

CDKN CCD Impact Research Fund Projects

2015 – 2017

In September 2014, CDKN launched the Climate Compatible Development (CCD) Impact Research Fund (CIRF). This two-stage research call run by the CDKN research programme sought innovative proposals relating to policy-relevant knowledge gaps under four themes. See [here](#) for the full CIRF Terms of Reference. The thematic areas, each with a set of sub-topics, were:

- Robust national plans for climate compatible development transitions
- Enabling conditions for urban climate compatible development
- Climate-related disaster risk management and adaptation
- Climate compatible development and the water, energy and food security 'nexus'

The research call received over 450 Expressions of Interest, of which the most promising 40 were invited to submit full proposals. Proposals were reviewed by a panel including CDKN staff and external experts, against criteria including their intellectual leadership, policy relevance and scientific excellence as well as their fit with the wider CDKN programme. On the recommendation of the review panel, CDKN funded the ten research projects outlined in this document. For more information about these projects, please visit the relevant project webpage on [our website](#) or approach the CDKN contact. Please contact [Amy Kirbyshire](#) with any queries regarding the research call more generally.

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Achieving green growth in developing countries: the political economy of energy security

CDKN Project code RSGL-1101

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Green growth offers a way for countries to achieve economic growth alongside climate change mitigation; it is a core part of climate compatible development and could provide realistic means for meeting relevant targets under the sustainable development goals. The energy sector and energy security concerns are crucial drivers for green growth, but opportunities and challenges for transforming the energy sector are often context specific and linked to vested interests with political power. How green growth can contribute to improved energy security in developing countries, and how interests and incentives resulting from a country's political economy can influence policy options and choices, are not well understood.

This project is exploring how the political economy of energy security influences the ambition and implementation of national green growth plans. The research will consider challenges and opportunities associated with institutional, business and political structures. Focussing on three countries with high projected growth, it combines a political economy analysis with an assessment of green energy pathways compared to a business as usual scenario.

In the short term, the project will establish a base of political knowledge to inform the ambition and achievability of green growth policy options in the energy sector. In the longer term, this may help decarbonise economic activities, and support these countries to become frontrunners of a low carbon world.

Project partners	<ul style="list-style-type: none"> • Lead: Netherlands Institute of International Relations 'Clingendael' (Louise van Schaik) • Energy research Centre of the Netherlands (ECN) • Oxford Policy Management (Indonesia Office) • ClimateCare (Kenya) • Independent Consultant (Colombia)
Countries	Colombia, Indonesia, Kenya
Budget	£ 270,000
Timeframe	Feb 2015 – June 2016 (18 months)
Links to CDKN country programmes	In Indonesia, the project builds on work with the Ministry of Energy and other actors in the energy sector at national and provincial levels. It will provide evidence to support the Government of Kenya's vision for a 'low carbon climate resilience development pathway' as laid out in the National Climate Change Action Plan . This research also builds on Amazon climate security work , and supports CDKN's Colombia Country Programme.
Links to CDKN thematic areas	Links to work on energy and low carbon development, under CDKN's Policy and Practice theme. The project is also relevant to CDKN's Climate Finance theme.
Source	CDKN CCD Impact Research Fund
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Towards a sustainable development-based Indian INDC

CDKN Project code RSGL-1102

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In 2015, ahead of the 21st Conference of the Parties (COP21) to the UNFCCC, countries are required to submit their intended contribution to preventing dangerous climate change, known as an Intended Nationally Determined Contribution (INDC). In accordance with India's priority of maintaining high economic growth rates and raising living standards, the country has adopted a co-benefits approach to addressing climate change mitigation. The INDC provides an opportunity for examining and enhancing such approaches toward a climate compatible development transition in India.

This research investigates how India's INDC can meet its sustainable development objectives while meaningfully contributing to climate change mitigation. It develops the analytical basis for India's INDC, with an emphasis on evaluating and operationalising sectoral co-benefits, and examines the notion that an INDC based on co-benefits is a viable and useful approach. There are three core strands of the research: 1) synthesis of the results of national and international modelling studies of Indian energy and emissions futures; 2) developing approaches for conceptualising and operationalising co-benefits approaches in the context of low carbon planning; and 3) enhancing the work of existing low carbon planning processes.

The aim is to stimulate a broader discussion around, and serve as an input to, India's formal INDC preparations and to inform longer-term approaches to energy and climate planning.

Project partners	<ul style="list-style-type: none"> • Lead: Centre for Policy Research (India) (Navroz Dubash) • Energy Research Centre (South Africa) • International Institute for Applied Systems Analysis (Austria)
Countries	India
Budget	£160,000
Timeframe	Feb 2015 – Jan 2016 (12 months)
Links to country programmes	This project, driven by CPR, enables CDKN's India Country Programme to inform the mitigation debate in India through a climate compatible development approach. This is new space for CDKN in India.
Links to CDKN thematic areas	Part of CDKN's Policy and Practice and Negotiations Support themes. This work builds on CDKN's support to the Mitigation Action Plans and Scenarios (MAPS) Programme and LEDS Global Partnership, and is one of several CDKN projects working on INDCs, presenting an opportunity for cross-country learning and collaboration.
Source	CDKN CCD Impact Research Fund
CDKN contact	Adivi Paul aditi.paul@cdkn.org

Aligning industrial policies and green economy strategies in Ethiopia

CDKN Project code RSGL-1103

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In 2010 Ethiopia launched a five year, multi-sectoral plan to bring the country to middle-income status, known as the Growth and Transformation Plan (GTP). Since 2011, Ethiopia's Climate Resilient Green Economy (CRGE) strategy has run alongside the GTP; its aim is to identify green economy opportunities to bring about high growth targets while keeping greenhouse gas emissions low, and to build resilience in the country's economy and social infrastructure. Ethiopia has broken new ground in sustainable development practice through aligning the GTP with the CRGE. However, systematic interactions and linkages with wider industrial policy within the GTP need strengthening. Since the launch of the CRGE, good progress has been made to streamline the green economy approach in some sectors, notably agriculture and energy, but there has been little integration of the strategy in industry. With the existing GTP winding down in 2015, there is an opportunity to provide practical policy recommendations that would help to streamline the CRGE strategy with Ethiopia's industrial sector strategy in the coming 5-year development plan (GTP II).

This research will develop understanding of the interaction between emerging industrial policies and green economy strategies in Ethiopia, with a view to supporting concrete policy reforms that are in line with Ethiopia's green economy ambitions and governance context. In the context of Ethiopia, the project will explore: opportunities, barriers and options for realising the alignment of the CRGE with national industrial policies and programmes; opportunities and barriers for greening industries; options for aligning institutional arrangements for governing industrial growth and the green economy; the character and drivers of the emerging national innovation system, and its suitability for nurturing green industrial development.

Project partners	<ul style="list-style-type: none"> • Lead: University College London (UCL) (Yacob Mulugetta) • Ethiopian Development Research Institute (Ethiopia) • Quantum Global Research Lab (Switzerland) • University of Reading (UK)
Countries	Ethiopia
Budget	£370,000
Timeframe	Feb 2015 – Sept 2016 (20 months)
Links to country programmes	As part of CDKN's Ethiopia Country Programme, this project builds upon existing work to support to the Government of Ethiopia to enhance low carbon economic growth.
Links to CDKN thematic areas	Links to CDKN's work on energy and low carbon development, under CDKN's Policy and Practice theme.
Source	CDKN CCD Impact Research Fund
CDKN contact	Ronald Mukanya ronald.mukanya@cdkn.org

Supporting Colombia in crafting ambitious and practical climate change goals

CDKN Project code RSGL-1104

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Planning for a low carbon future is a significant challenge for many countries. It requires robust information on greenhouse gas baselines and profiles, and the agreement of nationally appropriate climate change mitigation options. It is also a politically-charged issue. In Colombia, the approach to achieving a low carbon future is set out in the Colombia Low Carbon Development Strategy (CLCDS). This is a medium and long-term development plan which provides a roadmap to strengthen the country's economic and social development whilst keeping greenhouse gas emissions low. Ahead of the 21st Conference of the Parties (COP21) to the UNFCCC, the Colombian Intended Nationally Determined Contribution (INDC) will build on the CLCDS to detail plans for moving toward a low carbon, climate-resilient future.

This project is analysing greenhouse gas reduction policies in key sectors to support Colombia in crafting an ambitious, practical INDC which sets the country on a lower carbon, sustainable development pathway. Focusing on six economic sectors (electricity, industry, hydrocarbons, residential, waste and transportation), the research will assess mitigation options against factors such as their ambition relative to international best practices, cost effectiveness, energy efficiency, economic and social co-benefits and implementation feasibility. The project will also consider how actions supported by climate finance can be incorporated into an INDC, and options for securing international finance for INDC implementation.

Project partners	<ul style="list-style-type: none"> • Lead: Center for Clean Air Policy (USA) (Stacey Davis) • Universidad de los Andes (Colombia) • Twenty-First Strategies LLC (USA)
Countries	Colombia
Budget	£220,000
Timeframe	March 2015 – January 2016 (11 months)
Links to country programmes	This project is part of CDKN's Colombia Country Programme, and supports the Ministry of Environment and Sustainable Development in the Government of Colombia ahead of COP21.
Links to CDKN thematic areas	This is one of several projects which CDKN is supporting relating to the INDCs, connected to CDKN's Negotiations Support theme and wider work on energy and low carbon development under CDKN's Policy and Practice theme.
Source	CDKN CCD Impact Research Fund
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Disrupting urban 'risk traps': Bridging finance and knowledge for climate resilient infrastructural planning in Lima (cLIMAsinRiesgo)

CDKN Project code RSGL-1201

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Persistent climate and environment-related hazards and repeating disasters – many of them unrecorded – deplete the livelihoods and assets of the urban poor. They also damage a city's socio-economic future. Each one makes it harder for people to recover from subsequent disaster events, and they become caught in 'risk traps' from which it is hard to escape. Hazards and socio-economic risk drivers are deeply entangled, but how every day or episodic hazards lead to accumulated risk is poorly understood.

Taking the case of Lima, the second driest metropolis in the world, **this research explores the conditions that produce and reproduce urban 'risk traps', how and where they are created, and how they affect men and women in unplanned ('informal') or marginal settlements. It also explores how local communities and governments can disrupt risk accumulation cycles through targeted actions and investments.** The research will assess ongoing investments and efforts to mitigate and reduce risk, create evidence-based tools to inform climate-resilient funding mechanisms, and aims to disrupt urban 'risk traps'. Ultimately, the project seeks to promote ways for urban communities to strengthen their resilience and assure a brighter ecological and socioeconomic future for the city of Lima.

Project partners	<ul style="list-style-type: none"> • Lead: The Bartlett Development Planning Unit (DPU), University College London (UCL) (Adriana Allen) • Foro Ciudades Para La Vida (FCpLV) (Peru) • Centro de Investigación, Documentación y Asesoría Poblacional (CIDAP) (Peru) • Instituto de Desarrollo Urbano (CENCA) (Peru) • The Bartlett Centre for Advanced Spatial Analysis, UCL (UK) • Department of Civil, Environmental and Geomatic Engineering, UCL (UK) • UN-HABITAT (Kenya)
Countries	Peru
Budget	£275,000
Timeframe	Feb 2015 – Sept 2016 (20 months)
Links to country programmes	This project will provide valuable insights on how to link climate resilient infrastructure and decentralised funding mechanisms as part of the Peru Country Programme, with potential to scale up to the national level and to inform the Plan CC process.
Links to CDKN thematic areas	Relevance to CDKN's Climate Finance, Climate-Related Disaster Risk Management and Urban Policy and Practice themes.
Source	CDKN CCD Impact Research Fund
CDKN contact	Michelle Leppert michelle.leppert@cdkn.org

Finding the Finance: Climate compatible development in Asian cities

CDKN Project code RSGL-1202

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Urbanisation is a mega-trend in Asia. While capitals and megacities receive much attention, emissions growth and vulnerability are as pronounced in second-tier cities, and rates of population growth often higher, making climate-compatible development (CCD) a necessity and significant opportunity there. However, it is more difficult for them to access necessary funding. While financial needs are often not precisely known, international funding schemes currently only meet a small portion of the total financing needed to support CCD in cities. The Global Climate Fund (GCF) presents a new opportunity; the "*design and planning of cities to support mitigation and adaptation*" being one of its initial focus areas.

With case studies in India, Indonesia and the Philippines, **this research project is assessing the climate finance needs and gaps for CCD in second-tier cities and exploring how available financial opportunities can be harnessed to meet those climate finance needs.** Based on this assessment, the project will develop recommendations for how funding from the GCF can become more accessible to cities, for example through the creation of Urban Implementing Entities under the GCF, and how funding from the GCF can be used in order to incentivize the deployment of national and sub-national resources such as revenues from fees, local taxes or municipal bonds.

Project partners	<ul style="list-style-type: none"> • Lead: Germanwatch (Christoph Bals) • Vasudha Foundation • Institute for Essential Service Reform • Institute for Climate and Sustainable Cities (ICSC) • Eberswalde University for Sustainable Development
Countries	India, Indonesia, Philippines
Budget	£290,000
Timeframe	Feb 2015 – Sept 2016 (20 months)
Links to country programmes	CDKN has Country Programmes in India and Indonesia. This research is of considerable interest to both Country Programmes, and builds especially on city-level work in India and climate finance initiatives in Indonesia. For example in India this project relates to work carried out in Madurai, where a ‘future proofing’ plan has been produced which identified the financing needs, and potential sources of funding. The project also builds on work outside of these Country Programmes, for example in Colombia where CDKN is supporting another project on this topic.
Links to CDKN thematic areas	Intersects CDKN’s Climate Finance and Urban Policy and Practice themes.
Source	CDKN CCD Impact Research Fund
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Building resilience in Rwanda through business collaboration

CDKN Project code RSGL-1301

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The Rwandan economy has grown rapidly, powered especially by micro, small and medium enterprises (MSMEs). MSMEs make up around 98% of businesses in Rwanda, of which about 84% are informal. Climate-related hazards pose a risk to the livelihoods of business owners, workers and to the wider economy. They can damage physical assets, or threaten infrastructure and services which are vital for the operation of businesses. However, support for enhancing the resilience of small businesses is lacking. Climate finance is often difficult to acquire, climate information can be inaccessible, and risk-sharing mechanisms are scarce.

Collaboration between businesses may provide a mechanism to overcome challenges and to build MSME resilience; both vertical collaboration of larger businesses with smaller suppliers and horizontal collaboration between similarly-sized business. Examples of vertical collaboration include loans or efforts to strengthen local infrastructure, while horizontal forms include saving schemes or cooperation to access information or finance. Such cases of collaboration between businesses can be seen in Rwanda.

This research investigates how collaboration between businesses has contributed to resilience in the past, and assesses the potential for collaboration, particularly on collective action issues, to increase resilience in the future. The project focuses on the potential for collaboration to reduce the costs incurred by businesses from increased climate related impacts in urban areas of Rwanda. Findings on success factors and options for enhancing cooperation will inform recommendations for improving the regulatory framework within which businesses operate. Ultimately, the project aims to increase resilience of business through enhanced collaboration in Rwanda and further afield.

Project partners	<ul style="list-style-type: none"> Lead: Adelphi (Germany) (Christian Kind) Institute of Policy Analysis and Research-Rwanda (IPAR-Rwanda)
Countries	Rwanda
Budget	£144,000
Timeframe	Feb 2015 – April 2016 (15 months)
Links to country programmes	As part of CDKN's Rwanda Country Programme, this project builds on CDKN's support for the design and operationalization of Rwanda's National Climate and Environment Fund (FONERWA) and earlier support to the development of Rwanda's Green Growth and Climate Resilience Strategy , which identified gaps regarding how the private sector can be supported in achieving climate resilience.
Links to CDKN thematic areas	Relevance to CDKN's Climate-Related Disaster Risk Management and Climate Finance themes. Builds on CDKN's growing body of work on private sector engagement in CCD.
Source	CDKN CCD Impact Research Fund
CDKN contact	Ronald Mukanya ronald.mukanya@cdkn.org

Reducing Resettlement and Relocation Risk

CDKN Project code RSGL-1302

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Many national and local governments are resettling people who live in areas affected by climate-related disasters. This is often accompanied by the upgrading of vacated areas to reduce risk, or to change land use, with implications for those left behind or still living in the surrounding area.

Relocation and resettlement may reduce a region's future climate-related disaster risk, but can also increase people's poverty and vulnerability. The processes for making and implementing decisions on post-disaster relocation, pre-emptive resettlement and on-site upgrading play a large part in determining whether outcomes are socially just, and whether they actually reduce future risks for individuals, urban regions and society as a whole. While such programmes are widespread, the social and economic impacts of resettlement and relocation on individuals, society and urban regions are not well understood either by experts or by those enacting them.

With case studies across three continents, this research examines the differentiated social and economic implications of such climate-risk related resettlement and relocation policies, specifically in cities. It seeks to understand the political, economic and institutional contexts in which resettlement takes place; the costs and benefits of resettlement from the State's and from the individual's perspective; and how resettlement impacts people's well-being and resilience over different time frames. Identifying best-practice policies and practices for climate-related resettlement, the project will produce a decision framework and training materials for use by local governments involved in the process of resettlement.

Project partners	<ul style="list-style-type: none"> Co-Lead: The Bartlett Development Planning Unit, University College London (Cassidy Johnson) Co-Lead: Indian Institute for Human Settlements (Garima Jain) Latin American Social Science Faculty (FLACSO)
Countries	India, Uganda, Peru, Colombia and Mexico
Budget	£410,000
Timeframe	March 2015 – August 2016 (18 months)
Links to country programmes	CDKN has Country Programmes in India, Uganda, Peru and Colombia. While the specific focus on socioeconomic impacts of urban resettlement policies is new ground for CDKN, this research builds on DRM and adaptation work in cities in India, Peru and Colombia, and supports CDKN's goal to strengthen climate resilience in urban centres in Uganda.
Links to CDKN thematic areas	Intersects CDKN's Climate-Related Disaster Risk Management theme and Urban CCD Policy and Practice theme.
Source	CDKN CCD Impact Research Fund
CDKN contact	Amy Kirbyshire amy.kirbyshire@cdkn.org

Enhancing institutional arrangements for integrated water, energy and food security in Kenya

CDKN Project code RSGL-1401

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The water, energy and food sectors are inextricably linked, and are often in competition with one another for land and natural resources. In Kenya, land and water are increasingly becoming scarce as industries grow. Hydropower, irrigation and the extractive industries all require a slice of natural resources and have each played a part in driving competition. This is exacerbated by increasing rainfall variability and prevalence of drought and floods. These pressures threaten livelihoods as well as national economic growth.

The 2010 Kenyan constitution devolved many functions to the county level, including those relating to the management of natural resources. There are significant institutional challenges for integrated decision-making across the water, energy and food sectors within Kenya's two-tier governance system. However, the Kenyan government is in the early days of implementing governance arrangements under the 2010 Constitution, providing an opportunity to examine challenges and propose institutional and policy options.

In the context of the 2010 Constitution and tensions between national and county level government, **this research is examining the current institutional arrangements and challenges for achieving integrated water-energy-food planning and decision making in Kenya.** Looking at both formal and informal decision-making processes and norms, it will identify opportunities for improved vertical and horizontal integration in decision-making to support inclusive climate compatible development, with a particular focus on benefits for the poor and women. The potential role of private sector and local entrepreneurs in implementing such integrated governance will also be examined. This research will provide recommendations for Kenya and also for other developing countries facing similar challenges.

Project partners	<ul style="list-style-type: none"> • Lead: Pegasys Institute (South Africa) (Barbara Schreiner) • Losai Management (Kenya) • Institute for Development Studies (UK)
Countries	Kenya
Budget	£200,000
Timeframe	March 2015 – August 2016 (18 months)
Links to country programmes	This project, part of the CDKN Kenya Country Programme, builds on previous work on water governance and the water-energy-food security nexus in Africa and beyond (for instance in the Amazon).
Links to CDKN thematic areas	Part of CDKN's body of work on the water, energy and food security, under the CDKN Policy and Practice theme.
Source	CDKN CCD Impact Research Fund
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Mobilising efforts to reduce deforestation for water, energy and food security in Indonesia

CDKN Project code RSGL-1402

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Indonesia now has the world's highest deforestation rate, driven by increasing demand for natural resources by the water, energy and food sectors. There is a clear need for integrated management across these sectors (the 'WEF nexus'), but a lack of evidence and knowledge about the governance, institutional and political economy factors that determine the effectiveness of the nexus approach hinders its realisation.

Meanwhile, Indonesia is increasingly striving to ensure environmental sustainability and contribute to climate change mitigation, particularly through reducing emissions from deforestation and forest degradation ([REDD+](#)). There is potential for political momentum for the legal reform and cross-sectoral cooperation which comes with implementing REDD+ to catalyse a broader 'nexus approach' in Indonesia, and secure multiple-benefits for water, energy and food security at national and sub-national levels.

This research project investigates how the unique institutional structures and political momentum behind REDD+ implementation in Indonesia could provide lessons and opportunities to improve cross-sector policy making under a 'nexus approach'. The research focuses on Aceh Province, a government priority province for REDD+ implementation which has experienced severe social and environmental upheaval and which faces significant political and WEF nexus challenges.

Project partners	<ul style="list-style-type: none"> • Lead: Global Canopy Programme (Andrew Mitchell) • Wildlife Conservation Society, Indonesia Program
Countries	Indonesia
Budget	£280,000
Timeframe	March 2015 – January 2017
Links to country programmes	The research falls under CDKN's country programme in Indonesia which is largely focused on mitigation, sub-national CCD planning and implementation, and climate finance development. Thematically speaking, REDD+ and the WEF nexus are new areas for this country programme. However, this research builds on CDKN-funded WEF-nexus work in Latin America and the Caribbean , particularly Amazonia , and complements WEF-nexus research in Kenya .
Links to CDKN thematic areas	Contributes to CDKN's Policy and Practice and sub-national CCD themes.
Source	CDKN CCD Impact Research Fund
CDKN contact	Nigah Abbas nigah.abbas@cdkn.org