REEEP®

BEYOND ENERGY

2016 Annual Report

About REEEP

REEEP INVESTS IN CLEAN ENERGY MARKETS IN DEVELOPING COUNTRIES TO REDUCE CO_2 EMISSIONS AND BUILD PROSPERITY

Leveraging a strategic portfolio of high impact projects, REEEP creates, adapts and shares knowledge to build sustainable markets for renewable energy and energy efficient solutions; advance energy access, improve lives and economic opportunities; and reduce climate and environmental damage.

Market transformation is complex and multidimensional. We monitor, evaluate and learn from our portfolio to understand these complex systems, identify opportunities and barriers to success, and lower risk for market actors. This insight influences policy, encourages public and private investment, and informs our portfolio strategy to build scale within and replication across markets.

REEEP is committed to the principles of the Climate Knowledge Brokers Group in ensuring our data and knowledge are open, accessible and suited to the needs of decision makers in creating change.

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Foreword

LI YONG
Director General
UNIDO

THIS PARTNERSHIP, WHICH BUILDS ON TEN YEARS OF CLOSE RELATIONS, IS PART OF AN EXCITING NEW CHAPTER OF UNIDO-REEEP COLLABORATION

For more than a century, industrialization has been a central driver of economic and social development, technological advancement and poverty reduction worldwide. Industry wields enormous power to improve lives. But to do so, it must be pursued in a way that is both inclusive and sustainable. Inclusive, in that industry benefits all and leaves none behind, and prosperity is shared among women and men, young and old, rural and urban dwellers, everywhere. Sustainable, in that industry is pursued in an environmentally sound manner.

This year, the 192 countries of the United Nations joined together to adopt 17 ambitious Sustainable Development Goals. Goal 9 – Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation – recognizes the critical role of Inclusive and Sustainable Industrial Development (or ISID) in eradicating poverty by 2030.

Renewable energy and energy efficient solutions are a pillar of ISID. At the same time, these must be adopted by the private sector if they are to be economically sustainable. For this reason, I am especially proud that REEEP and UNIDO will be joining hands in 2016 to co-host the next generation of the Private Financing Advisory Network (PFAN), a multilateral public-private partnership that mobilizes private finance for clean energy projects in developing countries.

PFAN has to date raised over USD 800 million of investment for clean energy projects. In combining the strengths and programmatic synergies of UNIDO, the United Nations specialized agency for promoting ISID, and REEEP, a leading agent for rapid, impact-oriented clean energy market action at small and medium-sized enterprise level, we aim to drastically scale-up private finance for clean energy businesses that contribute to their countries' inclusive and sustainable industrial development.

Furthermore, REEEP and UNIDO have developed a clean energy technology transfer project funded by the European Commission (EC). The respective agreement on implementing the project was concluded by UNIDO and the EC's Directorate-General for Climate Action on the side-lines of the historic Paris climate conference in 2015. A collaborative project will promote clean energy technology transfer at waterworks in South Africa and contribute to the Intended Nationally Determined Contributions through reduction of greenhouse gas emissions in the region.

This partnership, which builds on ten years of close relations, is part of an exciting new chapter of UNIDO-REEEP collaboration, and I am pleased to introduce REEEP's 2016 Annual Report at this auspicious time.

Li Yong

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HENRY DERWENT

Chairman
REEEP Governing Board

THE WINDS AT THE TOP HAVE CHANGED DRAMATICALLY FOR THE BETTER, BUT THE NEED FOR ORGANISATIONS LIKE REEEP IS EVEN GREATER

One year ago, in REEEP's 2015 Annual Report, I wrote with cautious optimism of the outlook for global climate talks in the run-up to Paris. Since then, of course, that optimism was borne out by the extraordinary global recognition and buy-in to the 2015 Paris Agreement that resulted from the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC).

The agreement was far more ambitious in its goals than most of us had expected, seeking to hold global temperature increases to "well below 2°C above pre-industrial levels" and "pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels." Further, the agreement places a much-needed emphasis on helping countries adapt to the effects of climate change.

To meet these ambitious goals, the agreement also sets up a process for increasing financing, technology transfer and capacity building to support developing countries. All of these are sorely needed, although the greatest impact of the process will likely be in the high-level political commitments and signals – that decarbonisation will be the guiding force for post-2015 economic policy making – rather than in micromanaging the machinery of change. One question mark may be the finding of institutions capable of delivering finance for the momentous changes needed in developing countries. The Green Climate Fund and other new financial institutions have gotten off to a slow start, and will have challenges in delivering sufficient timely investment to those countries and sectors most in need of climate finance on their own. This is especially so at the level of small and medium-sized enterprises, which provide the livelihoods of the majority of people in low- and middle-income countries.

The winds at the top have changed dramatically for the better, but the need for organisations like REEEP is even greater: our job is to understand the levers needed to open up new markets to financing – particularly private investment – and find ways of pulling them. The need for rapid de-risking of business models and markets built around blazing advancements in technology is greater than ever before, as policy makers and bankers try to keep up with energy innovation.

The world's leaders have made their commitments. It will be up to all of us to see to it that they are held.

Henry Derwent

MARTIN HILLER

Director General
REEEP

ONCE THESE MARKETS ARE ABLE TO SUSTAIN ORGANIC GROWTH, PRIVATE FINANCE WILL START FLOWING MORE EASILY TOWARD REACHING CLIMATE AND DEVELOPMENT OBJECTIVES

There is a persistent tension in the world of energy, climate and development cooperation between the craving for simplicity in solutions and the complexity of reality on the ground. Meanwhile, it has become axiomatic that the private sector must be "mobilised" to contribute to broader efforts to meet climate and development objectives: being adept at navigating our complex market economies, so the saying, the private sector should be recruited into delivering broader public policy objectives such as climate protection and sustainable development.

The devil is, of course, in the detail. In the absence of decisive policy changes at a global scale (such as a carbon regime) we cannot rely only on the invisible hand to transform our economies. We must roll up our sleeves and tackle the challenge sector by sector, market by market, technology by technology, business by business.

REEEP focuses on de-risking – taking a number of informative steps to reduce risk perceptions of business models on the cusp of viability, and instigating behavioural change among a select group of key market players, including enterprises, investors, and policy makers. Once these markets are able to sustain organic growth, private finance will start flowing more easily toward reaching climate and development objectives.

This is where acceleration is needed: to support the small or medium-sized businesses we see innovating now, patient working capital must be available; investment pipelines must be primed; technologies must mature; tariffs must stimulate these new markets; regulatory frameworks must be optimized; supply chains must be secured; human expertise must be available; customers must be financially enabled and acquired – all within a span of a few years.

REEEP greatest asset is in our ability to understand and engage in this cross-cutting milieu, and to bring cohesive strategy to ground in helping markets move forward. It lies in our capacity to see beyond a business model; beyond a technology; and beyond energy to our ultimate objectives: overcoming climate change and improving peoples' lives.

Martin Hiller

Sustainable Development | REEEP for Sustainable Development

SUSTAINABLE DEVELOPMENT GOALS

The year 2015 was an historic one for global efforts to combat climate change, reduce poverty, and build a sustainable future for all. For REEEP, it has represented a renewed international recognition and commitment to the principles upon which we ourselves were created.

REEEP was born during the 2002 World Summit for Sustainable Development in Johannesburg, as one of over two hundred Type II Partnerships intended to stimulate public-private cooperation toward sustainable development. Thirteen years later, and following one of the most extensive and inclusive such consultation projects in history, the 193 member states of the United Nations adopted a sweeping new agenda to end poverty by 2030, codified in 17 Sustainable Development Goals.

The Sustainable Development Goals (SDGs), unlike their predecessors (The Millennium Development Goals, or MDGs), are truly comprehensive in scope. Building upon the remarkable success of the MDGs toward reducing poverty, particularly among the poorest and most vulnerable, the SDGs have greatly upgraded and expanded the development agenda to incorporate dimensions of prosperity that had hitherto been unaddressed, such as Industry, Innovation and Infrastructure (Goal 9), Responsible Consumption and Production (Goal 12), and Climate Action (Goal 13). In light of the Paris Climate Agreement under the UNFCCC, to which Goal 13 defers, the prognosis for global efforts to reduce greenhouse gas emissions looks immeasurably better than it did one year ago.

Goal 7, Affordable and Clean Energy, in particular was a resounding victory for our friends and colleagues at Sustainable Energy for All (SE4All) who fought diligently for its adoption; for REEEP, Goal 7 represented a validation of our efforts over the years to expand energy access in developing countries. Most importantly, for over a billion people worldwide who do not have access to modern energy, Goal 7 is recognition that energy is a core pillar of economic growth and human well-being.

The breadth of Agenda 2030 that is perhaps its greatest strength, however, also exemplifies a considerable challenge. The multiplicity of topics – 17 Goals, 193 Targets and over 200 proposed indicators – is clearly necessary to encompass the vast complexity of sustainable development. Yet an integrated architecture for understanding, guiding, monitoring and evaluating sustainable development progress – one which incorporates dependencies and other inter-linkages across targets while remaining manageable – is still to be developed. Indeed, developing such an architecture is part of Goal 17.

REEEP is building capacity to not only track how our efforts leverage the private sector toward targets under the SDGs (utilizing matching indicators), but also to better understand how clean energy markets impact sustainable development across targets, how supplemental methodologies and metrics can be developed to capture this total impact, and how this understanding can lead to more efficient investment practices for sustainable development-oriented financing. As part of these efforts, REEEP initiated the pilot IMPAQT (Indicators for Multidimensional Prosperity Assessment, Quantification and Testing) project. To read more about IMPAQT see the case study booklet enclosed in this report.

While the global development agenda has grown in size and scope to accommodate the complexity of the sustainable development challenge, so too has the number of organisations, agencies, businesses and other stakeholders working in the space. Amid this dynamic playing field, REEEP has since 2002 increasingly focused its efforts, developing key specialist capacities while levarging collaborative partnerships.

GOAL 7 IS RECOGNITION THAT ENERGY IS A CORE PILLAR OF ECONOMIC GROWTH AND HUMAN WELL-BEING

How REEEP Works

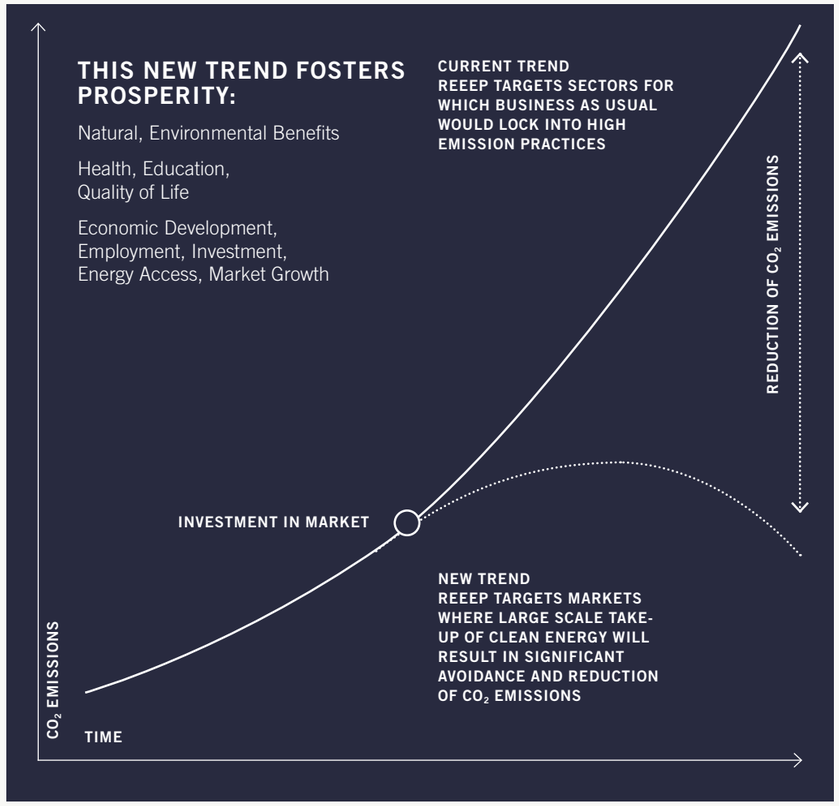
REEEP SEEDS AND DE-RISKS MARKETS FOR CLEAN ENERGY – RENEWABLE ENERGY, ENERGY EFFICIENCY – IN LOW AND MIDDLE-INCOME COUNTRIES AT EARLY STAGES

REEEP targets its activities according to a market's potential for contributing to broader "green growth" – growth that is environmentally, socially and economically sustainable.

Specifically, we look for sectors that can combat the effects of climate change (via avoidance/mitigation and/or adaptation) while contributing to growth in prosperity and human well-being, especially by expanding access to modern energy.

REEEP seeds markets by injecting targeted non-profit "investments" (grants or soft loans) via early-stage Small and Medium-Sized Enterprises (SMEs) offering new products and/or services utilising clean technologies that have been proven in similar or analogous applications. SMEs are selected for investment based on a highly competitive application and vetting procedure.

THE THEORY OF CHANGE: ENERGY + MARKETS

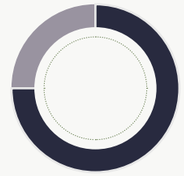


THE SMALL AND MEDIUM-SIZED FRONTIER

The outsized role of Micro, Small and Medium sized Enterprises (MSMEs) in developing countries' economies is well-known, making up around two-thirds of GDP and generating up to 85% of employment.

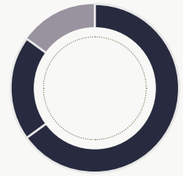
They are also crucial to diversifying economies and contributing to long-term inclusive and sustainable development.

The agricultural sector is particularly dominated by MSMEs. The challenges facing these businesses are multitude, yet the most daunting are the dual challenges of energy and finance: lack of access to energy is the single greatest obstacle to MSMEs in Sub-Saharan Africa and South Asia, and lack of access to finance in the top three obstacles across the developing world.



75%

of MSMEs in Sub-Saharan Africa are under- or unserved

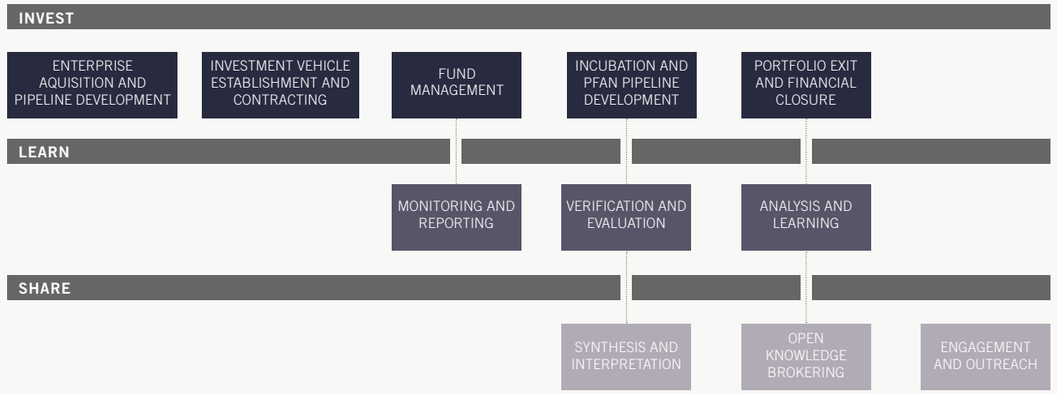


65%-85%

of employment is generated by MSMEs

REEEP INVEST / LEARN / SHARE

PROJECT STRATEGY DEVELOPMENT



REEEP Financial support to SMEs is typically between EUR 100-500K, and is accompanied by a host of technical support services including best practice advisory derived from the REEEP Portfolio; as well as business mentoring, and investor outreach and matchmaking services via the new PFAN platform housed within REEEP and UNIDO (see page 16).

Enterprises commit to REEEP's in-depth Monitoring, Evaluation and Learning framework, which sets goals and objectives, creates guidelines and benchmarks, monitors and evaluates progress, and produces sector-specific market intelligence for internal and external consumption.

These insights are directed into three work streams. Internally, sector intelligence and best practices are fed back into REEEP's own processes and advisory support for SMEs, as well as toward development of a downstream investor pipeline.

REEEP also leverages this market intelligence toward developing actionable feedback and recommendations supporting enabling environment actors on the policy side (legislators, regulators, policy practitioners), as well as investment side (multilateral development banks, impact investors, venture (growth) capital funds, mezzanine funds etc.)

REEEP pursues this strategy across three stages: Invest-Learn-Share. In some projects, REEEP maintains a lead role across all three stages; in others, REEEP focuses on a specific area, collaborating with other lead partners.

Invest

REEEP INVESTS IN CLEAN ENERGY MARKETS, TARGETING SMALL- AND MEDIUM-SIZED ENTERPRISES (SMES) AS DRIVERS OF INNOVATION AND CHANGE IN HIGH-IMPACT VALUE CHAINS. EFFICIENT AND SUSTAINABLE VALUE CHAINS ARE ESSENTIAL FOR CREATING THE GREEN GROWTH THE WORLD NEEDS IN ORDER TO BUILD PROSPERITY, FIGHT POVERTY AND REDUCE ENVIRONMENTAL AND CLIMATE DAMAGE

WHERE REEEP WORKS

REEEP concentrates its activities into three thematic focal areas, within which it develops projects that further focus activities along the Invest-Learn-Share archetype. We currently focus on a core group of high potential countries in the following regions:

East Africa (Kenya, Tanzania, Uganda)

Southern Africa (South Africa, Zambia, Botswana)

Southeast Asia (Cambodia, Myanmar)

South Asia (India, Bangladesh, Nepal)

In 2016-2017, we will continue our focus on clean energy in agrifood value chains and beyond-the-grid electrification. While we continue to explore new technologies and applications, we will also be strengthening investment and development into a number of specific sectors, including off-grid agricultural cooling (see page 38), solar-powered irrigation systems (see IMPAQT Case Study) and waste-to-energy (see page 48). Investments in beyond-the-grid electrification will focus on solutions ranging from upgradeable solar home systems to decentralized micro grids (see page 40-45).

We look for early stage ventures employing proven technologies and business cases, while bringing new and disruptive innovations addressing local market needs.

INVESTING IN IMPACT

A REEEP Invest-Learn-Share effort begins with a country or regional level analysis to determine market gaps and opportunities for clean technology deployment; a stakeholder landscape to understand key players and influencers; and an assessment of medium to long-term (5 to 15-year) market potential for delivering climate and sustainable development outcomes. These assessments are synthesised into a project strategy outlining technology and sector targets; investment vehicles and volumes; policy and regulatory considerations; ecosystem stakeholders and evidence requirements; and engagement strategies.

The investment solicitation and selection process begins once capitalisation has been secured through donor agreements. The process is typically launched via a call for proposals. Specifics of the call are adaptable, and depend on the realities of the market, as well as upon timing and administrative requirements of donors and local stakeholders. In some cases, multiple capital pools may be combined into a single call for proposals; in other cases, beneficiaries are identified through recommendations from expert networks and approached on an ad hoc basis.

In those cases where capitalisation is provided through a debt-issuing revolving fund, smaller calls for proposals may be issued as the fund is recapitalised by loan repayments. These innovative vehicles represent a promising new approach to growing investment in sectors that have fallen through the finance cracks due to ticket sizes (too large for microfinance, too small for private equity or commercial debt). Read more about REEEP's revolving funds on page 36.

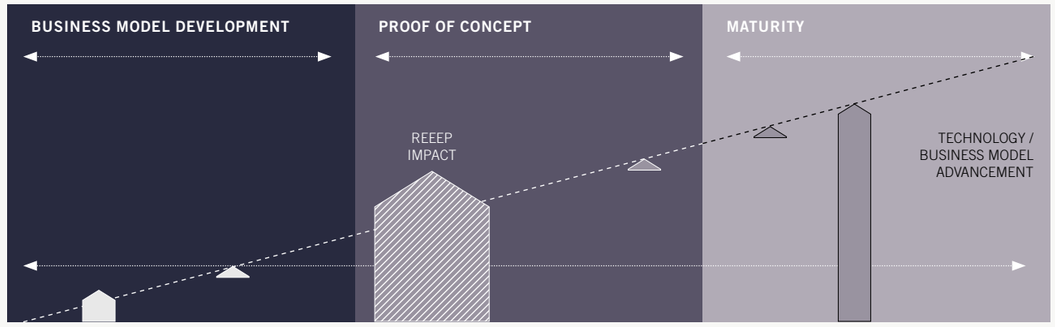
As part of a proposal SMEs are required to submit an application form, including a draft business plan, demonstrating their ability to provide a viable, clean technology-based product or service to a market in a least-developed country (LDC) or middle-income country (MIC).

SMEs are challenged to demonstrate how a business plan will lead to certain outcomes connected to REEEP's core principles: reducing the effects of climate change and building local prosperity. In some cases, these outcomes may be integrated into the selection processes as specific procurement objectives, allowing for results-based financing.

After initial application and due diligence process, successful applicants develop, together with REEEP and PFAN, a strategic plan incorporating a stakeholder analysis, key activities, outputs and outcomes, benchmarking and key performance indicators (KPIs), and contingency planning, among other elements. This strategic plan forms the basis of entry as a project investment. Enterprises are assigned a personal coach from PFAN's extensive network, who provides dynamic business advisory and mentoring, and have access to PFAN's investor matchmaking activities. Throughout its work, REEEP uses Results-Based Finance methods to verify project progress.

*A Redavia containerised solar generation system (**Credit**: Redavia)*

THE MISSING MIDDLE



Concessional Funds
Commercial Funds
Profitability

Early grant funding and targeted concessional vehicles can support R&D and early-stage start-ups that can develop into an investment pipeline

REEEP and PFAN combine seed-level donor financing with incubator-like support mechanisms to scale-up and replicate promising business models. We bridge the gap to private finance by de-risking, matchmaking and flowing into higher-level pipelines for growth stage investment

Insight gained from extensive monitoring and evaluation can inform policies to shape commercial and carbon financing ecosystems and enable crucial access to working capital for more mature enterprises and markets

FINANCING FOR TAKE-OFF; FINANCING FOR GROWTH

Entrepreneurs seeking to disrupt their value chains face myriad obstacles, chief among them a mismatched financial services sector. SMEs are often able to raise early-stage funding to generate a business model and prototype a technology only to stumble a year or two later at one of the many road blocks to scale.

The International Finance Corporation has termed this phase of business and technology development, along with associated funding needs, the "missing middle".

The joint REEEP-PFAN multistage incubation programme, called the Phased Financing Facility, tackles this gap head-on.

NEXT GENERATION ENTERPRISE ACCELERATION: PFAN JOINS REEEP AND UNIDO

In late 2015, the PFAN governing board announced it had entered negotiations with the United Nations Industrial Development Organisation (UNIDO) and REEEP for the two organizations to jointly host the next generation of PFAN in Vienna. The new PFAN, scheduled to launch in mid-2016, represents a major effort by the three organisations to accelerate the flow of private investment into clean energy sectors, in developing countries, with focus on small and medium-sized enterprises.

PFAN works by identifying promising clean energy projects at early stage; providing mentoring for the development of a business plan, investment pitch, and growth strategy; and matchmaking projects with private investors. PFAN achieves this by way of an extensive network of investors, financiers, and project developers with in-depth knowledge of local markets and technologies in over 40 countries across Africa; Latin America and the Caribbean; Southeast, East, and Central Asia; and the Commonwealth of Independent States.

Since 2013, PFAN and REEEP have collaborated to offer phased financing to transition clean energy SMEs from donor financing to private financing.

The new PFAN will bring together three prominent players in the global sustainable development effort, leveraging each other's strengths to promote investment in clean energy technologies and systems. UNIDO is the United Nations' specialised agency for promoting inclusive and sustainable industrial development; REEEP is a leading agent for rapid, impact-oriented clean energy market action at small and medium-sized enterprise level.

Through the new hosting arrangement, PFAN is expecting to diversify its services and broaden its implementation capacity, as well as attract new strategic partners and network members with a track record of business development and clean energy investment in developing countries to provide coaching services.

PFAN: A SNAPSHOT

$800m

USD in investment raised

590mw

clean energy generation capacity

2.5t

CO_2 per year mitigated

70

Projects in developing countries

*A farmer shows off a Sunflower Solar Irrigation Pump (**Credit**: Futurepump)*

*Children watch construction of a pico-hydro milling system in Nepal (**Credit**: SNV)*

*Milk being unloaded at a collection centre in Bangladesh (**Credit**: Enerplus)*

Learn

ENTERPRISES IN THE REEEP PORTFOLIO ARE NOT ABOUT BUSINESS AS USUAL. THEY ARE TESTING INNOVATIONS IN PIONEER MARKETS AT THE FRONTIERS OF POVERTY ALLEVIATION AND CLIMATE IMPACT, AND FACE MYRIAD CHALLENGES IN BREAKING EVEN, MUCH LESS ACHIEVING SCALE. ANALYSING AND UNDERSTANDING THESE CHALLENGES AND HOW THEY CAN BE OVERCOME IS OUR FOREMOST OBJECTIVE

LEARN

*A multi-use solar farm system in Nicaragua (**Credit**: Tecnosol)*

REEEP utilises a mixed methodology approach to monitoring, evaluation and learning designed to handle the complexity of the situations our investments face on the ground and the multiplicity of stakeholders involved, and to manage the various types and volumes of information flowing in and out of the project environment.

Because we are a pathfinder organisation, we are often operating in countries and markets with imperfect and/or unreliable data and knowledge about target markets, financial institutions, policies, stakeholders, competition, and other aspects of the market.

REEEP utilises a Theory of Change as a high-level project strategy guide, taking into account market context and cross-cutting considerations.

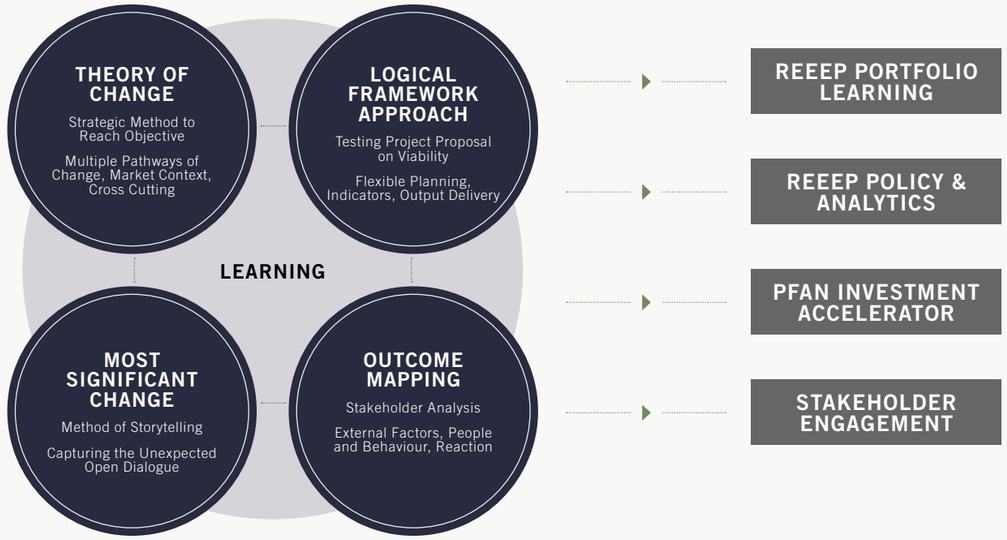
For each investment REEEP makes as part of a market acceleration project, we develop a SME-specific strategic plan that incorporates a stakeholder analysis; key activities, outputs and outcomes; benchmarking and key performance indicators (KPIs); and contingency planning, among other elements. This strategy typically includes a Logical Framework Approach (Logframe) template.

The plan is designed to ensure that the investment logic will lead to project objectives. We internally test the business plan, including activities, structure and strategy for growth, to confirm they have been adequately planned to deliver a high probability of success. In cases where intelligence and evidence from similar projects would suggest altering the business plan, we will consult with the submitter on making appropriate changes.

REEEP also works with entrepreneurs to perform Outcome Mapping, a critical element of any project that relies on specific actions or behavioural changes from a broad group of stakeholders amid imperfect market settings. The Outcome Mapping begins with an analysis of stakeholders – individuals, organisations, government bodies, etc. – who influence the ability of a project to reach an objective. In doing so, REEEP tests entrepreneurs' understanding of the stakeholder landscape: Are they aware of existing and potential competitors? Do they understand customer needs and unique characteristics? Are they relying upon a policy change in the future for their business model to be viable, and if so what are they doing to bring the change about? We track identified behavioural changes (or non-changes) that occur throughout the project. By understanding people, relationships and behaviours we can allow for real-time reflection and rapid reaction.

Finally, REEEP captures significant changes and impacts through a method of storytelling with an open format dialogue. These changes – known as Most Significant Changes – can be planned or unplanned, positive or negative, and the precise nature of these changes may be equally unknown beforehand. By recording and processing these elements we can adjust business plans, project scope or overall strategy if necessary. Combining these components leads to a holistic framework greater than the sum of its parts, which captures a broad range of key information and variety that make up the complex systems in which we are operating.

REEEP MONITORING, EVALUATION AND LEARNING



UNDERSTANDING POTENTIAL, MEASURING RESULTS, DEFINING IMPACT

REEEP's Theory of Change is a forward-looking hypothesis: if targeted investments are made into specific subsectors of a marketplace for clean energy (at SME-level); if those investments are closely monitored and evaluated; and if the insight gained therein is appropriately reapplied into: 1) the investment strategy, 2) the investment strategies of larger co-investors, and 3) a policy-learning and delivery mechanism; those targeted investments can have disproportionate impacts on trajectories of two macro trends: CO_2 emissions and multidimensional prosperity (or sustainable development).

To understand CO_2 emission mitigation/avoidance potential, REEEP generates medium-term (15-year) scenarios based on trend forecasts for key variables within a given system. Currently, we develop two scenarios per market: a business as usual (BAU) scenario assuming a worst-case prediction of market development (driven by existing or environmentally harmful energy sources and/or technologies); and a second scenario assuming a best-case prediction of market development (driven by renewable energy and/or energy efficiency technologies/solutions). We are currently working to improve and enhance these scenarios to include a broader range of possible trajectories.

Throughout the investment cycle we monitor whether emissions impacts of the technology as applied are meeting benchmarks. Together with field tests of other key assumptions, an assessment of KPIs tells us whether the scenario is – in the very short term – holding up, or whether adjustments are needed.

Measuring sustainable development is a more complex undertaking, as it encompasses a number of dimensions, many of which are closely interlinked.

Whereas most market-based projects are assessed in economic terms, we seek opportunities that can grow prosperity also in environmental, ecological, human, and social terms. But how can we measure, analyse and predict these impacts, such that they can be meaningfully assessed at portfolio and market level and integrated into decision making processes by policy makers and investors alike?

In 2016 REEEP launched the IMPAQT (Indicators for Multidimensional Prosperity Assessment, Quantification and Testing) programme to explore and develop quantitative metrics for assessing, verifying and analysing sustainable development impact of investments at project level (ex post), and to create scenario projections of impact at market level (ex ante). To read more about the project, see the IMPAQT Case Study included in this report.

The applications of such metrics and predictive models in terms of market potential are myriad, not least of which lies in better informing cost-benefit analyses of public policy options for decision makers. For instance, if a viable market for a certain product can be quantitatively shown not only to reduce climate emissions, but also to contribute heavily to local well being by improving health outcomes – thus adding to economic output and reducing public health expenditures – policy makers and impact-driven investors should incorporate these outcomes into decision making processes, for instance in accurately valuing incentives.

There is also significant potential for utilising such metrics to connect goals and targets of international climate and development agendas under UNFCCC and SDG processes. REEEP is working to explore how new methodologies might be streamlined into standardisation development for standards certification, or as early guidance aids to high potential markets. Such methodologies could also be used in the development of financial products that delivery sustainability returns (for instance, in monetary terms).

THERE IS SIGNIFICANT POTENTIAL FOR UTILISING NEW METRICS TO CONNECT GOALS AND TARGETS UNDER THE GLOBAL CLIMATE AND DEVELOPMENT AGENDAS

*Traditional tofu production is inefficient and hazardous to health. Modern biogas systems could offer an alternative (**Credit**: Mercy Corps)*

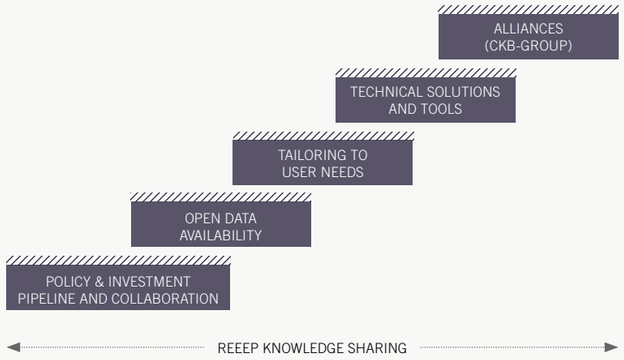
Share

THE EVIDENCE AND KNOWLEDGE WE DEVELOP IS ONLY VALUABLE IF TURNED INTO ACTION. WE FOLLOW A MULTI-TIERED APPROACH TO SHARING KNOWLEDGE, BEGINNING WITH DIRECT COLLABORATION WITH CLOSE PARTNERS WHO CAN PUT EVIDENCE TO GOOD USE BY DEVELOPING POLICY AND SHAPING INVESTMENT PIPELINES

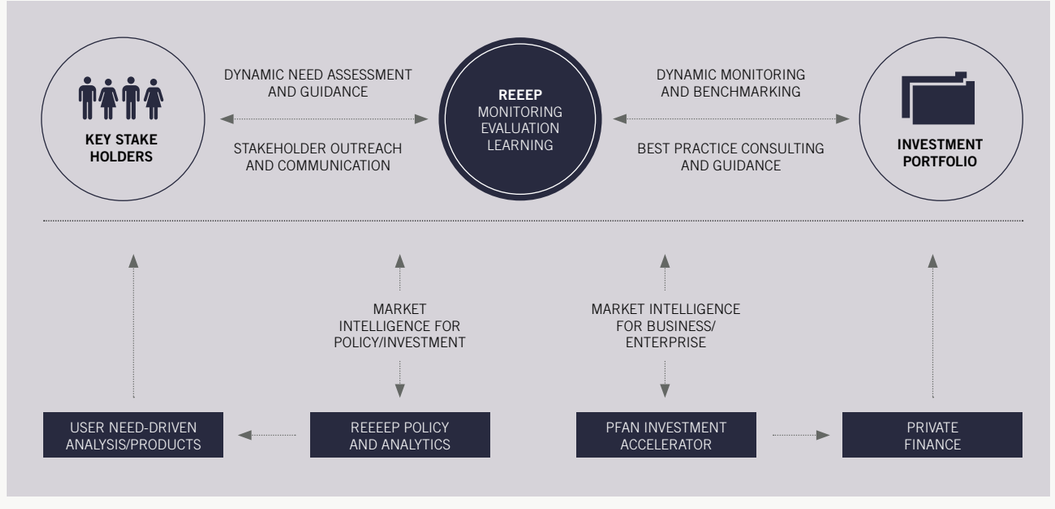
Market intelligence produced by the Monitoring, Evaluation and Learning process is directed into three information flows: the first is a dynamic feedback loop into the Theory of Change and project strategy review; the other two are outward flows of business intelligence and policy intelligence, respectively.

Commercial intelligence comprises the full range of business and investment-related data and insights, which are further processed together with CTI PFAN to derive actionable commercial best practices. These are anonymised and synthesised to advise other SME investments in the REEEP portfolio on best practices. At the same time, REEEP generates actionable investment intelligence, which can influence or even lead to concrete investment pipelines for larger investors (multilateral development banks, impact investors, venture (growth) capital funds, mezzanine funds etc.). This intelligence is a critical de-risking mechanism for specific downstream investors, as well as the investment climate in general.

REEEP KNOWLEDGE BROKERING



FROM INVESTMENT, TO INTELLIGENCE, TO IMPACT



Policy intelligence, comprising data and information on the ecosystem conditions of specific markets (including legal, regulatory, economic and political circumstances that act as external influencers on business and market activity), are further processed to derive actionable practice-based policy learning and recommendations. These can be utilised by partner organisations and decision makers involved in legislation and/or other policy and regulatory development processes. The form of REEEP's practiced-based policy will vary depending upon case to fit the needs of the policy making process in question. Within REEEP these activities are denoted "Policy Lab".

TAILORING KNOWLEDGE

For knowledge to reach its potential it must be available, accessible and suited to the needs of consumers. We act as an efficient knowledge broker (for more about knowledge brokering see pages 28-31) by ensuring that we understand our target audience and provide project learning in a tailored and open way, so it can be freely re-used and integrated into downstream knowledge products, such as web applications.

DATA REEEP

REEEP hosts a dedicated site to house data and knowledge generated within REEEP, data.reeep.org (or simply "data.reeep"). Data.reeep includes source data sets, published using the Open Government Data License for public sector information, free for re-use. Data.reeep also includes detailed instructions for any developers seeking to integrate REEEP datasets into their own systems.

At the same time, REEEP is focusing on unleashing the vast potential in efficiency gains and improved decision making possible by improving the architecture of how knowledge and information are shared and transferred between and among creators, brokers and users of knowledge globally.

Millions of people use climate-related information and data for a wide range of purposes, and those developing responses to climate change demand high quality data, information and knowledge to assess impacts and vulnerabilities associated with climate change, develop mitigation solutions, and improve resilience of vulnerable regions. Producing and providing this data, information and knowledge comes at a high cost for governments, businesses, international organisations, academia and NGOs.

Unfortunately these efforts are not always successful; information and knowledge products are often underutilised, duplicating existing material or simply misaligned with users' needs. The system of knowledge resources itself is overpopulated and disassociated, leaving users with bewildering arrays of alternatives, each of which is incomplete or even conflicting. This challenge increases when working in developing countries and when there is a need to tailor global data to local conditions.

BUILDING A CLIMATE KNOWLEDGE GRID

REEEP is working toward the creation of a Climate Knowledge Grid – a "smart grid" for climate knowledge that can act as a backbone resource for any knowledge-focused organisation or portal active in the climate and development spaces.

The Climate Knowledge Grid (the Grid), will enable streamlined coordination of the activities of climate knowledge providers by making available – free of charge – the technical tools needed to tap into the grid, as well as support in communicating effectively with their users while retaining the ability to tailor designs, structures, brands and specific offers. Some of these tools, such as Climate Tagger (see page 32), are already deployed and rapidly growing in popularity and range.

But technical solutions alone are not enough. REEEP is a leader in an emerging alliance of "climate knowledge brokers" – collectors, curators and providers of data and knowledge related to climate, development and environment issues, known as the Climate Knowledge Brokers Group (CKB) (see page 28). This group, supported by the Climate and Development Knowledge Network (CDKN) and consisting of more than 150 of the leading knowledge brokers worldwide, has already made tremendous progress in convening and mobilising key players and catalysing collaborative efforts and new products.

CKB is also spearheading an innovative new programme to build capacity within, and deepen ties among, climate knowledge brokers in the developing world (see page 31).

THE GLOBAL CLIMATE KNOWLEDGE SYSTEM IS OVERPOPULATED AND DISASSOCIATED, LEAVING USERS WITH BEWILDERING ARRAYS OF INCOMPLETE AND CONFLICTING ALTERNATIVES

CKB PRINCIPLES

01
People who are trying to address the impact of a changing climate deserve high quality information to support them in their decision making

02
CKB champions the importance of climate knowledge brokers in ensuring high quality climate relevant information is available and accessible to all who need it

03
We believe that understanding user needs in their multiplicity is the starting point for effective climate knowledge brokering

04
We are committed to learn together to improve the effectiveness of climate knowledge brokering

05
We support climate knowledge brokers in choosing appropriate tools and methods to address their users' needs, including intelligent use of digital technologies

06
We apply collaboration as a standard in our work

07
We promote open knowledge; meaning we have an open mindset, are actively seeking to share our knowledge and want to work with others who have the same attitude

REEEP In 2016

Appropriately, the story of REEEP in 2016 is one of energy. With the unveiling of the next generation of PFAN; the launch of new projects in Zambia, Southern Africa and India; the scaling-up of projects in East Africa and South Asia, and the rapid evolution of the Open Knowledge efforts that underpin all our work; REEEP has never been better placed to help countries accelerate green growth.

*A PowerMundo solar lantern provides off-grid lighting in Peru (**Credit**: Carlos Bertello)*

Cross-Sector Systems

INTERDISCIPLINARY, CROSS-SECTOR COLLABORATION AND PROBLEM-SOLVING FOR CLIMATE SMART DEVELOPMENT

Our world is dominated by increasingly interdependent and multidimensional systems. Yet many organizations and agencies from all areas continue to work in closed silos. We design our tools and processes to share knowledge, pursue collaboration and build holistic understanding across sectors and disciplines.

CURRENT PROJECTS:

- **Climate Knowledge Brokers Group**
- **Climate Tagger**
- **Powering Agrifood Value Chains**
- **SWITCH Africa Green**

CROSS-SECTOR SYSTEMS

Climate Knowledge Brokers Group

The Climate Knowledge Brokers (CKB) Group is an emerging alliance of leading global, regional, and national knowledge brokers specialising in climate and development information. It brings together a diverse set of information players, from international organisations to research institutes, NGOs, and good practice networks, and covers the full breadth of climate related themes. The focus is on primarily online initiatives, and those that play an explicit knowledge brokerage role, rather than being simply institutional websites.

Since 2014, the CKB is coordinated by the CKB Coordination Hub, run by REEEP with support from CDKN.

A MANIFESTO FOR CLIMATE KNOWLEDGE

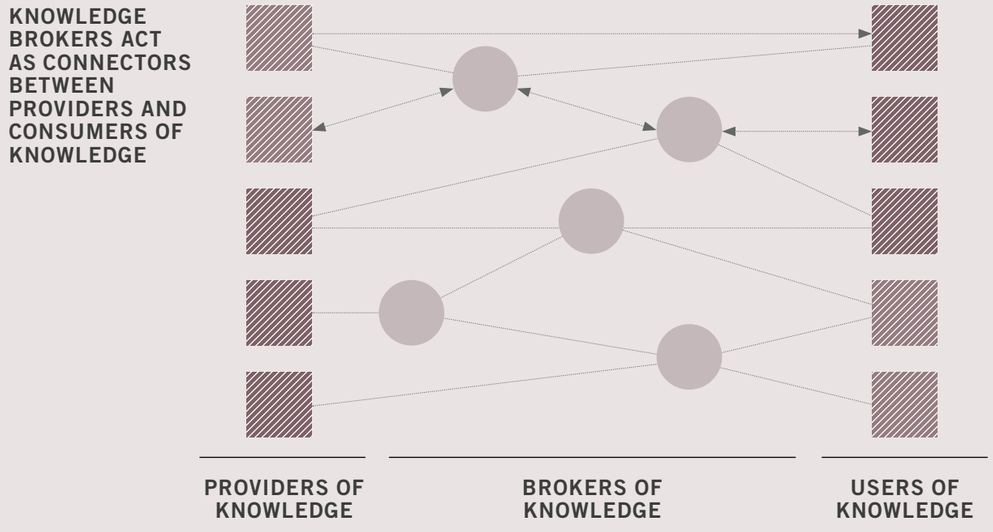
On September 17th 2015 in front of a packed house at the Overseas Development Institute in London, and live-streamed to an international audience, CKB announced the publication of the Climate Knowledge Brokers Manifesto, a landmark publication and call-to-action from the alliance.

The Manifesto is the result of a collaborative effort led by the CKB Coordination Hub and involving 17 contributors from organisations connected to CKB. The Manifesto's authors carried out dozens of interviews with climate knowledge users and participated in a two-day Editorial Conference in Vienna to analyse and synthesise the interview findings, and chart out the path to a draft that would accurately and inclusively reflect the core principles of the climate knowledge broker community.

Together with the launch event and global live stream, CKB orchestrated a coordinated distribution to put over 700 copies of the Manifesto on the desks of key audiences, and in the inboxes of hundreds more, within the first week of launch. Coordinated press outreach drove over 35 articles on various websites and blogs, including a Reuters piece that was republished by The Japan Times, The Daily Mail Online, and others, in addition to being presented at a roundtable discussion with major knowledge initiatives such as BRACED, CDKN and ICF Monitoring, Evaluation and Learning programme (MEL), hosted by the UK's Department for International Development, and a webinar hosted by the Clean Energy Solutions Centre.

CLIMATE KNOWLEDGE BROKERS ARE ABSORBERS, COLLECTORS, INTERPRETERS, CURATORS AND CREATORS OF DATA AND KNOWLEDGE

THE ROLE OF KNOWLEDGE BROKERS



Impressions from the CKB Capacity Building Workshop in Addis Ababa, Ethiopia

Impressions from the CKB Annual Workshop in Copenhagen, Denmark

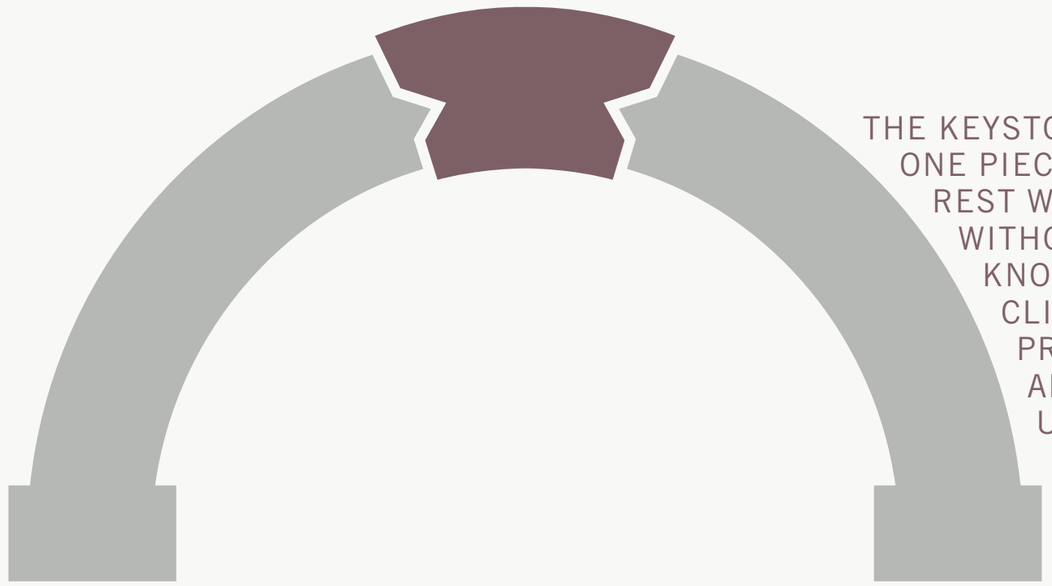
WHO IS TALKING ABOUT THE CKB MANIFESTO?

- CKB
- REEEP
- Ecosystems Marketplace
- UNORCID
- weADAPT
- Climate Technology and Knowledge Network
- DevelopmentARENA
- Thomson Reuters Foundation
- The Japan Times
- The Daily Mail Online
- Yahoo News
- InDepthNews
- Eurasia Review
- IDN (in German)
- IISD
- UNDP ALM
- BRACED.org
- PreventionWeb
- Green Growth Knowledge
- CDKN
- CDKN Spanish
- Caribbean Climate Blog
- Joint Implementation Network
- POLIMP
- ICCG
- InterPressService Deutschland
- Climate Eval
- Ser Responsible
- Avina Foundation
- Foundation for Democracy and Sustainable Development
- Climate Services Partnership Quarterly

The Manifesto was also actively discussed at numerous events around the world, including as the main topic at the COP21 side event Decision making for a climate resilient future: Creating a 'Climate Knowledge Grid', organized by the Coordination Hub with SEI, CTCN and others in the EU Pavilion.

Participants at the CKB Annual Workshop in Copenhagen, Denmark

THE CLIMATE KNOWLEDGE BROKERS MANIFESTO AND THE KEYSTONE



THE KEYSTONE OF THE ARCH IS THE ONE PIECE WITHOUT WHICH THE REST WILL FALL. SIMILARLY, WITHOUT EFFECTIVE KNOWLEDGE BROKERS, CLIMATE INFORMATION PROVIDERS AND USERS ARE DESTINED TO REMAIN UNCONNECTED. THE USERS' NEEDS GO UNMET AND THE EFFORT SPENT PRODUCING INFORMATION WASTED

STRENGTHENING CLIMATE KNOWLEDGE BROKERS

Collaboration, coordination and coherence have been the core principles behind the Climate Knowledge Brokers Group since it was established in 2011. CKB acts as a champion for the emerging field of climate knowledge transfer, an innovation hub, and a thriving community of practice. Since 2014, the CKB Group's activities and communications are coordinated by the "CKB Coordination Hub", based at REEEP in Vienna. The Coordination Hub has since its inception spearheaded joint projects, represented the Group at various events and organised annual workshops, nearly doubling the number of participants over two years.

In the third year of its existence, the Coordination Hub will focus its work on building new initiative on capacity building for climate knowledge brokering, with a pilot to be developed for African climate knowledge brokers; and enhancing tools developed within the CKB (such as Climate Tagger and Knowledge Navigator).

CLIMATE KNOWLEDGE BROKERS CAPACITY BUILDING INITIATIVE

The demand for climate knowledge is set to increase substantially in the years ahead as more people and professions realise the extent to which lives and jobs are sensitive to a changing climate. This points to a growing role for climate knowledge brokers and an urgent need to build capacity in this area, leveraging a globally connected network. This is an important part of a wider capacity challenge identified in the 2015 Paris Agreement, which notes in particular the need for collaboration, coordination and coherence if capacity building efforts are to be effective.

Following up on a scoping workshop in March 2016, CKB will develop a capacity building work programme, based on the inputs from the workshop, other capacity building efforts by CKB members and others, and background research. This pilot programme will then be implemented in close collaboration and agreement with CDKN, with a planned execution date towards the end of the year 2016, keeping the focus on African Climate Knowledge Brokers.

ENHANCING CLIMATE KNOWLEDGE TOOLS

In addition to the community of practice, the CKB Group has collaboratively developed digital tools to support the work of knowledge brokers around the world. Two of these tools are the "Knowledge Navigator" and the "Climate Tagger". Both aim to support the streamlining access to online knowledge resources. The knowledge navigator signposts users to appropriate climate knowledge platforms based on search preferences, while Climate Tagger connects knowledge objects and platforms through tags and keywords on a content level, allowing users to better understand the content and even connect to other platforms. Climate Tagger uses an expert-vetted thesaurus in five languages to support this semi-automatic tagging of documents and online text resources.

In year two of the Coordination Hub, REEEP and IDS have conducted a feasibility study on bringing the two tools closer together and enabling them to re-use the information bases from both.

CROSS-SECTOR SYSTEMS

Climate Tagger

CKB CLIMATE KNOWLEDGE BROKERS REEEP climatetagger

CLIMATE CHANGE DOESN'T RECOGNISE BORDERS. NEITHER SHOULD CLIMATE KNOWLEDGE

Climate Tagger is a suite of tools to help knowledge-driven organisations in the climate and development arenas streamline and catalogue their data and information resources, and connect them to the wider climate knowledge community.

Climate Tagger was developed by REEEP in collaboration with the US National Renewable Energy Laboratory's Open Energy Information programme, the Stockholm Environment Institute's weADAPT programme and the Institute for Development Studies' Eldis programme, as part of the CKB Group. Climate Tagger is made possible thanks to the generous financial support of a number of donors, including the Climate and Development Knowledge Network, the Federal Government of Germany and the Climate Technology Centre and Network of the United Nations Environment Programme.

Climate Tagger utilises Linked Open Data, and is backed by the expansive Climate Compatible Development Thesaurus, developed by experts in fields ranging from climate mitigation and adaptation to economy and green growth, and even specific areas such as REDD+ (Reducing Emissions from Deforestation and Forest Degradation).

Read more about Climate Tagger at www.climatetagger.net

Renewables Tagger

REEEP IRENA International Renewable Energy Agency

In 2015-2016, REEEP and the International Renewable Energy Agency (IRENA) teamed up to massively enhance the Climate Tagger Renewable Energy-specific vocabulary through the release of the Renewables Tagger, which integrates sector-specific definitions and taxonomies developed and used by IRENA.

Scheduled to launch mid-2016, the Renewables Tagger provides enhaned functionality, allowing users to choose a broad topic and a matching subset of the thesaurus (climate adaptation, mitigation, energy efficiency or renewable energy) for their resources before the tool assigns them more detailed labels.

Sharing Vocabularies

Caribbean Community Climate Change Centre SPREP Secretariat of the Pacific Regional Environment Programme REEEP

In an increasingly interconnected and information-rich world, the sheer volume of information and multiplicity of sources makes identifying and accessing the right information for a specific context and need increasingly difficult.

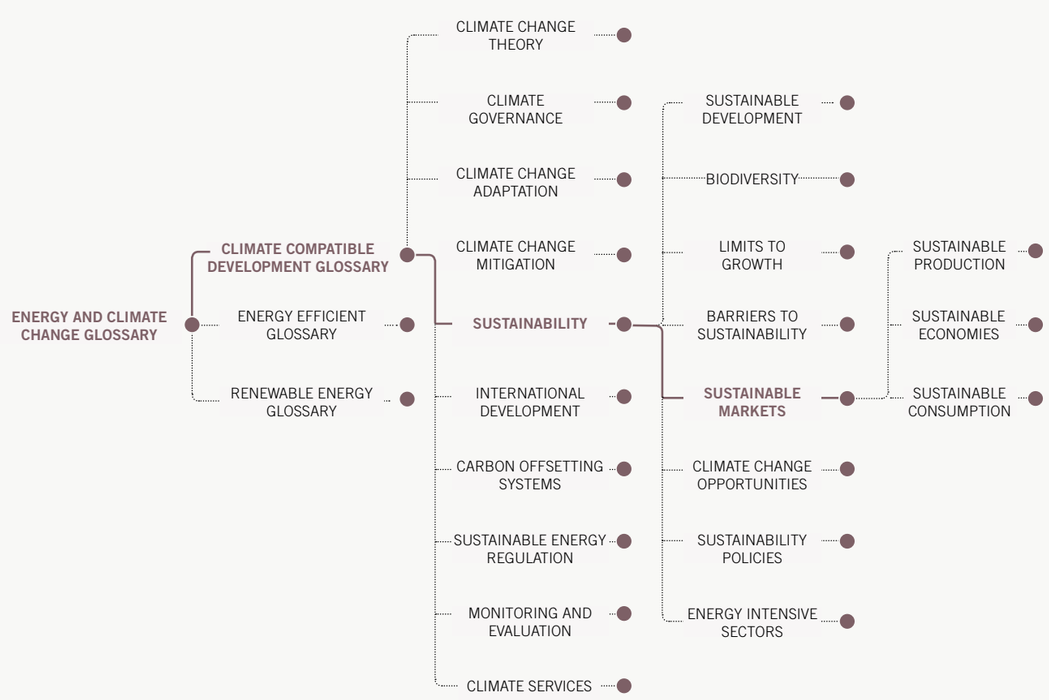
A new project of the Caribbean Community Climate Change Centre (CCCCC), the Secretariat of the Pacific Regional Environment Programme (SPREP) and REEEP aim to make a small contribution towards addressing this issue by connecting and aligning the three unique vocabulary sets each developed throughout the course of their existence.

CLIMATE CHANGE VOCABULARIES

The organisations set out mapping how each described key climate change terms, using this map – along with expert input from a pool of climate change specialists – to identify gaps and improve the vocabularies used by each to describe and categorise climate change information.

Beyond this, the three improved thesauri were linked to create a common vocabulary (available as Linked Open Data) for describing climate change, one that is freely available (for example in the Open Knowledge Hub) to create a better search mechanism for the wider sector to find appropriate information across geographic, sectoral and language barriers.

SNAPSHOT OF THE CLIMATE TAGGER ACTIVE TAXONOMY



CROSS-SECTOR SYSTEMS

Powering Agrifood Value Chains

REEEP · MINISTERIUM FÜR EIN LEBENSWERTES ÖSTERREICH · DFID

IN 2016 REEEP CONTINUED TO LEARN FROM THE NINE SMES PUSHING THE BOUNDARIES OF CLEAN ENERGY IN AGRICULTURE

*A stack of metal runners for Improved Water Mill (IWM) pico-hydro systems in Nepal (**Credit**: SNV)*

Our partners pursuing innovative solar-powered irrigation in Kenya (SunCulture and Futurepump) made considerable strides in building customer bases and capturing imaginations – SunCulture has been featured by outlets from the BBC to SXSW (The South by South West film festival), and both Futurepump and Sunculture/REEEP were winners of the Powering Agriculture: an Energy Grand Challenge for Development. (See the IMPAQT Case Study for more about solar-powered irrigation in Kenya)

Redavia has expanded into the DRE mini-grid space while attracting new growth financing (see page 37). Enerplus has teamed with one of Bangladesh's largest dairy companies to launch an SPV that will transform the dairy cooling sector (see page 38). In Nicaragua, iDEal Tecnologias has performed some of the most advanced agricultural market analyses in the country as they roll out their efficient low-pressure drip irrigation systems.

To read more about our investments, visit www.reeep.org/investments

*An affordable, low-pressure drip irrigation system in action in Nicaragua (**Credit**: iDEal)*

*A farm in Kenya utilising the SunCulture Agro-Solar Irrigation Kit (**Credit**: Sunculture)*

POWERING AGRIFOOD VALUE CHAINS IS YIELDING IMPORTANT INSIGHTS INTO TRANSFORMING AGRICULTURAL MARKETS IN DEVELOPING COUNTRIES

CROSS-SECTOR SYSTEMS

Highlight: **Revolving Loan Funds**

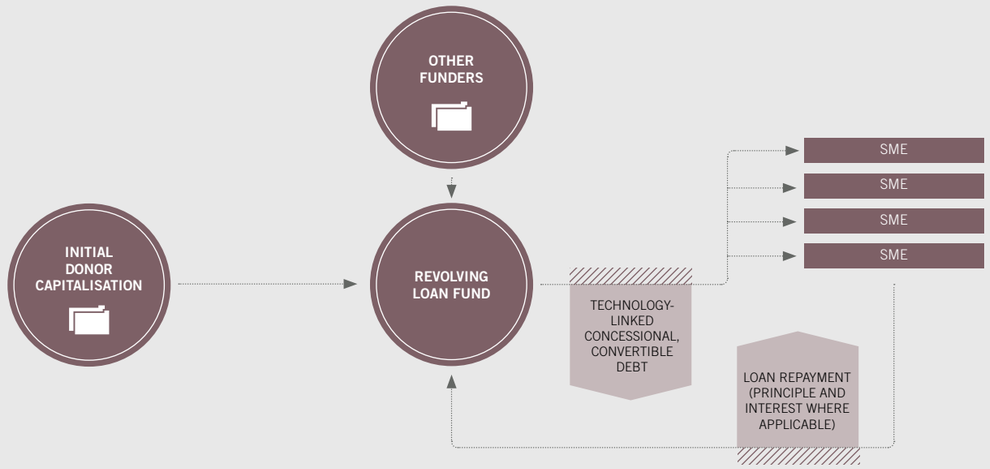
*A PV panel for solar-powered irrigation in Kenya (**Credit**: Futurepump)*

Non-repayable grant financing of the type issued by REEEP have had – and will continue to have – a critical function in developing and de-risking early-stage markets for clean energy technologies. At the same time, we see an increasing need among early-stage SMEs for more sophisticated and tailored financing options, particularly in the area of patient debt to finance working capital.

Patient (or concessional or soft) financing broadly refers to comparatively high-risk, low-return financing issued at below-market rates, although the specifics can vary wildly depending on the specifics of the investment.

REEEP has developed two regional funds, called revolving loan funds (or RLFs), from which to issue debt financing to SMEs on concessional terms: An East African RLF set up with initial capitalisation from the OPEC Fund for International Development (OFID) and a Southeast Asian RLF set up with Nexus and with initial capitalisation from the Government of Austria will act as lenders to SMEs offering clean tech solutions in a number of agrifood value chain subsectors. The flexibility of the RLFs allow them to issue new loans as they are replenished by repayments, as well as offering a low-transaction cost, high-impact investment opportunity to sovereign and other impact-driven investment partners looking to support market-based green growth in these regions.

REVOLVING LOAN FUNDS



CROSS-SECTOR SYSTEMS

Highlight: **Redavia**

The OFID-REEEP Revolving Capital Pool in East Africa brings cheaper and more reliable power supply to agribusinesses and rural communities in Tanzania through an investment in Redavia Tanzania Asset Company. The company offers competitively priced solar power through rental of pay-as-you-go "solar farms".

Since receiving a REEEP loan, Redavia has signed five new rental agreements (three in Tanzania, two in Kenya). Two solar farms in Tanzania have been deployed, which will power mini-grids serving rural communities. The mini-grids will serve two villages with a population of 3,400 (Shitunguru) and 6,000 (Isenzanya) – including around 20 maize milling operators, public buildings, micro enterprises and households. The solar power offers an improved and affordable energy access to these communities, as well as opportunities for economic development and improved food production.

Based on interviews with villagers, communities are looking to establish an oil seed grinding factory, which would enable them to add value to the region's widespread production of sunflower seeds. For maize millers, the solar power offers an improved product quality through reduced use of diesel, which sometimes pollutes maize flour. The third solar farm will serve the power needs of a fruit and chicken farm expanding the farm production with the help of solar energy.

After identifying the opportunity of serving the agri-food sector and rural communities through a mini-grid operator client and closing the first rental agreements, Redavia sees a great opportunity for scaling in Tanzania with this new approach as well as serving agri-food customers directly. To this end, Redavia successfully secured a USD 5 million investment for Redavia Tanzania Asset Company from InfraCo Africa, which will enable the financing of 30 additional solar farms in Tanzania. Additional funding of USD 2.8 million (Shell Foundation and EEP) has been leveraged for other Redavia entities serving Tanzanian and other markets. The potential of the Redavia Asset Company structure as an investment vehicle offering increased operational ability and larger capital deployment in the off-grid energy space – in a controlled and scalable way – is gaining confidence among investors.

Redavia is currently growing their team and establishing the structures and models for scale in Tanzania. The experience, learnings and track record gained from the first installations and sales processes will be gathered during 2016. Establishment and validation of processes, assumptions, and operational learning, as well as capturing the benefits created to the local communities and agri-food players, is helping Redavia reach the next level.

*A Redavia solar installation in Tanzania (**Credit**: Redavia)*

REVOLVING FUNDS CAN OFFER AN INNOVATIVE, HIGH-IMPACT OPPORTUNITY FOR SOVEREIGN AND OTHER IMPACT-DRIVEN INVESTORS

CROSS-SECTOR SYSTEMS

Highlight: **Enerplus**

MINISTERIUM FÜR EIN LEBENSWERTES ÖSTERREICH · REEEP · RENERPLUSCAN Inc.

*A milk collection centre in Bangladesh (**Credit**: Enerplus)*

REEEP is transforming the energy supply of the dairy value chain in Bangladesh through a strategic investment in Enerplus (in partnership with PRAN Dairy). Enerplus is helping PRAN, one of the biggest dairy producers in the country, establish a business with a model profiting from the energy savings reached through energy efficiency improvements as well as sales of solar powered electricity for cooling of milk at rural milk collection centres.
This will offer the dairy producer a reliable source of energy while avoiding costs from the use of diesel generators. For additional revenue and the opportunity of increasing the collection of domestic fresh milk, the PRAN subsidiary is also investigating the viability of selling electricity through a mini-grid to local dairy farmers near the milk collection centres.

To the end of establishing this business model, Enerplus has assessed energy consumption at PRAN's 104 milk collection centres and conducted detailed energy audits at 21 centres. As a result, a number of energy efficiency measures, at low or no cost, were identified and savings in energy costs of about 5% were reached with a change of simple components and/or change of operational aspects.
In addition, depending on the level of reliance on diesel at the milk collection centre, an estimated saving in energy costs of between 20 - 70% can be reached. Viable technology options were investigated and technology suppliers serving the Bangladesh markets were engaged and contracted. The energy efficiency improvements have already been implemented and solar water heaters, solar PV and ice storage solutions will now be installed at six milk collection centres during 2016.

Enerplus and PRAN have established the company this year – unlocking EUR 187,000 investment to the company from the two shareholders. The company is established as a Special Purpose Vehicle (SPV) within PRAN and is serving the function of sharing the risk in introducing new (unfamiliar) technologies to the operations of the dairy producer.
In addition, the partnership with Enerplus enables the transfer of skills in energy efficiency through close collaboration with current PRAN technical staff.

As a result, 15,323,362 liters of milk in total will be cooled on an annual basis using clean energy at the six milk collection centres – leading to USD 36,180 savings in related energy costs. The payback period is less than five years. Based on collected data through surveys (to be verified by energy audits) – the estimated total annual savings in energy costs is at least USD 300,000 if scaled to PRAN's total milk collection operations in Bangladesh. The extent of energy savings and short payback period has been a positive surprise to PRAN and Enerplus – the targeted cost savings of 15% were clearly exceeded. In the future, the partners have the vision to scale within PRAN milk collection as well as leverage their gained expertise and increase the revenue by serving other players in the dairy sector value chain. This would bring wider changes to the power supply of this key agri-food sector in the region with rapidly increasing demand for dairy products.

THE EXTENT OF ENERGY SAVING AND SHORT PAYBACK PERIOD WERE A POSITIVE SURPRISE TO PRAN AND ENERPLUS – THE TARGETED COST SAVINGS OF 15% WERE EASILY EXCEEDED

CROSS-SECTOR SYSTEMS

Switch Africa Green

European Commission | UNEP · sanedi · REEEP

SWITCH AFRICA GREEN SUPPORTS AFRICAN COUNTRIES IN THEIR TRANSITION TO AN INCLUSIVE GREEN ECONOMY, PROMOTING A SHIFT TOWARD SUSTAINABLE CONSUMPTION AND PRODUCTION (SCP) PRACTICES AND PATTERNS

Despite being home to some of the world's fastest economic growth rates, Africa faces persistent development challenges and deep-seated poverty, as well as risk of increased environmental degradation from new economic activity. To ensure that Africa's economic boom is economically, ecologically and socially sustainable, it must be driven by an energy revolution: one leveraging renewable energy and energy efficient innovation, taking advantage of technological and commercial advancements and powered by dynamic private sector entrepreneurship. Technologies such as efficient solar powered irrigation systems, small hydro-powered agrifood processing, and waste-to-energy systems are already cost effective in many low-income markets, and businesses have developed new models for raising awareness and building customer bases; for empowering and providing finance to clients with limited resources; or for helping customers access new markets for their own goods.

To bring about such a revolution, SWITCH Africa Green is supporting African countries in their transition to an inclusive green economy, promoting a shift toward SCP practices and patterns.

REEEP and SANEDI are laying the groundwork for South African MSMEs and eco-entrepreneurs in the agricultural and waste management sectors as they begin and manage this transition. Specifically through increasing awareness, up-take and successful implementation of SCP practices and sustainable energy opportunities for MSMEs in agrifood value chains in South Africa, interlinking with established initiatives and build existing insights.

The target group and final beneficiaries of the programme are MSMEs in the agriculture and integrated waste management sectors in South Africa, for whom a stakeholder platform will be established and a series of capacity building and training workshops will be provided.

The programme will:

» Support the development of green agro-businesses and eco-entrepreneurship via the use of SCP practices, and equip MSMEs across the key priority sectors to seize green business opportunities, and in doing so promote South Africa's transition towards an inclusive green economy.

» Provide an opportunity for resource-efficient and cleaner production implementation and alignment with the 10-year framework of programmes on sustainable consumption and production patterns.

The project is funded by the United Nations Environment Programme and the European Union.

*Cape Town's green waste is gathered and processed at a collecting station in the city. (**Credit**: Mabel Gundlach)*

Energy Access

ENABLING ACCESS TO MODERN, AFFORDABLE AND CLEAN ENERGY FOR PEOPLE IN ALL AREAS OF THE WORLD

Energy is fundamental to generating prosperity. Yet worldwide nearly 1.3 billion people do not have access to modern electricity. Many people throughout the world are not connected to formal energy grids. We are working to build a portfolio that capitalises on innovative ways to increase energy access for the world's rural and urban populations to fight energy poverty and improve livelihoods.

CURRENT PROJECTS:

Power Africa: Beyond the Grid Fund for Zambia

Smart Power for Rural Development

1.3bn

people worldwide do not have access to modern electricity

*SELCO Solar Lighting customers in Bangalore (**Credit**: Mallikarjun Katakol)*

ENERGY ACCESS

Power Africa: Beyond the Grid Fund for Zambia

IN FEBRUARY OF 2016, THE SWEDISH GOVERNMENT AND REEEP ANNOUNCED THE LAUNCH OF THE POWER AFRICA: BEYOND THE GRID FUND FOR ZAMBIA, AN AMBITIOUS NEW UNDERTAKING TO BRING CLEAN ENERGY ACCESS TO ONE MILLION ZAMBIANS AND ACCELERATE PRIVATE-SECTOR GROWTH IN ENERGY GENERATION AND DISTRIBUTION IN THE COUNTRY

*John Njoroge, micro-entrepreneur and solar-lantern seller (**Credit**: Morgana Wingard for Power Africa)*

In February of 2016, The Swedish Government and REEEP announced the launch of the Power Africa: Beyond the Grid Fund for Zambia, an ambitious new undertaking to bring clean energy access to one million Zambians and accelerate private-sector growth in energy generation and distribution in the country.

The Beyond the Grid Fund for Zambia will operate from 2016-2020 with an expected total funding level of €20m.

THE BEYOND THE GRID FUND FOR ZAMBIA WILL:

» Provide access to energy to 167,000 households and reach 1 million people;

» Reduce dependence on fossil fuels through a shift toward sustainable and renewable energy generation;

» Increase confidence and capacity of banks to extend credits to off-grid business ventures and leverage private investment;

» Support the transfer of technology and knowledge that accelerate Zambian energy sector growth.

The Fund is managed by REEEP on behalf of the Swedish Embassy in Zambia and in cooperation with Zambian partners.

SUPPORTING THE ZAMBIAN GOVERNMENT ENERGY STRATEGY

Zambia faces a significant energy supply gap in meeting the growing needs of its people and economy. Zambia is seeking new ways to substantially increase energy supply to meet this growing demand and extend the national grid to rural populations.

A number of initiatives are targeting a more conducive environment for renewable energy and energy efficiency. Central factors in ongoing developments are increasing energy prices, the gap in supply, the introduction of utility incentives for sustainable energy, and government commitment and efforts to ensure a cleaner energy mix.

Some 12 million Zambians (95% of the rural population) are without access to electricity. Addressing this gap via modern and affordable off-grid solutions – capable of targeting not only the basic energy needs (i.e. lighting and cooking energy), but also productive uses of energy at both household and rural enterprise levels, especially in agriculture and agribusiness – is a significant challenge.

INVESTMENT OPPORTUNITIES: BEYOND THE GRID

Zambia has enormous potential for increased power production from a vast array of renewables, including solar, hydro, (solid) biogas, biodiesel, ethanol, and waste to energy. As more and more people witness the benefits and potential cost and labour savings from electricity first hand, demand is likely to grow further. Thus the poor state and low coverage of the national grid present clear investment opportunities for renewable energy and novel business models targeted at communities, businesses, households and social institutions outside major hubs.

Sweden and REEEP will explore these opportunities by supporting ventures that can meet the needs and improve the lives of poor people, while paving the way for future investments in sustainable energy. A focus on energy services should take into account that energy connections alone are not the ultimate objective: it is how that energy is put to use that really matters – reading under a LED light at night to further education; chilling milk to be able to sell it on to the market; cooking from biogas instead of collecting firewood, or starting a business. As needs are likely to differ, various quantities and qualities of electricity can be supplied to consumers at varying levels of affordability.

BGFZ will explore a variety of market-based options across a number of energy service tiers (adapted from the SE4All Multi-Tier Framework for Measuring Access), providing incubation capital support and growth finance transition assistance to help unleash a cascade of future investments in renewable energy and beyond-grid solutions.

For more about the Beyond the Grid Fund for Zambia visit www.reeep.org/bgfz

*A d.Light solar lantern in use in Kenya (**Credit**: Morgana Wingard for Power Africa)*

*A Redavia containerized solar generation system in Tanzania (**Credit**: Redavia)*

THE BEYOND THE GRID FUND FOR ZAMBIA IS AN AMBITIOUS EFFORT TO BRING CLEAN ENERGY ACCESS TO ONE MILLION ZAMBIANS AND ACCELERATE PRIVATE-SECTOR GROWTH

ENERGY ACCESS

Smart Power for Rural Development

SINCE 2010, THE ROCKEFELLER FOUNDATION HAS WORKED TO EXPAND ACCESS TO ELECTRICITY THROUGH A MODEL UTILISING DRE MINI-GRIDS FOR LIGHTING AND PRODUCTIVE USE. IN 2014, THE ROCKEFELLER FOUNDATION SIGNIFICANTLY INTENSIFIED THIS WORK WITH A USD 75 MILLION COMMITMENT AS PART OF THE SMART POWER FOR RURAL DEVELOPMENT INITIATIVE

*Lathe owner Mujaheed checks his electricity consumption in Bihar (**Credit**: Smart Power India)*

The beyond grid concept is a long-view take on rural electrification via decentralised renewable energy (DRE) systems. Worldwide, one in five people lives without access to electricity. For most of these people, the long-term solution will be access to a central utility grid. In the meantime, however, DRE systems are already able to provide reliable, high quality power for lighting, televisions and household appliances, and even power "productive" loads such as agricultural or manufacturing equipment, computers and other commercial and institutional energy needs.

Yet while DRE systems can offer power to people now – and indeed there is often a viable business case for their commercial use – they face a number of hurdles: high capital costs, limited financing options, novel business models and new technologies, and complex customer compositions, among them. But the greatest hurdle is a lack of a clear and consistent environment in which to invest and operate.

To create this environment, we are seeing players from the private and public sector move away from the paradigm of "on-grid" or "off-grid", and toward a more holistic "beyond grid" concept, in which DRE solutions can provide near-term access to energy to those who need or want it – whether they are on the grid or off – and resilience and stability to a smarter central utility grid in the long-term.

This trend is nowhere better illustrated than in India, where the central grid is being extended at a blazing pace, yet at least 240m people remain without access, and more have unpredictable or very limited electricity. Recognising the potential of DRE, and specifically small "mini" utility grids, or mini-grids, to reach these people (as well as contribute to India's renewable energy capacity goals) the central government has made notable strides over 2015-2016 to improve the investment and business climate for private operators.

THE GREATEST HURDLE FOR COMMERCIAL DRE IS A LACK OF CLEAR AND CONSISTENT ENVIRONMENT IN WHICH TO INVEST AND OPERATE

Further, in early 2016, the government of Uttar Pradesh (UP) became the first state government to adopt a dedicated mini-grid policy that addresses the question of grid interactivity, a necessary step toward leveraging DRE to stabilise smart grids in the future.

Since 2010 The Rockefeller Foundation has been working to expand access to electricity through a model utilising DRE mini-grids for lighting and productive use. In 2014, The Rockefeller Foundation significantly intensified this work with a USD 75 million commitment as part of a new Smart Power for Rural Development Initiative (SPRD). At the time of this writing, over eighty DRE mini-grids had been deployed in the states of UP and Bihar as part of SPRD.

In 2015 REEEP received a grant from The Rockefeller Foundation to study the evidence and lessons learned from the SPRD programme to date, analyse trends in the market and enabling environment, and to synthesise these into knowledge products aimed at addressing the information needs of key stakeholders inside and outside of India.

*A machinist works on a lathe powered by a biomass mini-grid in Bihar (**Credit**: Smart Power India)*

*A petrol station powered by an OMC solar hybrid plant in Uttar Pradesh (**Credit**: Quinn Reifmesser for REEEP)*

Smart Cities

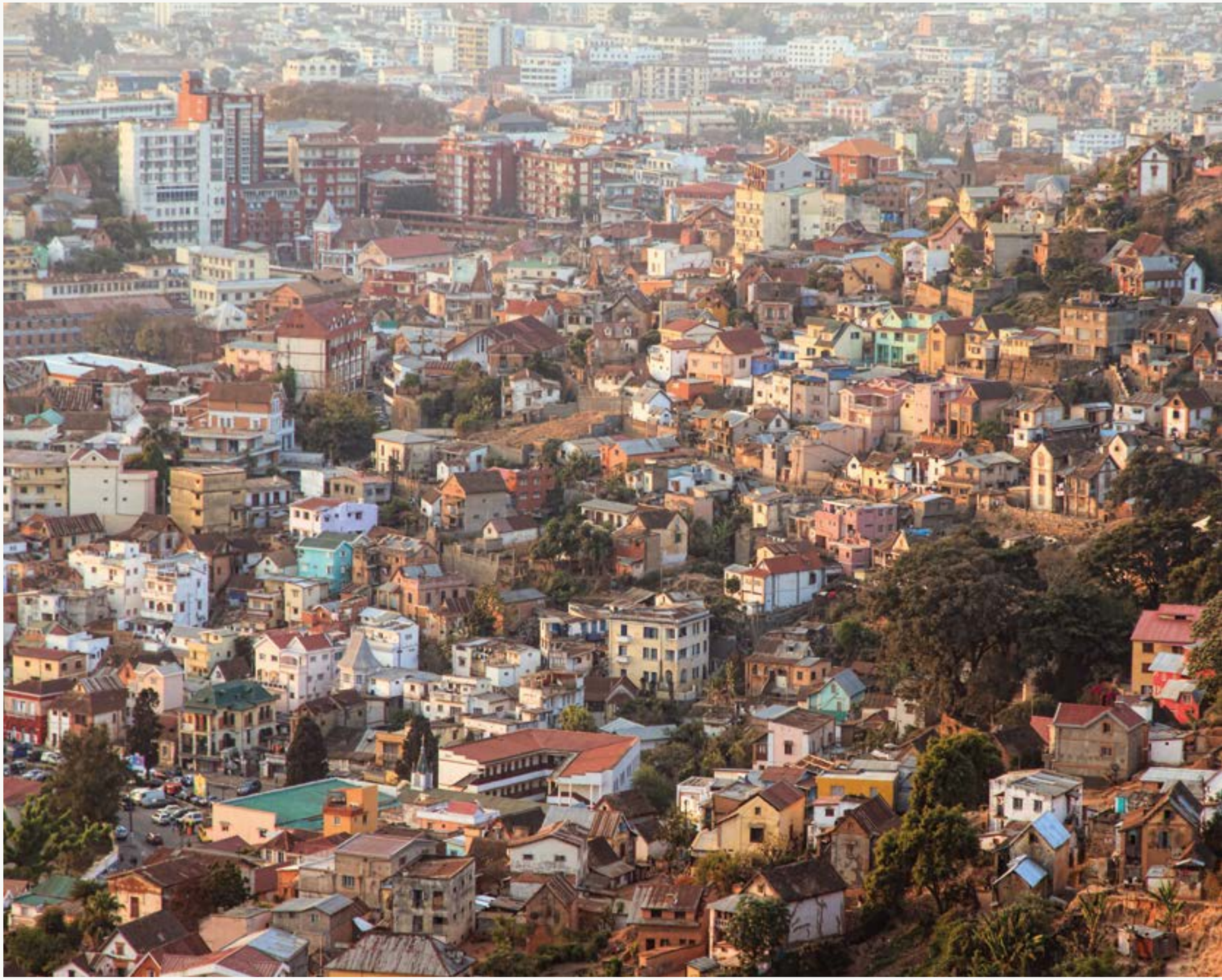
DESIGNING EFFICIENCY AND SUSTAINABILITY INTO THE URBAN ENVIRONMENTS OF THE 21ST CENTURY

The world is urbanising rapidly. Access to modern services is not keeping pace with this growth, causing strain on productivity and making people vulnerable to unsafe conditions. We are building a portfolio designed to make cities more efficient and sustainable, while improving the health and livelihoods of urban residents.

CURRENT PROJECTS:

Climate change, clean energy and urban water in Africa

Antananarivo, Madagascar



SMART CITIES

Climate change, clean energy and urban water in Africa

PROMOTING MARKET-BASED DEPLOYMENT OF CLEAN ENERGY TECHNOLOGIES AND SERVICES IN MUNICIPAL WATERWORKS: PILOT INITIATIVE IN SOUTH AFRICA

European Commission | UNIDO REEEP

BACKGROUND

Electricity costs can amount to up to 40% of total operating costs among water and wastewater facilities in developing countries and emerging economies.

Clean energy solutions are at the core of measures in urban water and wastewater services to reduce operational costs and contribute to climate change mitigation as well as adaptation benefits: reducing greenhouse gas emissions from fossil fuel based electricity and increasing water-efficiency and adaptive capacity of water scarceties.

*A decommissioned wastewater treatment tank in Zimbabwe (**Credit**: P. Feiereisen for Sustainable Sanitation Alliance)*

SOUTH AFRICA

- » Strong need for energy efficiency: Water and wastewater infrastructure accounts for around 35% of the total energy consumed by South African municipal administrations.
- » Strong need for water efficiency: South Africa is a water-scarce country, and water demand exceeds supply on national level.
- » High potential for GHG mitigation: 90% of electricity in South Africa is generated by coal-fired power stations.
- » Large gaps for waterworks at municipal level remain unaddressed: South Africa has ageing infrastructure; the level of non-revenue water stands at 35%. More than half of treatment plants do not fulfill effluent standards.
- » High potential to establish viable demonstration projects that are scalable and replicable across the SADC region. South Africa has a conducive policy environment. Municipalities are at the forefront of leading the charge to address climate change. The private sector market is relatively mature and could be the driver for replication in other municipalities and the region. Potential for outreach of project results in the Southern African region.

MODEL PATHWAYS OF MARKET-BASED APPROACHES TO COST-EFFECTIVE CLEAN ENERGY DEPLOYMENT IN MUNICIPAL WATER WORKS OF SUB-SAHARAN AFRICA.

The pilot initiative will focus on South Africa and create a basis for market-based replication and scale-up in the country and across the SADC region.

The project revolves around four key components:

INVESTMENT AND GUIDANCE FOR DEMONSTRATION PROJECTS

The project will select three municipalities for investment in pilot projects to optimise pumping and water treatment systems and deploy renewable energy systems to replace coal-fired electricity production.

The project will facilitate knowledge-sharing between the three municipalities, as well as relevant private sector service and technology providers, to support municipalities in:

- » Establishing viable energy management and data collection systems
- » Planning appropriate low cost/high return clean energy deployment
- » Developing detailed tendering documents and "bankable" proposals
- » Implementing planned activities, monitoring progress, and evaluating and verifying results.

The project will focus on simple and cost-effective technological solutions to improve efficiency and renewable energy production and decrease carbon footprints.

*A mini-hydro demonstration project in Sri Lanka (**Credit**: IFC)*

TAILORED CAPACITY BUILDING FOR MARKET PLAYERS AND ENABLERS

To ensure sustainable impact beyond the project lifespan, the project will create a critical mass of capacity for market enablers and market players.

On the one hand, the project will provide targeted training to municipalities on identifying, developing, implementing and managing clean energy investments in their waterworks.

TO ENSURE SUSTAINABLE IMPACT BEYOND THE PROJECT LIFESPAN, THE PROJECT WILL CREATE A CRITICAL MASS OF CAPACITY FOR MARKET ENABLERS AND MARKET PLAYERS

On the other hand, training will be developed for potential service providers, including financial service providers, technical experts and technology suppliers.

INNOVATIVE MONITORING, EVALUATION AND LEARNING

Monitoring and evaluation, together with practice-based policy research, will generate lessons learned and present practical solutions for clean energy deployment in waterworks and the concrete finance and business models behind them. A critical review into clean energy potentials of municipal waterworks in South Africa will complement the practical implementation of demonstration projects. This review will be complemented by targeted research aiming at practice based policy and market insights and recommendations for replication.

PROMOTION OF REPLICATION AND SCALE

The demonstration projects will act as lighthouses for South Africa and the SADC region, focusing on highly replicable and scalable business propositions.

Replication will be stimulated through peer-to-peer learning forums with selected satellite municipalities in South Africa, where lessons learned from the projects can be promoted and investigated.

As an international climate initiative, the project has the potential to increase the ambition levels of a large group of countries, exploiting achievable emissions reduction options at very low (or even negative) cost levels, while increasing local prosperity.

REEEP In Figures

REEEP is an international non-governmental organisation, registered in Austria as a non-profit association. This status, which has been extended until 2018, is subject to only limited taxation, as well as an annual statutory audit in accordance with Austrian law.

REEEP qualifies as an international NGO for official development assistance (ODA) contributions according to the Organization for Economic Co-operation and Development (OECD).

Financial information

IN APRIL 2016 DELOITTE CONDUCTED THE ANNUAL AUDIT OF REEEP'S FINANCIAL STATEMENTS AND PERFORMED ASSURANCE SERVICES – INCLUDING VERIFICATION OF COMPLIANCE – IN ACCORDANCE WITH AUSTRIAN ASSOCIATION ACT REQUIREMENTS.

The audit found REEEP's accounting system to be fully in accordance with generally accepted accounting procedures and an internal control environment.

THE AUDIT DETERMINED THAT:

- No objections to REEEP financial procedures were found.
- REEEP financial statements comply with legal requirements, are consistent in all material respects, and give a true and fair view of its financial position and performance for 2015/2016.
- REEEP funds were used in accordance with its statutes.
- No unusual income or expenses were noted.

REEEP OUTLAYS 2015/2016

In 2015/2016 REEEP outlays amounted to EUR 3.017 million, including EUR 1.6m in investment capital (project grants and patient loans). Together with fund administration, this amounts to 65% of total outlays. REEEP operations represented 18% of total expenditures. REEEP Open Knowledge and strategic projects were 10%, while Monitoring, Evaluation and Learning (MEL) and outreach accounted for 4% and 3% of outlays, respectively.

1 INVESTMENT CAPITAL AND FUND MANAGEMENT
1,954,000

2 REEEP OPERATIONS
544,000

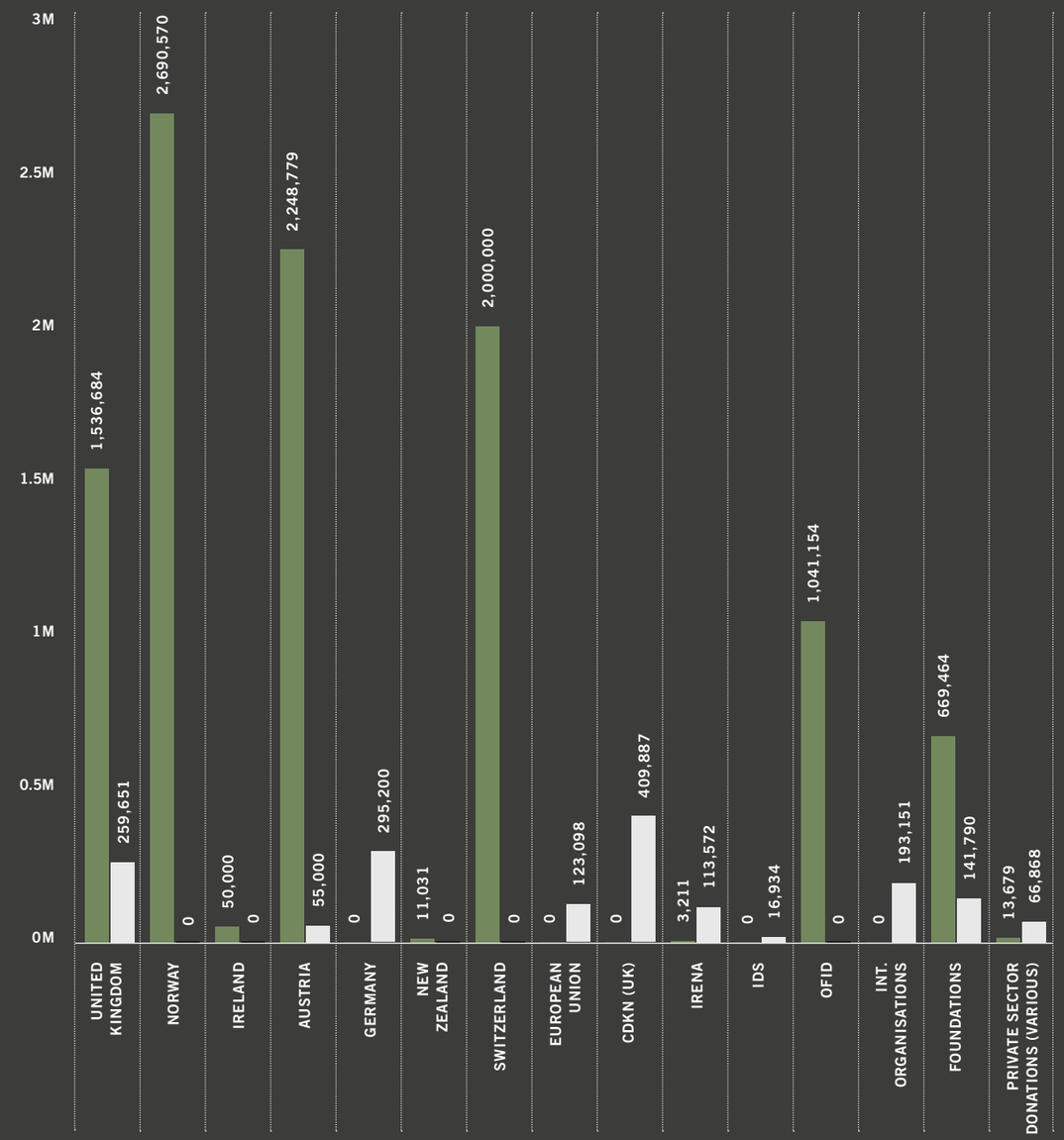
3 OPEN KNOWLEDGE AND STRATEGIC PROJECTS
286,000

4 MONITORING, EVALUATION AND LEARNING (MEL)
132,000

5 OUTREACH
101,000

REEEP FUNDING OVERVIEW 2011–2016

Over the five-year period from 2011/2012 to 2015/2016, REEEP received EUR 11.94 million in donations, including EUR 10.26 million in investment capital and fund management, and EUR 1.68 million for Open Knowledge and Strategic Projects.



Financial Information

OVERVIEW OF ASSETS AND LIABILITIES

The table summarizes REEEP's consolidated assets and liabilities as of 31 March 2016:

	MAR 16 kEUR	MAR 15 kEUR	MAR 14 kEUR	MAR 13 kEUR	MAR 12 kEUR	MAR 11 kEUR	MAR 10 kEUR	MAR 09 kEUR
ASSETS								
FIXED ASSETS								
Intangible assets	49	80	115	152	65	25	98	189
Tangible assets	3	5	9	18	27	17	7	9
CURRENT ASSETS								
Accounts receivable	88	114	8	30	99	91	104	107
Cash	4,875	5,920	9,135	11,998	11,953	12,881	12,546	12,249
PRE-PAID EXPENSES	5	9	13	7	6	1	0	12
	5,019	**6,128**	**9,281**	**12,204**	**12,150**	**13,015**	**12,756**	**12,567**
LIABILITIES								
EQUITY	1,323	1,377	1,797	2,249	2,341	1,908	1,838	1,718
PROVISIONS	621	868	1,104	1,066	786	628	1,028	524
LIABILITIES ON ACCOUNT OF EARMARKED FUNDS	3,001	3,659	5,989	8,312	7,946	9,219	8,833	9,804
LIABILITIES								
Accounts payable	12	35	92	181	282	164	49	99
Other liabilities	64	189	299	395	814	1,096	987	422
DEFERRED INCOME	0	0	0	0	0	0	20	0
	5,019	**6,128**	**9,281**	**12,204**	**12,150**	**13,015**	**12,756**	**12,567**
NET FINANCIAL ASSETS								
Current assets + pre-paid expenses	4,963	6,043	9,156	12,035	12,058	12,973	12,65	12,368
Provisions and Liabilities	3,697	4,751	7,483	9,955	9,809	11,107	10,917	10,849
	1,266	**1,292**	**1,673**	**2,080**	**2,249**	**1,866**	**1,733**	**1,519**

OVERVIEW OF INCOME AND EXPENSES

The following table summarises REEEP's consolidated income and expenses for the years ended 31 March, 2016, 2015, 2014, 2013, 2012, 2011, and 2010:

	2015/16 kEUR	2014/15 kEUR	2013/14 kEUR	2012/13 kEUR	2011/12 kEUR	2010/11 kEUR	2009/10 kEUR
NON–EARMARKED CONTRIBUTIONS	507	70	70	712	85	79	105
EARMARKED CONTRIBUTIONS	1,618	268	1,679	3,805	2,729	4,685	3,327
ALLOCATION TO LIABILITIES ON ACC.	658	2,330	2,323	-366	1,273	-386	971
OTHER INCOME	5	15	27	5	0	0	0
EXPENSES FOR PROJECTS	-1,690	-1,694	-3,083	-2,734	-2,267	-3,067	-2,923
EXPENSES FOR REG. SEC.	-7	-217	-288	-630	-377	-307	-388
COST OF STAFF	-903	-851	-763	-720	-707	-546	-522
DEPRECIATION	-39	-53	-54	-47	-27	-81	-96
OTHER OPERATION EXPENSES	-215	-308	-381	-450	-368	-372	-434
SUBTOTAL	**-59**	**-440**	**-471**	**-154**	**341**	**5**	**41**
INTEREST INCOME	15	27	25	83	122	86	106
OPERATING SURPLUS/LOSS	**-51**	**-413**	**-446**	**-71**	**464**	**91**	**147**
TAXES FROM INCOME	-3	-7	-6	-21	-31	-22	-27
ANNUAL SURPLUS/LOSS	**-54**	**-420**	**-452**	**-91**	**433**	**70**	**12**

Governance

REEEP'S GOVERNANCE STRUCTURE COMPRISES THREE ACTING BODIES: THE GOVERNING BOARD, THE PROGRAMME BOARD AND A GENERAL ASSEMBLY OF PARTNERS. REEEP'S MEETING OF PARTNERS, HELD AT LEAST ONCE EVERY TWO YEARS, FUNCTIONS AS THE GENERAL ASSEMBLY OF THE RENEWABLE ENERGY AND ENERGY EFFICIENCY PARTNERSHIP (COMPRISING ALL REEEP PARTNER ORGANISATIONS). THIS ASSEMBLY HAS ULTIMATE APPROVAL OF THE REEEP STATUTES.

Governing Board

REEEP's Governing Board holds office for a period of four years, and is responsible for the conduct of business in accordance with REEEP Statutes. The Governing Board develops and oversees key strategic direction, targets, time frames and priorities; prepares financial rules and accounting systems; and guides the operations of the International Secretariat.

Please see page 4 for a full list

Programme Board

The REEEP Programme Board comprises representatives from regional areas, donor institutions, intergovernmental organisations, private sector organisations and REEEP staff.

The Programme Board Chair is Matthew Kennedy, representing Ireland

REEEP Partners

REEEP embodies a global public-private partnership, and counts as its official partners 385 governments, international and multilateral organisations, non-governmental institutions, foundations and private sector actors.

The full list of REEEP partners can be found at www.reeep.org/partners

Advisory Board

The REEEP Advisory Board comprises eminent experts and thinkers in the clean energy and related fields, who provide the organisation with high-level expertise and strategic guidance. Members are invited by the Director General and approved by the Governing Board.

Please see page 4 for a full list

Abbreviations

AA	Autonomous Adaptation
AF	Adaptation Fund
AFB	Adaptation Fund Board
ASAL	Arid and Semi-Arid Land
ASIK	Agro Solar Irrigation Kit
BAU	Business as usual
BGFZ	Power Africa: Beyond the Grid Fund for Zambia
BRACED	Building Resistance and Adaptation to Climate Extremes and Disasters
CBA	Cost-Benefit Analysis
CC	Climate Change
CCCCC	Caribbean Community Climate Change Centre
CDKN	Climate and Development Knowledge Network
CKB	Climate Knowledge Brokers Group
COP17/21	17th and 21st sessions of Conference of the Parties of the United Nations Framework Convention on Climate Change, respectively
CTCN	Climate Technology Centre and Network
DALY	Disability Adjusted Life Years
DRE	Decentralised Renewable Energy
EEP	The Energy and Environment Partnership
ESCO	Energy Service Company
ESP	Energy Service Provider
EU	European Union
EUR	Euro
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross domestic product
GEF	Global Environment Facility
GHG	Greenhouse gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GS	Gold Standard
GW	Gigawatt
HLC	Health Lost due Climate Change
ICCG	International Center for Climate Governance
IEA	International Energy Agency
IDC	Industrial Development Corporation
IDS	Institute for Development Studies
IFC	International Finance Corporation
IFRC	International Federation of Red Cross and Red Crescent Societies
IGR	Income Growth Rate
IISD	International Institute for Sustainable Development
IMPAQT	Indicators for Multidimensional Prosperity Assessment, Quantification and Testing
INDC	Intended Nationally Determined Contribution
INR	Indian Rupee
IPCC	Intergovernmental Panel on Climate Change
IRENA	International Renewable Energy Agency
JRC	Joint Research Centre of the European Union
KMD	Kenya Meteorological Department
KPI	Key performance indicator
kW	Kilowatt
LAC	Latin America and the Caribbean
LDC	Least developed country
LE	Life Expectancy
LED	Light emitting diode
LFA	Logical framework analysis
LOD	Linked open data
M&E	Monitoring and evaluation
MDGs	Millennium Development Goals
MEL	Monitoring, evaluation and learning
MIC	Middle income country
MISW	Mixed index for Saved Wealth
MNRCZ	Management of Natural Resources in the Coastal Zone of Soc Trang
MNRE	Ministry of New and Renewable Energy
MONRE	Ministry of Natural Resources and the Environment
MOP	Ministry of Power
MRV	Measurement, reporting, and verification
MSME	Micro, small, and medium-sized enterprises
MW	Megawatt
NEPAD	New Partnership for Africa's Development
NGO	Nongovernmental organization
ODA	Official Development Assistance
ODI	Overseas Development Institute
OECD	Organization for Economic Co-operation and Development
OFID	OPEC Fund for International Development
PAVC	Powering Agrifood Value Chains
PB	Project Budget
(CTI) PFAN	Private Financing Advisory Network of the Climate Technology Initiative
PGR	Population Growth Rate
PGR	Price Growth Rate
PLT	Project Lifetime
POLIMP	Climate Policy Implications Programme
POP	Population
PM2.5	Particulate Matter 2.5
PWS	Personal wealth savings
RCP	Revolving Capital Pool
REEEP	Renewable Energy and Energy Efficiency Partnership
RBF	Results-based financing
RBM	Results-based management
SADC	Southern African Development Community
SANEDI	South African National Energy Development Institute
SCP	Sustainable consumption and production
SD	Sustained development
SDC	Swiss Agency for Development and Cooperation
SDGs	Sustainable Development Goals
SE4All	Sustainable Energy for All
SEI	Stockholm Environment Institute
SH	Saved Health
SME	Small and medium-sized enterprises
SPI	Smart Power India
SPRD	Smart Power for Rural Development
SPREP	Secretariat of the Pacific Regional Environment Programme
SW	Saved Wealth
TOC	Theory of change
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNFCCC	United Nations Framework Convention on Climate Change
UP	Uttar Pradesh
USAID	U.S. Agency for International Development
USD	U.S. Dollar
WB	The World Bank
WHO	World Health Organization
WLC	Wealth Lost du Climate Change
WPC	Wealth Per Capita
WRI	World Resources Institute

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Authors

John Tkacik
Merja Laakso
Sigmund Kluckner

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Cover Image: Zambia's Chilubi Island (Credit: NASA)

Designed By Surgery&Redcow

REEEP

VIC D-2169
Wagramer Str. 5
1400 Vienna
Austria