

Climate Finance Architecture: mapping green growth services



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Report Summary

This is a short review for DFID of actors working in and around Green Growth or 'Green Economy' (GE). This document outlines a broad spectrum of services that are relevant for supporting country implementation of Green Growth. It loosely defines the service offerings and indicatively maps key organisations against these service offerings. It then offers some early stage analysis that will feed into further work on a) defining the capability architecture b) understanding the gaps and c) more in-depth mapping organisations performance and ability. A database of actors has also been developed. This mapping provides a quick scan on information and is non-exhaustive. It offers foundation on which to build and layer on additional institutions and information.

Some insights from this initial scoping are:

- Developing a 'Green Economy' is described as a country specific strategy for economic growth and job creation that reduces poverty and manages increasingly acute resource constraints and climate change. It is characterised by resource-efficient and resilient forms of growth that bring about social, economic and environmental benefits. It is commonly seen as a way to reconcile the rapid growth and increasing prosperity with the needs of people still living in poverty and the imperative of a better managed environment.
- There is a large number of actors providing services relevant for Green Growth, ranging from large multilateral institutions with multiple specialisms to small niche player focused on specific issues or themes. These include; Multi-lateral Development Banks, International Organisations, Investment Funds, NGO/Private sector and others.
- The service offering around green growth covers;
 - A. Influencing,
 - B. Analysis, policy and strategy,
 - C. Planning,
 - D. Integration of green growth into wider development process, particularly budget and expenditure frameworks,
 - E. Access to and management of finance (both international and national),
 - F. Project and Investment Design.
- Few organisations can offer services that span the entire range of service offerings i.e. both influencing and supporting investment and project development.
- Influencing the Green growth agenda at the international level is well covered by respected UN agencies, International Organisations and Multilateral Development Banks.
- The areas of the Capability Architecture that are less well covered are:
 - Integration of Green Growth into economic planning and wider development activities
 - Developing bankable investments and projects.

SECTION 1

Green Economy services offerings

A 'Green Economy Transition' (GET) is frequently put forward as a public policy goal that is often vague and ill-defined. GET refers to concepts such as sustainable development, green growth, inclusive growth, green/blue economy, new-climate economy, climate smart development, and low-carbon development that have developed alongside each other, with slightly different definitions. In principle, they are all consistent with each other: economic development (i.e. growth) is aligned with environmental sustainability (i.e. green) and social equity (i.e. inclusive)¹. Moreover, the model of GET differs substantially from country to country, for example in fast growing middle income countries with significant levels of pollution and industrial development as compared to resource rich economies or some LDCs and fragile states. Even so, generally it is described as a strategy for economic growth and job creation that reduces poverty and can manage increasingly acute resource constraints and climate change. It is characterised by resource-efficient and resilient forms of growth that bring social, economic and environmental benefits². It is commonly seen as the only way to reconcile the rapid growth required to bring increases to the level of prosperity to which people aspire with the needs of people still living in poverty and the imperative of a better managed environment, both locally and globally³.

Box 1 Defining a 'Green Economy Transition'

There is some agreement around the definition of GET and how it is implemented and measured⁴. The OECD define Green Economy as "fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies."⁵This focuses on environmental governance: it is about a decoupling of a development pathway from environmental destruction and a gradual push toward protection and restoration of ecosystems and the goods and services they provide. Concepts of poverty and inclusion are also knitted in with a focus on the rights of poor and vulnerable groups, including women, to secure access to quality work, livelihoods and basic needs, including food, water, sanitation and shelter, and to benefit from a healthy environment⁶. It is an approach to growth and development that advances multiple benefits across three dimensions; social, environmental and economic. In essence, in this model, poverty eradication and environmental sustainability are placed on an

¹ GGKP, 2016 Measuring Inclusive Green Growth at the Country Level Taking Stock of Measurement Approaches and Indicators. Working Paper 02 2016. Available at: http://www.greengrowthknowledge.org/sites/default/files/downloads/resource/Measuring_Inclusive_Green_Growth_at_the_Country_Level.pdf

² PAGE, 2016. Integrated Planning & Sustainable Development: Challenges and Opportunities. Available at: http://www.un-page.org/files/public/undp_synthesis_report.pdf

³ World Bank, 2012. Inclusive Green Growth: the Pathway to Sustainable Development. Available at: http://siteresources.worldbank.org/EXTSDNET/Resources/Inclusive_Green_Growth_May_2012.pdf

⁴ Ibid, GGKP, 2016 Measuring Inclusive Green Growth at the Country Level Taking Stock of Measurement Approaches and Indicators. Working Paper 02 2016.

⁵ OECD, 2016; What is green growth and how can it help deliver sustainable development? Accessed June 2016:

<http://www.oecd.org/greengrowth/whatisgreengrowthandhowcanithelpdeliversustainabledevelopment.htm>

⁶ Ibid. PAGE, 2016. Integrated Planning & Sustainable Development: Challenges and Opportunities.

equal footing with economic growth. GET then influences the core of economic development plans and budgets, i.e. political decision making and shaping the financial system: balancing people, the growth and diversity of an economy and the environment.

Important aspects of GET are captured in a suite of global agreements, most notably with the adoption of the Sustainable Development Goals and the Paris Agreement.

The Paris Agreement ultimately set global limits on atmospheric concentrations of GHG emissions⁷. Countries now urgently need to address the significant gap between the aggregate effect of existing mitigation pledges and an aggregate emission pathway consistent with holding the increase in the global average temperature to well below 2 °C and pursuing efforts to limit the temperature increase to 1.5 °C⁸. This sets a global framework for all countries to act decisively and rapidly to transition toward low carbon growth and 'greener' development trajectories.

Implementation of GET is not only hindered by a lack of capacity to translate ideas into practice and by gaps in strategy, the underpinning financing structure, and by political economy issues. Countries are already implementing some elements of green growth or at least forward with plans, for example for reducing emissions, 162 countries have come forward with Nationally Determined Contributions - NDCs) as of June 2016⁹. Many of these will require implementation support, both financial and technical. The investment landscape has also changed, the World Bank Group for example has targeted 28% of its portfolio toward climate relevant investment by 2020¹⁰ and private sector is also cognisant of the risks and opportunities¹¹ and is allocating capital toward greener investments and systems of production¹².

Such as broad definition of what GET is implies that there are an extremely wide range of relevant services that can support green growth transitions on the ground; ranging from influencing policy makers, economic and policy analysis across thematic/spatial scales (water, forests, cities, land use and agriculture, transport, energy), traditional economic growth and development spaces (structural transformation work, infrastructure, agricultural transformation, industrialisation, urbanisation, jobs, taxes and so on), economic inclusion and environmental governance and management. This includes a broad base of traditional development practitioners and those working on more specialist areas of inclusive growth, climate resilient growth, environmental management or disaster risk management.

DFID are providing support to many organisation involved in GET. To better understand varied types of support available for GET, and the modalities by which they are provided, we have made a first attempt to a) define GET, and b) to set out a broad set of supportive services for GET that are being offered/provided by organisations (see Figure 1). This is the

⁷ IPCC 2014: Assessing Transformation Pathways in Climate Change, 2014: Mitigation of Climate Change. Contribution of Working Group III.

⁸ UNFCCC, 2015; Paris Agreement text. Conference of the Parties Twenty-first session FCCC/CP/2015/L.9

⁹ <https://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf>

¹⁰ See INDC country submissions to the UNFCCC. Access 20th June 2016 via:

¹⁰ <http://www4.unfccc.int/Submissions/INDC/Submission%20Pages/submissions.aspx>

¹⁰ In October 2015, WBG announced that climate financing could increase to 28 percent by 2020, in response to client demand. At current levels of co-financing, that would mean a potential \$29 billion a year for climate projects by 2020.

¹⁰ <http://www.worldbank.org/en/topic/climatefinance/overview>

¹¹ See for example the American Business Act on Climate Pledge. 81 companies have signed that employ over 9 million people, represent more than \$3 trillion in annual revenue, and have a combined market capitalization of over \$5 trillion. <https://www.whitehouse.gov/the-press-office/2015/10/19/fact-sheet-white-house-announces-commitments-american-business-act>

¹² See CDP, 2015. Putting a price on risk: Carbon pricing in the corporate world <https://www.cdp.net/cdpresults/carbon-pricing-in-the-corporate-world.pdf>

GET 'Capability Architecture' and it is defined here as the range and types of services being offered to support GET implementation at global and national levels.

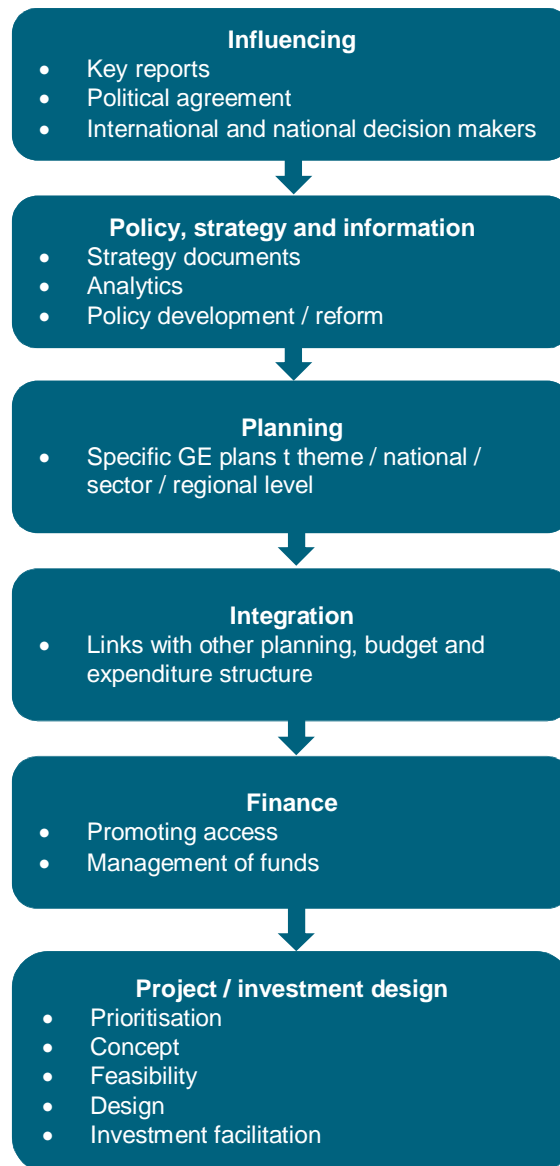
Box 2 The GET 'Capability Architecture'

A spectrum of service offerings that is available for providing support for GET at the global and national level. These are broad areas of services that flow from influencing decision makers through to finance and design of relevant projects. It is relevant for categorising different types of organisations in this diverse field. The services areas are interlinked with one another but they refer to distinct areas of organisational focus, for example on managing finance or on analytics. Organisations can have a singular focus (e.g. investment funds) or focus on multiple areas. It is not intended to be an exhaustive list of every available and potentially relevant service being offered and further development of the service offering will be necessary.

- ***Influencing policy/decision makers on GET:*** Support to international and national decision makers to make the case for and prioritise action. This is typically done through the development of key reports (such as UNEPs emissions gap report) and political initiatives (such as the World Bank Carbon Pricing Initiative) that foster international and national action. This includes advocacy, high level reports and activities aimed at shaping thinking and policy processes.
- ***Policy, Strategy development and information generation:*** Support to strategy development usually at country level, for example Nationally Determined Contributions (NDCs) and/or at thematic level (water, energy, cities, land-use). This includes diagnostic tools, economic analysis, policy formulation and strategy development.
- ***Planning support:*** Support to planning agents at country/regional level, utilising analysis to generate plans. This supports country level analysis (for example INDCs or Kenya's National Climate Change Action Plan) being available to help inform domestic priorities.
- ***Integration support:*** Support to mainstream Green Economy into the economic development. Integration, or mainstreaming, is focused on linking decision making and spending on GE with core economic planning and budgeting i.e. linking green growth strategies or INDCs and national development plans and domestic budgets. This type of support needs to be close to countries development planning architecture and go deeper than providing arms length 'drop-in' analytics. This can be sensitive (as it deals with spending priorities) and relatively few institutions that are engaged meaningfully in this space such as the UN-Poverty and Environment Initiative. *N.B Integration is a cross cutting service area influencing all stages (i.e. integrating GE into planning and analysis). Here it is classed as a distinct service area focused on linking GE concept to broader plans, budget and expenditure frameworks and into M&E systems.*
- ***Access to and management of finance:*** Support to access finance or the management of finance related to Green Growth, this is typically financing flows external such as climate finance, although domestic finance is important so central banks, development banks and Ministries of Finance are critical. This area is broad and ranges supporting inst to directly access funds, management of funds and support to tax and revenue collection.

- **Investment development and project design:** Support to the development of ‘bankable’ investments and projects. Bankable programmes/project development is often the high risk/high cost part of the project development cycle. It requires specialists such as MDBs and those with investment expertise. This is outside of a narrow definition of project development related to fund portfolio development i.e. support should be broader than project design functions focused on developing own portfolios.

Figure 1 Categories of GET service offerings



1.1 Mapping key actors:

Work on GET involves institution from diverse fields. There are a myriad of ‘climate’ and ‘green growth’ programmes and initiatives that are in operation. UNEP tracks 219 International Climate Initiatives¹³ and 375,000 participants spanning MDBs, governments,

¹³ UNEP, 2016 International Climate Initiatives Tracker. Available at: http://climateinitiativesplatform.org/index.php?title=Browse_initiatives

special initiatives, NGOs and civil society and the private sector¹⁴. At the global level more than 20 UN entities have introduced programmes that support the shift towards GET^{15 16}.

This is a short review for DFID of actors in a database. This mapping provides a quick scan of large actors mapped against the capability architecture and is non-exhaustive: it offers foundation on which to build and layer on additional institutions and information. A database is provided alongside this document that maps key actors in terms of major programmes, service offering, geographic focus and ways of working.

- There are a number of institutional groups that have relevant service offerings:
 - Multi-lateral Development Banks,
 - International Organisations,
 - International Investment Funds,
 - National Funds
 - Government donors
 - Private sector as investors and provision of consultancy services
 - Others initiatives and topic/theme specialists.
- Few organisations can offer services that span the entire range of service offerings i.e. both influencing and supporting implementation on the ground.
- Influencing the Green growth agenda at the international level is well covered by UN agencies, International Organisations such as the OECD, Multilateral Development Banks and others. There are landmark reports on the topic produced by the OECD, UNEP and OECD that have influenced the debate internationally and initiatives such as The World Bank Carbon Pricing Leadership Coalition have gathered political momentum.
- MDBs are an important actor as they have capacities spanning from country influence to implementation and have made specific objectives regarding climate financing. The World Bank for example will target 28% of its portfolio toward climate relevant investment by 2020¹⁷ and the IFC now targets directing 28% of the IFC's annual investment to climate investments by 2020¹⁸.
- There are numerous funds (international, regional and national). There are many related funds that have been created with often similar or overlapping mandates and relatively small levels of capitalisation given the scale of the challenge.

¹⁴ Climate Initiatives Platform (CIP) is an online data base/portal for collecting, sharing and tracking information about International Climate Initiatives (ICIs). Accessed: June 20th 2016 via <http://climateinitiativesplatform.org/>

¹⁵ UNEP Green Economy: Towards greener & more inclusive economies. Available at: http://web.unep.org/greeneconomy/sites/unep.org/greeneconomy/files/ge_flyer_october27_web-ready.pdf

¹⁶ A thorough review of UN activities on Green Economy can be found in an audit of current initiatives and key actors involved in Post-Rio+20 green economy work by UN DESA Sustainable Development Knowledge Platform. Available at: https://sustainabledevelopment.un.org/content/documents/1439AttachementA_Matrix%20summary%20of%20agency%20responses.pdf

¹⁷ In October 2015, WBG announced that climate financing could increase from the current 21 percent of its portfolio to 28 percent by 2020, in response to client demand. At current levels of co-financing, that would mean a potential \$29 billion a year for climate projects by 2020. Accessed via: <http://www.worldbank.org/en/topic/climatefinance/overview>

¹⁸ IFC, 2016: Climate Implementation Plan. International Finance Corporation, World Bank Group. Available at: http://www.ifc.org/wps/wcm/connect/5f5402804c60b510b6bbbeaccf53f33d/IFC_Climate_Implementation_Plan_03152016_WBG_v2.pdf?MOD=AJPERES

- This fragmentation of approaches, while initially useful to learn lessons and deliver funds through a variety of mechanisms for different priorities, could prevent scale and has high administration and management costs.
- The creation of the GCF could see a downscaling of such funds in the long term as climate funds are consolidated in new mechanisms such as the GCF and at country level.
- Most organisations have a focus on influencing and analysis and strategy development. This type of service can be done globally, regionally and at national/sub-national level for many countries with fewer resource needs and without the need for long term presence in country. Taking strategy and analytics through planning, integration, institutional change and investment design, requires country specific and in-depth knowledge. Having an in-country presence is beneficial in these service areas.
- The areas of the Capability Architecture that are less well covered are in terms of
 - Specialist Integration of Green Growth into economic planning and wider development activities and domestic budgets
 - Supporting the development bankable investments (outside of a narrow view of project development to meet specific funding requirements that is tied to funds i.e. funds to support the development projects to meet the needs of specific funding streams).
- There is an LDC focus of many programmes, as this is where capacity and finance are most needed. However, the role of MICs is critical in terms of low carbon transition (from the perspective of per capita and absolute levels of emissions and poverty). There is a valid question on the role of these service offerings for MICs, where finance becomes less needed and domestic political influence and technical assistance may be better suited. In term of geographic focus, East Africa generally has good coverage (Kenya and Ethiopia in particular) with other countries (Mozambique, Sudan or Somalia for example) being less well covered. West and Central Africa are also less well covered. LAC has broad coverage, with some countries, Peru for example, having multiple programmes. In Asia, large economies such as India and Indonesia have multiple programmes, but smaller countries such as Papua New Guinea and Pacific Islands have fewer.

N.B Gaps in geographic coverage are difficult to assess from this review, A) reviewed country programmes do not reveal the depth and scale of support at country level, B) even where multiple, or a full range of, services are available to a country this can be provided by different actors and not well aligned to country needs or implementation.

- In terms of ways of working, many institutions/programmes have centralised functions managed at HQ level and small country outreach programmes. There are different models deployed, from hosting within a local organisation, dedicated country offices or short term support programmes with local partners.

1.2 Other considerations/questions:

- **Funding the transition toward GE will require massive scale finance over the long term. The private sector and national governments will ultimately provide the vast bulk of funding for GE transition.**

- Financing for Development, the Paris Agreement and the SDGs recognise the role and importance of national budgets (tax revenues and expenditure)¹⁹.
- The private sector now routinely uses carbon pricing instruments to manage investment risk, pricing in future climate policy, and changing the way capital is allocated. Over 450 major international companies now use carbon pricing as a risk management tool, including Shell, Holcim Cement and BHP Billiton²⁰.
- Private funds, investors and large capital pools are entering the space. Goldman Sachs recently pledge to invest USD \$ 150 Billion into clean energy in the next 10 years²¹, with similar commitments from Citi Bank, Bank of America and JP Morgan Chase. Major financial institutions are active in the emerging green bond market and have the capital and skills to inject capital at scale into relevant sectors²².

The bulk of finance for GE transition will necessarily come from the private sector and national budgets, how can DFID engage with this to finance GE transitions? Using public funds to push the integration of green growth into planning and budgets is important, as are policy and investment frameworks and developing bankable investments.

- **Time frame and depth of support:** The GE transition is long term. There are a limited number of organisations that have capacity and ability to support long term transitions toward green growth (10 years+ with in depth country/regional knowledge and relevant skills and capacities). Institutions such as World Bank Group and MDBs may be able, but they are often not a neutral actor and have commercial interests, are driven by positioning for funding and generating lending based revenue.
 - Does long term support enable countries to better understand, integrate and implement GE? How can DFID provide long term consistent and flexible support on the ground support for GE transition? DFID adopts a flexible funding facility model – Nigeria, Ethiopia, Kenya, Myanmar, Tanzania that co-discovers and targets bottlenecks in country/sectors etc. What lessons emerge from this, how has it fostered integration and domestic expenditure? Is it explicitly linked to domestic expenditure and private investment? Is the time frame and scale sufficient?
 - DFID could push for services to go deeper than short term capacity support, trainings and strategy development (easily outsourced and short-term) toward delivering changes on the ground.
- **While some countries have access to a full range of service offerings, there may be dislocation of the value chain** i.e. services are offered but they are not well integrated with one another. There are few organisations that span the value chain: moving toward implementation on the ground, there can be multiple actors involved. There are many critical points in the value chain that can break down and not mesh well with each other for example if externally developed strategies that focus only primarily on climate and not economic development may not translate into integration and investment development work.

¹⁹ See the Addis Ababa Action Agenda of the Third International Conference on Financing for Development June 2015. Available at: http://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf

²⁰ CDP, 2015. Putting a price on risk: Carbon pricing in the corporate world. Available at: <https://www.cdp.net/cdpresults/carbon-pricing-in-the-corporate-world.pdf>

²¹ Goldman Sachs, 2016. Press release: Goldman Sachs announces \$150 billion clean energy target by 2025 in new environmental policy framework. Accessed 20th June via <http://www.goldmansachs.com/media-relations/press-releases/current/announcement-11-2-15.html>

²² Climate Bond Initiative 2015: Bonds and Climate – State of the Market 2015. Available at: <http://www.climatebonds.net/files/files/CBI-HSBC%20report%20July%20JG01.pdf>

- What value is there in having actors that can span service offerings? Intuitively, this should play a vital role both, especially from a planning, financing and implementation perspective. There are multiple specialisms that can be difficult to find on one organisation. This has implications for ensuring continuity of service offerings. How can DFID foster a full range of service offers in country and ensure different actors are coordinated and aligned?
- Organisation such as the World Bank and the UNDP do have significant in-country teams in many countries and are therefore well placed to provide a comprehensive service offering across the value chain. Can DFID push them to focus on integration and investment development in a broader sense i.e. not solely for the purposes of their own implementation projects?

1.3 Suggestions on next steps to develop the work:

1. Develop a Theory of Change for DFIDs green growth support. Is this a different concept to climate and economic development/wealth creation support and what is DFID seeking to change?
2. It would be useful to review capability architecture and define it further. Consider if this is the full range, is it well defined and with distinct service areas? It is currently broad and loosely defined. Moreover, there are cross cutting areas, for example in integration, and areas of potential overlap, for example, how do you categorise organisations that promote access to climate finance (influencing, analytics, access to finance)?
3. Consider other categorisations of service offering, such as the mechanisms deployed to deliver services (for example capacity building and training with partners, in-house delivery of products, through in-country teams and local partners or through external short term consultancy)
4. Consider layering on additional private sector investors in the mapping and institutions focused on PPP. The private sector is key, with large pools of capital. Encouraging private investment in green spaces should be a focus on DFID engagement. The number of actors is extremely large, so a highly selective focus on key funders and institutions may enable DFID to get a sense of the operations and direction of travel within this sector.
5. Objective assessment of organisation should go deeper than the stated aims of programmes and publically available information. Some programmes may not be effective or have provided value or benefits and others are oversold i.e. programmes often list a large number of countries that are covered, what is less clear is the actual work that has been delivered and the impact it has had.
6. Conduct an in-depth mapping of core actors once the capability architecture has been defined.
7. Consider country case studies to better understand the interactions between green growth service providers and decision makers.