

June 2013

# The Green Growth Action Alliance

## *Unlocking private finance for green growth*



[www.weforum.org/issues/green-growth](http://www.weforum.org/issues/green-growth)

# The G2A2 was launched at the G20 in June 2012 as an action-focused coalition for green growth



- The Alliance was founded by the B20 Task Force on Green Growth, a group of 25 prominent CEOs from global business, international public finance agencies and experts that provided action-oriented input to the G20
- The Alliance was formally welcomed by the G20 leaders in their Communiqué:

The G20 “welcomes the B20’s Green Growth Action Alliance... and highlights that green growth and sustainable development have strong potential to stimulate long term prosperity and well-being.”  
- **G20 2012 Leaders Declaration**



- The Russian G20 in 2013 and the Australian G20 in 2014 will provide important milestones and opportunities to reaffirm the imperative for delivering green growth
- The Alliance will deliver new models for green finance and innovative public-private solutions to the Russian and the Australian G20

# The Green growth action alliance was born in the G20 / B20 process but has grown beyond these routes



- September - UK government launches Capital Markets Climate Initiative to scale up private finance for low-carbon infrastructure
- **November - Korea G20**
  - Summit communiqué prioritizes "strong, sustainable and balanced growth", Green Growth becomes established in the International agenda
  - The first "Business 20" (B20) Summit; Green Growth Task Force releases comprehensive report on the green jobs opportunity



- May - OECD launches Green Growth strategy to help countries develop national strategies
- September - National development banks launch International Development Finance Club with an initial focus on mobilizing climate finance
- **November - France G20**
  - Summit communiqué urges "the operationalization of the Green Climate Fund" and stresses the role of international financial institutions in climate finance
  - B20 Green Growth Working Group recommendations



- January - World Economic Forum Annual Meeting in Davos - private session kicks off Mexican B20 Green Growth Task Force with a finance focus, ADB/IFC announce CPS Fund
- October - Global Green Growth Institute officially launched to catalyse bottom-up country action
- **June - Mexico G20**
  - Summit communiqué: "We commit to maintaining a focus on inclusive green growth as part of our G20 agenda"
  - Leaders welcome the G20 Development Working Group's Dialogue Platform on Inclusive Green Investment and the B20 Green Growth Action Alliance
  - B20 Green Growth Task Force launches the Green Growth Action Alliance focused on unlocking private finance
- December - UNFCCC and the Forum launch Momentum for Change Finance showcase initiative



- January - World Economic Forum Annual Meeting in Davos sees launch of IFC's Catalyst Fund, the Alliance releases its first Green Investment Report to track global green investment flows
- June - Global Investor Forum on Climate Change
- **September - Russia G20**

## ...and to the future

- Inspiration for the Global Commons Floor to Innovate new financial solutions
- Engaging long-term investors through the Global Investor Coalition on Climate Change
- Sharing solutions with governments via the G20 Development Working Group Dialogue Platform on Inclusive Green Growth
- Shaping China's Climate Finance Strategy through the Climate Group's China Green Finance Initiative
- Delivering financing solutions for the World Bank's new Climate Strategy
- Reporting on progress at the Australian G20 Summit in September 2014
- Catalysing leadership at the United Nations Secretary General Leaders Summit on Climate Change, September 2014

Catalyzing the agenda mobilize private finance for green growth

## Evolution of World Economic Forum Initiatives

2010 Critical Mass Initiative

2011-12 Green Growth Partnerships Initiative

2012-beyond Green Growth Action Alliance

2010

2011

2012

2013

# In 2013 the Alliance will progress innovative financing models and share insights to drive the green growth agenda

## 2013

## 2014

June July July September October December January March

### Green Growth Action Alliance - Milestones and Events

- Publish first **Alliance Progress Report** as input to the Russian G20 Summit
- Host Alliance panel at first **Global Investor Forum on Climate Change** in Hong Kong

● Start pilot phase of **Agroforestry Partnership Fund (APF)**

● Co-organize high-level finance panel at **Global Green Growth Forum**, Copenhagen featuring long-term investors to finalize investment structures tied to country pilots

● Together with UNFCCC, recognize innovative financing solutions at **COP19 in Warsaw - Momentum for Change Event**

● **World Economic Forum Annual Meeting** at Davos

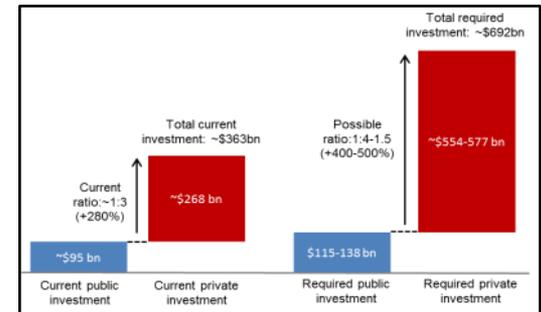
● Begin preparation for input to **Australian G20 Summit**

# The G20 has two-year action agenda to unlock private investment in green infrastructure

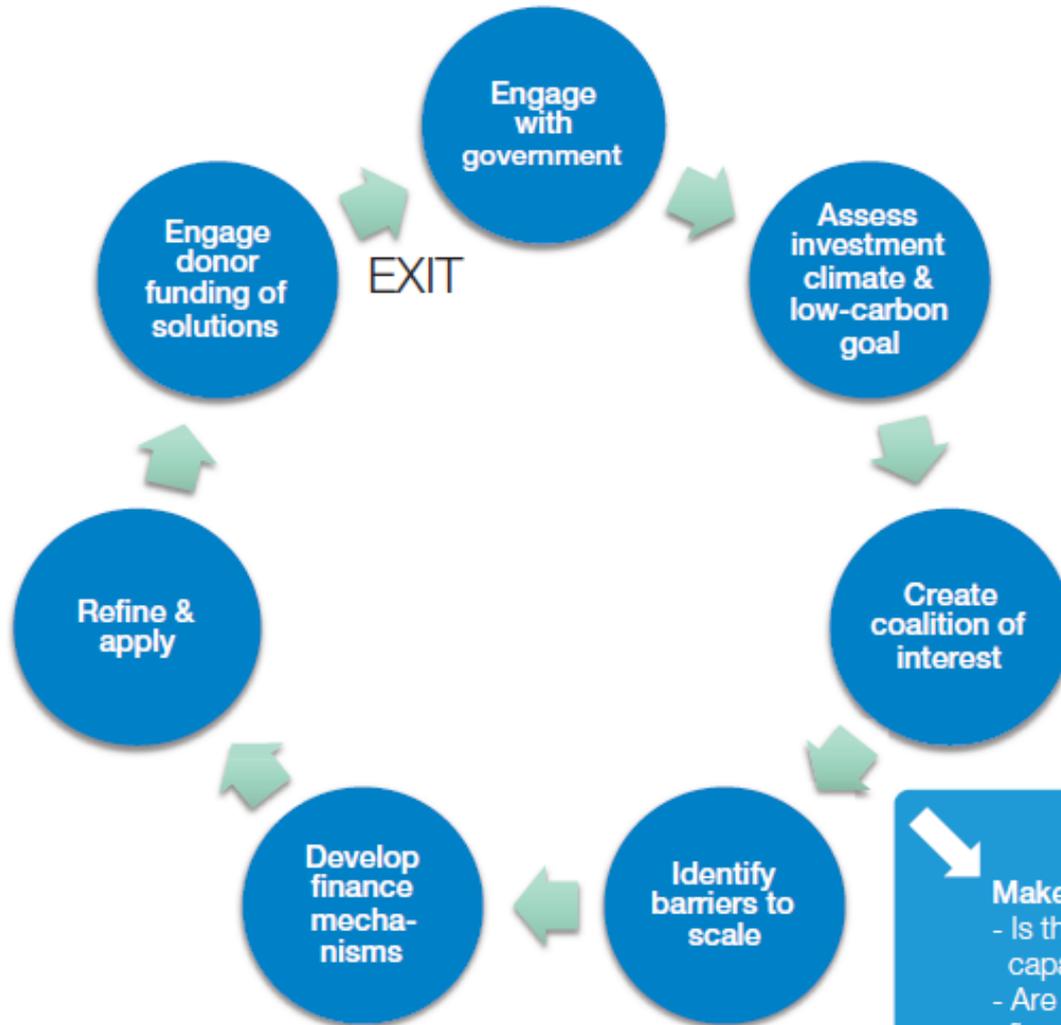
## The G20 focuses on four high-impact activities:

- 1 Track global progress in green investment and highlight the role of smart public policy to deliver private capital at scale
2. Develop proof points that draw in private investment for green growth at the country level
- 3 Provide new ideas and public-private models to shape the green growth policy agenda
- 4 Work with governments, MDBs and DFIs to scale up, replicate and adopt successful approaches

## Closing the climate finance gap with public-private investment



# The Alliance has created a unique approach to deliver on it's goals



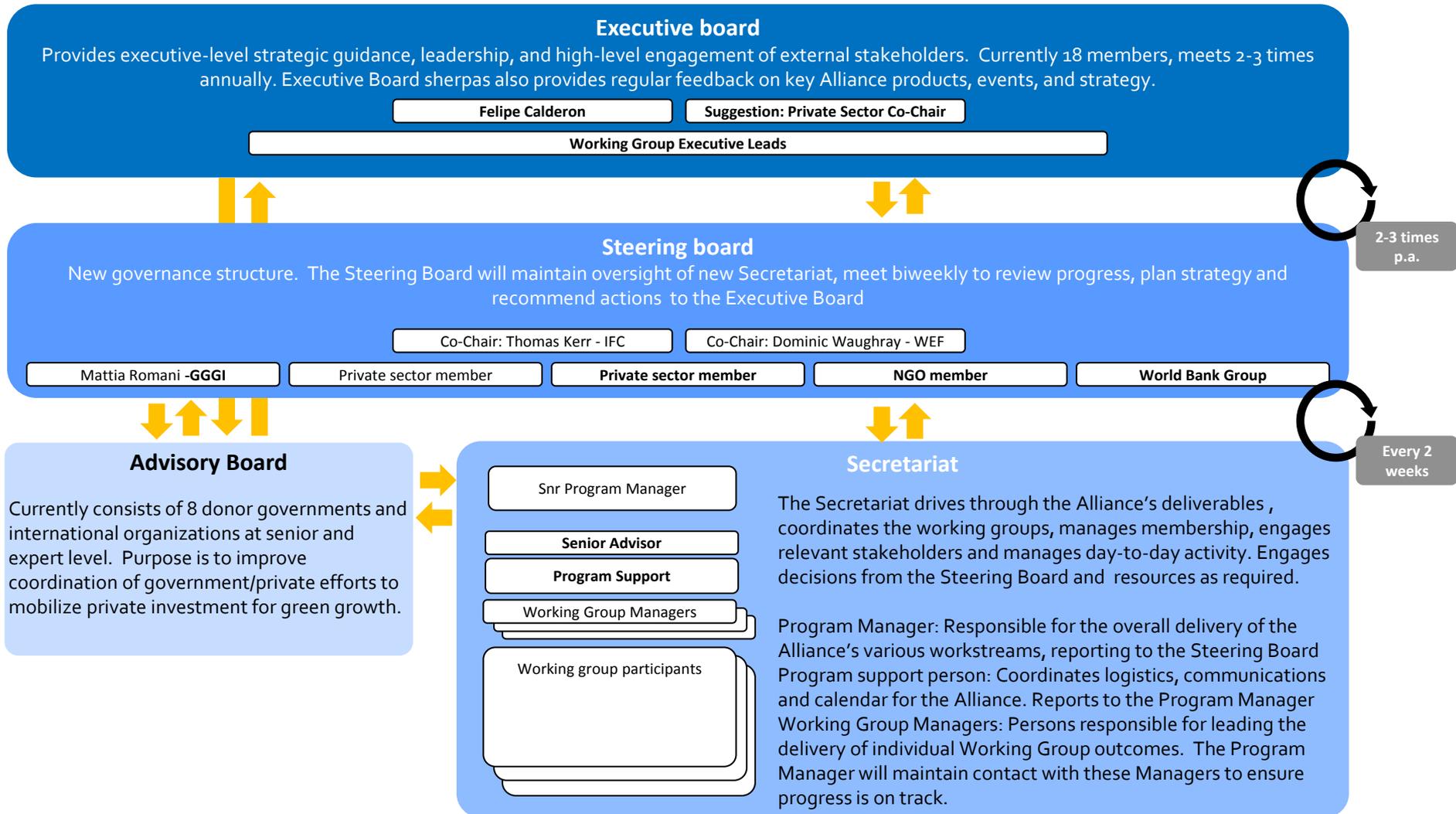
In its first year, the Alliance has worked to unlock capital for clean energy in Kenya; to shape new vehicles for financing climate smart agriculture in Vietnam; to advance new policy and market solutions to jumpstart India's National Solar Mission; and to transfer innovative structures for financing energy efficiency from Europe to Mexico and the Russian Federation.

The Alliance has developed a unique approach to delivering new financing solutions for green growth in developing economies

### Make a decision:

- Is there sufficient government capacity?
- Are enough international financial experts interested?
- Is there government buy-in?

# The organisation is structured in a way that delivers on this unique approach with strategic input from a high level executive board



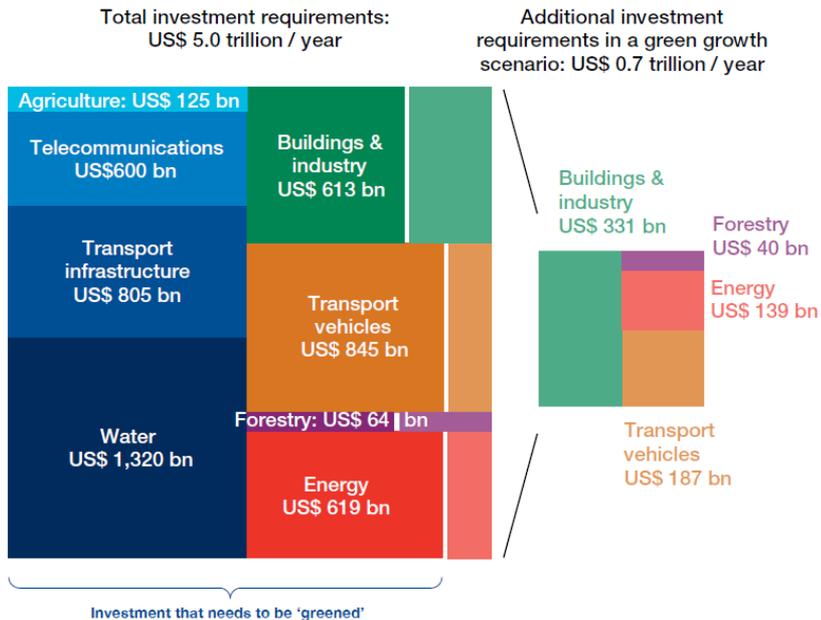
# Activity 1: Track global progress in green investment, and highlight the role of smart public policy to deliver private capital at scale

We have produced a report for Davos 2013 that...

1. Captures public and private investment flows for green growth

2. Highlights the gap between current levels and the amount needed to achieve green growth

3. Shows how public finance can unlock private finance



## Outcomes and insights



### Clarity on the green finance gap

- Defines the *current flows* of investment and *additional investment requirements* to address climate change
- Explores investment dynamics, identifying an increasing flow of capital from developing economies

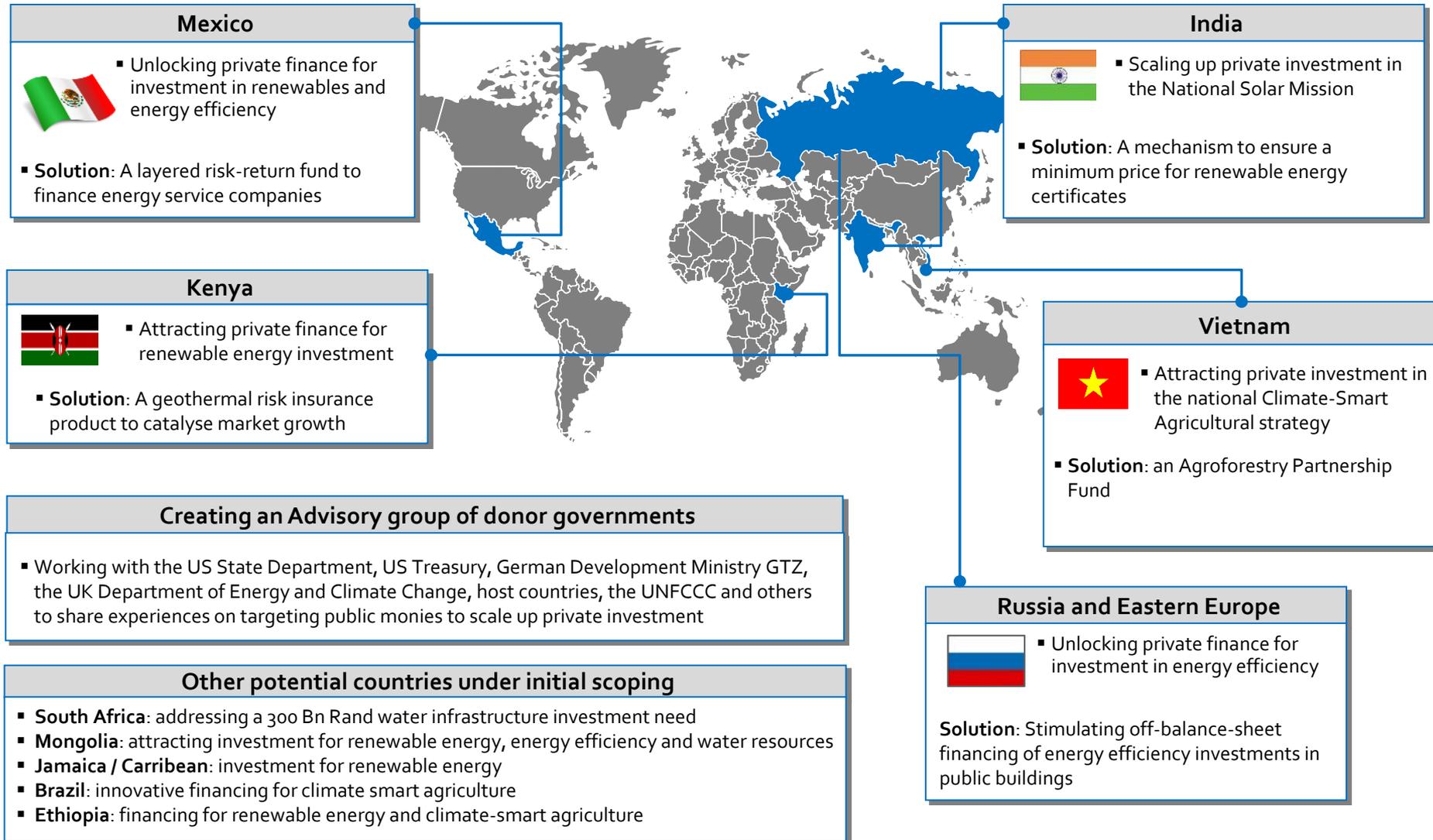
### Mobilizing private finance

- Explains how targeted public action can address the gap by promoting private investment
- Identifies instruments and mechanisms that have been successful in mobilizing private finance

### Catalysing leadership and private investment

- Provides recommendations for investors and policy makers to advance the agenda and enable greater investment

# Activity 2: Developing proof points that draw in private investment for green growth at the country level



# Floor price mechanism to backstop India's national renewable energy certificates market



“

We cannot exit the financial crisis without also addressing the climate crisis. There are proven ways to target limited public finances to crowd in private capital for green infrastructure, but hard work is needed to scale up successful approaches and to develop new models at the country level. I am happy that the UK's Capital Markets Climate Initiative was able to inspire the work of the Alliance, and look forward to continued collaboration in the future.

“

*Greg Barker MP, Rt Hon Minister of State for Climate Change, United Kingdom*

## What's the innovation?

The creation of a stronger price signal for investors through a targeted mechanism that ensures a minimum price for renewable energy certificates (REC)

## Background

- The RECs market in India is nascent but its potential as a market mechanism to incentivize investment in the solar energy sector could be significant.
- The development of the REC market has been inhibited by a number of factors including the lack of a buyer of last resort. As such, financial institutions have been reluctant to lend to projects on the basis of REC market revenues because of the risk that such revenues may not be realized.
- To support this emerging market, the Alliance designed – and the UK Government seed-funded – a pilot REC floor price mechanism to ensure a minimum price for solar power production that will complement the revenues derived from the sale of electricity – providing more certainty and consistency in solar power prices and RPO enforcement for investors.

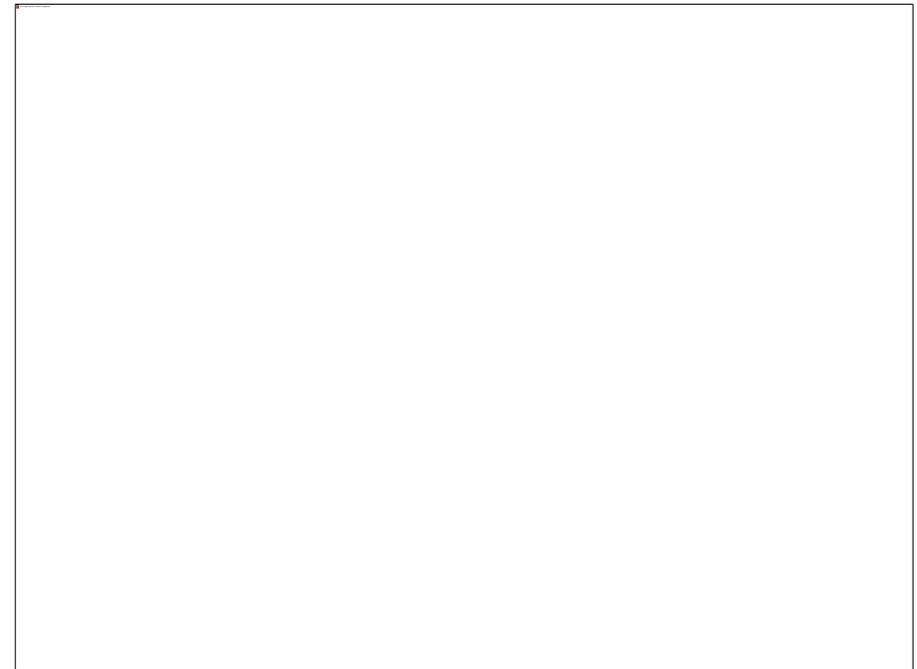
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### Path to a solution

- Alliance members and members of the United Kingdom government's Capital Markets Climate Initiative (CMCI), its advisers National Economic Research Associates and PricewaterhouseCoopers, and the Clinton Climate Initiative designed a concept note for a REC facility of an estimated size of £50 million (around US\$ 76 million) that provided solar power developers with a guaranteed price for RECs. This involved analysing the impact of a guarantee on simulated project cash flows.
- Options for structuring the facility, its criteria for extending funds and the appropriate implementing agency have been – and continue to be – tested with CMCI members and Indian stakeholders from the lending, developer and policy community.

### Next steps

- The Alliance shaped a unique public, private and civil society coalition to help the CMCI to identify an impactful, practical way to target its climate change funding.
- The Alliance-drafted project concept note received positive feedback and was approved by the UK Government in the autumn of 2012.
- The business case for this project will be submitted to the United Kingdom's International Climate Fund in July 2013 and approval is being sought from the Indian Government.



# Insurance for geothermal development drilling well output in Kenya



“

Kenya's power demand continues to rise steeply. This presents an opportunity to provide the clean energy that is needed for its growth and its sustained fast paced development. We can accelerate the development of geothermal, solar, wind and other clean energy sources on a small, medium or large scale implemented by both the public and the private sectors. In this respect, we are encouraged by the work under the Green Growth Action Alliance that engages our public and private sectors in the design of innovative mechanisms to unlock private financing for clean energy. We look forward to carrying forward this work in the future.

“

*Edward Njoroge, Chief Executive Officer, KenGen (Kenyan Generation Company)*

## What's the innovation?

A new insurance product to address geothermal exploration risk – one of the key initial barriers to private investment

## Background

- Geothermal energy is a promising means to meet Kenya's growing demand for reliable and clean baseload power. Geothermal already comprises 13% of power generation in Kenya but estimates suggest that this accounts for only approximately 3% of the available resource, implying significant potential for further growth. The government's ambition for the sector is to develop 5,000 megawatts (MW) by 2030.
- The high initial risk associated with resource exploration and the significant cost of drilling wells have hampered the development of geothermal resources that are cost-competitive on a life-cycle basis.
- Despite success in exploiting existing geothermal fields, the pace of expansion has been slow and public finances (donors and the Government of Kenya) continue to provide most of the funding.

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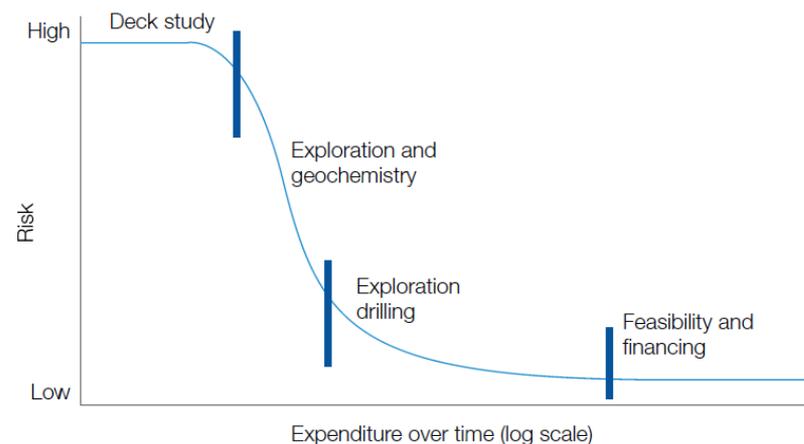
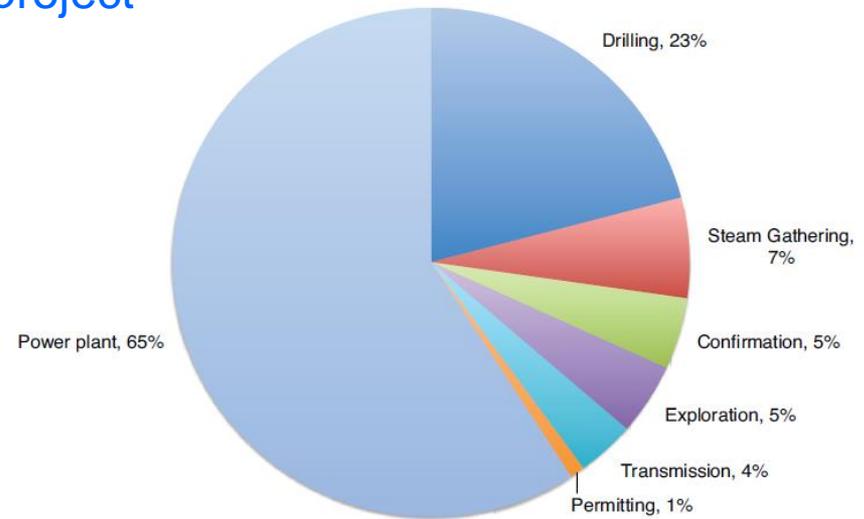
## Path to a solution

- A new Geothermal Development Drilling Well Output insurance product has been designed to reimburse drilling costs if insufficient aggregate geothermal capacity is achieved.
- This concept was initially conceived by the International Finance Corporation (IFC) in conjunction with geothermal advisory company GeothermEx in connection with the development of Turkish Geothermal Reservoirs. It is a flexible tool that can be tailored to work efficiently and economically in a number of different scenarios and reservoir types. Building from the IFC model, the Alliance tailored a solution for Kenyan geothermal projects and Kenyan legislation.
- This risk sharing mechanism is intended to reduce risk after the first exploratory wells have been drilled.

## Next steps

- This product offers great potential, however, the costs of insurance make it unattractive for any one private sector developer to develop the product individually.
- The Alliance is actively seeking donor support to develop a wider pilot insurance programme, perhaps as part of the country's NAMA (Nationally Appropriate Mitigation Action) being developed for the United Nations climate change process.
- To procure donor support for the development of the proposed pilot programme, a more detailed concept note is required.

## Cost breakdown of a typical geothermal project



# Financing climate-smart agriculture in Vietnam



“

Great to see progress being achieved to scale initiatives and deliver new ways to attract private sector investment. Under the leadership of MARD [Ministry of Agriculture and Rural Development of Vietnam], these collaborative platforms of the New Vision for Agriculture and the Green Growth Action Alliance have really helped to sustain that commitment.

“

*Rashid Qureshi, Managing Director, Nestlé*

*Vietnam*

## What's the innovation?

The creation of the Agroforestry Partnership Fund, a portfolio of sustainable agroforestry projects that attracts private investment by using domestic public finance anchoring

## Background

- Vietnam has set agricultural sector targets to reduce emissions by 20% by 2030, improve resource efficiency, develop efficient supply chains and reduce poverty.
- Shifting private investment to support climate-smart agriculture (CSA) is therefore a goal for many governments with agricultural economies. However, while a number of initiatives exist, an example of how to attract private investment for CSA in practice is lacking.
- Fundamental challenges exist to providing financing for the agricultural sector in Vietnam. These include among others limited access to finance from formal banking institutions or microfinance, low premium for certification to farmers, land rights for small and restricted areas, which raises the additional challenge of efficiently aggregating supplies and interests, lack of efficient infrastructure, inefficient supply chains.

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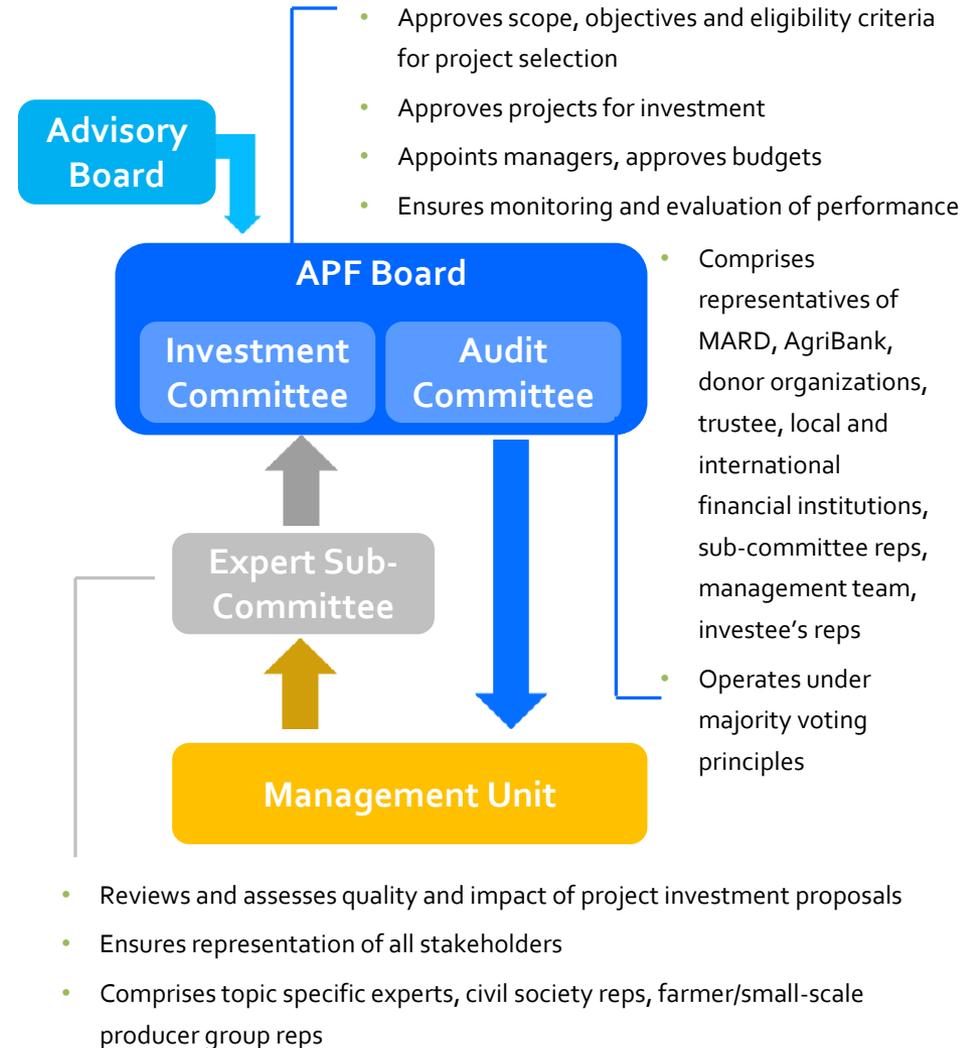
## Path to a solution

- An Agroforestry Partnership Fund was designed to achieve maximum leveraging of private investments through a portfolio of climate-smart agro/forestry projects with a diverse range of revenue sources and levels of profitability.
- To ensure the Fund's impact is directly related to climate-smart objectives and it delivers attractive financial returns, a number of environmental, social and governance metrics have been developed against which the projects will be evaluated.
- The Fund's investment strategy centres on the production of ecologically-sustainable or organically-produced and certified products that can be sold at a committed price premium to the large processors. Excess returns will be invested in non-commercial activities that aim at removing obstacles hindering smallholders from adopting these sustainable production business models on a small scale.
- To prove the investment strategy, a US\$ 50 million pilot Fund was set up in 2013; the target Fund size for round two is US\$ 500 million. The Fund will aim to generate an internal rate of return in the mid to high single digits per annum for investor distribution.

## Next steps

Critical next steps for the Fund include developing a commercially interesting and climate-smart portfolio of projects, establishing the governance structure with a Vietnamese anchor entity and representatives from the relevant government ministries, and fundraising for Fund development costs, promotion and outreach to potential investors.

## Proposed Governance Structure



# Creating new markets for energy efficient investment in Mexico and the Russian Federation



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At a time when climate change impacts are increasingly being felt, the need for practical action across the globe with strong carbon emissions reduction becomes more urgent than ever. Building on our experience established with over 600 energy efficiency and renewable energy projects and investments over US\$ 14 billion, the European Bank for Reconstruction and Development is pleased to be a member of the Green Growth Action Alliance and to bring our practical project financing knowledge working with the private sector to address the global climate change challenge.

“

*Josué Tanaka, Managing Director, Operational Strategy and Planning, Energy Efficiency and Climate Change, European Bank for Reconstruction and Development*

## What's the innovation?

Stimulating off-balance-sheet financing of energy efficiency investments in public buildings

## Background

- Public sector buildings are characterized by under-investment both in the building structure and building services equipment (for heating, lighting, ventilation and air-conditioning, etc.). This causes energy inefficiencies, and the potential for significant energy (and monetary) savings.
- Realizing this potential requires designing, financing and implementing energy efficient investment projects. However, building owners (typically central or local governments or their agencies) often lack the technical knowledge needed to realize energy efficient investments and have limited funding.
- The Energy Service Companies (ESCOs) concept of Energy Performance Contracting (EnPC) addresses these constraints. ESCOs finance and implement energy efficient investment projects that have commercially acceptable paybacks (e.g. <10 years for building services equipment<sup>5</sup>); they are repaid from a share of the future savings.

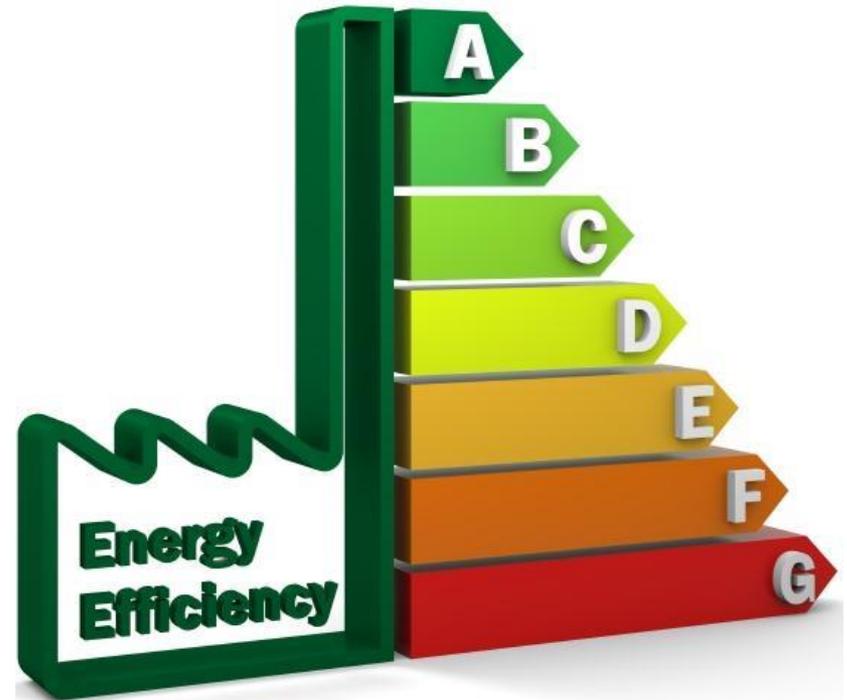
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## Path to a solution

- As most ESCOs are engineering or construction companies with limited balance sheet capacity, they cannot easily support much long-term debt. Refinancing is usually achieved by selling a portion of the future receivables due under the EnPC contract by way of a forfeiting transaction that takes place once the energy saving measures have been installed and the energy savings have been verified.
- In emerging markets no track record of EnPC exists so banks are not yet ready to offer these services directly to ESCOs. However, the same service can be provided by establishing Dedicated Energy Efficiency Financing Funds for ESCO financing – providing forfeiting and potentially working capital finance to ESCOs entering into EnPCs with both public and private sector clients.
- Initial capital needs for an EnPC financing fund in a given country may be quite modest – in the range €10 to €20 million.

## Next steps

- The Green Growth Action Alliance is now testing this fund concept in the Latin American market, more specifically in Mexico
- The EBRD has shared this concept with Government of Ukraine and Russia and with the Alliance's Working Group on Institutional Investors to gather the group's unique insights on the attractiveness of this model as a scalable solution.



# Innovative models for demand-pull renewable energy in India



“

No individual actor can solve the huge global environmental challenges we now face. We need new models of collaboration that bring together the best in business, government and civil society to deliver practical solutions on the ground. The Green Growth Action Alliance is a leading example of this new approach. The World Resources Institute has been delighted to work with the Alliance since its launch, sharing our research and experiences in unlocking private finance and scaling up corporate renewable energy purchasing to achieve critical mass.

“

*Andrew Steer, President and Chief Executive Officer, World Resources Institute*

## What's the innovation?

Pooled corporate purchasing to create demand (and more attractive financing) for large-scale renewable energy projects

## Background

- In India, renewable energy generation is promoted through a combination of state feed-in tariffs, tax incentives, generation-based incentives and capital subsidies.
- Owing to the strong policy framework and National Solar Mission targets, renewable energy increased from 4% in 2010 to over 12% of India's 200 GW power production capacity in 2012. Grid-connected solar capacity has dramatically increased from 18 to 940 MW in the past few years.
- Because of their rapidly declining cost, increasing availability and stable input prices, renewable energy sources offer a strong value proposition for large energy purchasers in India. However, purchasing models, financing mechanisms and improved regulatory frameworks are needed for companies to take full advantage of this opportunity.

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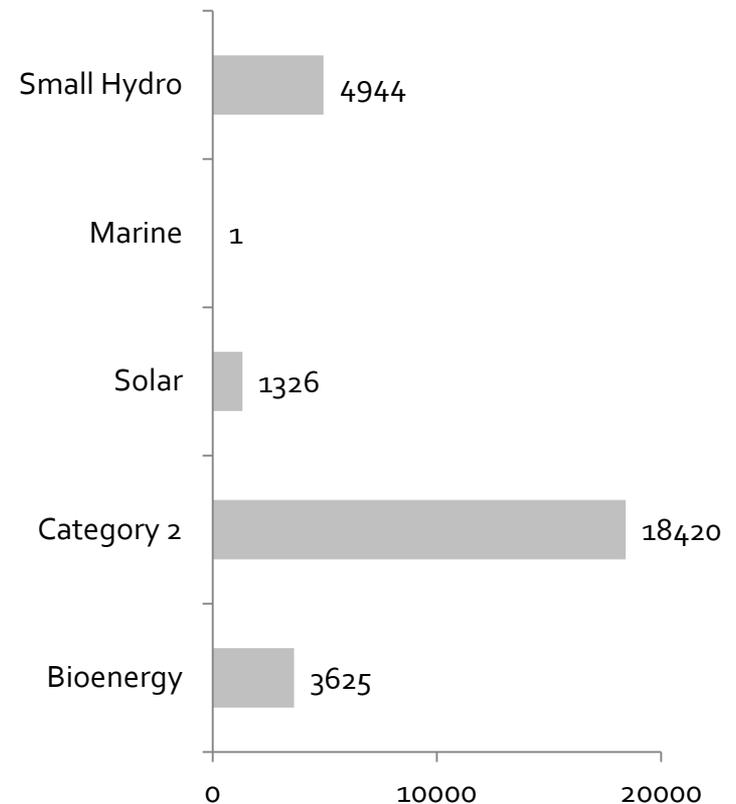
## Path to a solution

- To jump-start the market for renewable power, the World Resources Institute (WRI) created an innovative purchasing cooperative among large energy consumers – the Green Power Market Development Group.
- The group will pool demand, jointly explore both onsite and offsite renewable energy purchasing options and engage with regulators to facilitate the expansion of renewable energy supplies. The Alliance helped to facilitate connections to several industrial companies in Bangalore that are part of the group and provided links to financial experts.
- The US Department of Energy is also partnering with the India cooperative and is bringing innovative technologies and low-interest financing ideas.
- Informed by this work and additional research, WRI and Alliance members are conducting a survey of effective global policy drivers that help industrials increase the use of renewable energy.

## Next steps

- Next, Indian companies plan to develop contracts with standard commercial terms for onsite solar and offsite solar and wind projects that reduce transaction costs and make it easier for bidders to respond to requests for proposals from the companies.
- WRI is interested in replicating this model with a group of corporate purchasers in Mexico. Wal-mart Stores and FEMSA are leading this effort.

## India's Renewable Energy Generation Capacity, 2012



# Activity 3: Provide new ideas and public-private models to shape the green growth policy agenda

- Working groups have been established to progress specific thematic challenges to the international green growth agenda
- Ideas and models will inform country work to ensure impact

## Topic



## Description

- Explore breakthrough approaches to linking institutional investors to bankable pipelines of green infrastructure, projects with adequate risk returns to meet fiduciary duties

- Build a better understanding of green free trade issues within the Alliance and with key policymakers and other stakeholders

- Define a set of characteristics that influence investment allocation for DFIs and commercial banks. Propose a set of common PPA terms and develop guidance to governments and regulators

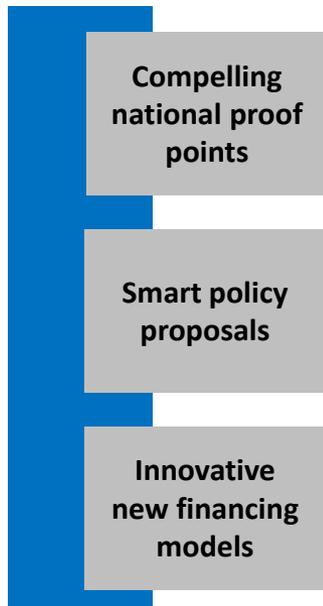
## Delivery points

- Design and launch new vehicles to facilitate institutional investor interest
- Build support for green free trade agenda at key workshops and international events
- Identify key principles of bankable PPAs in emerging markets and test in a few geographies

## Activity 4: Work with governments, MDBs and DFIs to scale up, replicate and adopt successful approaches

- To ensure rapid replication and scale-up of successful models, the G2A2 is:
  - Documenting case studies in the *Green Investment Report* – first report was issued in January 2013 <http://www.weforum.org/greengrowth>
  - Feed successful models to relevant policy platforms and investor networks

### G2A2 outcomes



### Recipients



# There are currently 9 working groups in the alliance at different stages of maturity

## Status and Actions to end 2013

Working Group Name	Concept	Detailed Development	Implementation	Chairs
Insurance for Geothermal Well Output (Kenya)	✓	US\$ 75'000 required for a detailed development		- -
Floor Price Mechanism for RECs (India)	✓	✓	Due 2014	- -
Climate Smart Agriculture (Vietnam)	✓	US\$ 150'000 required to develop fund details		Nestle TBC
Institutional Investors (Global)	Resources required to deliver initial paper	Financing / pro-bono required for detailed analysis	By latest 2014 UN leader summit on climate change	Zurich Insurance Group, Deutsche Bank
Layered Energy Efficiency Fund (Mexico)	By end Aug 2013. Country workshop to refine	Financing / pro-bono required for detailed development		EBRD, IFC Accenture
End-User Renewable Energy Financing (India)	✓	Lead by WRI, with funding from Wal-Mart and FEMSA		WRI / Infosys Walmart / Femsa
Standardized PPA (Kenya / Mongolia)	First draft matrix ready for workshop in DC 30 July	Financing required for detailed legal support		OPIC Baker McKenzie
Green Free Trade	Revisiting deliverables and milestones	Need to expand engagement with countries and companies		ICTSD, General Electric, Vestas
Green investment report	Needs a concept for GIR 2	US\$ 300'000 Financing or pro/bono for analytics	Decide if the report is annual and on-going	Accenture / WRI / Suzlon
Advisory Board	Consists of 5 donor governments agencies and international organizations at senior and expert level. Purpose is to improve coordination of government/private efforts to mobilize private investment for green growth.			

# G2A2 Executive Board

## Honorary Chair: Felipe Calderón

Pierre Nanterme, Chief Executive Officer, Accenture

Thomas C. Heller, Executive Director, Climate Policy Initiative

Caio Koch-Weser, Vice Chairman, Deutsche Bank

Josué Tanaka, Managing Director, Operational Strategy and Planning, European Bank for Reconstruction and Development (EBRD)

John Rice, President and CEO, Global Growth and Operations, General Electric Company

Howard Bamsey, Executive Director, Global Green Growth Institute

Kris Gopalnakrishnan, Chairman, Infosys

Simon Upton, Chair, OECD Round Table on Sustainable Development, Organisation for Economic Co-operation and Development (OECD)

Elizabeth Littlefield, President, Overseas Private Investment Corporation

Mike Rees, Chief Executive, Wholesale Banking, Standard Chartered

Tulsi Tanti, Chairman and Managing Director, Suzlon

Rachel Kyte, Vice-President of Sustainable Development, The World Bank

Ditlev Engel, President and Chief Executive Officer, Vestas Wind Systems

Andrew Steer, President and Chief Executive Officer, World Resources Institute

Ole Jorgen Haslestad, President and Chief Executive Officer, Yara International

Cecilia Reyes, Group Chief Investment Officer, Zurich Insurance Group

# A multi-stakeholder coalition

## G2A2 Members

The Green Growth Action Alliance is supporting the scale-up in green growth through the collaboration of more than 50 leading financial institutions, corporations, governments and nongovernmental organizations.

Members		
<p>Accenture Applied Materials Bank of America Merrill Lynch Barclays Capital Black Sea Trade and Development Bank Climate Development Knowledge Network Climate Policy Initiative Deutsche Bank Group Environmental Defense Fund European Bank for Reconstruction and Development European Investment Bank FEMSA GDF Suez GE Energy Global Green Growth Forum Global Green Growth Institute Grupo Financiero Banorte Hanwha Group HSBC Iberdrola</p>	<p>Infosys Inter-American Development Bank International Centre for Trade and Sustainable Development Japan International Cooperation Agency KfW Bankengruppe McKinsey &amp; Company Morgan Stanley Nacional Financiera SNC Novozymes Organisation for Economic Co-operation and Development Overseas Private Investment Corporation Philips Electronics Private Sector Center for Sustainable Development Studies Samsung Electronics Company Sekunjalo Investments Siemens Standard Chartered Bank Standard &amp; Poor's</p>	<p>Suntech Power Suzlon Energy Swiss Reinsurance Company Thomson Reuters Trina Solar United Nations Environment Programme Finance Initiative United Nations Foundation Vestas Wind Systems Vnesheconombank Wal-Mart Stores Welspun Energy Wermuth Asset Management World Bank Group World Resources Institute World Trade Organization Yara International Zurich Insurance Group</p>

# Membership

- The G2A2 has been created to facilitate action on the green growth agenda. Members and Advisory Group Members are expected to actively participate by:
  - **Dedicating a liaison (Sherpa)** with access to the organization's senior management that will help to engage colleagues in their organization (issue experts or regional leads) to support G2A2 workstreams as appropriate
  - **Joining and actively participating in at least one Working Group** and participating in Member calls/meetings
  - **Joining quarterly G2A2 Sherpa update calls**
  - Engaging senior organization representatives as appropriate **to participate in high-level G2A2 or other events**
- The G2A2 will grow by selectively recruiting new Members with unique geographic, sectoral or political assets or leadership
- The Secretariat will review the list of members twice a year and contact organizations that do not meet these criteria to discuss whether Membership should continue

# World Economic Forum support team

- **Overall Lead**  
**Dominic Waughray, Senior Director Environment Initiative**  
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- **Country work lead and G2A2 coordinator**  
**Brindusa Fidanza, Associate Director**  
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