day — risk never having political and market traction. This level is a litmus test for achieving the others below.

2. Projects/enterprises: This is the level at which external institutions have most direct control. The imperative tends to be to aim for the largest projects to have the most influence. The challenge is to ensure that large projects work in all the dimensions that are important for livelihoods.
3. Local economy, policies and institutions: IGG will be embedded in and contribute to particular local contexts. These contexts will determine if and how it is possible to scale up from isolated projects into programs with forward and backward links. In poor countries, they tend to be characterized by informality, constrained resource portfolios and multiple livelihoods. But there may also be effective decentralization and rich natural resources that can fuel IGG.
4. National economy, policies and institutions: These will encourage or constrain the regulatory and market signals needed for a wholesale transition from brown to green. Projects will not be sustainable if they are not aimed at IGG. While green growth initiatives are often focused at the national level, they often fail to fully recognize that countries' policies and institutions can be at quite different starting points in the transition to a green economy (GE) (see 2.1.2).
5. Global economy, policies and institutions: The poorest countries feel the influence of distant national and corporate economies; these, and trade and global finance policies, will both enable and constrain what kinds of people and environmental assets will be favored in the market. Green growth initiatives rarely address this level. They should develop a shared strategy at the level of international governance and finance rules if the transition is to be effective at levels 1 to 4.

At each level, it can be helpful to focus attention on the capitals or assets available to those who are to be included. Using the "six capitals framework" of human, social, financial, natural, manufactured and intellectual capital (IIRC, 2013), helps to assess livelihoods at individual and household level, to assess small and large business models in terms of stakeholder reporting, and national levels in terms of wealth accounting (Figure 1.3).

Figure 1.3 The six types of capital that people access, manage and invest in

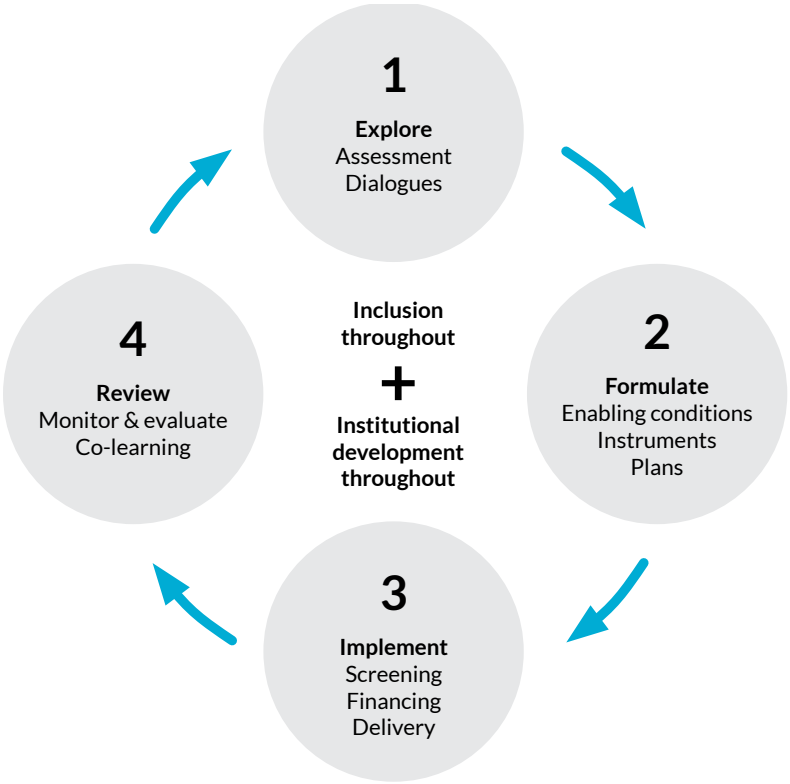


Source: International Integrated Reporting Council (2013)

1.4.3 Change Process for Achieving Inclusive Green Growth

Inclusive green growth is not a "technical fix" but a process of societal change and economic transformation (Figure 1.4). There are different components of the "change cycle" that need to be addressed. Broadly, these are: exploration (assessment, debate, visioning), policy formulation (macro to micro policies), implementation (project investment and delivery), and review (monitoring and evaluation, and learning). Underlying all of these are the human dimensions of engagement (inclusion) and institutional development. The main issue here is to have a clear understanding of how this process is playing out in a country, and secondarily, how to map out ways to improve it through specific tasks and organizational roles.

Figure 1.4 Achieving inclusive green growth — continuous improvement



2. Current Status of Inclusive Green Growth

Section 2 presents a quick stocktake of the progress of inclusive green growth in a range of countries. There have been a number of assessments of green growth per se, so the focus here is on examining where green growth has had a strong impact on degrees of inclusion and poverty reduction. It begins to answer the question: What innovations have already been put in place — policies, instruments, projects and investments — including by poor women and men themselves?

Recent years have seen progress in stakeholder debate on inclusive green economy (GE) and green growth (GG): re-envisioning it to suit local conditions (2.1.1 below); progress in institutional coherence, specifically the ability to treat people and environment holistically in economic decisions (2.1.2); in developing policies and instruments aimed at pro-poor and inclusive approaches (2.1.3); and in rolling out specific international programs to suit different national contexts (2.1.4). So far, the track record in terms of the outcomes and impacts of IGG activity is not long, but we offer a few short case studies from a variety of countries to illustrate progress (2.2, with more detail in the appendices).

2.1 National Progress of Inclusive Green Growth: A Quick Stocktake

2.1.1 National Debates on Inclusive Green Economy and Growth Reveal Visions of Inclusion, Poverty Reduction and Jobs

IIED and the Green Economy Coalition (GEC) have been facilitating multi-stakeholder dialogues and initial diagnostics in 11 developing countries to help national stakeholders assess the progress, needs and prospects for a green economy (see Box 2.1).[2] The reasons for interest in green economy dialogues were diverse: some countries were worried about a potential trade barrier or aid conditionality materializing from discussions on green economy/green growth at the UN and the Organisation for Economic Co-operation and Development (OECD) others wanted to help develop their position for Rio 2012; still others saw this as a timely opportunity to get to grips with the economics of sustainable development; and most were curious to explore how economic growth might be generated by better using their natural capital.

But out of the dialogues, some important distinctions emerged. The dialogues suggest that developing countries see green economy as a means to get the economics right for sustainable development — shaping economic and financial rules and incentives. This gave rise to an important perceived distinction between green economy and green growth. Green growth is seen by many (although not all) as the important initial impetus that gains the interest of finance authorities and company chief executive officers. But this then turns attention to green economy, which shapes the wider economic governance needed for sustainable development.

In contrast to the range of potentials outlined by developing countries in Box 2.1, international organizations promoting green growth to date have focused on greenhouse gas (GHG) abatement, partly in the hope of attracting international climate finance. Yet specific GHG abatement projects or technologies may have positive or negative implications for inclusion, poverty reduction, jobs and other developmental aims. In addition, international organizations have neglected strategies for other (non-climate) environmental assets and hazards. Notably, adding value to natural resources through sustainable use of environmental assets, and respecting ecological limits or "planetary boundaries", have received far less attention — yet many stakeholders in poorer countries tell us that these are more important to them.

Clearly, with the rapid growth of GGGI, the establishment of the UN's Partnership for Action on Green Economy (UNPAGE) program[3], and the emerging programs on green growth by multilateral development banks, it is useful to have adequate country "demand-side" analysis and dialogue. The process of country dialogues can also serve to improve the awareness of a country's stakeholders and their readiness to make good decisions on what international green growth support they actually need.

---

2 Including Amapa State in Brazil, Cambodia, the Caribbean region, Ethiopia, Kazakhstan, India and Zambia.

3 See www.unep.org/greeneconomy/page.

Box 2.1 Developing country stakeholders' views and priorities on green growth

IIED and GEC facilitated green economy dialogues in 11 countries or regions from 2010 to 2015. Most were co-hosted by ministries of finance (or development) and ministries of environment, and involved sector authorities, business and civil society — 90 percent of the participants being nationals.

Almost all country green economy dialogues began with a significant proportion of participants resisting the notion of green economy or green growth. Equally, by the end of the dialogue process there was consensus on the relevance of both, and almost always a redefinition of "green economy" and "green growth" to suit the country. In spite of the diversity of contexts — LDCs, Small Island Developing States (SIDS), low-income and middle-income countries — several commonalities emerged in what developing countries want from green economies. Poverty reduction, inclusion and jobs stood out:

Poverty reduction, inclusion, jobs and informal economy: There is a very strong emphasis on making sure a green economy supports those who have been failed by the current economic system. Some have emphasized green jobs, notably through inclusive green business, but also (in the Caribbean, Zambia and India) a range of poverty-reducing options such as green small, medium and micro-sized enterprises (SMMEs), social enterprise, and joint environment/social protection schemes. LDCs want to know if green approaches can give them the 5–10 percent GDP growth rates they believe they need, and if the green regulations of trading partners will effectively exclude products from LDCs. Some have raised the real-world issue of a prevalent informal economy: a green economy needs to work for poor people where they are today, in their own markets and informal enterprises, and not just for the big corporate partnerships and global value chains that dominate some GE/GG initiatives. Involvement of, for instance, women's groups and micro/small business associations in the dialogues helped participants to think of poor people as consumers and citizens, and not just as producers and aid recipients. They noted that options for green economic activity accessible to poor groups (including in informal waste recycling, traditional agriculture and water management) can be cheaper than with big business.

Natural resource opportunities: Most countries see GE as being about sustainable agriculture, forestry, fisheries, biomass energy, ecotourism and so on — perhaps more than the greenhouse gas abatement projects that have dominated some international initiatives. While they recognize that international climate funds can drive some GE opportunities, there is interest in attracting investment into more productive use of increasingly scarce natural resources. Some were alarmed at the prospect of carbon storage by trees being at a high environmental and social cost (since "any carbon as long as it is in huge quantities" is often linked to large forestry plantations. Such plantations often have low biodiversity and lack community control that benefits poor people).

Local and city green economies: LDCs will have over a third of their people living in urban areas in five years' time. That urbanization opportunity needs to be grasped — leapfrogging to clean technology and realizing the efficiency advantages of proximity in city planning and management. In addition, taken as a whole, long-standing urban problems — in water, sanitation and slums — can itself become an engine for growth by embracing all the job-creating potentials of social enterprise and municipality/community partnerships.

Green industrialization: The LDCs called for an "industrialization" SDG, and some are interested in what form "green industrialization" might take. Countries that are not burdened with an existing and entrenched brown economy can leapfrog to greener infrastructure and technologies, and develop industries that add value to natural resources. This is a capacity and financing issue, and has framed LDC proposals to the SDGs and aid system on building "productive capacity".

Transformation: Exploring existing green and inclusive activities in each country helped stakeholders to be clear that the principal barriers to inclusive green activities (or to their scale) are in the enabling conditions. Thus Kazakhstan, focused on major projects, realized that governance and economic rules need to change as well. Indeed, the dialogues suggest that developing countries see GE as a means to get the economics right for sustainable development — shaping economic and financial rules and incentives. This gave rise to an important perceived distinction between green economy and green growth. Green growth is seen by many (although not all) as the important initial impetus that gains the interest of finance authorities and company chief executive officers. But this then turns attention to green economy, which shapes the wider economic governance needed for sustainable development.

Sustainable development remains the overriding framework and goal: The dialogues revealed there is almost universal adherence to two goals in LDCs and lower-income countries: 1) achieving middle-income status; and 2) sustainable development. Many stakeholder groups expressed confusion about how green growth relates to other concepts — such as green economy, low-carbon development and climate resilience — and they resisted multiple paradigms. This is not just a matter of neat definitions: almost all dialogues asserted that sustainable development is the ultimate goal. The Zambian and Caribbean dialogues found sustainable development "language" to be politically more acceptable than GG or GE, but were still keen to "map" the different paradigms and work undertaken under them. The SDGs were welcomed as a setting or framework for both sustainability and inclusivity consistent with sustainable development.

Source: Based on Bass (2013)

2.1.2 National Institutional Coherence: Countries are at Different Levels of Maturity in Integrating Environment, Social and Economic Objectives

These three constituent objectives of inclusive green growth are located in very separate institutions in almost all nation states. They need to be brought together if any inclusive green growth paradigm is to endure. How they are brought together is an institutional issue, including specifically economic/financial rules. It might be noted that many traditional, indigenous societies have not separated these linked objectives into "silos", but treat them together — a benefit of an inclusive approach is the chance to learn from these more holistic traditions.

Classifying how far institutions integrate the constituent objectives of inclusive green growth, notably green objectives and poverty/inclusion objectives, is not done overtly. We suggest that a simple framework would be useful. Put crudely, we can identify four levels. Put even more crudely, there is a general trend for countries to progress from levels 1 to 4 below. These levels could therefore be thought of as stages in a country's institutional development (Raworth et al., 2014):

1. Separate: Green growth and poverty are totally separate policy issues, run by separate institutions. In such cases, many stakeholders perceive green growth as irrelevant at best. This approach prevails in only a few countries today.
2. Safeguards: In many countries, green growth and poverty endeavours are at the "mutual safeguard" stage only. Green growth is viewed as being a matter of improving the environmental assessment of development plans, and the social assessment of environmental plans. GG may be viewed as a constraint on development. There is no high-profile joint agenda.
3. Synergies: Some countries have advanced towards identifying certain green growth and poverty "win-wins", where economies can grow and produce jobs from environmental assets and low-carbon investment. Communities of practice are working together. The discussion is about efficiency, incentives and investment. However, what can be achieved is limited by current systems of governance and finance.
4. Sustainability and equity: A few countries now realize that economic governance and financial institutions, rules and metrics must be fundamentally transformed if joint human and ecosystem well-being are both to be achieved — beyond isolated, easy win-wins to optimal trade-offs and positive feedback loops. The discussion is about effectiveness and equity.

With each stage there is also progressively greater focus on economic governance: from mere economic analysis at stage 2, to many instruments at stage 3, and economic reform at stage 4.

Exploring this institutional diversity can reveal many reasons and ways to progress to inclusive green growth. But currently there is confusion — different people discussing green growth together might come from all four levels above; and this threatens to become a barrier to progress. Rio+20 brought all of this to a head: unsurprisingly, it concluded that green economy processes should be country-tailored.

Perhaps more interesting is what drives progress from stage 1 to 4. In part, it is progressive leaders positioning countries, companies or indeed communities for a brighter future. They see ways of becoming more competitive and efficient in a resource-constrained world, of creating jobs that produce the environmental services that are increasingly in demand. There is a growing consensus among developing country leaders that this competitive positioning cannot take place without transformation. As K.Y. Amoako has put it (until recently Executive Secretary of the United Nations Economic Commission for Africa), "Development depends on good governance." He cites a speech by United States President Obama on his trip to Ghana in 2009: "[Governance] is the ingredient that has been missing in too many places, for far too long. That is the change that can unlock Africa's potential. And that is a responsibility that can only be met by Africans." Amoako is clear that transformation will take a generation, as in Asia, and that effective international partnerships will be those that contribute to maturing institutions (Amoako, 2015).

2.1.3 Instruments for Inclusive Green Growth

There are potentially many policies, procedures and instruments that can achieve inclusion/poverty reduction purposes (1.4.1), at specific levels of concern (1.4.2), and/or at given points in the green growth change process (1.4.3) (See also Box 2.2).

Box 2.2 Building blocks — and key policy instruments — for inclusive approaches to the GE transition

1. National economic and social policies
- Fiscal policies: Distributional aspects of resource pricing/taxation, subsidy reform, green funds
- Micro-credit, small to medium-sized enterprise policies, social protection and public works
- Multi-stakeholder forum ("old" SD councils — "new" GE accords)
- Public environment and climate expenditure reviews
- Strategic environmental and social assessments

2. Stakeholder rights and capacities
- Rights and security of tenure over natural resource wealth
- Rights to information, participation, access to justice
- Ensuring voice in decisions on resource use and benefit distribution
- Community (natural resource) management regimes
- Joint social and environmental protection schemes
- Education and training schemes that support inclusion in labor market transformation to green

3. Inclusive green markets and finance
- Inclusive business models and value chains, e.g. outgrower schemes, partnerships
- Public procurement that targets sustainability and inclusion
- Finance windows and investment codes that prioritize green and inclusion
- Poor people's access to markets and supply chains

4. Harmonized international policies and support
- Coherence within and between countries on development, trade, technology, social and environmental policy
- Donors' harmonized policy, investment and capacity-development support

5. New metrics for planning and measuring progress
- Green accounting; capitals frameworks; well-being; distributional indicators within all development metrics

Source: Based on Poverty-Environment Partnership (2013)

The challenge now is to move on from isolated applications of one or two of these instruments, to a more system-wide approach that grasps reform opportunities, such as the SDGs, but uses them to make the structural and institutional changes required in a country, locality or sector.

2.1.4 International GE/GG Support Programs: Increasingly Tackling Inclusion and Poverty, but in Different Ways

This discussion of national progress would not be complete without a note on the status of international GE/GG initiatives. While many of these programs are only in the start-up phase, already there are signs of how they might be improved in relation to inclusion and poverty reduction. Indeed, these "people issues" are becoming a focus for many of the initiatives, as they gain feedback from developing countries and their donors on their importance (Box 2. 1).

The main weaknesses of these international green growth programs might derive from not being fully informed of real progress and stakeholder perspectives in individual countries. These programs have not always taken the time to understand the national political economy in order to mobilize local champions and authorities. Nor have initiatives been designed to tackle the barriers to further progress (Section 3). In such circumstances, where they promote themselves as flag-bearers for GG/GE, this weak fit with national conditions can itself be a barrier to real progress. Early green growth efforts in particular focused attention on high-level players in powerful ministries, international funds, big infrastructure suppliers and national macroeconomic growth. At the same time, they have almost completely ignored small players, domestic funds and informal and local economies — precisely those who have also been failed by the "brown" economic system. This top-down approach has neglected the social goals important to poorer groups (natural resource business and traditional livelihoods); and runs the risk of causing negative impacts (such as land use or livelihood impacts of major carbon-focused investments); and the transitional costs of the formal green economy activities proposed are too high for most people. In contrast, the lower-cost options for green economic activity accessible to poor groups (e.g. in informal waste recycling, traditional agriculture and water management) have been ignored. Finally, despite becoming aware of such issues, there is no joint learning program in place: however, GGGI and GEC have raised the idea.

2.2 Case Studies: People-Focused Green Growth Activities

While there are many "glimpses" of inclusive green growth associated with various projects, e.g. at www.greeneconomycoalition.org, there are as yet few detailed and independent assessments of country-based transitions to green growth and their outcomes and impacts. This section introduces case studies of different countries, with the caveat that the evidence base is not always as strong as we would like. The case studies explore noteworthy interventions and processes designed to address community, informality, gender and poverty reduction issues. Few were labelled "inclusive green growth" initiatives as such, illustrating the need to look broadly. Here we summarize the case studies and the kinds of IGG progress made, while the full text and detail can be found in Appendices A–J.[4]

Indonesia: Phasing out fossil fuel subsidies, complemented by social safety nets
For over 30 years, direct fossil fuel subsidies formed an important part of the Indonesian government's economic program. These subsidies were larger than the combined spending on education, health and social protection. With growing financial costs, limited social benefits compared to alternative social spending, and emerging environmental impacts, the government has begun to phase out the subsidies. Instead, it has moved towards building a stronger social safety net to support the breadth of welfare needs of its poorest citizens. Schemes such as rice subsidies, public health insurance, cash assistance for school costs, and both direct and conditional cash transfers have all helped to support the poor while fossil fuel subsidies are removed. With current low oil prices, this could be an opportune moment for other countries to also phase out fossil fuel subsidies. This move towards green growth can be achieved in an inclusive manner if there is the political will to set up more effective forms of social protection (Appendix A).

Rwanda: Ecotourism in a least developed country — revenue-sharing with local communities improves both livelihoods and biodiversity conservation
The growth of Rwandan tourism linked to national parks and its famous mountain gorillas, alongside a comprehensive scheme for sharing tourism revenue among local communities, suggests that socially inclusive tourism is a model that can be expanded. The Rwandan model shows that the details matter: the 5 percent of tourism revenues shared are far more beneficial for local communities than Uganda's higher headline figure (which is lower in absolute revenue terms, as it is restricted to park entry fees). Engaging local communities in fairer deals from tourism gives them strong incentives to protect vulnerable wild landscapes and biodiversity. Green growth through nature-based tourism can be reconciled with the needs of poor local communities wherever their interests can be aligned and the benefits shared (Appendix B).

Mexico: Consultative approach to renewable energy rollout and fuel subsidy reform produced environmental improvements, while mitigating negative impacts on marginalized groups
Mexico has shown that a progressive legislative stance on climate change and strong consultative processes can be successfully combined to deliver a renewable energy rollout and fuel subsidy reform in ways that protect the poor. Managed, incremental shifts in energy policy, along with successful alternative cash transfer mechanisms, have produced environmental improvements while mitigating negative impacts on marginalized groups. It has also minimized the controversy that can blight poorly communicated sustainability policies. The lesson is that a robust consultation and approval process at the heart of the green growth policy ensures that it succeeds on its own terms, as well as supporting the social welfare of the poorest (Appendix C).

Philippines: Integrated national greening and inclusive forestry in a developing country
The Philippines National Greening Program (NGP) is a key example of a national program of socially inclusive environmental policy and forest rehabilitation. The US$650 million program to plant 1.5 billion trees was planned to create livelihoods for poor and marginalized communities — although there were some challenges with weak implementation. In circumstances where major tree-planting programs are often top-down impositions on local development, the NGP strove to combine ambitious green objectives with effective, equitable and sustainable social benefits (Appendix D).

South Africa: Implementing holistic environmental and social protection strategies in an emerging economy
South Africa's economic growth has not yet yielded a wide distribution of benefits among the population and poverty is persistent. At the same time, water shortages, other resource constraints and environmental vulnerabilities demand restorative action in many ecosystems. The South African government has responded to these issues through aligning social and environmental policies. Its "Working for…" joint environment/social protection programs have supported jobs and livelihoods for marginalized groups, involving them in environmental protection efforts in water management, wetlands, biodiversity management and renewable energy (Appendix E).

4 Other useful cases are in Raworth et al. (2014) and Benson et al. (2014).

Durban (South Africa): Inclusive city-level climate action planning
Durban's experience illustrates the important role that municipal authorities can play in engaging poor and marginalized communities in green growth. Durban's Climate Change Strategy is an example of municipal climate policy that makes pro-poor inclusion explicit, understanding that climate resilience cannot be achieved without poverty reduction. Community consultation was put at the heart of developing Durban's response, building on the successful history of consultative environmental interventions through the Climate Smart Communities program. Durban's Mayor James Nxumalo has said, "The success of the Durban Climate Change Strategy will depend on how inclusive the process is, so that all voices of our city are represented and heard" (Appendix F).

Germany: Inclusive renewable energy policy reforms in an industrial economy
Germany's Energiewende is a success story built on community ownership of local energy assets, and on an inclusive consultative approach to planning and constructing modern energy grids. A combination of national political ambition and local cooperative ownership has allowed Germany to deliver new renewable energy capacity rapidly and at scale, without alienating the local communities on which successful change depends. This represents a valuable model for developing countries to emulate, with strong national emissions, renewables and efficiency targets — combined with energy efficiency funding for poorer households — allowing a rapid environmentally sustainable transition in a prosperous industrial economy (Appendix G).

Peru: Fostering local inclusive growth based on indigenous models of equity and environmental limits
The Cusco region of Southern Peru is home to 1 million indigenous Peruvians, and to unique biodiversity, notably many varieties of potato. One key initiative provides a good example of a local inclusive green economy: the Potato Park's community-led development and conservation initiative has demonstrated an inclusive approach to improving the livelihoods and climate resilience of some of Peru's poorest indigenous communities. The park's community of 6,000 people is governed in accordance with customary laws and values. Indigenous knowledge and biocultural diversity combine in developing climate-resilient agriculture and fee-earning genetic conservation. Inter-community benefit sharing, based on customary laws, ensures that the rewards are shared equitably among park communities, which consequentially have a strong sense of ownership and pride in the program. The example of Cusco's Potato Park demonstrates that indigenous knowledge can be an asset in developing local pro-poor green growth programs, if it is acknowledged and leveraged in an inclusive way (Appendix H).

Wales: Establishing long-term thinking — the Well-being of Future Generations Act
"Short termism" is one of the most frequent causes of failure to meet sustainability challenges. The Governor of the Bank of England, Mark Carney, recently coined the phrase "tragedy of horizons". It describes the market failure by which investors, companies and governments fail to look far enough ahead to consider coming problems — even though these problems, such as climate change, are well known to them. Hillary Clinton has similarly used the phrase "quarterly capitalism" to express how "too many pressures in our economy today are pushing businesses toward short-termism — a focus on the next earnings report or the short-term share price, rather than the sources of long-term growth and lasting value."

Wales recently issued a legislative response intended to overcome short-termism. Its Well-being of Future Generations (Wales) Act 2015 sets a framework for the long-term improvement of well-being, with performance targets and cross-government responsibilities to deliver. The act is innovative because it empowers policymakers to consider costs and benefits that are normally beyond the horizon of their short-term remits, helping to justify long-term green growth policies. It also defines success more broadly than GDP, as improving the social, economic, environmental and cultural well-being of Wales (Appendix I).

Individual small businesses
IIED's green economy dialogues in developing countries identified a huge demand for local examples of inclusive green growth at the livelihood and micro or small enterprise levels. Most countries want a picture of what sectors could look like if they engaged the poor and made money. As well as the many glimpses of a green economy at www.greeneconomycoalition.org, there are other good examples; see Box 2.3 and Box 2.4. More work is needed to catalogue these initiatives, to assess their requirements for investment and enabling conditions, and to promote them to mainstream sector players.

Box 2.3 Mariam Salim's small business: Finance for a green, clean food stall in Kisauni, Mombasa County, Kenya

Fifty-year-old Mariam Salim is a village elder (Mzee wa mtaa), chairperson of a 25-member women's group, and owner of a microbusiness selling food from her home in Kisauni, Mombasa County. Her customers describe her chapatis, mandazis and viazi karais (fried potatoes) — prepared and served from her front-door verandah — as the best for miles around.

Thanks to a small asset-based loan from Kenya Women's Finance Trust Bank (KWFT), a Kenyan financial institution supported by USAID, Mariam was able to acquire a green, energy-saving multipurpose jiko (stove) — enabling her to reduce her charcoal use from four to an average of one bag each month. Mariam was also able to use another asset-based loan to install a three-lamp solar lantern system in her home. Repayments for the solar system are much less than the 3,000 Kenyan shillings (US$35) she previously had to spend each month buying kerosene fuel for lighting.

Through the KWFT inclusive loan program, Mariam has been able to drastically reduce her energy costs while helping to contribute to environmental conservation and sustainability in Kenya.

"Our homes have been transformed," says Mariam. "Our children can study at night without problems, our businesses are thriving, we are saving handsomely and I can barely remember the hassles of using kerosene lamps."

Source: USAID (2014) Financial Inclusion for Rural Microenterprises

Box 2.4 Mustafa Bepari's small business: Turning coconut fiber into carpet threads in Faridpur, Bangladesh

Beyond the social impact of providing jobs for 30 people in his local community who previously had no employment opportunities, Mustafa Bepari's business has positive environmental impacts: working with "waste" natural fibers from coconuts, his material is being used in place of artificial materials such as plastics and foams.

"It is not a business, it is my destiny," says Mustafa. His business processes and trades the coconut fiber (copra) used in mattresses, carpets, sofas and other furniture. He collects and purchases raw coconut fibers from various coconut mills and processes them into small strands. These fiber strands are then sold to buyers who turn them into fillings for mattresses and sofas.

Mustafa learned his trade from his uncle, who taught him about negotiation, financial management, procurement and maintaining good relationships with customers. When Mustafa wanted to set up his own business, he needed capital for machinery and raw materials. The skills he had developed and his visible determination helped him to persuade BRAC Bank to agree to a loan, to help his cash flow, and to give him access to skill development workshops. BRAC Bank has also given Mustafa the opportunity to participate in the Danida Business-to-Business network, so that he can meet and form relationships with overseas companies.

Source: Global Alliance for Banking on Values (2013)

Global: Sustainable Energy for All

The Sustainable Energy for All initiative is a multi-stakeholder partnership between governments, the private sector and civil society to achieve inclusive energy access. Launched by the UN Secretary-General in 2011, it has three interlinked objectives to be achieved by 2030:

1. Ensure universal access to modern energy services
2. Double the global rate of improvement in energy efficiency
3. Double the share of renewable energy in the global energy mix

These three objectives, each one important in its own right, reinforce each other in important ways. For example, affordable renewable energy technologies bring modern energy services to rural communities, in circumstances where extension of the conventional power grid is prohibitively expensive and impractical in the medium term. Boosting energy efficiency can provide substantial cost savings to governments, businesses and households, while freeing up power for other more productive uses. Achieving the three objectives together in an inclusive way will maximize development benefits and help stabilize climate change (Appendix J).

3. Barriers to Green Growth Being Inclusive and Reducing Poverty

Inclusive green growth is clearly unfinished business, as Section 2 described. Progress has been patchy, and not always scaled up or scaled out. Few countries have been bold enough to transform economic and financial governance (i.e. to the fourth institutional stage described in 2.1). This section therefore asks the question: What are the barriers to reducing poverty and adopting an inclusive approach to green growth?

3.1 Barriers to Poverty Reduction and Inclusive Approaches to Green Growth

Several persistent barriers to progress are identified:

Governance is too weak to make the bold changes required
Both introducing green growth and making it inclusive require strong and effective governance systems. But reforms cannot be introduced unless there is good awareness of the issues, trust in government institutions and respect for the rule of law — which is often a challenge in low-income countries. Policy cannot change without the engagement of a knowledgeable civil society and a free press able to hold government and business stakeholders to account. And market failures cannot be corrected without well-informed, coherent and sufficiently strong information campaigns and enforcement that level the playing field for poorer economic actors and provide underpinning social policies.

Stakeholders are too often excluded in national planning processes, which then blocks green growth implementation
Too often, there is inadequate consultation — across government as well as with civil society and business — and a lack of dialogue of the kind that can come up with consensus visions or plans. The results are at best "planners' dreams" (resulting in many national sustainable development strategies, with limited links to budget or investment), or at worst, appeal only to those with the power to act and may not bring benefits to poor women and men. If this lack of multi-stakeholder engagement carries on into implementation, there tends to be passive or active resistance to the changes, or at least inadequate understanding, and the green growth approach could become discredited.

The inclusive green growth agenda is presented as an external idea, lacking national ownership
Green growth has in some cases been seen as an external or donor-driven agenda, with proprietary methodologies and presumptions about which aspects are most important. Rio+20 brought all of this to a head: it concluded that green economies should be country-tailored — and the current appetite for such tailoring through country-driven, multi-stakeholder approaches is a positive trend. But not enough external initiatives offer the time, resources and space for this multi-stakeholder, consensus-building approach which would allow IGG to pervade thinking across society and the economy.

Elites may benefit from the existing unequal brown economy
National economies, particularly in low-income countries, are currently largely shaped around deals with large-scale, unsustainable extractors of natural resources like minerals, timber and fisheries. The whole economic and political system exists to maintain that kind of status quo. The potential losers of pro-IGG reforms – such as the fossil fuel industry – are highly powerful and vocal, both internationally and through political and financial links with national elites. Those with vested interests who will lose out from green growth can mobilize to stop or delay IGG reform. Even where the formal plan might propose IGG, political decisions to implement have often run into opposition. IGG exposes some major issues in the political economy of environment, poverty and development. Real change will ultimately be political, and this should include the involvement of poor women and men's social movements. These movements may come from informal groups of rural or urban households (such as shanty residents, landless farmers or indigenous groups), informal trade associations, trade union organizations and other civil society representatives. However, since they challenge the status quo, these movements may not always be well supported. This can change with political space, such as the rise of social movements in Latin America over the last decade; this has led to electoral success for such groups, for instance indigenous groups in Peru.

Limited decentralization, and shortage of locally controlled finance, does not match the scale of the problem
Inclusive green growth issues are intensely local in nature and it is often only at the local level, and by local groups, that precise trade-offs and integration can be made. Yet local powers and resources tend to be inadequate, and there

is limited decentralization of the powers and finance needed to act. Furthermore, policy is not always informed of any effective local approaches that work — such as the locally controlled slum upgrading schemes supported by the poor people's federation, Slum and Shack Dwellers International,[5] or Asian Housing Coalition (Section 4.2.3).

Poor groups and small/informal business lack power, access and agency
This barrier underlies all of the above. It is entrenched when IGG initiatives respond by making poor groups the object of inclusive, green growth initiatives rather than active drivers of them. And IGG initiatives tend to deal only with formal institutions, limiting progress in the informal economy. Yet there are many examples of people taking the initiative to provide the environmental and developmental benefits that the formal structures cannot provide — suggesting what can be achieved if people are empowered to act and "own" the IGG agenda (Benson et al., 2014).

Skewed distribution of the costs of change including balancing short and long term
The significant upfront costs and delayed benefits of low carbon development, ecosystem conservation, or green job creation can create major barriers. Consumers often passively support elites by being unwilling to accept the higher prices that might initially result from changes in big business practice. Poor people may not be able to afford the transition costs and risks of shifting to, for instance, more sustainable land use. In these cases, policymakers need to trade off competing interests, not only in the short term but also the long term. Introducing green growth policies and initiatives is not just a technical issue; it also requires addressing winners and losers and ensuring that poor people benefit.

Lack of inclusive finance
A serious challenge is that very little development finance reaches the villages and informal urban settlements that need it most. Furthermore, the people most at risk rarely have a say in how to spend the money. Centralized government ministries, mainstream financial institutions and large-scale investors do not usually serve the poor (Steele et al., 2015a).

Reasons for this include:
- difficulties in reaching out to communities
- priorities for economic infrastructure-led growth over social development
- low returns on investments
- high transaction costs
- risks that borrowers will default on loans.

Table 3.1 Barriers to wider adoption of green growth

GG policy process >	Economic development planning	Economic development prioritisation	Sector growth	Small business opportunities	Fiscal development	Land management
Case-specific barriers to adoption >	Civil society have limited access to planning process and decision-making	Social goals not explicit: • Poverty reduction & inequality • Social inclusion • Social safety nets Equitable outcomes not explicit	Supportive social policies inadequate: • Inadequate education & training • Definitions and standards for green jobs & decent work absent • Social protection absent Infrastructure absent: • Transport to employment not adequate • Housing inadequate or distant	Small business forgotten in policy processes: • Access to markets • Finance • Training	Regressive tax or subsidy reform hitting poorest hardest Financial access & literacy - micro financing and banking service provision to poorest inadequate	Access to resources insecure: • Water, land, others • Land rights and property ownership
Cross-cutting barriers to adoption >	Lack of access, awareness, trust, capacity and skills among those needed to vote for, invest, buy, or implement					

In conclusion, the barriers to inclusive green growth are largely governance-related and institutional in the broadest sense. This should lead us to imagine a future IGG agenda which is targeted at systemic institutional change, rather than just a set of projects. The way that this holistic change is planned is key: it has to build the necessary vision and trust between institutions and levels, as Section 4 will explain.

5 See www.sdinet.org.

4. Ways Forward for Inclusive Green Growth

This section addresses the question: What are the ways forward for reducing poverty and improving social inclusion within the transition to green growth? It describes what is needed, in terms of four inclusive, pro-poor outcomes to be achieved, particularly to overcome structural barriers. It then proposes four principles for how the outcomes can best be achieved.

While both the outcomes and principles are aimed at the high-level structural changes that are ultimately necessary for pro-poor and inclusive approaches, they can also be deployed in more modest project settings. This can help to ensure that each project contributes to the major changes needed to achieve inclusive green growth.

4.1 Inclusive, Pro-poor Outcomes

There is a growing body of literature on how to achieve green growth. It tends to be associated with initiatives focused on formal production sectors. It identifies the (huge) investment needs required, notably for low-carbon energy and infrastructure. And it looks to ways to attract this investment, notably through international climate finance. This is all of great value. But little of it focuses on inclusion and poverty reduction, even if labelled as such (e.g. the World Bank's 2012 report on inclusive green growth), and there is not a lot on the systematic policy and institutional change required beyond the project level.

The goal for IGG transformation is for leadership to supply broader governance reforms, and for societal demand to drive IGG reform, including by poor women and men. To achieve these goals our focus here will therefore be on those policy and institutional transitions (in the widest sense) that are most important for making this green growth inclusive and pro-poor.[6] We identify four outcomes that we need to work towards:

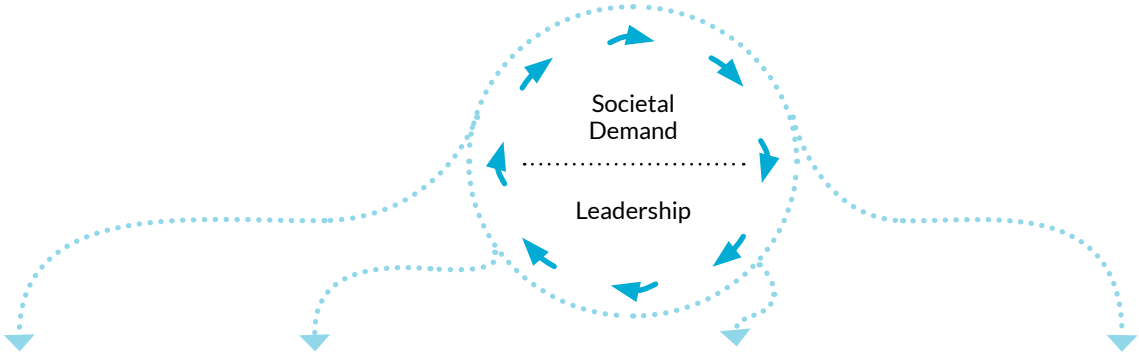
1. governance that is inclusive, nationally owned and transformative
2. strengthened livelihoods, rights, capital assets and empowerment for poor women and men
3. inclusive finance
4. metrics for inclusive green growth.

These are set out in Figure 4.1.

---

6 Poverty Environment Partnership (2013), and much of the green jobs literature from the International Labour Organization are useful, as well as certain research reports, such as Raworth et al. (2014).

Figure 4.1 Inclusive green growth: Outcomes to achieve and principles to achieve them



Governance

Multi-stakeholder dialogue and diagnosis – driving demand for IGG

Government coordination and leadership – making the policy space for change

Integrated governance frameworks – institutions becoming better linked and working together

International policy – development finance as a catalyst to wider change combined with sustainable consumption and production in richer countries

Empowerment

A participatory transition process owned by the excluded and poor women and men themselves:

Poor and excluded groups' knowledge deployed and supported in IGG

Local government's role in supporting poor women and men is at the heart of effective IGG strategies

Poor women and men's capital assets recognized, protected and strengthened – so that they can attract external capital at scale

Informal labor and production markets recognized for green growth – and, where necessary, formalized in inclusive ways

Natural resource rights and control are secured for the excluded and poor women and men

Green growth technologies are screened and promoted for how they benefit poor and excluded women and men

Finance

Reforms to financial markets start to drive investment in inclusive, green growth

New commitments are made to inclusive, green growth by emerging market finance institutions

Poor women and men come to be recognized amongst the wide range of investors required for the IGG transition

Local governments provide important channels for inclusive finance

Microfinance, local funds and social protection schemes provide instruments for finance to reach those who need it most

Financial mechanisms start to prioritize the informal economy and SMMEs

Natural resource revenues are carefully managed to benefit the poor and sustain future flows – bringing about a resource "blessing" rather than a resource "curse"

Financial mechanisms ensure the transition costs of green growth are not borne disproportionately by the excluded and poor

Metrics

Agreed metrics for inclusive green growth – improving confidence of decision makers to make changes

Alignment of multiple SD/GG metrics – ensuring consistency and clarity for IGG integrated governance frameworks – institutions becoming better linked and working together

4.2 Inclusive, Pro-poor Principles

We focused on describing transformative outcomes for inclusion and poverty reduction in 4.1, rather than specifying particular policies, instruments or technology recommendations — recognizing that the outcomes will be achieved differently in particular contexts. However, we suggest that there are four inclusive and pro-poor principles that do have wide applicability for how the outcomes can best be achieved; these are based on analyzing effective progress to date towards IGG:[7]

1. Start with where people already are, and build on existing progress: Build on poor women and men's livelihoods, their (informal) economic activities, their forms of organization; build on progress already made for inclusion and poverty — exploring and adding to what already works well within resource constraints, both policies and technologies.
2. Ensure IGG strategy is transparent, demand-driven and participatory: Green growth process and information must be accessible and accountable to all. There must be participation throughout — making deliberate provision for inclusion; ensuring stakeholders' access to full and effective involvement; and supporting their agency, demand-driven by those affected at all levels, with leaders responding to bottom-up demand/movements.
3. Support social justice and embrace diversity: Respect people's rights, cultural and social diversity, and meet diverse human needs and social goals fairly (both within and between generations); supporting diversity as a precondition for resilience, deploying specialist skills, encouraging partnerships and being clear about responsibilities.
4. Plan for the long term: Support the poor through the transformational societal and economic changes needed; and look out for future generations' needs.

7 These principles draw from all the experience reviewed in this research, but particularly Raworth et al. (2014) and GEC (2012) — "Nine principles of a green economy".

These four principles can be applied to all the outcomes. These outcomes are set out in Table 4.1, with recommended activities for each outcome. Further details for each activity are given in Table 4.1.

Table 4.1 Policy recommendations for the inclusive growth transformation

Outcomes for IGG	Activities for IGG
Governance that is inclusive, nationally owned and transformative	• Multi-stakeholder dialogue and diagnosis — driving demand for IGG • Government coordination and leadership — making the policy space for change • Integrated governance frameworks — institutions becoming better linked and working together • International policy — development finance as a catalyst for wider change, combined with sustainable consumption and production in richer countries
Strengthened livelihoods, rights, capital assets and empowerment for poor women and men	• A participatory transition process owned by excluded and poor women and men themselves • Poor and excluded groups' knowledge deployed and supported in IGG • Local government's role in supporting poor women and men at the heart of effective IGG strategy • Poor women and men's capital assets recognized, protected and strengthened — so that they can attract external capital at scale • Informal labor and production markets recognized for green growth — and, where necessary, formalized in inclusive ways • Natural resource rights and control secured for excluded and poor women and men • Green growth technologies screened and promoted for how they benefit poor and excluded women and men
Inclusive finance	• Reforms to financial markets start to drive investment in inclusive green growth • New commitments made to inclusive green growth by emerging market finance institutions • Poor women and men come to be recognized among the wide range of investors required for the IGG transition • Local government provides important channels for inclusive finance • Microfinance, local funds and social protection schemes provide instruments for finance to reach those who need it most • Financial mechanisms start to prioritize the informal economy and SMMEs • Natural resource revenues are carefully managed to benefit the poor and sustain future flows — bringing about a resource "blessing" rather than a resource "curse" • Financial mechanisms ensure the transition costs of green growth are not borne disproportionately by the excluded and poor
Metrics for inclusive green growth	• Agreed metrics for inclusive green growth through the SDGs — improving decision makers' confidence to make changes • Aligning multiple SD/GG metrics — ensuring consistency and clarity for IGG

4.2.1 Outcome 1: Governance that is Nationally Owned, Integrated and Transformative

Multi-stakeholder dialogue and diagnosis — driving demand for IGG
Externally driven projects, government-led plans, individual fiscal instruments, or civil society campaigns will only go so far in making the transition to inclusive green growth. In most countries, it will be necessary to hold a series of stakeholder and multi-stakeholder dialogues to assess demand and need, and to engage people in identifying and diagnosing existing inclusive green activity, drivers and barriers. The South African case study (Appendix E) suggests that a green growth stakeholder accord can help in providing the platform for joint assessment, planning and then learning. Caribbean experience points to the need for a continued action learning group to try new approaches with marginalized groups — as well as to keep a good communications program to build the IGG track record and improve confidence.

Government coordination and leadership — making the policy space for change
Our call for an inclusive process does not diminish the importance of government coordination and leadership. In Zambia, for example, the all-important national development planning machinery of regular five-year plans is being mobilized to develop the country's inclusive green growth strategy. Recent green growth dialogues in many countries have strengthened government resolve to mobilize and improve the consultation and participation procedures used in national plans. All the case studies illustrate the key role of government in leading the process of inclusive, green reform — with the Philippines president championing the national greening program and Durban's mayor stressing an inclusive city climate strategy.

Integrated governance frameworks — institutions becoming better linked and working together
It is time to progress from reliance on a few one-off procedures, such as impact assessment and safeguards, to more holistic ways of working. There has been a recent shift in polarity. Where once environment ministries and civil society activists pushed their concerns onto reluctant planning ministries and development practitioners, now planning ministries and development players seek advice on the resource scarcities and climate threats that are beginning

to threaten poverty reduction. This has helped to kick off uptake of IGG integration tools — sustainability criteria and metrics, standards and safeguards, assessment and monitoring regimes, interdisciplinary and systems science, agreements and accords. These ingredients for institutional change are now known at least, but their limited use has not amounted to institutional reform. The next step will be to invest in institutional capacities and rules that build in sustainable development and IGG principles, learning and emergent strategy. In short, people's jobs now need to change. Ultimately, all organizations should be able to plan and report to common or aligned IGG (or sustainable development) standards, whether in government, civil society or business.

International policy — development finance as a catalyst for wider change combined with sustainable consumption and production in richer countries

The focus on national ownership within developing countries should not undermine the case for a global move to inclusive green growth, with the most to gain from action in the richer countries. The changing context for development finance and aid should open up many possibilities for supporting IGG. Aid's new focus on the SDGs, climate finance, humanitarian action, developing country economic growth and tax revenues all point to the need to reform countries' economic governance, rather than the management of external grants. Aid will need to seek out the female, young and aged faces of exclusion, put a priority on their voice and knowledge – and the (informal) economies in which they find themselves – and emphasize inclusion.

However, international action for IGG is not only about aid. It should also concern international economic governance regimes; for instance, corporate governance and sustainability reporting, investment, and bilateral/multilateral trade agreements. These need to be informed and reformed in relation to their impacts on IGG. It refers also to the potential benefits of domestic action in rich countries: green policies (such as biofuels percentage targets, standards for carbon credits) need to be coherent with developing countries' strategies and the needs of their populations.

Industrialized countries also need to urgently take steps for sustainable consumption and production as this is the main driver of brown growth in many parts of the world. Most least developed countries' natural resource exports are destined for markets in industrialized countries. So unless there are changes in the demand from richer countries, these unsustainable export patterns will persist. Similarly, it is reduced emissions from rich countries that can set the trend for reductions in global greenhouse gas emissions. Often there are huge potential savings in GHGs in rich countries that dwarf the emissions that would be created by the poor. For example savings on the USA car fleet emissions would be enough to power the poor — as explained in Box 4.1.

Box 4.1 USA vehicle efficiency could save enough emissions to power the poor

Sustainable consumption and production matters in richer countries. The savings in emissions by rich countries would dwarf the emissions that would be created by the poor. One striking statistic is this: if electricity were provided to the 1.3 billion people who currently have none (using standard technologies), the entire extra emissions produced could be offset by switching all USA vehicles to European fuel efficiency standards.

Source: World Bank (2012a: 141)

4.2.2 Outcome 2: Strengthened Livelihoods, Rights, Capital Assets and Empowerment for Poor Women and Men

A participatory transition process owned by the excluded and poor women and men themselves

It is vital that the excluded and the poor are brought into discussion and decision-making on green growth. They have been surprisingly invisible in many green growth initiatives, which have often been characterized primarily by environmental themes, and favor large, formal or corporate solutions. The international level now needs to hear the voices of LDC leaders and poor women and men themselves. The national and local levels also need to hear the voices of the excluded and poor men and women — and/or those who work with them. This can be challenging in some countries, where democracy and civil society dialogue is limited and there are political tensions. This is a key point where government needs to embrace social movements rather than resist them. Where inequalities have been overcome, this has often resulted from social movements demanding changes in the "rules of the game", supported either by political and constitutional change or by their own creation of spaces for change (Zibechi, 2008).

Poor and excluded groups' knowledge deployed and supported in IGG

Strategies are needed to break knowledge hegemonies and the intellectual property rules that are a barrier to poor groups' involvement. Capacities will need to be built for indigenous research and technology development in developing nations, linked to global and South-South networks. Information and communication technology advances may be

deployed to support people's informational and political power, with much greater mobilization of locally controlled development funds to improve their financial power. The case study of the Philippines national greening program shows the intention of the program to make poor rural farmers, including the most excluded indigenous groups, active agents in the tree planning and maintenance schemes.

Local government's role in supporting poor women and men at the heart of IGG strategy
Local government is often closest to political representation of poor people. Yet green growth initiatives tend to focus on national authorities — with often tough or tokenistic results if national governments attempt to take a lead on engagement with marginalized groups. Development is an intensely local affair, in terms of how environment and poor people's needs are actually integrated or traded off. Local government can play a facilitating role, but this requires effective decentralization of political and economic power, to enable it to work alongside local groups — as in our case study of Durban.

Poor women and men's capital assets recognized, protected and strengthened — so that they can attract external capital at scale
Inclusive green growth involves building the assets or capitals that the excluded and poor have already, improving their productivity and added value, and protecting poor people's rights to them. Figure 1.3 showed the six types of assets or capital that each person has, with a particular focus on the excluded and poor: human capital (labor is most people's primary asset); social capital (the ability to form social groups and support networks, including to manage assets); intellectual capital (local people's knowledge being often undervalued, or external technology being inaccessible); manufactured or physical capital (critical in some cases to enable other capitals to be used); as well as natural capital (land often being limited) and financial capital (limited access to savings schemes and informal credit). An IGG strategy could be expected to focus on: supporting the labor of the excluded and poor through informal labor markets; improving local accessibility of financial capital; enabling investments in building or restoring natural capital; and technology that uses natural capital in ways that best suit the excluded and poor. The practice of external capital seeking cheap land and labor is still widespread; some Chinese involvement in Africa is popularly characterized this way. Increasingly, in developing countries today, this should be turned on its head: local people with rights and knowledge of natural assets need to seek and find financial capital at scale. This is set out in more detail below.

Informal labor and production markets recognized for green growth — and, where necessary, formalized in inclusive ways
There can be much promise in an IGG approach to smallholder agriculture and off-farm employment such as small and medium-scale enterprises in urban and rural areas, including decentralized services for energy, water and waste collection. Informal labor markets can be supported in many ways, to achieve higher wages and to avoid attempts by some governments to simply criminalize or ban them. Where informal labor markets do have negative environmental and health impacts on the poor, such as in some small-scale mining and waste recycling and disposal (e.g. ship breaking), technological and training support can shift informality along the spectrum from dirty and illegal to professional and efficient.

This will usually require some formalization. Formalization organized by government or corporations can be (inadvertently) exclusionary or environmentally ineffective. Formalization organized by small producers or traders, based on producers' own capitals, knowledge and organization, can be more sustainable but miss out on technological, skills and market opportunities. Through better understanding of informal actors, the power and agency of those actors, and appropriate formalization, innovative hybrid approaches can create rewarding livelihoods and decent jobs. In the long run, education and training programs are also needed, to build a workforce suited to an inclusive, green future. The Rwandan case study demonstrates how former poachers are now being employed in the nature tourism industry and benefitting from inclusive green growth.

Natural resource rights and control secured for the excluded and poor women and men
It is a mistake to assume that increasing the value of natural capital will always benefit the excluded and poor — higher prices for natural capital can cause the poor to further lose their access. Increasing land prices leads to "land grabs". It is vital that green growth policies do not inadvertently create "green grabs" where high-value carbon and biodiversity resources are taken away from poor women and men, who may be highly dependent on these resources for their livelihoods. This situation can be prevented by securing resource rights and control by poor people, including equitable tenure policies and incentives for sustainable management. This will require challenging political reforms and taking on elites who are seeking greater resource control. The Philippines case study highlights how afforestation policies are intended to benefit poor households, even where they may have little or no land of their own.

Green growth technologies screened and promoted for how they benefit poor and excluded women and men
Green technology can potentially produce more outcomes with fewer polluting inputs and/or natural capital inputs. But it also has impacts on other types of assets — it may require more or less labor or capital inputs which may negatively impact on poor women and men. These technologies need to be carefully assessed, especially if the technologies are

new to the country. Thus IGG does not only need imported or high-cost high technology — though internet connectivity and high-tech medicines will almost always be important. An inclusive approach to green growth will aim to identify and support local technical knowledge and innovations suitable to informal economies. Efficient stoves made from local materials, bicycle-based transportation and local mobile phone apps are examples of technology affordable to poor groups. Social enterprises can be good brokers for finding, testing and extending appropriate technologies that produce the inclusive and green outcomes sought by poor groups. The solar water heater program in Bangladesh, supported by social enterprise, aims at maximizing benefits for the excluded and poor: low-income women are the producers and distributors, and hundreds of thousands of female jobs have been created.

4.2.3 Outcome 3: Inclusive Finance

Reforms to financial markets start to drive investment in inclusive green growth
With the 2008 financial crisis, a series of financial reforms was enacted rapidly in many countries, sometimes by providing state funds to bail out loss-making private investors as well as introducing new regulations. At the international level, Basel III[8] has aimed at reducing risk in the banking system, but has had the effect of reducing investment both in longer-term environmental management projects and in poor countries. While these short-term fixes have not always been good news for the green growth agenda, there are signs of reform, with some investors paying greater attention to sustainable development objectives. These reforms are in the banking sector (both commercial banks and central banks), bond markets and institutional investors — with much of the innovation in emerging markets such as Brazil and China (UNEP, 2015). They are only just beginning; but the potential magnitude of capital that they could unleash is huge and could prove to be important means for mainstreaming green growth. The challenge will be to make these often formal financial reforms actually promote financial inclusion. There are also issues of addressing cultural transformation and market governance, given the perverse impacts of financial markets in promoting, for example, short-termism and risk-taking. Change will require sustained pressure from regulators as well as enlightened leadership from within financial institutions, as demonstrated by the Governor of the Bangladesh Central Bank, who has introduced a number of green banking reforms.

New commitments made to inclusive green growth by emerging market finance institutions
The Brazilian Development Bank makes annual loans of up to US$70 billion per year — almost three times the amount loaned by the World Bank. The China Development Bank is even bigger and has a greater focus on investing abroad; by 2012 its combined overseas loans had reached over 90 countries and totaled over US$220 billion in infrastructure, agriculture and energy. The Brazilian Development Bank has been updating its social and environmental policies and safeguards, but there is limited transparency, making it difficult to assess progress. While the China Development Bank is also improving its social and environmental guidelines, they remain less demanding than those of multilateral institutions (Democracia et al., 2013). In addition to these national banks, the BRICS (Brazil, Russia, Indian, China and South Africa) are setting up new international financing institutions with the China-led Asian Infrastructure Investment Bank and the BRICS New Development Bank. While these BRICS financial developments are all important, it is still early days in terms of commitment by institutions. The new financing institutions will become increasingly important, and so will need to be embraced as core players in a future IGG agenda. One positive sign is that China's Asian Infrastructure Investment Bank has hired global experts to support its safeguards policy development, but national borrowers and civil society groups in borrowing countries will need to watch carefully to ensure that these inclusive policies are actually applied in practice.

Poor women and men come to be recognized among the wide range of investors required for the IGG transition
The transition requires many sources of investment. Three types of investor need to be recognized, mobilized and linked so that they are mutually supportive (Macqueen, 2013):

- local investors: smallholders, small-scale producers and natural-resource processors who invest their labor, savings and capabilities
- enabling investors: government agencies, donors, non-governmental organizations (NGOs) and, on occasion, the private sector, who are investing in capabilities, policies and security of rights. They put capital in, and sometimes write it off, to build the self-sufficiency and attractiveness of the business. This creates the conditions for asset investment
- asset investors: conventional profit or product-oriented investors who expect the nominal value of underlying capital to increase, or at least not fall.

The links between enabling and asset investors are regularly addressed. But the links with local investors need more attention if green growth is to take off and be inclusive. The Food and Agriculture Organization (FAO) has shown that, globally, smallholder, community and family forest owners invest more than all the forestry corporations combined. Recognition of this kind of commitment should be reflected in formal incentives. Germany's renewable energy program

8 Basel III is a global agreement to regulate banks more closely following the 2007 financial crisis.

has shown remarkable success in attracting individual households to invest — up to 30 billion euros per year in total.

Local government provides important channels for inclusive finance

Local authorities can be important channels for inclusive finance. For this to happen, local governments need capacity and autonomy, and local people need to be able to hold the authorities to account. Box 4.2 describes a successful example of a local government fund that supports adaptation to climate change in Kenya. Such funds are filled by national treasuries or donors and are designed to disburse their principal capital each year. They are crucial for poor rural communities that cannot use their own savings to raise funds for public goods in the way urban local funds can. The long-term value of these funds will depend, however, on governments and development partners replenishing them.

Box 4.2 Local government financing adaptation in rural Kenya

In Kenya's Isiolo County a climate adaptation fund was set up with donor finance, to allow local people to identify "public good" type investments that build resilience to climate change. Communities identified projects for funding through ward-level committees. A county-level committee of community and government representatives then assessed the proposals and helped strengthen them to meet the funding criteria. The funded projects include rehabilitating a livestock disease laboratory, building sand dams to store water, and establishing local agreements to strengthen the traditional dedha system of rotating grazing lands and managing access to dry season water. Successes like these have prompted the approach's expansion in four more counties, to cover a combined 29 percent of Kenya.

Source: Wells and Hesse (2014)

Microfinance, local funds and social protection schemes provide instruments for finance to reach those who need it most

Where new finance is brought into the economy to drive green growth, only rarely is this done in ways that benefit poor and excluded women and men. In many cases the poor and excluded are not able to access formal credit markets, most financial instruments, or even basic banking loan facilities, due to their lack of collateral and low earnings (only a quarter of adults of sub-Saharan Africa have access to a formal bank account). There are other means, such as microfinance, local funds (see Box 4.3), and social protection schemes that are expanding to increase financial capital for excluded and poor women and men (Steele et al., 2015a).

Box 4.3 Local funds for urban financial inclusion

Local funds can quickly provide cash to address collective needs of low-income groups in a cost-effective way. Several such funds have emerged from local savings groups and have been bolstered by international donors, giving the poor direct access to development finance that would ordinarily fail to reach them.

Local funds are often distributed as revolving loans rather than grants, and can therefore be re-used for future investments. Such funds can nurture partnerships between communities and local governments. This results in a more democratic planning process and helps to release further funds from the state to deepen local development initiatives. Most experiences of effective, efficient and empowering local funds come from urban contexts. They enable development finance to reach the most marginalized communities, while scaling up community processes from the local to city, provincial and even national levels.

The Asian Coalition for Community Action (ACCA) program, run by the Asian Coalition for Housing Rights, enables urban poor groups to improve living conditions in partnership with city governments. As of 2014, ACCA had improved informal settlements in 165 cities in 19 Asian countries. Between 2008 and 2011, ACCA's investment of US$2.3 million unlocked US$35.6 million worth of government land for poor people's housing.

Source: ACCA (2013)

Intermediaries also include adaptive social protection, where social protection and climate resilience objectives are linked and targeted to the households most vulnerable to income and climate shocks — while other social protection schemes are starting to address ecological rehabilitation such as afforestation and water management (Porras et al., 2015). This is illustrated by schemes in Brazil, Ethiopia and India (see Box 4.4) and in South Africa's "Working for…" programs, where the public works schemes for cleaning up the nation's river basins and water bodies are targeted at single-parent households — including those affected by HIV (Appendix E).

Box 4.4 Social protection schemes starting to address climate and environment objectives

Brazil: The national Bolsa Verde program provides cash payments to low-income families who adopt practices that conserve trees, fish and other natural resources. The scheme targets people in extreme poverty, particularly forest-dependent communities in the Amazon region. The Bolsa Verde program distributes more than US$40 million dollars each year among more than 69,000 families. The quarterly payment of 300 reais is nearly double the average quarterly income.

Ethiopia: The Productive Safety Net Project provides 7 million people who are chronically food insecure with a predictable transfer of cash or food in return for labor on schemes that benefit vulnerable communities. These work schemes include tree planting, water harvesting and constructing health centres. The project enables vulnerable people to resist shocks, accumulate assets and feed themselves. The project aims to encourage households to engage in production and investment. It promotes market development by increasing household purchasing power.

India: Each year, the Mahatma Gandhi National Rural Employment Guarantee Scheme provides tens of millions of people with 100 days of paid manual work. The scheme creates a legal right to employment. Anyone who applies and is not given work within 15 days is entitled to an unemployment allowance. Since 2006, when the scheme began, it has distributed about US$25 billion. Participants work on projects that benefit their local communities, such as creating infrastructure for water harvesting, drought relief and flood control.

Source: Steele et al. (2015b)

Financial mechanisms start to prioritize the informal economy and SMMEs

In terms of inclusive consumption, there are potential major "bottom of the pyramid" markets to explore to better meet the needs of poor consumers, many informal. In terms of including more people in green production, the individual's job, livelihood or micro-enterprise needs to be seen as a potential driver of IGG strategies, especially where "job creation" is the number one political concern. Grants to SMMEs are useful at the start (as shown in Box 4.5). They work well for projects that may not generate revenue, but they are not ideal for promoting growth. Grants may also increase government expenditure over investments, or provide false market signals if investment is on the rise. Even the poor may not need grants or subsidies in the long run. Subsidies should be phased out once markets are developed. Both organizations described in Box 4.5 (Bangladesh's Infrastructure Development Company Limited and Nepal's Alternative Energy Promotion Centre) have gradually phased out subsidies for all but the lowest-income households. The Infrastructure Development Company also phased out its institutional development grants once its partners had the required capacity. The Rwandan study demonstrates how the informal economy is benefitting from tourism revenue entering the area (Appendix B).

Box 4.5 Supporting SMMEs in Bangladesh and Nepal

In Bangladesh, a state-owned financial intermediary called the Infrastructure Development Company provides a grant to reduce the cost to households buying solar home systems. A common subsidy for all income segments provides a higher proportion of subsidies for poorer households, which tend to need smaller systems. The Infrastructure Development Company also provides grants to develop the capacity of partner organizations that install and service the solar power systems. Grants are disbursed on delivery of certain outcomes. This shifts the purchasing power to the poor and performance risk to private investors.

In Nepal, the Alternative Energy Promotion Centre has also developed a targeted subsidy model to enable the most vulnerable households to adopt renewable energy technologies. Forty percent of its National Rural and Renewable Energy Programme's US$170 million budget is being disbursed as grants. Depending on the circumstances, grants cover between 30 and 50 percent of the cost of buying and installing renewable energy technology, with the remainder coming from concessional loans. These grants are delivered in accordance with Nepal's Subsidy Policy for Renewable Energy (2013), which promotes the targeting of poor, vulnerable and socially marginalized households.

Source: Rai et al. (2015) and Steinbach et al. (2015)

Natural resource revenues are carefully managed to benefit the poor and sustain future flows — bringing about a resource "blessing" rather than a resource "curse"

Revenue flows from natural resources — minerals, land, forests and fisheries — are much more important to low-income than to rich countries, a dependency which has increased with commodity price booms. It is vital that these revenues are used in ways that benefit the poor through revenue-sharing schemes, while paying the ongoing costs of managing the natural resource base for future revenue streams as Mozambique has done (see Box 4.6).

Box 4.6 Mozambique's success with natural resources revenue collection

The estimate for total environmental expenditures in Mozambique stands at 18,806.5 million Mozambique meticais (MZN) from 2007 to 2010, an average of 4.3 percent of the state budget, and 1.4 percent of GDP.

By contrast, total environmental revenues totaled MZN 1,048.8 million from 2008 to 2010, or 0.4 percent of the state budget and 0.1 percent of GDP. However, including natural resource taxation revenues (the most substantial of which is for petroleum) would increase the total to MZN 11,546.7 million (3.9 percent of the budget and 1.3 percent of GDP).

There has been a rising trend in natural resource revenue collection, with a significant rise in 2010 with the introduction of fines and a fee for the fisheries development fund. The introduction of mining fees and a doubling of fees for the national environment fund also contributed to the rise. By sector, fishing and hunting have contributed the largest proportion to total revenues since 2008 (46 percent).

Source: MCOA (2012)

The Rwanda case study demonstrates how 5 percent of the US$75 million generated over the last 5 years by nature tourism revenues has been directly shared with local households for small-scale infrastructure and other poverty-reducing investments.

Financial mechanisms ensure the transition costs of green growth are not borne disproportionately by the excluded and poor

The medium- and long-term benefits of green growth are clear and — if done properly — will benefit the excluded and poor. However, there are many costs of transition — essentially the costs of moving from unsustainable production and consumption processes to sustainable ones. It is vital that these transition costs are not borne by the excluded and poor.

The most obvious example will be any short-term increases in energy prices before renewable energy prices can compete with fossil fuels. In many cases, there will be immediate benefits to the poor: renewables are now price-competitive (half the new energy-generating capacity installed in 2014 across the world was renewable). In many cases poor people are too far from the grid to benefit from traditional power supplies, and decentralized renewables may be cheaper for them. Similarly, when the external costs of coal — such as its impacts on health and outdoor air pollution — are included, renewables may be more cost-effective. But there may be some potential negative impacts from fossil price rises on the poor, such as the removal of subsidies. It is important to be aware of the transition costs and to ensure that they are addressed to benefit the excluded and poor, as shown by the example of Kenya in Box 4.7.

Box 4.7 Successful energy subsidy reforms in Kenya

In Kenya, reform efforts led to a new energy policy in 2004 with an increase in power tariffs in 2005 to reflect long-run marginal costs, introduction of an automatic pass-through mechanism to adjust tariffs for changes in fuel costs, and reconstitution of the Electricity Regulatory Commission as an independent regulator.

This led to improvements in the electricity sector as power generation increased steadily, distribution losses declined, and the number of customers served by grid-supplied power increased substantially. In the post-tariff increase period, average annual increase in power supply in Kenya was over 5 percent. Line losses declined from 18 percent in 2005 to 16 percent in 2011, and the collection rates increased from 85 percent of total power bills in 2005 to 99 percent in 2011. In Kenya, electricity access increased by nearly 140 percent between 2005 and 2011.

The political opposition to the process was achieved through consultation with the unions, which avoided the need for job losses; commitments that increased revenues would be used for increased energy access; and the use of an independent regulator to create a more transparent process.

Source: IMF (2013)

For example, some countries have shifted the savings from subsidy removal into social programs that benefit the poor. This has been achieved in the case studies of fossil fuel subsidy reform in Indonesia, Mexico and Germany where the transition costs are cushioned by social protection reforms and other programs.

Box 4.8 An inclusive approach to green growth infrastructure

Infrastructure is key to green growth — economic structures and energy systems organize around it — but it must be made inclusive and embrace "natural infrastructure" equivalents. There is a huge risk of regret if transport, water management, sanitation, communication and energy infrastructure do not enable poor economic actors to participate. Thus the LDCs' new emphasis on "productive capacity", as a route to structural transformation and ultimately sustainable development, is currently focused on low-carbon energy and transport infrastructure. There are significant opportunities for poor groups to build, operate and benefit from infrastructure — as in the experiences of community-led sanitation enterprises which create jobs and produce services for all, at low capital and operating costs, through partnerships with municipalities (see www.sdinet.org).

In future, "natural infrastructure" alternatives also need more attention. By this, we mean investments in environmental management and climate solutions that provide services underpinning practically all sectors important to poverty reduction, e.g. watershed management, flood protection, soil regeneration and so on, and that can be run by poor groups through incentives such as participatory management and payments for ecosystem services. The Philippines case study highlights the role of the National Greening Program in restoring the country's depleted forest resources with associated benefits in terms of watershed protection and other ecosystem services. The case study on South Africa's Working for Water and Working for Wetlands programs highlights similar national investments in ecosystem restoration.

4.2.4 Outcome 4: Metrics for Inclusive, Green Growth

Agreed metrics for inclusive green growth — improving decision makers' confidence to make changes

Good metrics will ensure effective progress. Inappropriate metrics will lead to mistaken decisions. For green growth there is a growing number of indicators emerging, including the use of GDP adjusted to include environmental costs. Until recently, few measures for environmental quality paid any attention to exclusion. This has now changed with the Sustainable Development Goals, which give much greater prominence to linked poverty and environment issues (Table 4.2).

Table 4.2 SDG entry points for inclusive green growth[9]

Goals	Selected targets that address inclusive green growth
Goal 1: Poverty	**1.4** by 2030 ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services including microfinance **1.5** by 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
Goal 2: Hunger and Food Security	**2.1** by 2030 end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round **2.3** by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment **2.4** by 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality
Goal 3: Health	**3.9** by 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
Goal 4: Education	**4.7** by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including through education for sustainable development and sustainable lifestyles
Goal 5: Gender	**5.a** undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources in accordance with national laws

9 The table illustrates how open the SDG agenda is to inclusive green growth. It does not show a complete analysis of all relevant SDG targets, particularly from the "means of implementation" targets that form part of each goal.

Goals	Selected targets that address inclusive green growth
Goal 6: Water	**6.1** by 2030 achieve universal and equitable access to safe and affordable drinking water for all **6.2** by 2030 achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations **6.4** by 2030 substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity
Goal 7: Energy	**7.1** by 2030 ensure universal access to affordable, reliable and modern energy services **7.2** by 2030 increase substantially the share of renewable energy in the global energy mix
Goal 8: Growth	**8.3** promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services **8.4** improve progressively through 2030 global resource efficiency in consumption and production, and endeavor to decouple economic growth from environmental degradation in accordance with the 10-year framework of programs on sustainable consumption and production with developed countries taking the lead
Goal 9: Infrastructure	**9.1** develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
Goal 10: Inequality	**10.1** by 2030 progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average
Goal 11: Cities	**11.1** by 2030 ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums **11.6** by 2030 reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management
Goal 12: Sustainable Consumption & Production	**12.2** by 2030 achieve sustainable management and efficient use of natural resources **12.4** by 2020 achieve environmentally sound management of chemicals and all wastes … and significantly reduce their release to air, water and soil to minimize their adverse impacts on human health and the environment
Goal 13: Climate	**13.1** strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries **13.2** integrate climate change measures into national policies, strategies and planning
Goal 14: Oceans	**14.2** by 2020 sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans **14.7** by 2030 increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
Goal 15: Ecosystems	**15.1** by 2020 ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands **15.2** by 2020 promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally **15.3** by 2020 combat desertification, and restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation neutral world **15.9** by 2020 integrate ecosystems and biodiversity values into national and local planning, development processes and poverty reduction strategies, and accounts
Goal 16: Governance	**16.3** promote the rule of law at the national and international levels, and ensure equal access to justice for all **16.7** ensure responsive, inclusive, participatory and representative decision-making at all levels **16.10** ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
Goal 17: Global Partnership	**17.**7 promote development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries **17.14** enhance policy coherence for sustainable development **17.19** by 2030 build on existing initiatives to develop measurements of progress on sustainable development that complement GDP, and support statistical capacity-building in developing countries

Source: IIED (undated)

Aligning multiple sustainable development and green growth metrics to ensure consistency and clarity for IGG

While the SDGs open the policy door to inclusive green growth, by highlighting many relevant IGG dimensions, 17 goals and 169 targets do not offer a clear and operational set of metrics that can be integrated across planning and monitoring systems. There are several frameworks that can be used — government approaches "beyond GDP" such as wealth/capitals accounting, science approaches such as the Millennium Ecosystem Assessment's ecosystem services/ well-being framework, and corporate approaches such as sustainability reporting. While this offers many chances to best suit different contexts, ultimately, their coverage of inclusion and poverty varies. Moreover, international alignment on IGG metrics is needed, especially for market purposes. The opportunity presented by green growth is that it can connect development objectives with market effectiveness. However, this requires markets to be given relevant signals, policy frameworks and investment stimuli that create confidence in the private sector.[10]

10 Aligning metrics between SDGs, national "beyond GDP", and corporate sustainability performance is being developed with IIED's partners in the Measure What Matters project. See: http://measurewhatmatters.info.

5. Next Steps: Towards a Strategy for Inclusive Green Growth

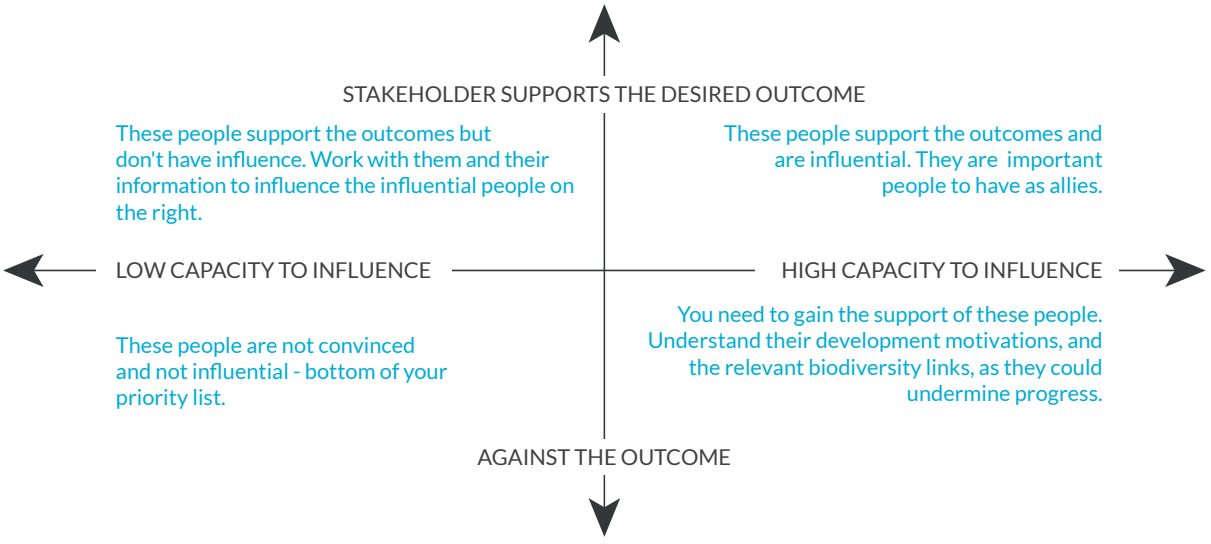
Section 4 laid out a high-level framework or "lens" for focusing on inclusion and poverty reduction, describing the main outcomes needed, and principles to follow. Section 5 now answers the question: What typical operational steps can be taken to ensure green growth is inclusive and pro-poor? It maps these steps to a typical programmatic cycle: exploring, formulating, implementing and monitoring. Again, it focuses on poverty and inclusion, rather than all aspects of green growth. It also addresses national processes rather than, say, the GG planning of a corporation. While this is not an operational manual, short boxes are offered on tools that can help these steps.[11]

5.1 Step 1: Explore Inclusive Green Growth Progress and Barriers

An initial diagnostic assessment can inform what a national IGG strategy is building on in terms of in-country progress and precedents, and what constraints it might focus on. This might best be done by a multi-stakeholder working group, or by commissioning independent and credible research to be reviewed and validated by the group. This work should be planned and implemented in close synchrony with the dialogue work at Step 2. Typical terms of reference might include:

- What progress has been made to date towards the four main IGG outcomes — what results have been achieved within the country?
- What has enabled this progress — what driving forces (e.g. policy, market, environmental change), enabling conditions, and particular initiatives and mechanisms?
- What barriers remain to further progress — institutional (legal, power, capacity), political economy, knowledge, resources and other constraints?
- Which stakeholders have enabled or constrained this progress — who are the protagonists and antagonists of IGG? (Figure 5.1) Where have they formed partnerships, and where are conflicts critical?
- What are people's prospects for IGG — what are the assets that people manage and invest in (Figure 1.3), the institutional context and how it handles inclusion (2.1.2), the economic context (dependence on the environment and national resources, and vulnerability of local and national economies), and the policy context (assessing policy space for IGG)?
- What expertise is available — who are the possible partners to engage with if planning and implementation is to be properly pro-poor and inclusive, including poor people's skills?

Figure 5.1 Stakeholder mapping: Motivations and influence for pro-poor inclusive green growth



Source: IIED and UNEP-WCMC (2015)

11 GGGI will be publishing an accompanying Operational Guidance Note for Achieving Pro-poor Inclusive Green Growth. It further elaborates these steps in the context of GGGI's strategy and program cycle.

Dialogues can inform inclusive green growth as a societal process that can only endure if it reflects societal demand. Thus the technical analysis above needs to be brought into a process of stakeholder debate and consensus building. Dialogue is an active tool for making significant change, and not just a "talking shop" (Box 5.1). The dialogue process might begin with an overall national meeting of all stakeholder groups, but to make real progress needs to let the different groups apprehend the issues, work through the options and build the confidence to make changes. Finally the stakeholders come back together to make decisions — balancing drivers of societal demand for real IGG, with political leadership to enable it. Thus:

- national workshop to introduce overall IGG analysis and launch dialogue process
- meetings with and among social groups (e.g. civil society and women's groups, small business associations and local authorities as their interlocutors) — to identify IGG opportunities and threats, putting poor groups at the centre of debate, and therefore decentralized
- meetings with individual authorities separately — to identify IGG opportunities and threats in different sectors
- bringing stakeholders together — towards consensus on situation, problem, vision and possible solutions — to feed the planning process below
- the dialogue would then continue at key points, such as in reviewing the success of schemes.

Box 5.1 Approaches that distinguish effective dialogue from "talking shops"

- Purpose of dialogue is agreed, and all information is transparent: Effective dialogue will be purposeful, directed at an agreed area of change, and all will come to it with equal access to information. A preliminary multi-stakeholder meeting can agree the purpose, and make sure that the background analysis (step 1) is available and in a form suitable for all in advance of the dialogue.
- Stakeholder ownership: Dialogue is based on collective needs among all stakeholders involved, not a single entity. All stakeholders are involved in shaping the agenda and the outcomes, and are responsible for continuing the dialogue as well as implementing the recommendations.
- An engagement process: It is not a one-off event. It involves engagement of key stakeholders from the start (usually through a multi-stakeholder advisory group) and the engagement will continue after the event through a collaborative process of change.
- Hosting and facilitation: An overarching authority should call the dialogue together. Alternatively, joint hosting by poverty reduction and environmental authorities can be very effective. Independent facilitators are desirable to ensure that the dialogue works on a basis of equality.
- Catalyst for actions: Stakeholder ownership and continuous engagement lay the foundation to reduce conflict, and identify common interests and opportunities for collaboration.
- Field trip component in a dialogue: This can ground policy discussions in realities and spur more realistic solutions. The field environment is also more effective in building personal bonds among participants and breaking down barriers to understanding each other's views.
- Allowing people to change: Dialogue is not about fighting for existing positions, but giving groups the space to change. The "Chatham House Rule", which allows discussion to be non-attributed, can really help: "When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed." (Chatham House, 2015). Making the write-up useful: As with the background analysis, the dialogue report should not foreclose further exploration, but it could clarify the state of consensus or difference, and summarize priority issues and options for consideration. It might best be written by an independent, in a format that supports follow-up; for instance, to enable its use in a cabinet submission or development plan draft.

Sources: Bass (2013), IIED and UNEP-WCMC (2015)

5.2 Step 2: Formulate and Plan for Pro-poor Inclusive Green Growth

Given the wide-ranging significance of the IGG agenda, and the need to mainstream it, the analysis and multi-stakeholder dialogue might best be connected to an existing major mainstream process. In many countries, it is the environment authorities who lead green growth planning, which would not usually be the best way to mainstream pro-poor and inclusive approaches. Thus IGG planning should aim at the ministry of finance or planning through the national development, economic, social and/or spatial planning process — the entry point for IGG in each of these will increasingly be the country's need to prepare national plans to implement the SDGs. The following should be addressed in the IGG plan (Box 5.2):

- the locations, sectors, enterprises and livelihood types where the excluded and poor have most need and/or potential for green growth
- the distributional impacts of GG options and ways to improve them; deploying safeguards
- prioritization criteria that take account of poverty reduction and inclusion.

Box 5.2 Prioritizing poor and excluded women and men in green growth plans

The "where" of inclusive green growth planning includes prioritizing the excluded and poor in terms of sectors, spatial areas, households and enterprises:

Sector: Support sectors where the poor and excluded live and work. GGGI's strategy to work in land use, water, city development and energy is a good one: all these sectors have strong links to the excluded and poor in both rural and urban areas — but those links need to be identified. Three focal areas can be suggested: agriculture in the informal economy, where the majority of many LDC poor find themselves; waste management, where much can be done to improve informal systems, generating both jobs and environmental services; and tourism, a major employer in many LDCs and SIDS, with potentials to bankroll environmental protection.

Localities: In selecting what cities and land areas to work in, priority should be given to areas where poor or excluded men and women live and work — especially those where livelihoods are natural resource-dependent (such as the remote rural poor), or are highly vulnerable to climate change and environmental hazards (such as slum-dwellers, artisanal miners and coastal communities). Planners should get to understand how these localities work as local (inclusive, green) economies. They should identify the potential leaders of IGG seeking capital and know-how.

Firms, households and individuals: IGG planners should understand who the excluded and poor are and what targeted policies can reach them. This will involve addressing within-firm and household exclusion through gender, caste, age or disability. Particular themes that could attract high leverage potential are youth unemployment and support to female-headed firms or households.

The "how" of IGG planning raises a cautionary note on the bias and limits of some economic methodologies and market instruments: Economic planners commonly use valuation tools and cost-benefit analyses that risk overlooking or undervaluing social and cultural goods and services, distributional impacts and long-term value. Likewise, market-based instruments such as cash transfers may provide critical safeguards but their ultimate effectiveness depends on institutional capacity and on procedural justice being in place. One solution can be through including the "six capitals" framework, to make good business cases based on mobilizing the capital assets of the poor — rather than overlooking them or even marginalizing them.

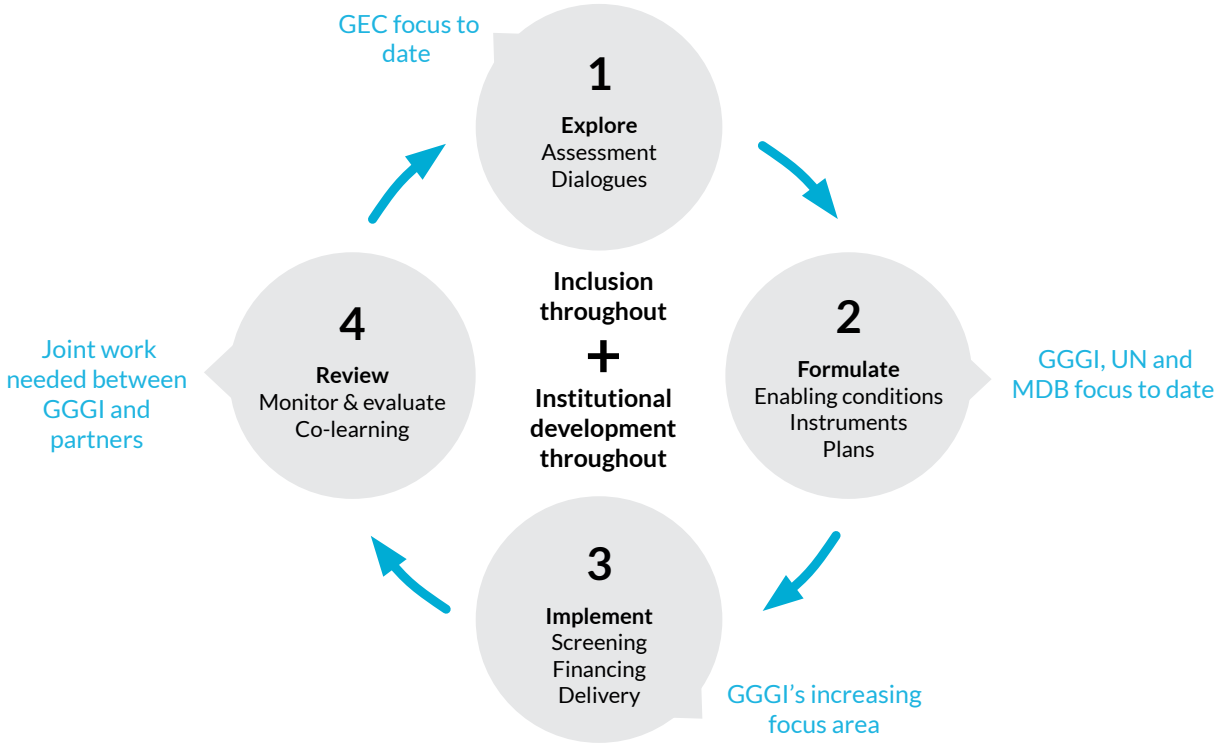
5.3 Step 3: Implement, Mobilize and Build Capacity for IGG

Given their ambition and lack of precedent, there is a risk that IGG plans turn out to be another case of well-meaning "planners' dreams" without real substance behind them. To ensure they are, instead, real-life processes of institutional and economic change towards human and environmental well-being, they need to be actually implemented. This requires getting the resources and policies right for the people with most incentive to act. The above approach to assessment and dialogue can help this by identifying champions and examples of real progress from the beginning, and ensuring the process is focused on poor women and men as active agents. Priorities are to mobilize and build up:

- investment and finance mechanisms that best reach marginalized groups and the poor, and can be influenced by them
- resources of those organizations that have been shown to be effective or promising for GG process, building capacity and planning reform where needed
- marginalized groups in, for instance, the informal economy; building capacity and empowering them where needed through the GG process
- partnerships with (international) organizations which can help the country, with each understanding the comprehensive IGG challenges, but focusing their roles to exercise their real strengths in partnership with others (Figure 5.2).

Figure 5.2 crudely maps three of the main international IGG players against certain functions in the change cycle. For example, GGGI has a track record in formulating green growth plans and strategies, with some formal sector policy work. There are other organizations that intend to focus on policy enabling conditions, including UN-PAGE and other multilateral agencies, and others working on the explore aspects, notably the Green Economy Coalition with its emphasis on stakeholder dialogue. We suggest that all international initiatives engaged in IGG need to work together more closely on inclusion and capacity development, as well as review through monitoring, evaluation and co-learning.

Figure 5.2 Basis of collaboration between international green growth initiatives

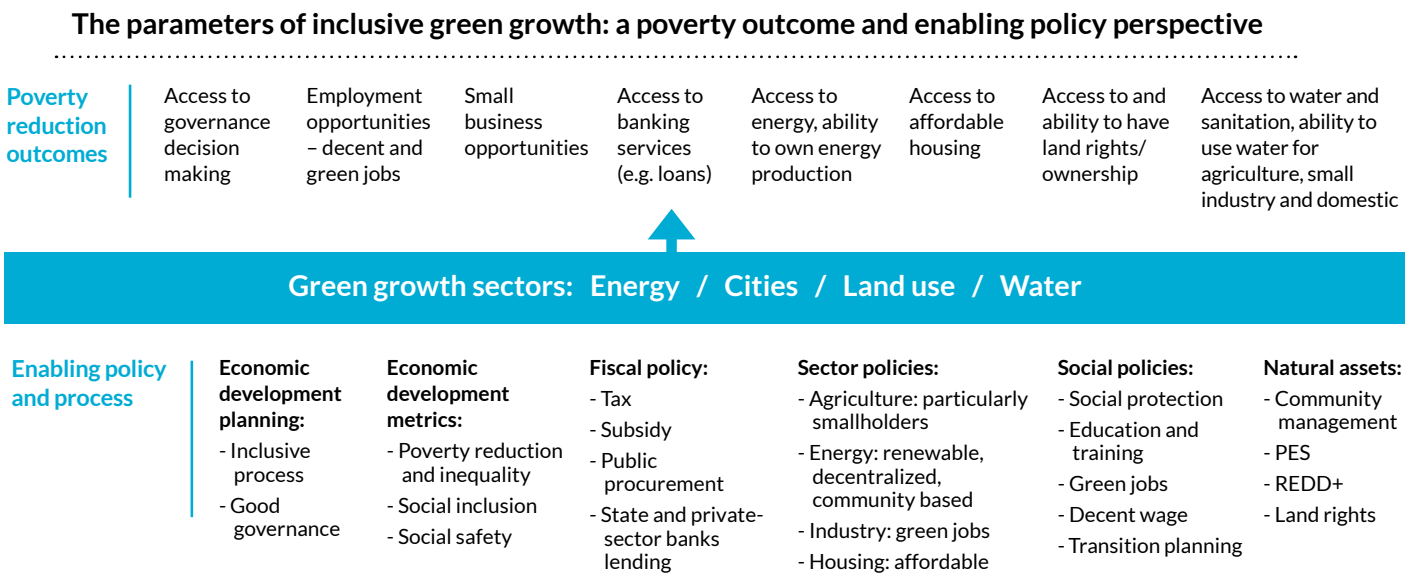


5.4 Step 4: Monitor, Learn and Review — IGG through Continuous Improvement

Inclusive green growth has little precedent at the systemic level, although there are plenty of partial examples everywhere. While the steps above may lend some clarity to the overall vision, achieving IGG will not be a matter of predetermined strategy; rather, it will necessarily be a process of adaptive strategy — almost a hypothesis to be kept under review. New institutional norms will need to be forged, based on proven innovations. The best way to evolve this is through a process of co-learning among stakeholders, fed by regular monitoring of relevant metrics. The following steps might begin this process:

- Agree and plan key performance indicators on inclusion and poverty reduction that aim at both process and outcomes, and preferably map these into mainstream development sectors (Figure 5.3).
- Support government monitoring and consideration of new metrics — with a focus on practical ways of getting distributional figures and highlighting "winners and losers".
- Organize in-country fora to learn from IGG progress and failures, connected to the existing machinery of government and business; such as linking the national development planning process, national statistics and business fora in some kind of IGG accord, as in South Africa.
- Support international collaboration in learning and defining IGG best practice, such as helping the Green Growth Knowledge Platform with its current intention to learn about the fundamental needs of inclusion in GG strategies.

Figure 5.3 Outcomes and processes for pro-poor inclusive green growth



Notes: PES — payments for ecosystem services; REDD+ — stands for countries' efforts to reduce emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks

In conclusion, the concrete steps that can be taken to promote inclusive and pro-poor green growth include best practices in pro-poor project design and investment, with social safeguards, participatory project management and monitoring. But action can — and perhaps should — go beyond this. Priority should be given to tackling the structural issues that have constrained people-centred economic progress in developing countries to date, through innovations in governance, metrics, empowerment and finance. This may appear more challenging in the short term than investment projects, but it will ensure the transformation that is needed for inclusive green growth. It will require the resources, skills and good will of many organizations, working collaboratively and putting poor women and men at the centre. But this attention to enabling conditions could unleash the potential of all partners — in particular those of low-income countries and poor women and men themselves.

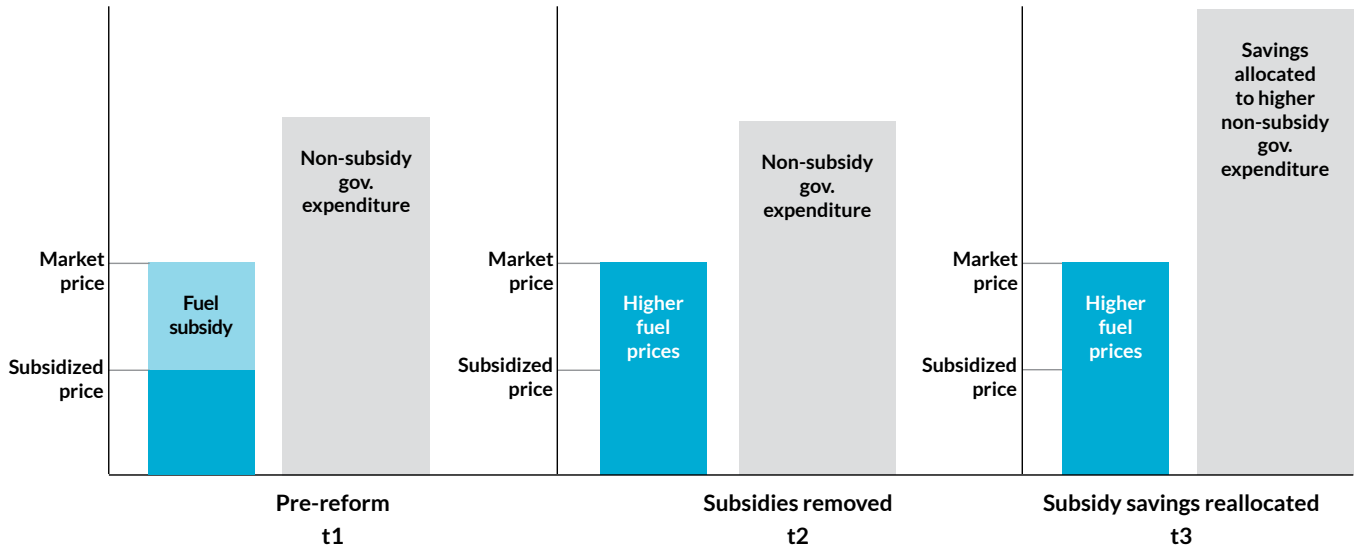
Appendices: Case Studies of Progress Towards Inclusive Green Growth

Appendix A

Fossil Fuel Subsidy Reform in Indonesia

Since the oil shocks of the 1970s, the Indonesian government has kept the market price of fossil fuels low through an extensive range of subsidies worth up to US$20 billion per year (World Future Council, 2016). Up until 2009, more was spent on these subsidies than health, education, social security and defence combined (IISD, 2012). The subsidies were significant disincentives to reducing fossil fuel use and cutting carbon emissions.

Figure A.1 Reform in Indonesia during a period of high world-oil prices



Source: Casier and Beaton (2015)

A roll back of the subsidies is predicted to have a large impact on reducing Indonesian greenhouse gas emissions, as well as freeing up the government budget (Mourougane, 2010; Perdana, 2014). Questions have been raised as to whether environmental motivations lay behind the subsidy reform, given Indonesia's plans for further increases in coal-fired generation (Casier and Beaton, 2015; World Future Council, 2016); but impact studies nonetheless suggest GHG reductions of between 3 and 10 percent over varying timescales (Casier and Beaton, 2015).

Despite Indonesia's exposure to the negative effects of climate change as an island nation with a coastal population, efforts to remove subsidies in 2005, 2008 and 2013 were controversial (Perdana, 2014). This resistance reaffirmed the need for policies supporting pro-poor subsidy reform.

The subsidy removal process has accelerated under President Joko Widodo in 2015, and with fuel subsidies in 2014 reported to have cost the state US$21.2 billion (15 percent of total budget expenditure), reforms were increasingly necessary (Kahn, 2015). Gasoline and diesel subsidy expenditure has fallen from over US$12 billion to just US$1.3 billion

for the 2015 fiscal year, but for the first time the changes seem to be holding, thanks to low oil prices and a honed set of social protection policies (Kahn, 2015).

Securing an inclusive, pro-poor transition
In recent decades, the Indonesian government has responded to the need for fossil fuels price increases by setting up inclusive compensation schemes to offset the impact on the poorest citizens. National schemes were targeted at households, communities and businesses, and ran in conjunction with smaller local government initiatives (Perdana, 2014). Despite earlier problems with this more direct support for the poor, the 2015 package seems to be succeeding.

The core household targeted schemes include Raskin (a subsidized rice program for poor households), JPK Gakin (healthcare funding for the poor through public health insurance), BSM (cash assistance to poor students for non-tuition school costs), PKH (a targeted conditional cash transfer to the poorest households), and BLSM (temporary direct cash assistance). The gradual replacement of fuel subsidies with targeted compensation schemes is part of a successful wider trend toward more explicit poverty alleviation policies and social protection in Indonesia (Perdana, 2014).

Challenges, complaints and distribution mechanisms
Despite leading to a pro-poor and green outcome, the process of subsidy removal has been far from inclusive; incremental progress has been achieved largely through top-down presidential decrees (World Future Council, 2016). Where consultation or public input into implementation is allowed, there is still a need to improve complaints mechanisms, which are neither clear nor accessible — as with the predecessor to the BLSM transfer, the BLT (Beaton and Lontoh, 2010).

The move away from subsidizing the consumption of "strategic commodities" has also introduced new challenges to inclusion, through the need to administer means-tested or conditional transfers. Village heads are often given responsibility for identifying households in need of compensation and support, opening up incentives for local corruption. Some central verification is necessary as a check against this (Beaton and Lontoh, 2010).

From cheap fuel to social protection
Studies on the past effects of the subsidy regime have shown that benefits mostly accrue to the wealthiest citizens, who consume the most fuel, while making up only 0.5 percent of the incomes of the poorest (Mourougane, 2010). Removing the subsidies is therefore likely to bring progressive change, by removing a burden paid by all taxpayers and freeing revenue for more inclusive measures directed at the poor (Mourougane, 2010).

Given that expenditure on fuel made up 5 percent of total spending for the poorest in 2010, the effects of subsidy removal would still risk the welfare of the worst-off without new compensatory anti-poverty programs (Mourougane, 2010; Casier and Beaton, 2015). In 2014, the Indonesian government responded by going even further and introducing the new Productive Family Program — funded separately from the anticipated subsidy savings — covering financial assistance, education and healthcare support (Casier and Beaton, 2015).

Communication is key
The Indonesian example demonstrates both the real opportunity, and the difficulty, of fossil fuel subsidy removal in developing economies. The removal of consumption-based subsidies must be partnered with a strengthening of social welfare policies and new pro-poor compensatory transfers if they are to succeed in securing public buy-in (Beaton and Lontoh, 2010; Perdana, 2014; World Future Council, 2016).

The current situation of historically low oil prices represents the ideal time to make inclusive reforms, and Indonesia has used this window of opportunity well (Casier and Beaton, 2015). But if Indonesia, and others, are to succeed in making their reforms stick they must plan for the potential return of US$100 oil prices in the future. A crucial part of this must be better communicating the reality of fuel subsidies, explaining not just the costs and why they must be replaced, but what will replace them as a more effective social safety net (Casier and Beaton, 2015). Reform is doomed to fail in the medium term if the poor are unaware that their fuel is and was subsidized at all, as 80 percent were in Indonesia (Casier and Beaton, 2015). Inclusive communication before reform, and inclusive policies after, cannot be ignored.

Appendix B

Rwanda: Using Ecotourism to Create Livelihoods and Protect Biodiversity

Rwanda is a country with both unique challenges and opportunities for inclusive green growth. It has the highest population density in Africa, some of the lowest greenhouse gas emissions per capita in the world, and is hugely vulnerable to climate change and damage to its unique biodiversity (Government of Rwanda, 2011). The government's 2011 Green Growth and Climate Resilience Strategy aimed to respond to this by setting out an integrated plan for green growth in the country, and in particular to support the revenue-sharing ecotourism model in operation in some areas since 2005 (Rwanda Development Board, undated).

Rwanda has managed to conserve the biodiversity of its forests and wildlife through the creation of key "designated management areas" — including the three national parks of Volcanoes, Akagera and Nyungwe Forest — which have also helped boost its tourism industry to become its major source of foreign exchange (Tusabe and Habyalimana, 2010). The main draws for tourists include Rwanda's endangered mountain gorillas, which pulled in 80 percent of the US$75m in tourism revenue produced by the national parks from 2006 to 2013, and innovative ecotourism in the other parks (Government of Rwanda, 2011; Komugisha and Nicolson, 2014). These attractions are seen as key drivers for Rwanda's burgeoning economic growth (8.5 percent GDP per year for the 5 years up to 2011) and also essential for their role in producing inclusive livelihoods through revenue-sharing (Government of Rwanda, 2011).

Inclusive revenue-sharing: A Rwandan success story

Community inclusion is an important priority and strength for modern Rwanda, with female parliamentarians making up a world-leading 64 percent of its legislators (Komugisha and Nicolson, 2014). Experience showed that an inclusive approach would be needed to protect its natural biodiversity too. Since their creation, Rwanda's three main national parks lost more than 51 percent of their initial area due to increasing pressures from illegal activities and settlements by nearby communities (Tusabe and Habyalimana, 2010). If the parks were to survive they needed a more inclusive model that incentivized local communities to help protect and support them.

In 2005 the Rwandan government found this model in the form of an innovative revenue-sharing scheme – 5 percent of revenues from the lucrative protected areas would go into a protected scheme for communities neighboring the national parks (Tusabe and Habyalimana, 2010). Use of these funds is managed by the Rwanda Development Board, and fund allocation is partially based on beneficial impacts to biodiversity in the protected areas and local communities, with these communities given prioritized funding access (Tusabe and Habyalimana, 2010). In practice the funds are often allocated for schools, water tanks, soil erosion control, health centres, buffalo walls and roads (Maekawa et al., 2015).

Measuring the impact: Livelihoods, revenues and more

Ecotourism has been hugely successful in Rwanda, as it has allowed communities to feel that they have a real stake in their natural environment. One of the key livelihood impacts of revenue-sharing has been local support for the national parks, with those around Volcanoes National Park "overwhelmingly supportive" (Maekawa et al., 2015). Places where support is weak — and where there are more cases of conflict between protected areas and the community — also have further preferential access to the shared funding (Tusabe and Habyalimana, 2010).

Rwanda's scheme is different from models operated elsewhere in that communities have access to a share of all tourism revenue. In Uganda, the revenue model was changed to distribute a share of park entry fees only, which are typically much lower — of the order of US$25 for entry, compared with US$500 for individual gorilla tracking permits in Rwanda (Maekawa et al., 2015). The Rwandan model sets a progressive example that does not attempt to "short-change" locals out of the true benefits of tourism. As a result, well over US$1.8 million in revenue has been allocated to Rwandan community projects since the scheme was launched in 2005 (Maekawa et al., 2015).

Further impacts on previously excluded Rwandan communities are also becoming clearer, with community participation in tourism activities much greater around national parks then before. Local people are making use of their traditional knowledge — not for poaching, but as guides, interpreters, dancers and entrepreneurs (Tusabe and Habyalimana, 2010). Former poachers are increasingly involved in anti-poaching activities, protecting the local environment and biodiversity

that their actions once put at risk (Tusabe and Habyalimana, 2010).

A model to build on

While an excellent example of a growing and inclusive initiative driving economic development, the Rwandan scheme is still relatively small, due to the country's late start as a tourist destination. Revenue leakage to foreign-owned safari companies and investors is another challenge that Rwanda must continue to confront, though current polices ensure the majority of tourism revenues are retained (Maekawa et al., 2015).

Though local communities have certainly benefited from the scheme, locals are often unaware of how the revenue allocation and project approval process works. This leaves them confused as to how local services are funded, unable to distinguish the benefits of revenue-sharing from the broader investment by local government (Maekawa et al., 2015). Communities must be more clearly engaged in decision-making processes if they are to be fully supportive of the conservation work that goes hand in hand with the tourism revenue from which they benefit.

Green revenue-sharing going forward

The ongoing growth of Rwandan tourism, alongside revenue-sharing, demonstrates that environmentally sustainable and socially inclusive tourism is a model that can work. But the details matter. The sharing of only 5 percent of revenues may look low, but as the Uganda comparison demonstrates, the headline figure is less important than which revenues are covered. As local communities are increasingly offered fairer deals from tourism, their incentives to protect valuable wild landscapes will become stronger. Rwanda shows a clear example of how these environmental goals can be increasingly aligned with the social aims and goals of economic development that all can endorse.

Appendix C

Mexico: Consultation, Renewable Energy and Fuel Subsidy Reform

Climate change action in Mexico

Mexico has been a regional leader in promoting environmental sustainability, becoming in 2012 only the second country (after the UK) to pass a Climate Change Act committing it to robust and legally binding climate targets (EY, undated). The act commits Mexico to a 30 percent reduction in GHG emissions by 2020 and a 50 percent reduction by 2050, both against a baseline of emissions in 2000 (Green Fiscal Policy Network, 2014). Further, the Special Climate Change Program (or PECC in Spanish) was set up to ensure Mexico's economic development could continue and remain consistent with the new environmental targets.

As part of the program Mexico aims to source 35 percent of electricity from renewable sources by 2025 (EY, undated), up from the 10 percent of total supply in 2014 (Grunewald and Martínez-Zarzoso, 2014). This is an ambitious goal but potentially achievable, given Mexico's recent record of success in increasing renewable energy capacity. From 2005 to 2010, Mexico exponentially increased its wind-power capacity from the low base of 2 megawatts up to 514 megawatts, making it the second largest wind-power producer in Latin America after Brazil (UNEP, undated).

The Mexican government is also increasingly getting to grips with the necessary fiscal reforms to bring its policies into line with more inclusive and sustainable objectives. Mexico has long operated "price smoothing" policies on gasoline and diesel, variably taxing or subsidising the market price to protect consumers and the poor from excess variability (Beaton et al., 2015).[12] This has encouraged excess fossil fuel consumption and presented a blockage to reducing GHG emissions. On average this smoothing has acted as a fossil fuels subsidy, and so the policy is increasingly being phased out, with expenditure on implicit subsidies falling from 0.9 percent of GDP in 2007 to 0.7 percent in 2013 (Green Fiscal Policy Network, 2014). Incremental price rises through to the end of 2013 had brought Mexico's pump prices almost up to the level of international prices, themselves falling with the oil price (Beaton et al., 2015). Since 2015's permitted rise in diesel prices of 1.9 percent some commentators are anticipating that the Mexican authorities will take advantage of supressed oil prices and finally shift toward net taxation of fossil fuels (Nicola, 2015).

Inclusion challenges

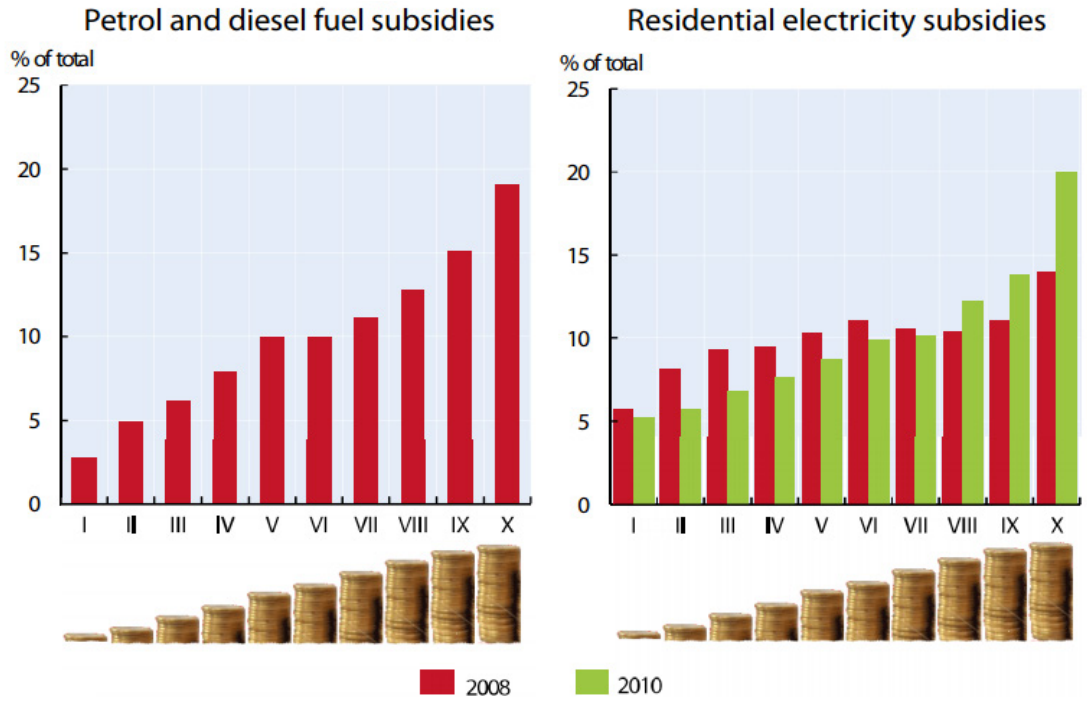
Green growth in Mexico has had to confront significant inclusion challenges due to its level of poverty (Mexico's poverty is the worst among OECD member countries) and its concentration among disadvantaged indigenous groups (OECD, 2013a). The phasing out of energy subsidies represents an important step in confronting these challenges due to the disproportionate benefits they deliver to high-income groups and large agricultural land owners (OECD, 2013a; see also Figure C.1).

Aside from subsidy removal, progress has been made in spreading the proceeds of growth through initiatives like the World Bank-funded Sustainable Rural Development in Mexico project (World Bank, 2016). This scheme successfully united pro-poor and pro-green objectives by harnessing a flexible US$50 million loan to stimulate green growth in rural areas of Mexico (World Bank, 2012b). Aimed at supporting more than 2,000 SMME agribusinesses, the adoption of environmentally sustainable technologies is expected to reduce carbon dioxide emissions in poor rural communities by almost 2 million tons in total, and save 308,062 kilowatts of energy overall.

While the inclusion in the green policy-making process is often a challenge for developing and middle-income countries, for Mexico it has been a success story. The OECD rates Mexico as being among the strongest in the OECD in terms of the "consultation on rule-making" procedures in its design of regulatory proposals and mechanisms for civil society influence (Grunewald and Martínez-Zarzoso, 2014; OECD Statistics, 2015). This is substantially better than comparable Latin American economic peers like Brazil who are also attempting to initiate inclusive green reforms (Grunewald and Martínez-Zarzoso, 2014). For the fuel pricing and subsidy reform, transparency on the rationale for price changes and price composition has been strong, despite weaknesses and potential improvements in ensuring up-to-date information on current prices (Beaton et al., 2015).

12 See: https://energypedia.info/wiki/Fuel_Prices_Mexico

Figure C.1 Distribution of energy subsidies across income deciles, 2008 and 2010



Source: OECD (2013c)

Anti-poverty alternatives

An obvious inclusive alternative to the direct price controls and fuel subsidies currently being phased out has been the Mexican government's direct income supplement to help households afford energy costs through the Oportunidades cash transfer program (Beaton et al., 2015). While still disincentivizing clean energy use and efficiency, this supplement avoids the regressive impact of more general consumption subsidies, since it is managed through a successful targeted anti-poverty program.[13] The OECD estimates that in 2008 Mexico spent twice as much on energy subsidies as it did on all anti-poverty programs, demonstrating the opportunity to take successful programs like Oportunidades even further once subsidy revenue can be redirected (OECD, 2013a).

The inclusive impact of programs like Oportunidades, as well as subsidy removal, is supported through Mexico's strong policy assessment process and the requirement for federal ministries to produce regulatory impact assessments of both new and existing polices, as well as make these public in advance of draft legislation (OECD, 2013a). This consultation system has much to commend it and provides robust incentives for including public opinion in regulatory proposals, and for ensuring an explanation when public opinion is not included (OECD, 2013a).

A progress check

Despite the steps forward in inclusive greening achieved in Mexico, it is fair to say that — while being on a par with progressive peers like the Czech Republic and South Korea — its achievements still lag behind the greening progress in western and northern Europe (Park, 2013). Here it is essential to consider the multiple stages of institutional progress, and the need for multiple speeds to transition to inclusive green growth, suited to the enabling environment. Mexico is now in transition from an institutional "safeguarding" approach towards an appreciation of "inclusive-green synergies" (see 2.1.2). While its progress in terms of outcomes is not comparable to some inclusive green transitions in Europe, Mexico remains a key standard-bearer for its own stage of institutional and economic development.

Consultation delivers results

Mexico shows that a progressive legislative stance on climate change and strong consultative process can be successfully combined to deliver a renewable energy rollout and fuel subsidy reform that protects the poor. Managed incremental shifts in policy and the identification of successful alternative cash transfer mechanisms can produce real green returns, while offsetting negative impacts on marginalized groups, and avoiding the controversy that can blight poorly communicated sustainability polices.

13 See case study summary from the World Bank 2004 Shanghai Poverty Conference: http://web.worldbank.org/archive/website00819C/WEB/PDF/CASE_-62.PDF

Appendix D

Philippines: Integrated National Greening and Inclusive Forestry in a Developing Country

Sustainable forestry and green land-use change

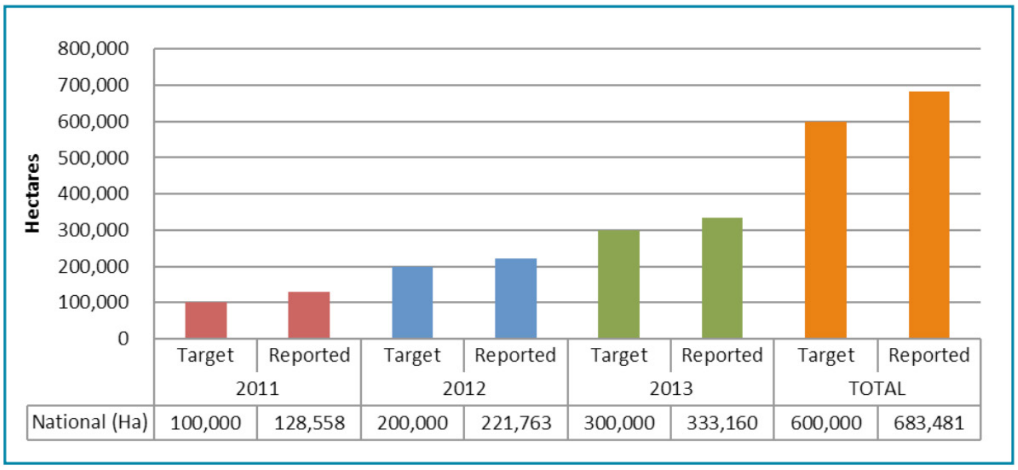
The Philippines National Greening Program (NGP) has been a leading example of an integrated approach to inclusive greening. While primarily a massive forest rehabilitation program, aiming to plant 1.5 billion trees in 1.5 million hectares across the Philippines from 2011 to 2016, the true goals of the NGP are much broader (DENR, 2016). The Philippine government has set the NGP as a priority program, championed by the president because of the central role it plays in reducing poverty and promoting food security, environmental stability and biodiversity conservation (Israel and Arbo, 2015). Such was the significance of the program that 30 billion Philippine pesos (US$650 million) was set aside to fund it (Bonita, 2013).

Beyond the domestic, social and environmental benefits, the NGP is also a key contributor to international climate change mitigation (DENR, 2016). The Philippines experienced extensive deforestation and degradation throughout the twentieth century, largely as a result of population pressures leading to upland migration, agricultural expansion and heavy logging (Lachica, 2014). By planting more trees over 6 years than have been planted in the Philippines in the past 50 (Lachica, 2014), the NGP helps restore the Philippines' lost forest stock, benefiting local communities as well as acting as a carbon sink to offset the warming effects of global CO^2 emissions (DENR, 2016).

Livelihoods from sustainable reforestation

The National Greening Program was conceived to promote inclusion, in addition to its reforestation goals, by helping to provide alternative livelihood activities for otherwise marginalized upland and lowland groups (DENR, 2016). In practice, these livelihoods have come from local communities being involved in seedling production and the tending of the hundreds of thousands of new trees successfully funded and planted each year (Israel and Arbo, 2015). The level of planting even exceeded the NGP's planned annual targets in 2011, 2012 and 2013 (Bonita, 2013; Israel and Arbo, 2015; Figure D.1).

Figure D.1 National targets and reported areas planted by the National Greening Program, 2011–2013



Source: Israel and Arbo (2015), based on NGP-DENR data

An inclusive process and enhanced targets

Thanks to its community-based approach, as of 2013 the NGP had employed more than one million people (an estimated 1,182,000) from upland and rural communities in reforestation activities (Lachica, 2014). It is local and indigenous communities themselves that are contracted to manage planting and maintain the trees, while seeds are procured from a network of clonal nurseries and state colleges, or where this is not possible, through competitive bidding (Lachica, 2014).

Surveys of NGP participants found perceptions that the program has performed well, raising incomes and livelihood opportunities while improving environmental conditions through planting (Israel and Arbo, 2015). Despite these positive

impacts, respondents also mentioned areas for improvement, including delays in initial funding for reforestation and a lack of personnel (Israel and Arbo, 2015).

It is in the light of these challenges that there have been proposals for more explicit "enhanced targets" for the NGP, explicitly taking into consideration the number of local or indigenous people benefiting from sustainable livelihoods as a result of the program (Bonita, 2013). The challenge is to transition from short-term paid maintenance of forests to truly sustainably managed forest and agroforestry plantations, for which the interests and livelihoods of participating local people play a central role (Bonita, 2013).

Suggestions for further improving the inclusivity of the NGP program include a cumulative target of assisting 4.5 million local and indigenous people in securing land-use tenancy of the reforested areas, with an ultimate goal of ensuring self-ownership and management for all by the NGP project's end in 2016 (Bonita, 2013). One way of achieving such a proposal in the Philippines is to develop public-private partnerships for development and reforestation of indigenous lands, where the "public" aspect of the partnership is fulfilled by indigenous owner/managers themselves (Bonita, 2013).

Distributing the benefits of the NGP

Overall the NGP has delivered, and will deliver, a wide range of benefits to communities in the Philippines. The indigenous agroforestry developed from reforestation is expected to lead to self-sufficiency for timber, coffee, fuel wood and paper products (DENR, undated). Reforestation in the uplands has helped distribute economic activity across the islands, and delivered improved welfare for excluded communities. These communities will also benefit in the medium term from improved environmental stability and climate resilience. On completion the NGP is predicted to increase forest cover by 12 percent (on 2003 levels) and increase carbon sequestration by 8 percent per year (DENR, undated). By pushing back decades of deforestation, indigenous farmers will also enjoy reduced downstream flooding and soil erosion, as well as many environmental services benefits from healthier ecosystems (DENR, undated).

A global model for inclusive reforestation is possible

The success of the Philippine's National Greening Program proves that inclusive reforestation is a viable model for other countries, particularly for biodiverse developing countries, to emulate. Ambitious targets combined with inclusive processes on the ground can deliver impressive land-use greening, and greater-than-expected results, by including those communities whose livelihoods are most affected. Stronger processes, and explicit inclusion targets to match environmental ones, can take the NGP even further in the Philippines; but the level of environmental and social progress – compared with previous, less inclusive initiatives — is a laudable success and a model to be recommended.

Appendix E

South Africa: Implementing Holistic Environmental and Social Protection Strategies in an Emerging Economy

Setting the stage for inclusive green growth

Despite relatively strong South African economic growth in recent years, there are ongoing concerns that South Africa's economic success continues to exclude the poor (OECD, 2013b). A fractured social structure and the legacy of apartheid have led to entrenched inequality across the country, with the poorest individuals and communities faced with the harshest social and environmental challenges.

It is in this context that inclusive green growth has been highlighted as the way forward for both the poor and the environment (OECD, 2013b). Almost uniquely across the world, it is the South African environment authorities — not economic ministries — who are taking it upon themselves to make South Africa a global leader on inclusive green growth. South Africa has recognized that a common vision of green and just national prosperity must be built by championing integrated social and environmental policymaking.

South Africa's Green Economy Accord presents a strong example of exactly this kind of integrated planning for a shared green vision (Government of South Africa, 2011a). Twelve government departments, three major labor federations, and diverse business and community organizations came together in order to implement a major program of public and private green investment. A core component of this plan is the creation of 300,000 green jobs by 2020, with much of these in renewable energy and improved waste collection (Government of South Africa, 2011b; Borel-Saladin and Turol, 2013).

Essential green inclusion

Despite success in both greening and economic growth, poor individuals and communities have historically been excluded from the benefits of economic development in South Africa. In many ways South Africa's economy is similar to a union of one rich and several poor countries. From an environmental perspective, while there are high formal environmental standards, the poor lack the necessary environmental services which are key for green growth. Consequently, green job creation was highlighted as a key factor that required attention.

It is in this context that South Africa's Green Economy Accord has emerged as a leading African example of an integrated approach to inclusive greening. Not only does it aim to address local social and environmental needs, it also targets appropriate strategies for broader climate change mitigation.

"Working for" inclusive greening

Inclusive green growth in South Africa has been primarily pushed forward by the environment authorities through a series of joint environmental/social protection job schemes, such as the Working for Water and Working for Wetlands schemes (Government of South Africa, 2011b). Through Working for Water, people from disadvantaged groups are employed to clear water of invasive plant species, creating jobs for the economically disenfranchised while improving community water availability (Carraro et al., 2015). Around 20,000–30,000 jobs per year have been created and 1 million hectares of invested area has been successfully cleared (Government of South Africa, 2011b). Moreover, the two-year contracts for those employed on the scheme was a crucial economic support for those with typical access to only irregular, informal employment.

Working for Wetlands was launched in 2002 in an effort to generate jobs protecting and rehabilitating the wetlands of 15 river basins. The jobs created were targeted towards benefiting low-income workers and single-parent families, as well as those living with HIV/Aids. Support for these diverse and vulnerable groups was provided through training and the development of basic skills in health and education (Government of South Africa, 2012; WWF, 2006).

Another example is the plan to develop renewable energy capacity by installing 1 million solar water heaters by 2014, again aimed at both achieving environmental goals and supporting local plumbing and manufacturing services — and reducing people's energy bills (Wlokas, 2011). Unfortunately, the initial heater installation progress was slow and as of 2015 the program is still short of the final 1 million installation goal (Ensor, 2015). Further renewables support has come

in the form of South African Renewables Initiative, launched in 2011 to assist with ambitious scaling-up of renewable energy in South Africa (Masullo and Brown, 2014). The South African government aims for this too to unite economic, social and environmental benefits, with up to 54,000 direct and indirect jobs created per year in the sector by the years 2020–2025. Additional energy security and greening co-benefits are also anticipated, particularly for geographically and socially isolated communities away from reliable power grids.

Overcoming inclusion challenges

Barriers to the inclusive greening of South Africa's economy have hindered the progress of several of the above initiatives. One issue is that many of the policies do not adequately address aligning government interests with the poorest, and while high formal environmental standards have been set in place, they are not reaching the poor — leading to environmental mismanagement.

These effects are compounded by the level of inequality and poor social structures in many South African communities. Trade-offs and synergies between social and environmental outcomes are highly specific to the circumstances of localities across the country. The Working for Wetlands program attempted to address this with a flexible set of local policy approaches, and provides a good example of projects aiming to support adaptive, context-specific projects in a sustainable context. Supporting this adaptive, context-specific policy approach is key to wider success across South Africa.

Another barrier for inclusive greening has been that the incumbent carbon-intensive sectors continue to receive a lot of support. Greening the economy lacks wide support when there are concerns over potential job losses in favored carbon-intensive sectors. Specific policies and strategies at local and national levels are needed to address this, and ensure that those in South Africa with the most to lose from a green transition can be offered alternative economic opportunities. "Inclusion" is not achieved by assisting only those who are currently marginalized.

A long-term threat to South Africa's growth is the anticipated effects of climate change, triggering calls for stronger linkages between economic development and environmental policies. South Africa's social context means that the capacity to mitigate and adapt will depend on policies that consider the poorest and most vulnerable groups. Pressures of population growth and rapid urbanization will further increase the need to adopt inclusive green growth strategies.

Lessons from inclusive greening

South Africa's experience in recent decades reiterates the inadequacy of non-inclusive economic growth. Environmental and social factors must play an important role in future economic development, and holistic inclusive green growth strategies will be essential for driving this success across the economy and improving livelihoods for the poor.

The "Working for" environment/social protection programs show the pathway for job creation and greening in South Africa and abroad, with other less inclusive approaches much less successful in achieving broader social and environmental aims. Further development of inclusive green growth strategies that are holistic, suited to local contexts, and provide additional (and alternative) green jobs will be key in deciding South Africa's economic future and climate resilience.

Appendix F

Durban (South Africa): Inclusive City-Level Climate Action Planning

Durban and its periphery is among the largest urban areas in South Africa, yet it has consistently led the world in creating community-sensitive and sector-relevant climate resilience polices (Dodman and Satterthwaite, 2008). Since 2004, eThekwini Municipality (the Durban area local government) has carried out and developed its Municipal Climate Protection Programme (MCPP) to anticipate the impacts of climate change on local communities and vulnerable sectors (Roberts, 2010a). This in turn has developed into the fully fledged 2014 Durban Climate Change Strategy, set up to implement the program at ground level by all sectors of Durban's community (EPCPD, 2014; see also Figure F.1).[14]

Figure F.1 "Word cloud" developed from Durban Climate Change Strategy document

Source: EPCPD (2014)

Durban's integrated strategy has been developed around the ten interrelated response themes: water; sea-level rise; biodiversity; food security; health; energy; waste and pollution; transport; economic development; and knowledge generation and understanding (EPCPD, 2014). Goals and objectives are oriented around this framework so as to plan effective sectoral and community interventions, all with the recognition that Durban's urban poor are otherwise likely to suffer most from climate impacts (EPCPD, 2014). The strategy's core focus on climate resilience is in part motivated by the need to combat the effects on the poor, since these kinds of interventions offer the clearest co-benefits for those in poverty (Roberts, 2010a).

Community and consultation in city-level climate resilience

The unique approach of the Durban authorities (compared with previous programs in London or New York) has been to put community, rather than city-wide, impacts to the fore of the resilience strategy (Roberts, 2010a). By taking this approach, developmental and environmental goals are aligned and communities, particularly the poorest, can be put at the heart of implementation (Roberts, 2010b).

Of course, procedural inclusion and participation is also essential, and this was acknowledged by the authorities in developing the final Durban Climate Change Strategy. Consultation with local NGOs, faith groups and climate specialists was built into the process to ensure that the plan was robust and that the level of municipal buy-in was sufficient for the plan to succeed (EPCPD, 2014). Initial open public consultation on the strategy was run through a range of methods to encourage wide participation by vulnerable communities – internet surveys, SMS, phone interviews and face-to-face meetings (EPCPD, 2014). These fed into the development of the final strategy framework, and the goal that climate adaptation and mitigation uses local knowledge to be effective while remaining consistent with municipal goals and the needs of communities.

Targeted community resilience interventions

One of the inclusive projects launched under the MCPP was the Climate Smart Communities pilot project, focusing on interventions to improve local adaptation, food security and water management (Roberts, 2010a). Authorities selected the poor but contrasting communities of urban Ntuzuma and rural Ntshongweni to better understand the challenges of greening for marginalized groups.

14 See: http://tinyurl.com/durban-climate-change-strategy

By putting local concerns at the forefront of resilience planning the project pre-empted social concerns that might have hindered a more top-down approach. For example, the productivity of a key subsistence crop, dryland maize, was predicted to fall to nothing for almost all climate scenarios (Roberts, 2010a). Through Climate Smart Communities, alternative crops were explored in ways that took social acceptability into account (eThekwini Municipality, 2011). Successful "cook-offs" of the new crops took place at the planting sites and helped support wider acceptance and consideration of alternative climate-resilient foodstuffs and the adapting of local recipes to the new crops (ibid).

Inclusion in process and outcome is at the heart of the Durban Climate Change Strategy, and this has often been made explicit in public. Durban Mayor James Nxumalo has said that, "The success of the Durban Climate Change Strategy will depend on how inclusive the process is, so that all voices of our city are represented and heard. We therefore encourage all citizens to participate in the strategy development process." This once again highlights the important role municipal authorities can play in engaging otherwise marginalized communities in local greening, climate resilience and economic development.

Challenges for the Durban approach

The main challenge for Durban's building of inclusion into green policies is the sheer scale of inequality and deprivation in the region. In 2010, local government estimates put the proportion of people living in poverty at 32.3 percent, while in 2014 the unemployment rate was estimated to be above 30 percent (EPCPD, 2014). South African cities are consistently rated as highly unequal by most measures, and Durban's 2011 Gini coefficient of 0.61 places it squarely among the most unequal cities in the world (Adomaitis, 2013). This level of deprivation makes procedural inclusion of marginalized groups in decision-making all the harder.

That the MCPP was able to succeed and progress to become the Durban Climate Change Strategy, despite an environment that was more obstructive than enabling, offers hope that aligned inclusive greening policies are not luxury initiatives for city administrators. However, the Durban focus on climate resilience over climate mitigation emphasizes the need for green growth polices to recognize local realities, needs and spare capacity.

Inclusion and city-level climate strategy

Durban's Municipal Climate Protection Programme and recent Climate Change Strategy are essential markers of success for other cities. They show that sectoral and community approaches to climate resilience can be effectively implemented at the city level and bring pro-poor outcomes and growth to even the most unequal communities. For inclusive green growth, Durban's success demonstrates that decision-making can be successfully brought down to the level of individual communities and that those most impacted by policies can be included in their implementation.

Appendix G

Germany: Inclusive Renewable Energy Policy Reforms in an Industrial Economy

Germany's inclusive Energiewende

The German Energiewende, or "energy transition", is probably the most dramatic example of a green national energy policy in the world. With tensions high in the aftermath of the 2011 Fukushima Daiichi nuclear disaster in Japan, the German government surprised many international observers when it announced the beginning of a nuclear energy phase-out — with eight reactors temporarily halted, never to be restarted, and the further nine reactors to be closed by 2022 (Buchan, 2012). This was followed by the immediate acceleration of its green 2010 Energy Concept (the proto-Energiewende) through the legislature in 2011 (Buchan, 2012).

Despite the sudden reversal in nuclear energy policy, the Energy Concept's key environmental targets were retained essentially unchanged as the new Energiewende:

1. A 40 percent reduction in greenhouse gas emissions (on 1990 levels) by 2020, building to an 80–95 percent cut by 2050.
2. Renewables share in final energy use of 18 percent by 2020 (a shared EU target), and 60 percent by 2050.
3. Reducing primary energy consumption by 20 percent (on 2008 levels) by 2020, and 50 percent by 2050.

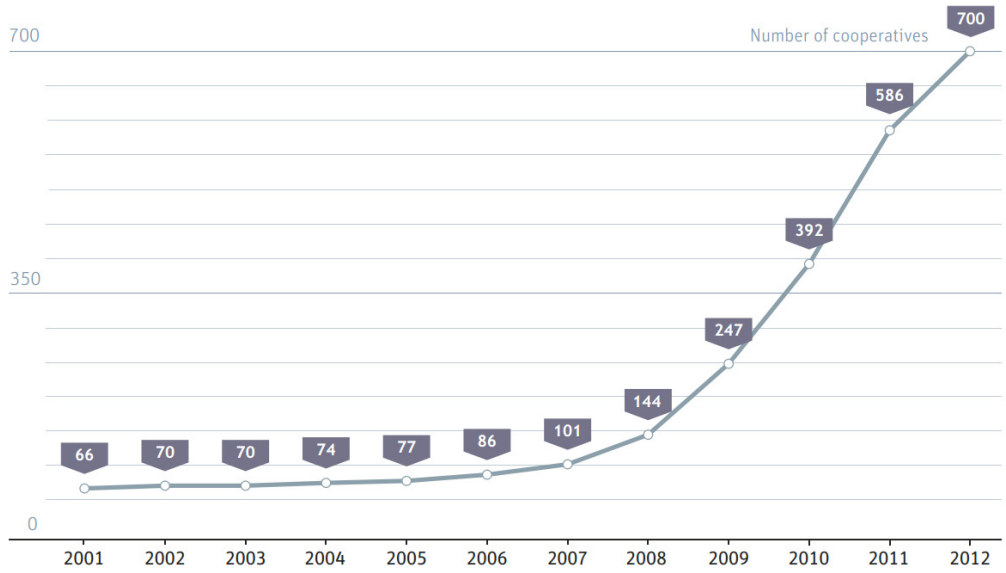
Source: Agora Energiewende (2013)

These targets were undoubtedly both ambitious and green, but the crucial point — and shock to critics — is that the renewable expansion does not seem to have hindered Germany's economic growth. Up to 2010, the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety of Germany (BMU) estimated that effects on German employment and growth were positive for all plausible scenarios (BMU, 2010). Since 2010 there have been considerable economic headwinds for all eurozone countries, complicating estimates of the Energiewende's aggregate impact. An uptick in German GHG emissions from cheap imported coal has highlighted the dangers of environmental complacency in an open energy market, but renewable energy capacity has continued to expand, and Germany remains Europe's strongest industrial economy.

Inclusion in energy ownership

In addition to combining an ambitious greening process with strong underlying economic performance, the Energiewende has also typified aspects of a successful bottom-up and inclusive policy process. At the end of 2010, an astonishing 40 percent Germany's 53 gigawatts of (non-hydro) renewable capacity was privately owned, with much of this ownership in the form of local cooperatives (Buchan, 2012). In the two short years between 2010 and 2012, the number of German energy cooperatives nearly doubled from 392 to 700 (Morris and Pehnt, 2012; see Figure G.1).

Figure G.1 Number of energy cooperatives in Germany, 2001–2012



Source: Morris and Pehnt (2012)

This community ownership results in much stronger economic returns for local communities on their energy assets, and also garners public support for renewables projects by allowing a more inclusive consultation process throughout planning and construction (Morris and Pehnt, 2012). The combination of national-level political ambition with local ownership has allowed the Energiewende to deliver renewable energy rapidly and at scale, without alienating the local communities on which successful change depends.

As stated, inclusion in the planning and ownership of energy generation is only one part of inclusive green growth — the outcomes must also be aligned with the interests of the poorest. This is a fundamental challenge for programs like the Energiewende since rapid scaling of new energy generation, renewable or not, usually involves the costs passed to consumers via higher energy tariffs, and the poorest being burdened proportionally most of all.

The German model has addressed this primarily through a national drive for energy efficiency and the funding of "energy audits" for poorer households (Morris and Pehnt, 2012). These kinds of measures are one reason why German consumers use only a third of the energy American consumers do, and so pay unit energy costs that are twice as high while still enjoying bills that are on average comparable or lower than in the USA (Morris, 2015).

An inclusive process on the ground

One implication of the rollout of renewable generation was that the German electricity grid needed to be expanded to accommodate the many "distributed" generation sites coming online. As a consequence, the Federal Ministry of Economics and Technology (BMWi) launched its "future-oriented grids" platform, implementing an innovative inclusive approach to public consultation (BMWi, 2012).

The aim of the program was to ensure coordination and transparency when building potentially controversial new power lines. An advisory council, including representatives from politics, science and civil society was set up to advise the program on all issues concerning grid expansion and grid regulation (BMWi, 2012). Keeping the public "in the loop" was recognized as a priority for ensuring public backing and acceptance of the new power lines, and essential for Germany's new renewables-friendly, integrated power grid.

The revised grid-planning process involves four stages, three of which have an open consultative phase (BMWi, 2012):

1. Scenario framework: Grid operators submit their estimates of grid expansion needs to the Federal Network Agency (BNetzA), which encourages a public consultation on the proposals, and must consider this input when approving the scenario framework.
2. Ten-year grid development plan: Grid operators must develop the framework into a more detailed ten-year plan which must be posted online for open public consultation.
3. BNetzA must produce an additional environmental report which is open to further public consultation.
4. Based on the previous three stages, BNetzA then develops a Federal Requirement Plan, which is finally passed to legislators for approval.

Obstacles to the transition

The challenge of a truly inclusive Energiewende was increased by Germany's sudden decision to phase renewables in and nuclear out simultaneously (Buchan, 2012). Whatever the broader merits of abandoning nuclear, removing it from the energy mix took off the table a large chunk of relatively low-carbon base-load capacity just when Germany might have needed it as back-up generation, or as a back-up plan. This deficit meant that even more renewables capacity would be needed, and more quickly — potentially compromising the possibility of thorough and inclusive consultation processes for new sites.

A further weakness of the German approach is that no official statistics on "energy poverty" were collected in 2011 (Buchan, 2012). The number of people unable to pay their power bills both before and after the changes are therefore based on rough estimates, compromising the ability of policy-makers to assess distributional and poverty impacts.

Despite these challenges, a combination of factors ensured that German public participation and support remained paramount. The unique proliferation of locally owned energy cooperatives helped ensure that energy developments were rarely imposed unilaterally on communities. While at the national level, political support for the Energiewende remained strong due to the prominence of green political voices and the popularity of a transition away from nuclear (Morris, 2013).

Germany's enabling environment as a large economy with a strong industrial base, devolved political system, and longstanding green political movement gave it unique advantages when undertaking this kind of inclusive green growth policy. How replicable the Energiewende model is in other nations with fewer advantages and weaker social institutions can be questioned, but a slower pace of transition would potentially do much to offset these concerns.

Green and inclusive outcomes

It is estimated that energy cooperatives and community-owned renewables projects have leveraged €800 million in investments from more than 80,000 German citizens (Morris and Pehnt, 2012). Other estimates put the German community and household contribution to renewable energy investment as high as €30 billion per year (Simpson, 2013). There are also low barriers to entry for average citizens to invest, with a single share costing less than €500 in two thirds of the cooperatives. Germany's Solar Industry Association argues that the democratization benefits of community ownership are clear: "Energy cooperatives democratize energy supply in Germany and allow everyone to benefit from the energy transition even if they do not own their own home" (Morris and Pehnt, 2012).

The OECD has highlighted the potential trade-off of the subsidy-heavy German approach to renewable energy — high total emissions abatement costs (OECD, 2014). Out of 15 OECD countries covered by their 2013 review, at 0.3 percent of GDP Germany had the highest total abatement costs of carbon-related policies applied in the electricity sector. This was explained by the Energiewende approach — generous feed-in tariffs, combined with high ambition, meant relatively costly policy instruments (OECD, 2014). Overall, though, the OECD argues for a "fairer allocation of costs among all market participants [to] facilitate public acceptance of the transition to low-carbon energy", reinforcing the importance of inclusive, pro-poor transition, even as nations look for lowest-cost policy instruments.

A global Energiewende?

Germany's Energiewende approach has not been without its pitfalls and challenges, not least operating alongside the huge changes to Germany's nuclear energy policies. Other nations will not have to manage two such radical changes to their energy mix simultaneously. The Energiewende, though still in progress, stands as a leading example of a successful and rapid renewable energy transition run along socially inclusive lines, all without compromising industrial competitiveness. If Germany can make the green transition, why not other developed industrial nations? The real challenge will be to replicate German levels of public support for a green energy transition, and following the German model of inclusive energy ownership is a proven way of building such support.

Appendix H

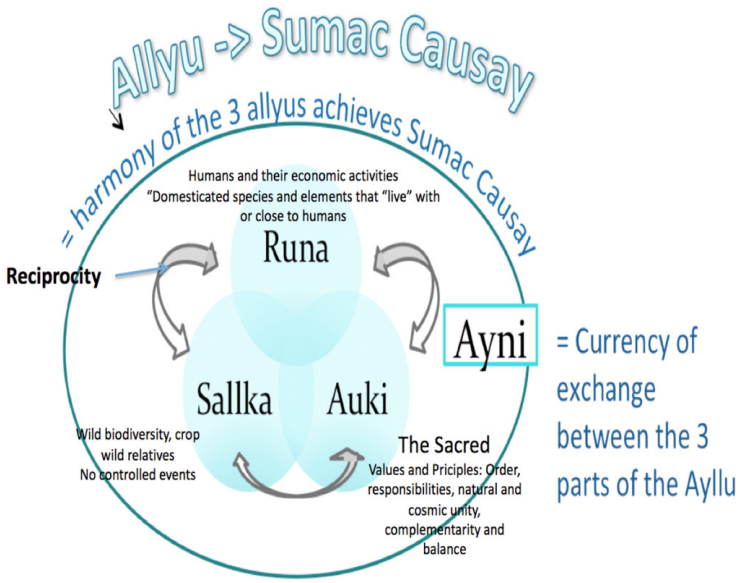
Peru: Fostering Local Inclusive Growth Based On Indigenous Models of Equity and Environmental Limits

Sumaq causay: An indigenous concept for inclusive green rural development

The Cusco region of Southern Peru is rich in biological diversity and home to about 1 million indigenous people. Indigenous peoples' concepts of well-being and customary laws stress social equity, balance with the environment and self-sufficiency (rather than infinite growth) (Munera, 2014); and their holistic worldview recognizes the linkages and inter-dependence between economic, social and environmental goals. Sumaq causay or buen vivir is an Andean concept of well-being that sees the need for balance between humans, wild species (environment) and spirituality (ethics, social equity) (Asociación ANDES and the Potato Park, 2015). Fostering such development models offers a pathway for achieving IGG in rural areas, which is likely to have greater legitimacy and support for implementation than external concepts. The Potato Park, a community-led development and conservation initiative near Cusco, Peru is guided by the concept of sumaq causay and Andean customary laws. It provides an example of how indigenous development models can promote rural economic growth, poverty alleviation and climate-resilient agriculture, using existing assets, namely indigenous knowledge and biocultural diversity.

Achieving sumaq causay requires harmony between three ayllus: runa ayllu, which is the community of humans and domesticated species; sallka ayllu, the community of wild and semi-domesticated species; and auki ayllu, the community of the sacred and ancestors (Asociación ANDES and the Potato Park 2015; see also Figure H.1). In the context of IGG, runa represents "holistic growth", sallka represents integrated conservation approaches for resilience, and auki represents cultural and spiritual values (i.e. ethics, customary laws). The Potato Park is also guided by three key Andean customary laws: reciprocity, which means equal exchange in society and with nature; equilibrium, which means balance in society and with nature; and solidarity, which means helping those in need (without the need to reciprocate).

Figure H.1 ***Sumac causay: An*** *indigenous concept for inclusive green development*



Source: Argumedo (2015)

The Potato Park: Fostering sumaq causay for poverty reduction and biodiversity conservation

The Potato Park was established in 2000 by six Quechua communities who have collective land title over their ancestral territory of over 9,000 hectares in the high Andes, with a population of about 6,000. In 2002 they legally registered the Association of Potato Park communities, with support from the non-governmental organization Asociación ANDES. This representative organization governs the park collectively in accordance with customary laws and values. All the activities and institutions in the park are guided by the concept of sumaq causay and customary laws.

The communities live below the national poverty line, and women are poor or extremely poor — but their incomes are steadily growing as a result of various economic activities which enable full benefit capture, rather than benefit sharing. They have established economic collectives for tourism, crafts, medicinal plants, gastronomy and natural products, some of which are run exclusively by women. Ten percent of the revenues from these collectives is invested in a Potato Park fund, with tourism being the highest and steadily growing source of revenue. An inter-community benefit-sharing agreement based on customary laws ensures that these funds are distributed equitably among the park communities, in accordance with their contribution to sustaining the park's biocultural heritage. Funds are also shared with those most in need (e.g. widows, orphans) (Asociación ANDES et al., 2011; Asociación ANDES and the Potato Park 2015).

Since the Potato Park was established, potato diversity has tripled to about 650 different varieties, thanks in part to an agreement for potato repatriation with the International Potato Centre, where scientists work collaboratively with indigenous researchers in the park that make up the "potato guardians" collective. Repatriation has enabled the communities to re-establish their custodianship rights over potato varieties that had been lost, while the International Potato Centre has also agreed not to patent any traditional potato varieties it has collected from the park.

A key ingredient for building the Potato Park has been the highly participatory action-research methodology used by Asociación ANDES, which uses indigenous concepts, research methods and protocols, along with modern participatory methods. This "de-colonising" of research methodology, where indigenous researchers lead in research design, facilitation and analysis, has created strong collective institutions, research capacity and a strong sense of pride and ownership in the Potato Park (Argumedo, 2012).

Challenges: Going to scale and linking with government

Asociación ANDES has started the process of establishing a Barter Park in Lares, another district of Cusco, based on the Potato Park model. However, for initiatives like the Potato Park to be scaled up beyond individual projects, they need to be supported by government policies and programs, but without being controlled by them. Current policies in Peru and other countries tend not to support indigenous knowledge, culture and crops, but rather contribute to their erosion. In agriculture, policies and subsidies largely support Green Revolution packages of high-yielding modern varieties plus chemical inputs, which tend to benefit richer (often male) farmers but not the poorest farmers, such as indigenous people and women, who often cannot afford to buy seeds and inputs; and rely on diverse local varieties adapted to local conditions to reduce risk (Pant, 2011; Swiderska et al., 2011). These policies also disincentivize traditional farming systems that are sustainable, resilient and often highly productive. Similarly, traditional knowledge and culture needs to be integrated into other sectors, such as education, health and economic development, to prevent the further weakening of indigenous cultures and concepts of development.

The Potato Park has gained the support of the Cusco regional government, particularly the environment ministry, through continual engagement with support from Asociación ANDES. The Cusco government has introduced regional ordinances against biopiracy and against genetically modified organisms, in order to protect the region's unique biocultural diversity that supports a growing tourism industry (Asociación ANDES and the Potato Park, 2015). It has also proposed to scale up the Potato Park across the whole region, and has established a cross-sectoral Commission on Biocultural Heritage, which includes different government ministries, Asociación ANDES and other indigenous organizations.

Getting the support of the national government of Peru (outside the environment sector) has proved more challenging, given its strong focus on less inclusive development approaches and industrial agriculture, particularly in the wake of the USA-Peru free trade agreement (Siegele et al., 2006). With this in mind, Asociación ANDES has established a multi-stakeholder National Innovation Platform focusing on smallholder farmers, bringing together the national agriculture ministry and related institutes, environment officials, and indigenous organizations. Asociación ANDES is also actively engaging with the formal agricultural research system at international level; for instance it entered the Potato Park gene bank into the FAO treaty's multilateral system and hosted official meetings in the Potato Park, providing a means to strengthen links with the national agricultural research system. Engaging other governments in the region also offers a way to promote policy change at national level by creating wider political demand for a better balance between western and indigenous economic development models.

Appendix I

Establishing Long-Term Thinking – The Well-being of Future Generations Act

Measuring the sustainable progress of a nation

To achieve IGG, decision makers are regularly called upon to take the long view on matters of public policy. Indeed, the Brundtland Commission famously defined sustainable development as "…the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission, 1987). In order to meet this challenge, Wales has developed and adopted the Well-being of Future Generations (Wales) Act 2015 (WFGW) to put this sustainable development principle at the heart of national decision-making (Welsh Government, 2015b).

A mere aspiration to be sustainable, or isolated green policy interventions, will not succeed in delivering long-term green growth unless the decision-making architecture is set up to allow this, and the right oversight is in place to ensure sustainable national progress. The WFGW Act is a good model of a national framework that mandates public bodies to go beyond short-term metrics, like GDP growth, in measuring their success. The Welsh public bodies listed in the act must pay attention to the long term, work better with people and communities and each other, and look to prevent future problems through a holistic approach (Welsh Government, 2015a).

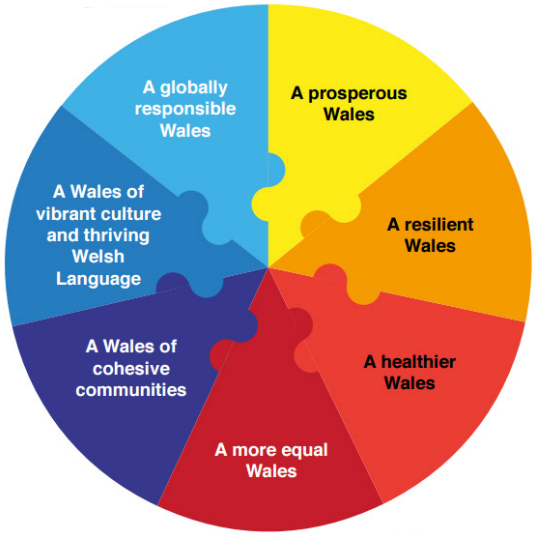
Including future generations' well-being

While inclusion is usually concerned with engaging the poor and excluded in any country, one regularly overlooked, marginalized constituency is that of future generations. The WFGW Act expands the inclusiveness of decision-making by explicitly giving future generations a stake in decisions taken today that will have long-term impacts (see Figure I.1). These decisions are very often of resource allocation on social spending, sustainability, and — increasingly — climate change.

Each Welsh public body must carry out sustainable development by:

- setting and publishing objectives ("well-being objectives") that are designed to maximize its contribution to achieving each of the well-being goals
- taking all reasonable steps in exercising its functions to meet those objectives (Welsh Government, 2015b).

Figure I.1 Well-being goals for future generations in Wales



Source: Welsh Government (2015b)

The well-being goals provide a shared vision of Welsh society, addressing a range of IGG issues and covering prosperity, resilience, health, equality, communities, indigenous culture and global responsibility (Welsh Government, 2015b).

The WFGW Act also establishes a statutory Future Generations Commissioner for Wales, to support public bodies and act as a guardian for the interests of future generations in Wales, and Public Services Boards aimed at achieving the well-being goals for each local authority area in Wales (Welsh Government, 2015a).

Testing the framework

Having only been adopted in April 2015, the WFGW Act is yet to be tested on the ground in Wales. Alignment with the newly adopted SDGs was a motivating factor behind adoption of the framework, but public bodies in Wales will have to ensure that there is alignment rather than duplication when it comes to implementing the 17 SDGs and seven well-being goals.

Better implementation of the WFGW Act could come through ensuring that consulting civil society groups, as was done in its development, continues through the monitoring and evaluation phase, so that national indicators and milestones remain fit for purpose.

An important first step

The WFGW Act is a world-leading example of a national decision-making framework that challenges short-termism, the "tragedy of horizons", and promotes the inclusion of future generations' interests. The challenges of inclusion and greening often confound attempts at short-term fixes, meaning that the wider adoption of long-term policy frameworks is essential to meeting these challenges. IGG can only be helped by holistic decision-making that puts people, welfare and sustainability at its centre.

Appendix J

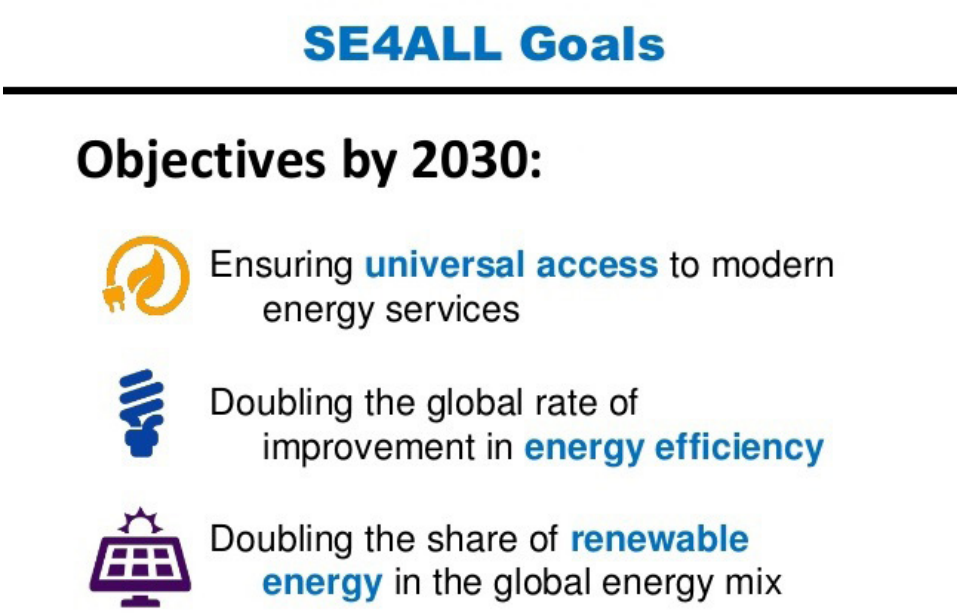
Global: Sustainable Energy for All

Securing sustainable energy across the globe
In September 2011, UN Secretary-General Ban Ki-moon launched Sustainable Energy for All (SE4ALL) as a global initiative mobilizing action from all sectors of society in support of three linked energy objectives:

- providing universal access to modern energy services
- doubling the global rate of improvement in energy efficiency
- doubling the share of renewable energy in the global energy mix.

With 1.2 billion people still living without access to modern energy services and 2.8 billion without access to clean cooking methods, the SE4ALL initiative prioritized action to support the goals and set a target deadline of 2030 for achieving them (see Figure J.1).[15] In 2014, the UN General Assembly further declared 2014–2024 the "Decade of Sustainable Energy for All", reinforcing their view that sustainable development would not be possible without accessible sustainable energy.

Figure J.1 SE4ALL goals for 2030



Source: Energy For All and ADB (2015)

An inclusive approach to energy
With goals to secure energy supply as well as energy access, both sustainability and inclusion are at the heart of the SE4ALL program. From its inception in 2011, the SE4ALL initiative envisioned a "multi-stakeholder approach" as being critical to its success, with government, the private sector and civil society named as its three "pillars". Procedural inclusion has been built into the process of achieving the SE4ALL goals, as well as socially inclusive outcomes being core to the goals themselves.

15 See www.se4all.org/about-us

Implementing the SE4ALL agenda
By June 2014, 83 developed and developing countries had "opted in" to the SE4ALL initiative and most had begun the implementation phase (Gallagher and Wykes, 2014). This involves first carrying out a "gap analysis" to assess the status of a country's energy sector in relation to the three SE4ALL goals. This is then to be followed by drafting a national implementation plan for meeting them. As of 2014, 43 countries had successfully completed gap analyses, and 30 countries were developing plans (SE4ALL, 2014a).

SE4ALL has also identified around 50 "high impact opportunities" or intervention areas where multiple stakeholders can work together to significantly advance the three SE4ALL objectives. These action areas include opportunities to include communities marginalized from energy decision-making, such as: energy and women's health, modern cooking appliances and fuels, off-grid lighting and charging, and sustainable energy for island economies (SE4ALL, 2015).

Challenges to inclusive implementation
While the role of civil society organizations (CSOs) was recognized by SE4ALL as an essential pillar for inclusiveness in the implementation process, in reality giving CSOs a voice has only been partially successful. Given the opportunity, CSOs can act as trusted intermediaries between government, private and informal groups, as well as promoting the involvement of marginalized groups. Despite this, a 2014 survey of 50 CSOs in Indonesia, Kenya, Nepal, Nicaragua, Nigeria and Zimbabwe by CAFOD, Hivos, IIED and Practical Action found that a majority of respondents felt that they had not been included adequately, or that they were unable to engage meaningfully, in the SE4ALL initiative (Gallagher and Wykes, 2014).

This result demonstrates how it is often difficult for initiatives and interventions, particularly at the global level, to deliver on procedural inclusiveness goals without adequate resource allocation and interaction with groups that would wish to engage — in supportive or critical roles. The CSO groups that identified the weakness of on-the-ground stakeholder engagement in the SE4ALL program nonetheless recognized the importance of the initiative and the positive direction of travel in promoting inclusive energy access outcomes (Gallagher and Wykes, 2014).

Achieving green and inclusive energy outcomes
By 2015, the SE4ALL initiative aimed to accelerate the provision of electricity to 200 million people, and clean and efficient cooking and heating solutions to 400 million individuals (SE4ALL, 2014b). The second SE4ALL Global Tracking Framework report, Progress Toward Sustainable Energy 2015, shows that this ambition is yet to be realized and "… the rate of progress during the 2010–2012 tracking period falls substantially short of the rate that would be needed to ensure that the three objectives are met by 2030" (SE4ALL, 2015).

Electrification is one area where progress has been brisk, with the growth in this measure of energy access (0.6 percent per year) near the 0.7 percent target (SE4ALL, 2015). This is largely thanks to developments in India, where 55 million (largely urban) residents gained access over the 2010–2012 period. This to some extent covered up the lack of progress in sub-Saharan Africa and in promoting reliable, affordable rural energy access (SE4ALL, 2015).

Ambition meets reality on global progress towards inclusive energy
Overall, the SE4ALL initiative is a key example of a global approach to inclusive green economy which has aspired to laudable goals on sustainability and inclusion, without managing to combine and implement them effectively on the ground – yet. It is an essential case study demonstrating that a top-down approach to achieving inclusive outcomes can easily fail, and that the inclusion of communities in decision-making and implementation cannot be a check-box exercise or fulfilled by ambitious initial principles alone. Inclusion happens on the ground when communities are involved in the policy process and CSOs' engagement is encouraged at all levels of an initiative.

The SE4ALL initiative seems to recognize the mismatch between its inclusion aspiration and the reality on the ground. The 2015 Global Tracking Framework identifies "…a growing realization that a more integrated approach to sustainable development policy and practice is needed post-2015 to break down the silos in policymaking and to focus instead on the interconnectedness of sustainable development goals and targets" (SE4ALL, 2015). SE4ALL must link strongly to communities called to make profound changes to their energy infrastructure, and include CSOs in aligning its aims to SDG 7, helping deliver on its aspirational objectives for energy access, efficiency and renewables (ACCESS, 2015).

References

ACCA (2013) Asian Coalition for Community Action. See www.achr.net/activities-acca.php

ACCESS (2015) Measuring what matters in the Energy SDG. Briefing, May 2015. See http://pubs.iied.org/pdfs/G03929.pdf

Adomaitis, K (5 March 2013) The world's largest cities are the most unequal. See http://blog.euromonitor.com/2013/03/the-worlds-largest-cities-are-the-most-unequal.html

Agora Energiewende (2013) 12 insights on Germany's Energiewende. Oktoberdruck, Berlin. See www.agora-energiewende.de/en/die-energiewende/12-insights-of-germanys-energiewende/

Amoako, KY (2015) How to anchor Africa's growth. Africa Business 420, 40–41.

Argumedo, A (2015) Presentation at the 9th conference on Community Based Adaptation (CBA9). Nairobi, 29 April 2015.

Argumedo, A (2012) Decolonising action-research: The Potato Park biocultural protocol for benefit-sharing. IIED, London.

Asociación ANDES et al. (2011) Community biocultural protocols: Building mechanisms for access and benefit-sharing amongst the communities of the Potato Park based on customary laws. IIED, London.

Asociación ANDES and the Potato Park (2015) Biocultural heritage innovations in the Potato Park: smallholder innovation for resilience. Qualitative Baseline Study, Peru. IIED, London.

Bass, S (2013) Scoping a green economy: A brief guide to dialogues and diagnostics for developing countries. IIED, London.

Beaton et al. (2015) An input to Indonesian fuel price system reforms. International Institute for Sustainable Development, Geneva. See www.iisd.org/gsi/sites/default/files/ffs_indonesia_pricing.pdf

Beaton, C and Lonton, L (2010) Lessons learned from Indonesia's attempts to reform fossil-fuel subsidies. International Institute for Sustainable Development, Winnipeg. See https://www.iisd.org/gsi/sites/default/files/lessons_indonesia_fossil_fuel_reform.pdf

Benson et al. (2014) Informal and green? The forgotten voice in the transition to a green economy. IIED, London. See http://pubs.iied.org/pdfs/16566IIED.pdf

BMU (2010) Renewably employed! Short and long-term impacts of the expansion of renewable energy on the German labour market. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Berlin. See http://germany.info/contentblob/3179136/Daten/1346894/BMU_RenewablyEmployed_DD.pdf

BMWi (2012) Germany's new energy policy: Heading towards 2050 with secure, affordable and environmentally sound energy. Federal Ministry of Economics and Technology. See www.bmwi.de/English/Redaktion/Pdf/germanys-new-energy-policy

Bonita, M (2013) Improving Philippine forest policy: Ten-point agenda for enhancing the national greening program. Ecosystems & Development Journal, 4(1) 50–59. See http://mtrir.com/ojs/ojs-2.4.3/index.php/edjournal/article/viewFile/7/8

Borel-Saladin, J and Turok, I (2013) The impact of the green economy on jobs in South Africa. South African Journal of Science, 109(9–10) 1–4. See www.sajs.co.za/sites/default/files/publications/pdf/Borel-Saladin_News and Views.pdf

Brundtland Commission (1987) Our common future. World commission on environment and development. Oxford University Press, Oxford.

Buchan, D (2012) The Energiewende — Germany's gamble. Oxford Institute for Energy Studies, Oxford. See www.oxfordenergy.org/wpcms/wp-content/uploads/2012/07/SP-26.pdf

Carraro, C et al. (29 January 2015) Why fiscal policy matters for a green economy transition. See http://dx.doi.org/10.7711/feemre3.2015.01.001

Casier, L and Beaton, C (2015) Fossil-fuel subsidy reform and higher fuel prices in Indonesia: Impacts and expectations. International Institute for Sustainable Development, Winnipeg. See https://www.iisd.org/gsi/sites/default/files/ffs_indonesia_briefing_impacts_eng.pdf

Chatham House (2015) Chatham House rule. See www.chathamhouse.org/about/chatham-house-rule

Chen, S and Ravallion, M (2012) More relatively poor people in a less absolutely poor world. Policy Research Working Paper 6114, 37.

Democracia et al. (2013) A review of the environmental and social policies of national development banks in Brazil, China, and India. Friends of the Earth US. See http://tinyurl.com/pxr6exh

DENR (2016) National Greening Program. See www.denr.gov.ph/priority-programs/national-greening-program.html

DENR (undated) Expected project outcome. See http://ngp.denr.gov.ph/index.php/site-map/expected-project-outcome

Dodman, D and Satterthwaite, D (2008) Institutional capacity, climate change adaptation and the urban poor. IDS Bulletin, 39(4) 67–74.

Energy For All and ADB (2015) SE4All status report for Asia-Pacific. Slideshow. See www.slideshare.net/energyforall/se4all-status-report

Ensor, L (12 March 2015) Solar water heating delay hurts investment. BDLive. See www.bdlive.co.za/business/energy/2015/03/12/solar-water-heating-delay-hurts-investment

EPCPD (2014) Durban Climate Change Strategy. Environmental Planning and Climate Protection Department and Energy Office of eThekwini Municipality. See www.durban.gov.za/City_Services/energyoffice/Documents/DCCS_Final-Draft (4).pdf

EY (undated) Mexico: leading green technology adoption in Latin America. See www.ey.com/GL/en/Issues/Driving-growth/EY-Rapid-growth-markets-forecast-july-2014-Mexico-leading-green-technology-adoption-in-Latin-America

eThekwini Municipality (2011) Community adaptation projects. See http://tinyurl.com/o6ckd95

Franks, P (11 May 2015) Equity, justice and ecosystem services: What do we mean? See www.iied.org/equity-justice-ecosystem-services-what-do-we-mean

Gallagher, M and Wykes, S (2014) Civil society participation in the Sustainable Energy for All Initiative: A survey of six countries. Practical Action Publishing, Rugby, UK. See http://pubs.iied.org/pdfs/G03878.pdf

GEC (2012) Nine principles for a green economy. See http://tinyurl.com/nseqtdw

Global Witness (2014) Deadly environment. Global Witness, London. See www.globalwitness.org/campaigns/environmental-activists/deadly-environment

Global Alliance for Banking on Values (2013) Change makers: The stories behind the values based banks transforming the world. See www.gabv.org/wp-content/uploads/GABV_Change_Makers_Book.pdf

Government of Rwanda (2011) Green growth and climate resilience national strategy for climate change and low carbon development. Kigali, Republic of Rwanda. See http://tinyurl.com/o8pd379

Government of South Africa (2012) Working for water. See www.dwaf.gov.za/wfw

Government of South Africa (2011a) Green economy accord. See www.economic.gov.za/communications/publications/green-economy-accord

Government of South Africa (2011b) Working for the environment. Department of Environmental Affairs, Pretoria. See www.grida.no/publications/working-for-the-environment

Green Fiscal Policy Network (2014) Mexico. Country overview. See www.greenfiscalpolicy.org/countries/mexico

Grunewald, N and Martínez-Zarzoso, I (2014) Green growth in Mexico, Brazil and Chile: Policy strategies and future prospects. Ibero America Institute for Economic Research. See www2.vwl.wiso.uni-goettingen.de/ibero/working_paper_neu/DB229.pdf

IIED (undated) Poverty environment partnership: getting to zero (2016): A new poverty, environment and climate agenda to 2030. Draft, January 2016. IIED, London.

IIED and UNEP-WCMC (2015) Mainstreaming biodiversity and development: Tips and tasks from African experience. See http://pubs.iied.org/14650IIED

IIRC (2013) Capitals background paper for integrated reporting. See http://integratedreporting.org/wp-content/uploads/2013/03/IR-Background-Paper-Capitals.pdf

IISD (2012) A citizens' guide to energy subsidies in Indonesia: 2012 update. Global Subsidies Initiative of the International Institute for Sustainable Development, Geneva. See www.iisd.org/pdf/2011/indonesia_czguide_eng.pdf

ILO (2014) Global employment trends: Risk of a jobless recovery? See www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_233953.pdf

IMF (2013) Energy subsidy reform in sub-Saharan Africa. See www.imf.org/external/pubs/ft/dp/2013/afr1302.pdf

International Integrated Reporting Council (2013) The international IR framework. See: http://integratedreporting.org/resource/international-ir-framework

IPU (2014) Women in Parliament 2013. Inter-Parliamentary Union, Geneva. See www.ipu.org/pdf/publications/WIP2013-e.pdf

Israel, D and Arbo, M (2015) The National Greening Program: Hope for our balding forests. Philippine Institute for Development Studies. See http://dirp3.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidspn1502.pdf

Kahn, D (20 April 2015) Opinion: Escaping the fuel subsidy trap in Indonesia. See http://cdkn.org/2015/04/escaping-fuel-subsidy-trap-indonesia

Komugisha, U and Nicolson, A (28 July 2014) How Rwanda's gorillas are helping to sustain entire communities. See www.theguardian.com/global-development/2014/jul/28/rwanda-gorillas-community-tourism

Lachica, A (2014) Philippines: Degraded forest rehabilitation and sustainable forest management in the Philippines. In: Proceedings of the Workshop on Degraded Forest Rehabilitation and Sustainable Forest Management, 1—12 July 2014, 80—89. See www.apfnet-ktc.cn/upload/201409/01/20140901529415232.pdf

Macqueen, D (2013) Ringing the changes with a new approach to forest investment. IIED, London. See http://pubs.iied.org/pdfs/17144IIED.pdf

Maekawa, M et al. (2015) Mountain gorilla ecotourism: Supporting macroeconomic growth and providing local livelihoods. In: Young, H, and Goldman, L (eds) (2015) Livelihoods, Natural Resources, and Post-Conflict Peacebuilding. Routledge.

Masullo, I and Brown, L (27 May 2014) Lessons from South Africa: Mobilizing investment in renewable energy. See www.wri.org/blog/2014/05/lessons-south-africa-mobilizing-investment-renewable-energy

MCOA (2012) Public environmental expenditure review: Mozambique 2005—2010. Ministry for the Coordination of

Environment Action, Republic of Mozambique. See www.unpei.org/sites/default/files/dmdocuments/Mozambique PEER Full English.pdf

Morris, C (26 May 2015) German power bills are low compared to US average. See http://energytransition.de/2015/05/german-power-bills-low-compared-to-us

Morris, C (19 August 2013) Germans still overwhelmingly support Energiewende. See http://energytransition.de/2013/08/germans-still-overwhelmingly-support-energiewende

Morris, C and Pehnt, M (2012) Energy transition: The German Energiewende. Heinrich Böll Stiftung, Berlin. See http://energytransition.de/wp-content/themes/boell/pdf/en/German-Energy-Transition_en.pdf

Mourougane, A (2010) Phasing out energy subsidies in Indonesia. OECD, Paris. See http://dx.doi.org/10.1787/5km5xvc9c46k-en

Munera, C (17 March 2014) Biocultural heritage: The foundation of a sustainable economy. See www.resilience.org/stories/2014-03-17/biocultural-heritage-the-foundation-of-a-sustainable-economy

Nicola, S (30 January 2015) Fossil fuel subsidies fall in gain for renewables. Bloomberg.com. See www.bloomberg.com/news/articles/2015-01-30/fossil-fuel-subsidies-fall-in-gain-for-renewables

OECD (2014) Germany — Keeping the edge: Competitiveness for inclusive growth. OECD, Paris. See www.oecd.org/germany/Better-policies-germany.pdf

OECD (2013a) Mexico — towards a whole-of-government perspective to regulatory improvement. OECD, Paris. See www.oecd.org/gov/regulatory-policy/Mexico-review-of-regulatory-reform-2013-executive summary.pdf

OECD (2013b) OECD economic surveys: South Africa. See www.oecd.org/eco/surveys/South Africa 2013 Overview FINAL.pdf

OECD (2013c) Environmental performance reviews: Mexico 2013. See www.oecd.org/env/country-reviews/EPR%20Highlights%20MEXICO%202013%20colour%20figures.pdf

OECD Statistics (2015) Better life index — edition 2015. See http://stats.oecd.org/Index.aspx?DataSetCode=BLI

Oxfam (2014) Working for the few: Political capture and economic inequality. Oxfam International, Oxford. See http://tinyurl.com/omlmxr5

Pant, R (2011) Heritage on the edge: Protecting traditional knowledge and genetic resources in the Eastern Himalayas, India. IIED, London. See http://pubs.iied.org/G03442.html

Park, J (2013) The evolution of green growth policy: An unwelcome intrusion on global environmental governance? Journal of East Asian Economic Integration, 17(2) 207—241. See www10.iadb.org/intal/intalcdi/PE/2013/12579.pdf

Perdana, A (2014) The future of social welfare programs in Indonesia: From fossil fuel subsidies to better social protection. International Institute for Sustainable Development, Geneva. See www.iisd.org/gsi/sites/default/files/ffs_indonesia_briefing_welfare.pdf

Porras, I et al. (2015) Conditional social transfers and payments for ecosystem services: Scaling up to meet social and environmental objectives. IIED, London.

Poverty-Environment Partnership (2013) Building an inclusive, green economy for all. See www.povertyenvironment.net/sites/default/files/-files/PEP-GE4All.pdf

Rai, N et al. (2015) Financing inclusive low-carbon resilient development: Role of Central Bank of Bangladesh and Infrastructure Development Company Limited. IIED, London

Raworth, K et al. (2014) Securing social justice in green economies: A review and ten considerations for policymakers. IIED and CAFOD, London

Roberts, D (2010a) Prioritizing climate change adaptation and local level resilience in Durban, South Africa. Environment and Urbanization, 22(2) 397—413. See http://eau.sagepub.com/content/22/2/397.full.pdf

Roberts, D (2010b) Thinking globally, acting locally — institutionalizing climate change at the local government level in Durban, South Africa. CIVIS No. 3, June 2010. Cities Alliance. See www.citiesalliance.org/sites/citiesalliance.org/files/CIVIS%203_June2010.pdf

Rwanda Development Board (undated), Community initiatives. See www.rdb.rw/tourism-and-conservation/conservation/community-initiatives.html

SE4ALL (2015) Progress towards sustainable energy by 2015: Global Tracking Framework. See http://trackingenergy4all.worldbank.org/

SE4ALL (2014a) SE4ALL results and deliverables: Partners making progress. See www.se4all.org/sites/default/files/l/2014/04/SE4ALL_Partners_Progress-1.pdf

SE4ALL (2014b) Sustainable Energy For All: An overview. See www.un.org/millenniumgoals/pdf/SEFA.pdf

Siegele et al. (2006) The impact of foreign trade agreements on pro-poor implementation of the biosafety protocol. Scoping paper. FIELD-IIED, London.

Simpson, A (2013) Community energy strategy: DECC consultation. See www.communityenvironment.org.uk/cms/wp-content/uploads/2013/08/Community-owned-energy-generation-Alan-Simpson.pdf

Steele, P et al. (2015a) Intermediary organisations to channel finance to those most in need. IIED, London.

Steele, P et al. (2015b) Beyond loans: Financial instruments to reach those who are most in need. IIED, London.

Steffen, W et al. (2015) Planetary boundaries: Guiding human development on a changing planet. Science, 347 (6223). See www.sciencemag.org/content/347/6223/1259855.abstract

Steinbach, D et al. (2015) Financing inclusive low-carbon resilient development: The role of the Alternative Energy Promotion Centre in Nepal. IIED, London.

Swiderska et al. (2011) Adapting agriculture with traditional knowledge. IIED, London. See http://pubs.iied.org/pdfs/17111IIED.pdf

Tani, D (2015) Global growth tracker. See www.worldeconomics.com/papers/Global%20Growth%20Monitor_7c66ffca-ff86-4e4c-979d-7c5d7a22ef21.paper

Tusabe, R and Habyalimana, S (2010) From poachers to park wardens: Revenue sharing scheme as an incentive for environment protection in Rwanda. Mountain Forum Bulletin, 10 (1). See www.mtnforum.org/sites/default/files/publication/files/5500.pdf

UN (2014a) Report of the Intergovernmental Committee of Experts on sustainable development financing. United Nations, New York. See www.un.org/ga/search/view_doc.asp?symbol=A/69/315&Lang=E

UN (2014b) The Millennium Development Goals report 2014. United Nations, New York. See www.un.org/millenniumgoals/2014 MDG report/MDG 2014 English web.pdf

UNDP (2014) Towards human resilience: Sustaining MDG progress in an age of economic uncertainty. See www.undp.org/content/undp/en/home/librarypage/poverty-reduction/inclusive_development/towards_human_resiliencesustainingmdgprogressinanageofeconomicun.html

UNDP (2013) Human development report 2013 - The rise of the South: Human progress in a diverse world. See http://hdr.undp.org/sites/default/files/reports/14/hdr2013_en_complete.pdf

UNEP (undated), Mexico's pathway to a green economy. See www.unep.org/greeneconomy/AdvisoryServices/CountryProfiles/Mexico/tabid/104141/Default.aspx

UNEP (2015) Aligning the financial system to sustainable development - Pathways to scale. United Nations Environment Program, New York. See http://web.unep.org/ourplanet/march-2015/unep-publications/aligning-financial-system-sustainable-development-pathways-scale

USAID (2014) USAID Kenya: Financial inclusion for rural microenterprises fact sheet. See www.usaid.gov/sites/default/files/documents/1860/FIRM%20Fact%20sheet%20August%202014.pdf

Wells, G and Hesse, C (2014) Isiolo County Adaptation Fund: Activities, costs and impacts after the first investment round. Kenya National Drought Management Authority, Nairobi.

Welsh Government (2015a) Well-being of future generations (Wales) Act 2015. See http://gov.wales/topics/people-and-communities/people/future-generations-bill/?lang=en

Welsh Government (2015b) Well-being of future generations (Wales) Act 2015: The essentials. Sustainable Development Branch, Welsh Government. See http://gov.wales/docs/dsjlg/publications/150623-guide-to-the-fg-act-en.pdf

WHO (25 March 2014) 7 million premature deaths annually linked to air pollution. See www.who.int/mediacentre/news/releases/2014/air-pollution/en

Wlokas, H (2011) What contribution does the installation of solar water heaters make towards the alleviation of energy poverty in South Africa? Journal of Energy in Southern Africa, 22(2) 27—39. See www.scielo.org.za/pdf/jesa/v22n2/04.pdf

World Bank (2016) Sustainable rural development. See www.worldbank.org/projects/p106261/sustainable-rural-development?lang=en&tab=documents&subTab=projectDocuments

World Bank (2012a) Inclusive green growth: The pathway to sustainable development. See http://siteresources.worldbank.org/EXTSDNET/Resources/Inclusive_Green_Growth_May_2012.pdf

World Bank (20 November 2012b) WB/Mexico: Promotion of green growth. Press release. See www.worldbank.org/en/news/press-release/2012/11/20/wb-mexico-promotion-green-growth

World Bank (2006), Where is the wealth of nations? Measuring capital for the 21st century. World Bank, Washington DC. See http://siteresources.worldbank.org/INTEEI/214578-1110886258964/20748034/All.pdf

World Future Council (2016) Phasing out Indonesia's fossil fuel subsidies. See www.futurepolicy.org/renewable-energies/indonesia-fossil-fuel-subsidies

WWF (2006) Working for Wetlands, South Africa. See http://assets.panda.org/downloads/mrwworkingforwetlandscs.pdf

Zibechi, R (2008) Autonomías y Emancipaciones - América Latina en Movimiento (Autonomy and emancipation: Latin America on the move). See http://biblioteca.hegoa.ehu.es/system/ebooks/19558/original/Autonomias_y_emancipaciones.pdf?1383563096

Acknowledgements
This paper was co-authored by Steve Bass, Paul Steele and Camilla Toulmin of the International Institute for Environment and Development (IIED), and Oliver Greenfield and Chris Hopkins of the Green Economy Coalition (GEC), with inputs from Inhee Chung and Thomas Nielsen of the Global Green Growth Institute (GGGI). It also benefits from a peer-review meeting on June 17 involving colleagues from development and environmental NGOs; finance, trade and business organizations; researchers; and discussion at the GGGI Council meeting in July 2015. We are also grateful for comments from Martha Rampley of GEC and Krystyna Swiderska of IIED. The contents of this paper are endorsed by GGGI, IIED and the GEC but do not necessarily reflect their current policies.

Citation
Bass S, Steele P, Toulmin C, Greenfield O, Hopkins C, Chung I and Nielsen T (2016) Pro-poor, inclusive green growth: experience and a new agenda. GGGI, IIED and GEC.

Cover Photo Credit
UN Women/Gaganjit Singh

About the Global Green Growth Institute
The Global Green Growth Institute was founded to support and promote a model of economic growth known as "green growth", which targets key aspects of economic performance such as poverty reduction, job creation, social inclusion and environmental sustainability.

Headquartered in Seoul, Republic of Korea, GGGI also has representation in a number of partner countries.

Member Countries: Australia, Cambodia, Costa Rica, Denmark, Ethiopia, Fiji, Guyana, Hungary, Indonesia, Jordan, Kiribati, Republic of Korea, Mexico, Mongolia, Norway, Papua New Guinea, Paraguay, Philippines, Qatar, Rwanda, Senegal, Thailand, United Arab Emirates, United Kingdom, Vanuatu, Vietnam

Operations: Cambodia, China, Colombia, Ethiopia, Fiji, India, Indonesia, Jordan, Laos, Mexico, Mongolia, Morocco, Mozambique, Myanmar, Nepal, Peru, Philippines, Rwanda, Senegal, Thailand, Uganda, United Arab Emirates, Vanuatu, Vietnam

About the International Institute for Environment and Development
The International Institute for Environment and Development (IIED) is a policy and action research organization. We promote sustainable development to improve livelihoods and protect the environments on which these livelihoods are built. We specialize in linking local priorities to global challenges. IIED is based in London and works in Africa, Asia, Latin America, the Middle East and the Pacific, with some of the world's most vulnerable people. We work with them to strengthen their voice in the decision-making arenas that affect them — from village councils to international conventions. **www.iied.org**

About the Green Economy Coalition
Established in 2009, the Green Economy Coalition (GEC) is the world's only civil society-led multi-stakeholder group working together on green economy. The GEC is made up of think-tanks, environmental and development NGOs, trade unions, businesses, campaign organizations and UN bodies. The GEC vision is one of resilient economies that provide a better quality of life for all within the ecological limits of the planet. The GEC mission is to accelerate the transition to these new green economies. **www.greeneconomycoalition.org**

Global
Green Growth
Institute

Global Green Growth Institute
19F Jeongdong Building, 21-15 Jeongdong-gil, Jung-gu, Seoul, 04158, Korea

Global
Green Growth
Institute

Follow our activities
on Facebook and Twitter

www.gggi.org