USAID
FROM THE AMERICAN PEOPLE

CEADIR
Climate Economic Analysis for Development, Investment, and Resilience

Discussion Series

Navigating the Climate Economy: Investing for Growth and Resilience

Effective Financial Instruments, Post Paris

October 22, 2015
Crown Agents, Washington, DC

Moderator:
Alan Miller,
CEADIR Climate Finance Lead

Speakers:
Stacy Swann, *Climate Finance Advisors*
Maria Netto, *Inter-American Development Bank*

Agenda

Welcome to the CEADIR Series

Dr. Marcia Trump, *CEADIR Chief of Party,* Abt Associates

Finance and Private Investment Needs Beyond COP21

Alan Miller, *Climate Finance Lead,* CEADIR project

Evolving Private Sector Financing Mechanisms

Stacy Swann, *Founding Partner,* Climate Finance Advisors

Leveraging Finance to Scale Up Pilot Projects

Maria Netto, *Financial Institutions Lead Specialist,*
Inter-American Development Bank

Open Forum

Finance and Private Investment Needs Beyond COP21

Alan Miller

Climate Finance Lead

CEADIR project

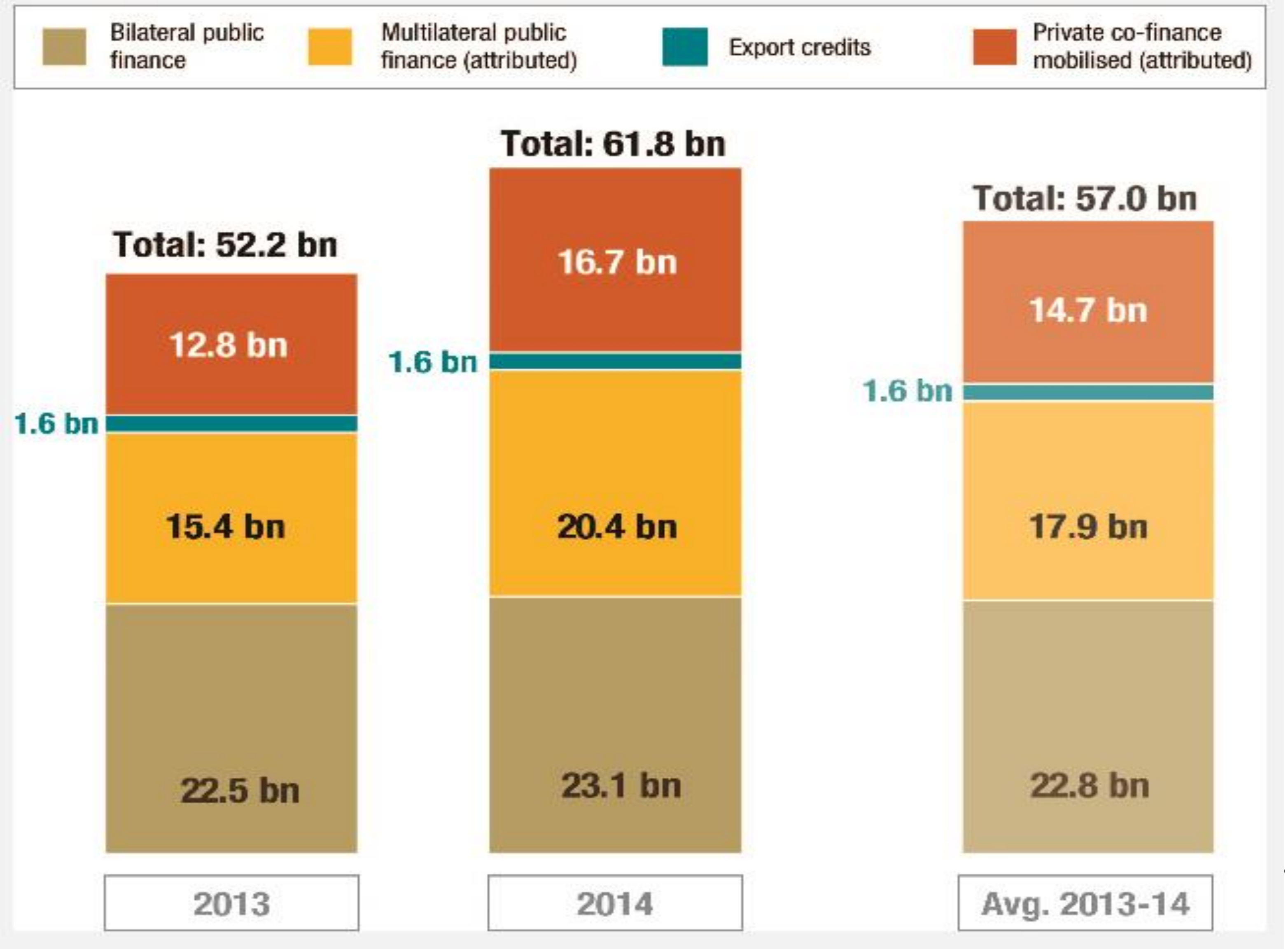
- Climate change and global environmental expert with more than 30 years' experience.
- Served as Principal Climate Change Specialist for the International Finance Corporation (IFC).
- Previously, team leader for Climate Change at the Global Environment Facility.
- Widely published author on climate change, energy, and development.

The Finance Issue at COP 21

"In particular, developed countries need to provide clear, reassuring information about the implementation of their commitment to mobilize $100 billion a year by 2020 from a variety of sources, public and private, bilateral and multilateral, including alternative sources of financing, to support climate change adaptation and mitigation actions in developing countries."

From a 2014 letter to the OECD from the presidents of COP 20 (Peru) and 21 (France)

Mobilizing Public Climate Finance and Private Co-Finance



Source: Breakdown of climate finance in 2013, 2014 and the average over 2013-2014 (USD billions) OECD/CPI, Oct. 2015

Halfway to the Goal Already–Good or Bad News? What Are We Counting and Is It a Good Measure?

- “The key conclusion is that there is significant progress towards the USD 100 billion goal. . . .Bilateral climate finance forms the largest source of finance over this period, and is significantly higher in 2013-14 than reported in 2011-12 owing both to real increase in finance as well as increase in reporting coverage.

- From these partial figures it is not possible to draw general conclusions regarding the overall ability of public finance to mobilize private finance [26% of the total] or about the balance of public and private in future flows. The extent to which mobilization of private finance happens depends on many factors, including the enabling conditions and sector-specific policies in the recipient country, the institution providing the finance, the type of instrument, and the purpose for which public finance is being made available.” (OECD/CPI, 2015)

Not Enough to Address the Needs

- IEA, World Energy Investment Outlook 2014: The investment path traced in the report falls well short of reaching climate stabilization goals.
  - $53 trillion in cumulative investment in energy supply and in energy efficiency is required by 2035 to get the world onto a 2 °C emissions path.
  - Investment of $14 trillion in efficiency helps to lower 2035 energy consumption by almost 15%.
  - Consistent policy signals and innovative financing vehicles essential for investment in low-carbon energy supply rise to almost $900 billion.
  - Spending on energy efficiency to exceed $1 trillion per year by 2035, double the respective amounts in the main scenario.

- UNEP, Adaptation Gap Report 2014: By 2050, developing countries will need to invest $250 to $500 billion in adaptation annually.

Greater Amounts Continue to Be Invested in Fossil Fuels

- Capital expenditures (CAPEX) for global exploration and production spending on oil and gas declining over $30 billion this year, over 20%, to about $590 billion.
- To rise again will require oil prices to stabilize at or above the $65 to $70/bbl (Rigzone, 6/17/2015).
- "*Climate change is the tragedy of the horizon…The horizon for monetary policy extends out to 2-3 years. For financial stability it is a bit longer, but typically only…about a decade. In other words, once climate change becomes a defining issue for financial stability, it may already be too late*." Mark Carney, Governor Bank of England, and Chairman, Global Financial Stability Board

Redirecting Large-Scale Investment from “Brown” to “Green”

- New UNEP Inquiry on aligning the financial system with sustainable development:
  - High level input over two years from across the international financial system.
  - Highlights many innovative public and private initiatives to ‘green’ investment.
  - Conclusion: a “quiet revolution” is underway as financial policymakers and regulators take steps to integrate sustainable development considerations into financial systems.
- But, time is not on our side!!!

Evolving Private Sector Financing Mechanisms

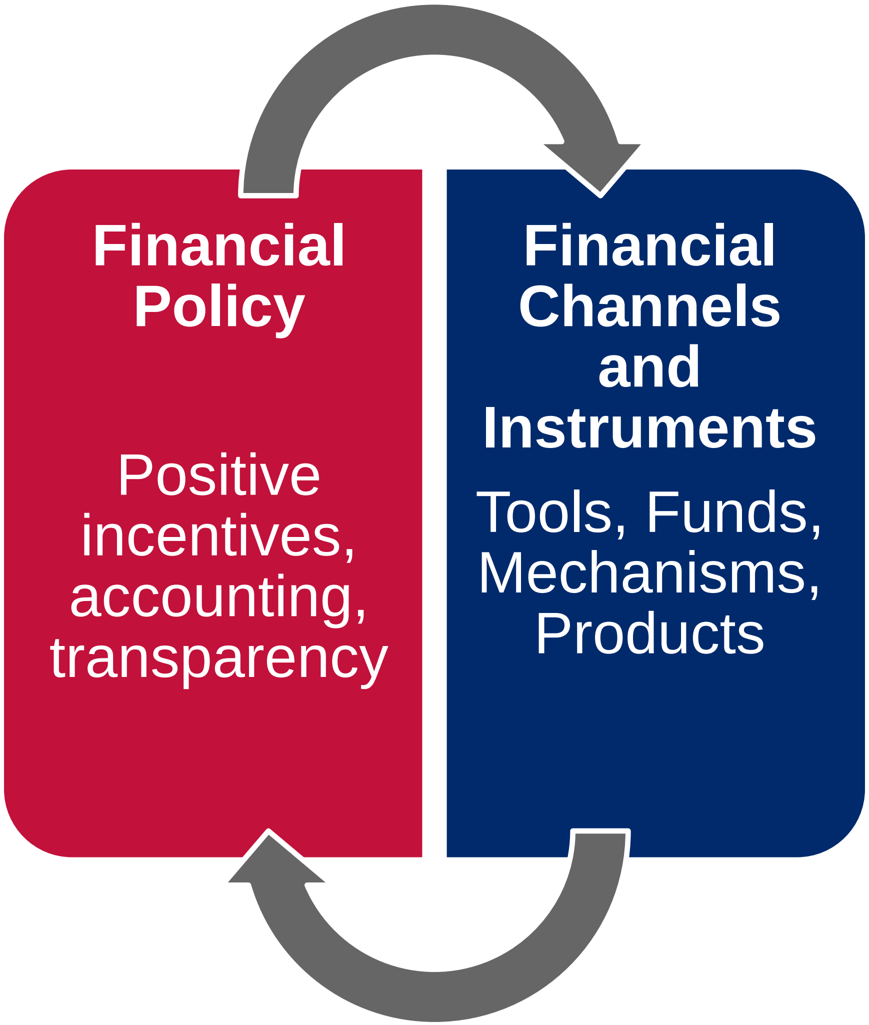
Stacy Swann

Founding Partner

Climate Finance Advisors

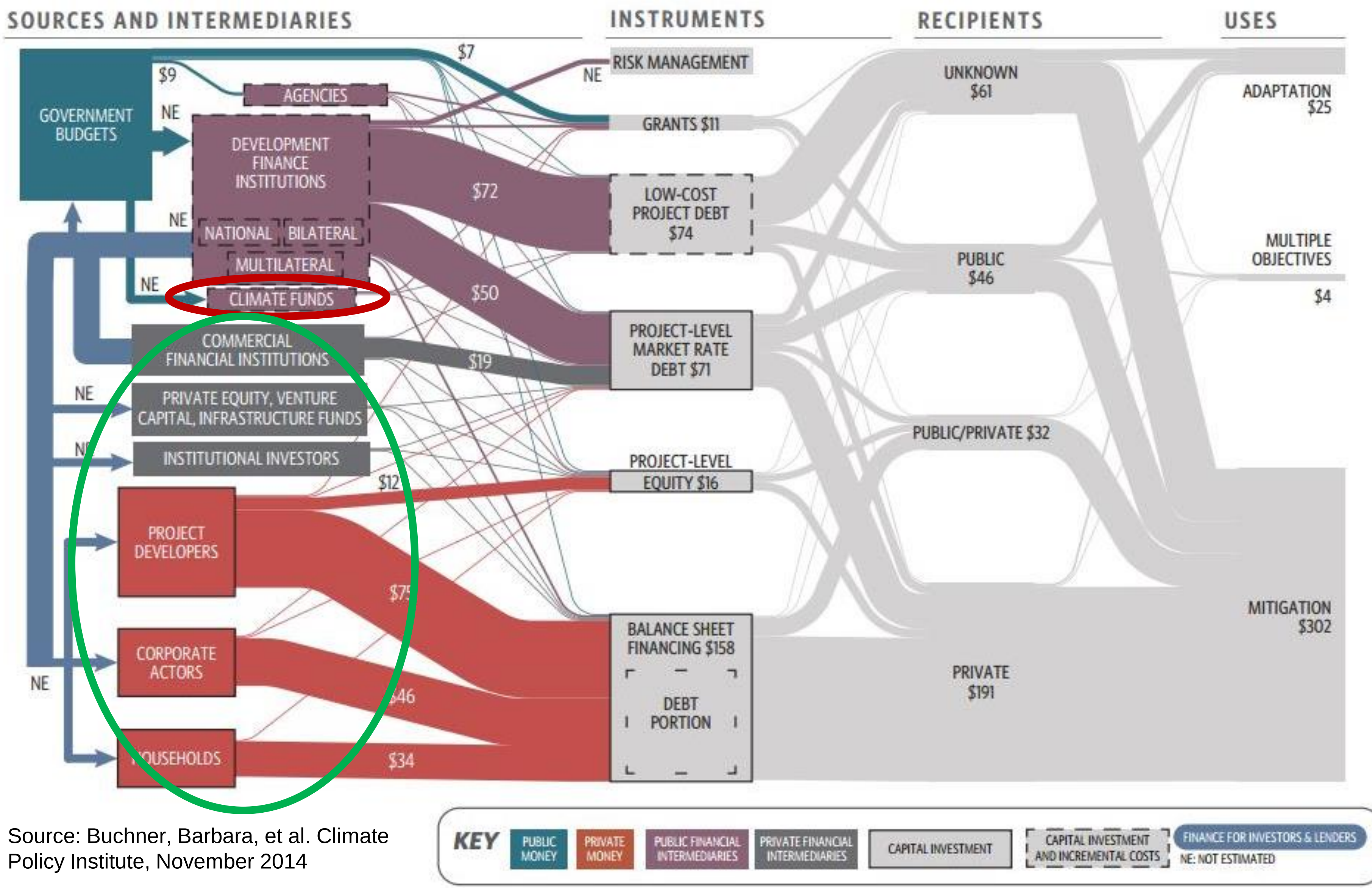
- Over 18 years of experience in finance and fund management and development.
- Previously with the International Finance Corporation (IFC). Ms. Swann developed policies to blend public funds and catalyze private sector investment. Managed over $750 million in donor funds for climate-smart investments.
- At the World Bank, supported work with policy makers on climate finance and fiscal policy to manage climate risks.

Investment at Scale Requires Simultaneous Action



1. Ensuring financial policies are aligned to promote systemic shifts
2. Ensuring international financing channels and instruments leverage private capital and maximize impact

Landscape of Climate Finance 2014



Source: Buchner, Barbara, et al. Climate Policy Institute, November 2014

Channels: Funds, Vehicles, Mechanisms

- Existing 'official' climate finance architecture is one part of the larger financial ecosystem
  - All channels have a role to play
- Existing multilateral channels could be better
  - **Pros**: Useful for projects/programs, technical assistance, technological and financial innovation
  - **Cons:** Inefficient, slow, and bureaucratic
- Many bi-lateral public channels
  - E.g., USAID, MCC, DFID, some Fast Start allocations

KEY FOR ALL CHANNELS
Use scarce public funds to "crowd-in" additional private capital

Channels: Funds, Vehicles, Mechanisms

Many types of financial institutions part of "ecosystem"

- Pension funds
- Institutional investors
- Private equity/venture capital

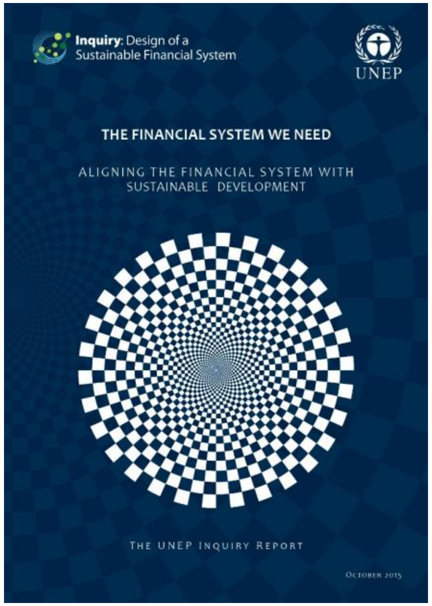
- Significant capital/assets under management
- Discussions about "scaling up" flows have been "in the abstract"
  - Little actual capital from these sources flowing to new markets
- Moving this capital will require:
  - Vehicles that accommodate restrictions (e.g., layered funds, risk sharing)
  - Products, tools to address key barriers

Simultaneous Policy–Financial Policy

- How the financial system supports scaling up climate-related financing
  1. Incentives/Disincentives
     - Incentives
       - Tax policies, credits
         - Preferential treatment
     - Disincentives
       - Carbon pricing
  2. Understanding and managing climate risk
     - Where is it?
     - What is the economic, financial exposure?
     - How should it be managed?

"In other words, once climate change becomes a defining issue for financial stability, it may already be too late."

-Mark Carney, Governor Bank of England



Paris: Just the Start

Or…the end of the beginning…..

- Simultaneous effort
  - Financial mechanisms/instruments
  - Financial policy
- Financial mechanisms & investment options
  - INDCs
  - SDGs, development finance & climate coming together
- Financial Policy
  - Role of G20, FSB on the global level
  - Country level leadership (e.g., China, Brazil, others?)

PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

Source: UNFCCC

Leveraging Finance to Scale Up Pilot Projects

Maria Netto

Financial Institutions Lead Specialist

Inter-American Development Bank (IDB)

- Economist, Master's degree from the Institute of International Studies of Geneva.
- Previously worked the United Nations Development Programme (UNDP) assisting countries to assess investments and financial flows to address climate change.
- Worked for more than 10 years on climate and carbon finance for the UN Framework Convention on Climate Change (UNFCCC).

Using Financial Institutions and Capital Markets to Scale Up Private Investment

Why?

- Management of financial risks
- New business opportunities
- Financial return
- Reputation and public image

Depends on whom.

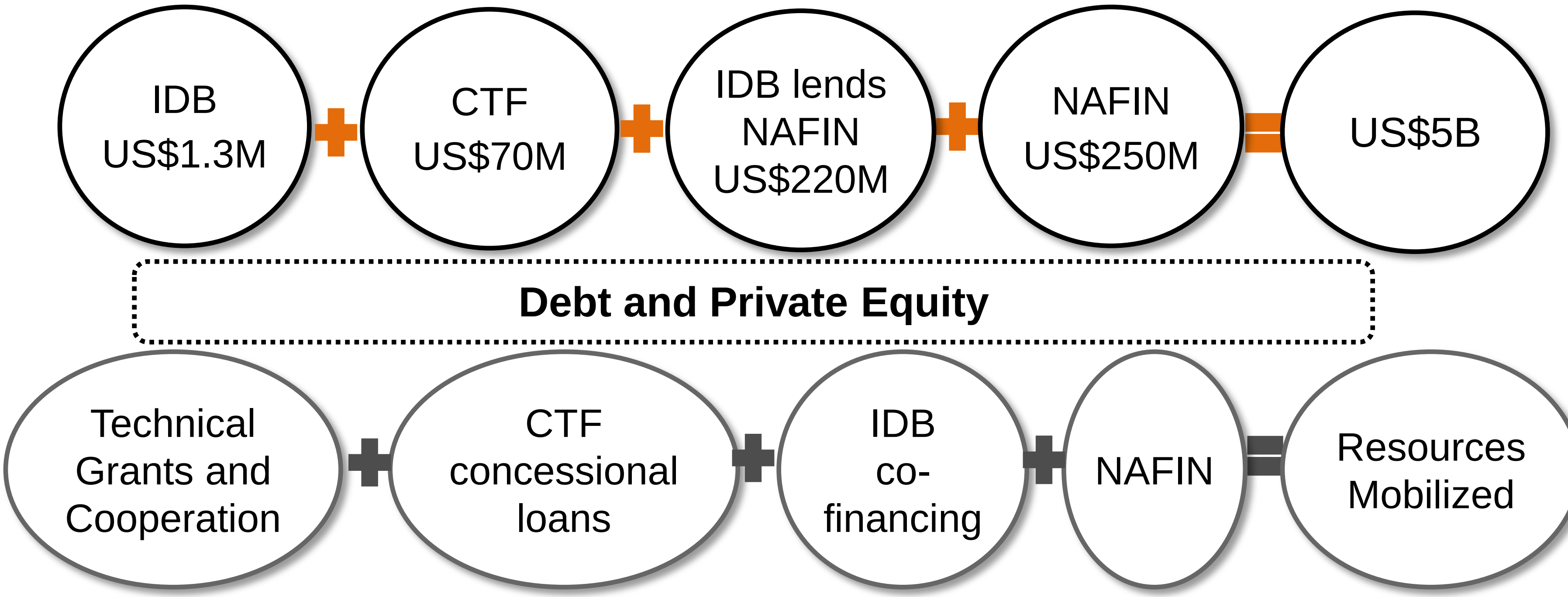
- Institutional investors/ pension funds
- Commercial banks
- Public banks
- Trust funds
- Insurance and re-insurance

Potential: LAC National Development Banks Example

Potential: LAC National Development Banks Example

Category of Instrument		Leverage Factor
Tier 1	Non-concessional debt	2-5 x
	Debt financed via grants	8-10 x
Tier 2	Non-concessional debt	1 x
	Debt financed via grants	4-8 x
Tier 1	Direct Equity	12-15 x
	Equity financed via grants	20 x
Tier 2	Direct Equity	12-15 x
	Equity financed via grants	N/A
	Guarantee at non-concessional rates	4-8 x
	Guarantees financed via grants	25 x

Potential: LAC National Development Banks Example



Who, What, Why and When of Climate Risks

Who is exposed to risks?

- Financial intermediary perspective (e.g., credit risk).
- Institutional investor
- Equity investor/end user
- Technology provider

What are categories of risks

- Construction risk
- Market risk
- Credit risk
- Technology risk
- Currency risk
- Political, policy, and regulatory risk
- Disaster, environmental and social risks

Who, What, Why and When of Climate Risks

Why are CC investments more risky?

- High up-front costs
- New technologies
- Market demand uncertain
- Long time-horizon of investments
- Policies favor incumbents

When do risks appear?

- Different stages in investment cycle
- Different stages of market development
- Sectors and technologies

Where is De-risking Relevant?

Small-scale or distributed solutions, e.g., EE and renewable energy

- Households
- Commercial and industrial SMEs
- Agriculture and forestry
- Larger industry
- Public sector services (buildings, municipal lighting)

Infrastructure

- Transport infrastructure and systems
- Electricity generation, transmission and distribution
- Water and sanitation
- Waste

"DE-RISKING"
The activity or series of activities which reduces or lowers investment risk in any given situation.

The Toolbox of De-risking Instruments

Financial

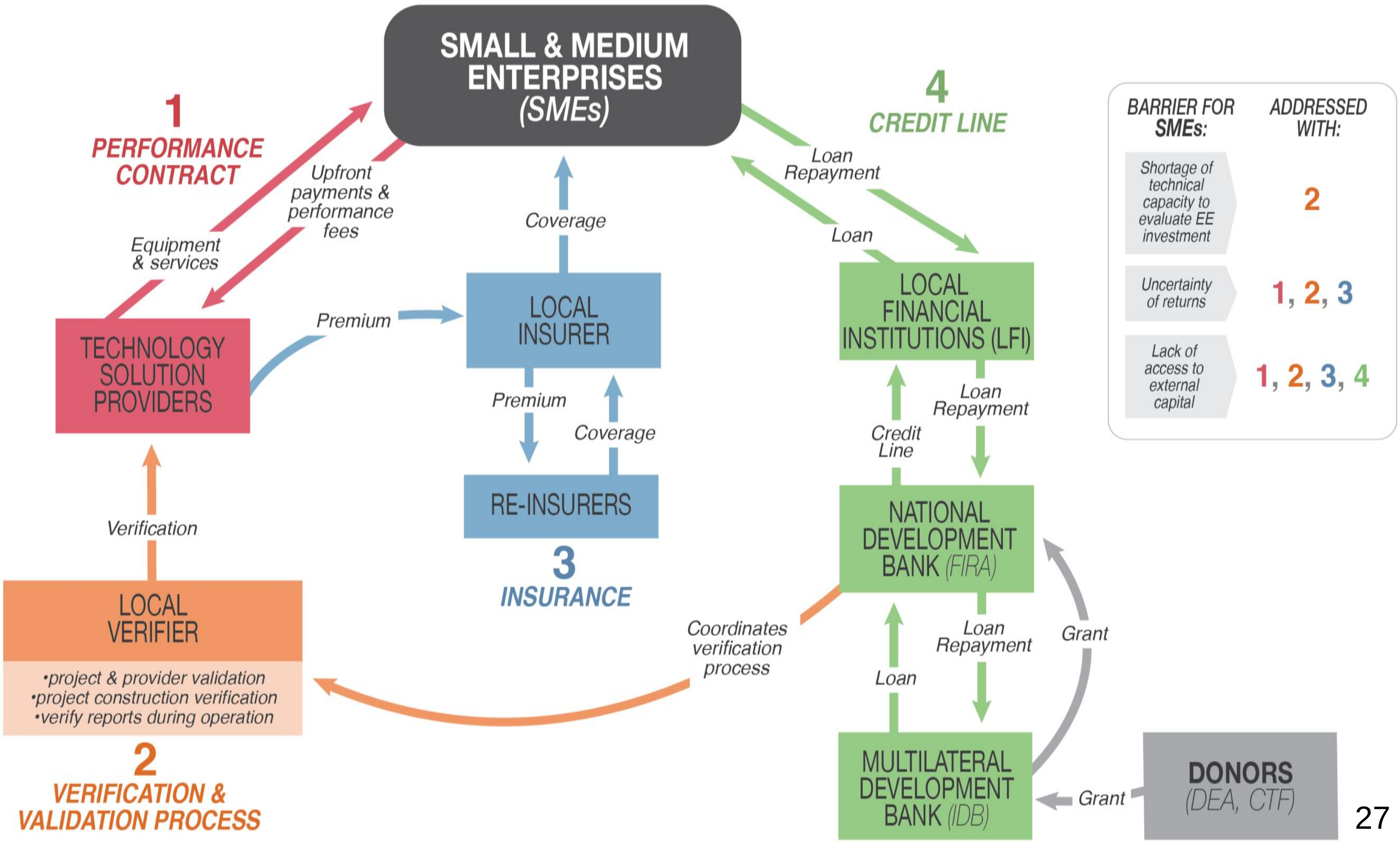
- Guarantees and insurance products
- Partial credit guarantees
  - Performance guarantee and insurance
  - Project completion
  - Political risk
  - Policy and regulatory risk
- Debt subordination
- Loan loss reserves (first loss)
- Currency risk
- Cornerstone/subordinated equity
- Public investment funds

The Toolbox of De-risking Instruments

Non-financial

- Contractual provisions
- Regulatory provisions
- Technology norms and standards
- Third-party validation and verification
- Access to information, knowledge-sharing
- Advance market commitment
- Institutional development and capacity-building

IDB Energy Savings Insurance in Colombia



Source: Inter-American Development Bank

IDB Climate Risk Insurance in Bolivia

Catastrophic risks

Risks not manageable by producers

Risk transfer

International re-insurance

Contingent fund

Local insurance market

Risks manageable by producers

Risk retention

Investments in adaptation technologies and measures

Promote participation of private insurers

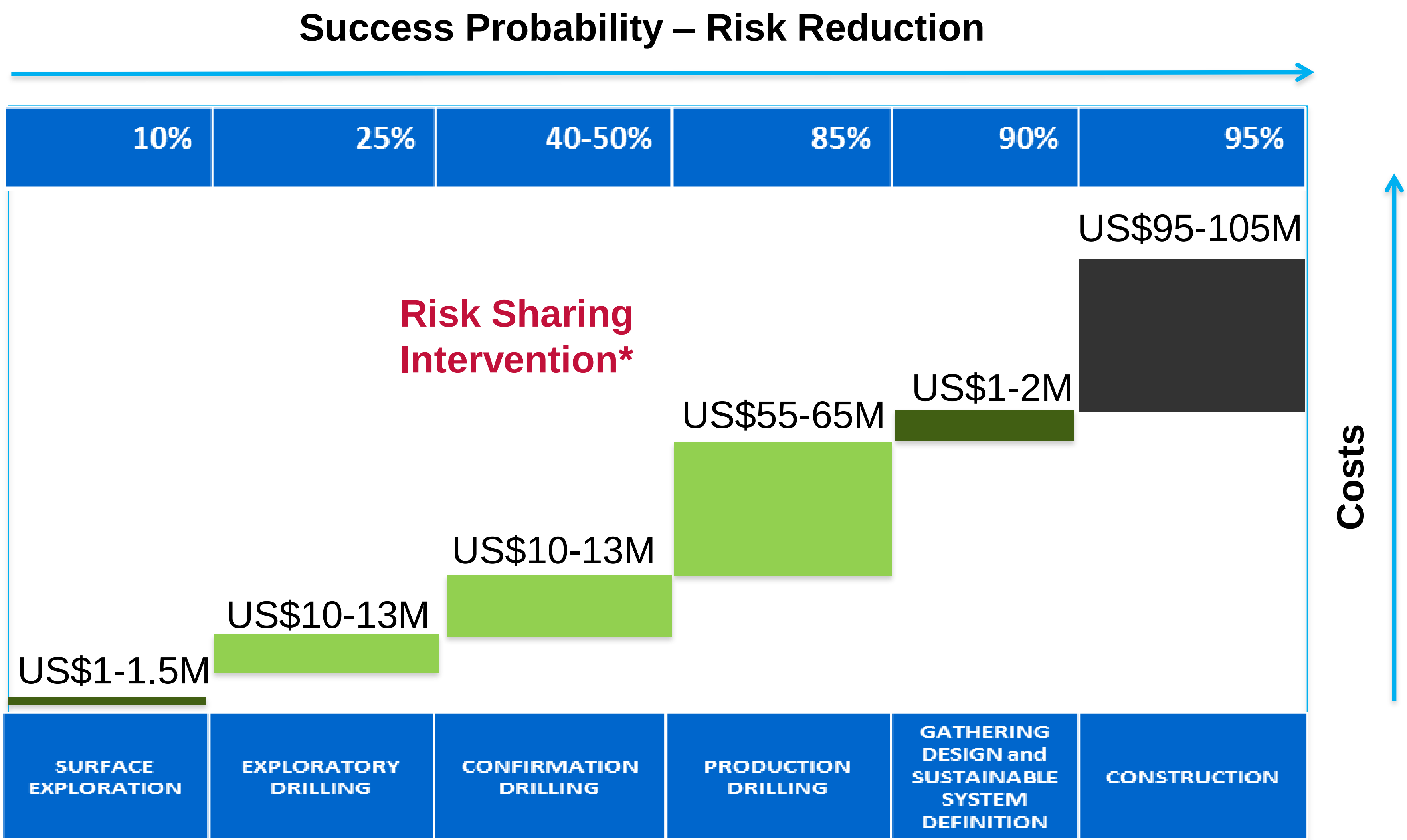
Generate productive Information

Reduce transaction costs

Financial education of producers

Source: Inter-American Development Bank

IDB Geothermal Risk Sharing in Mexico



*Example ±$175-200M Standard 40MW plant

Source: Inter-American Development Bank

Q&A Session

Alan Miller
Climate Finance Lead

CEADIR project

Stacy Swann
Founding Partner

Climate Finance Advisors

Maria Netto
Financial Institutions Lead Specialist

IDB

About CEADIR

***CEADIR** supports countries to assess and scale up low-carbon, climate resilient development.*

CEADIR covers three thematic pillars of USG climate change strategy:

Adaptation

Clean Energy

Sustainable Landscapes

CEADIR Series

- **Expert dialogues**
- **Critical issues**
- **Economic analysis**
- **Financing climate change**

Up Next

- A recording and copy of today's presentation will be sent to all attendees.
- Listen to previous CEADIR discussions on Climatelinks YouTube page.
- Additional questions?
  - Dr. Marcia Trump, Chief of Party, CEADIR project, marcia_trump@abtassoc.com
  - Robert Voetsch, Project Manager, CEADIR project, rvoetsch@crownagents.com

Up next in the *Navigating the Climate Economy* discussion series:

Financing Adaptation in Vulnerable Countries
Wednesday, November 18 at 9am Eastern

For more information, visit
https://ceadirseries.adobeconnect.com/admin/show-event-catalog

Presentation References

- Boman, Karen, *Mid-Year Survey Projects Much Improved E&P Spending Outlook in 2016*, Rigzone, June 17, 2015. http://www.rigzone.com/news/oil_gas/a/139184/MidYear_Survey_Projects_Much_Improved_EP_Spending_Outlook_in_2016
- Buchner, Barbara, Martin Stadelmann, Jane Wilkinson, Federico Mazza, Anja Rosenberg, and Dario Abramskiehn. *The Global Landscape of Climate Finance 2014*, Climate Policy Institute, November 2014.
- Carney, Mark. Speech given at Lloyd's of London. September 29, 2015. http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx
- Inter-American Development Bank, The Global Innovation Lab for Climate Finance, *Energy Savings Insurance*, May 2015. http://climatefinancelab.org/wp-content/uploads/2015/05/Energy-Savings-Insurance-Overview.pdf
- International Energy Agency (IEA), *World Energy Investment Outlook 2014*, https://www.iea.org/publications/freepublications/publication/WEIO2014.pdf
- Organisation for Economic Co-operation and Development (OECD), Climate Policy Institute (CPI), *Climate Finance in 2013-14 and the USD 100 billion goal*, October 2015, http://www.oecd.org/environment/cc/oecd-cpi-climate-finance-report.htm
- United Nations Environment Programme (UNEP), *Adaptation Gap Report 2014*, November 2014, http://www.unep.org/climatechange/adaptation/gapreport2014/portals/50270/pdf/AGR_FULL_REPORT.pdf
- United Nations Environment Programme (UNEP), *The Financial System We Need: Aligning the financial system with sustainable development*, October 2015. http://web.unep.org/inquiry/publications