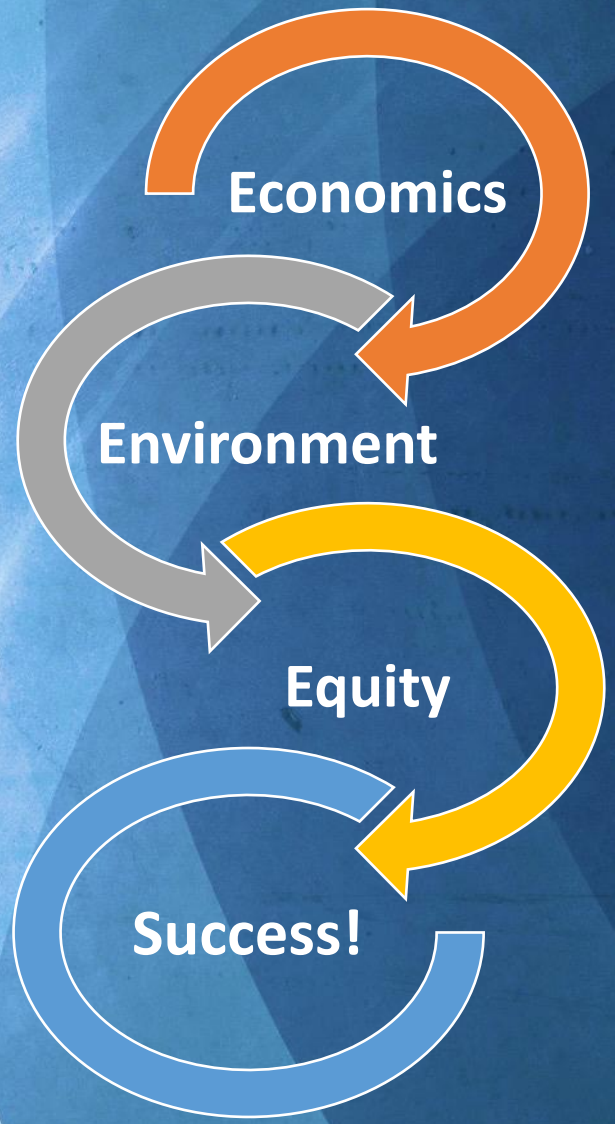

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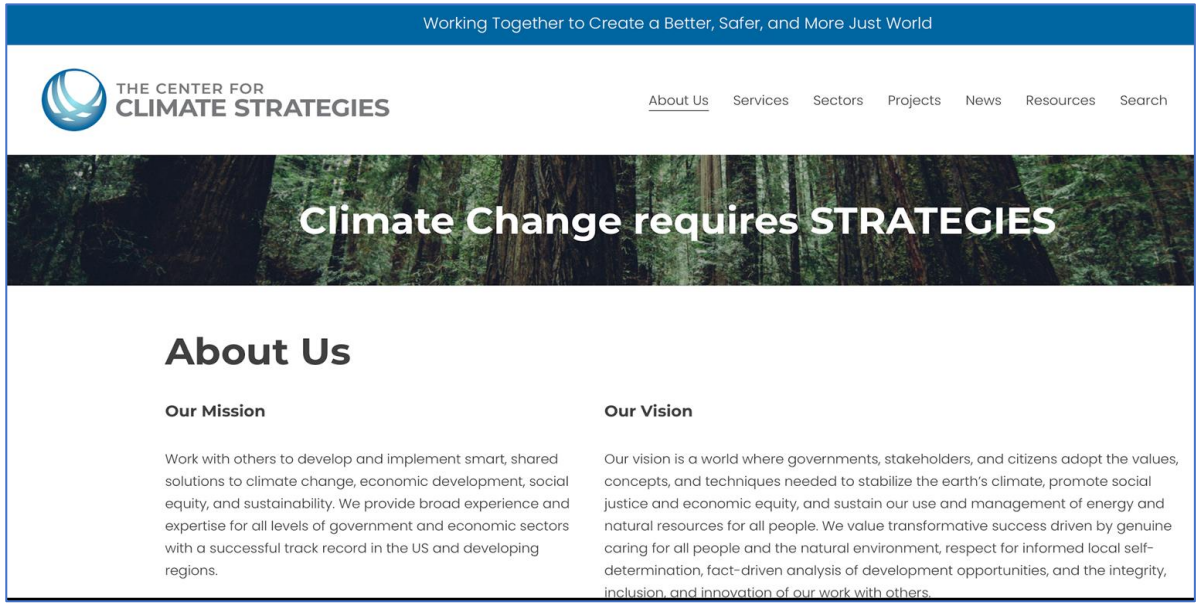
Global Dialogue on the Impacts of the Implementation of Response Measures 2024

Strategies for maximizing co-benefits and minimizing negative impacts in the design and implementation of NDCs

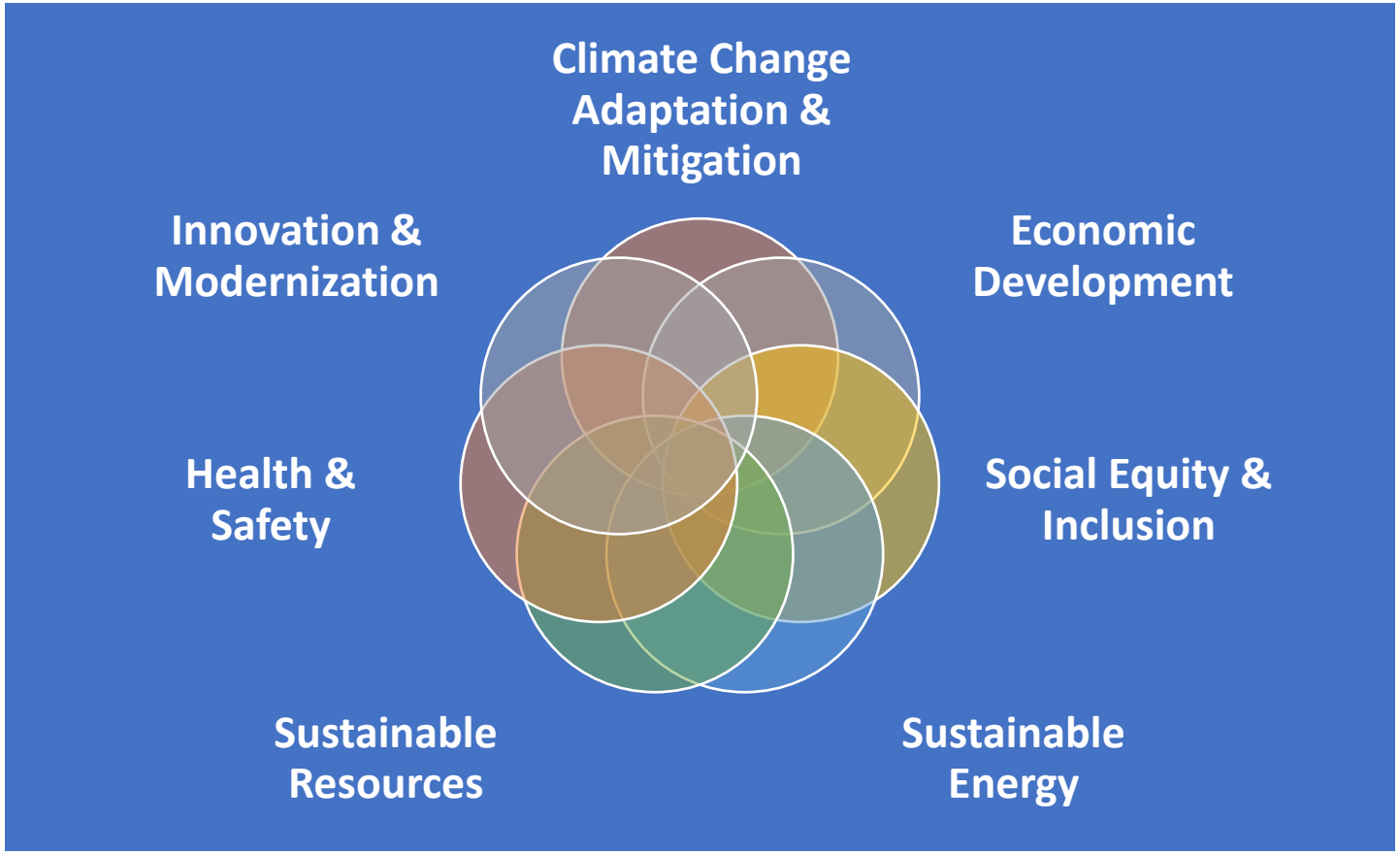
Tom Peterson
President and CEO
The Center for Climate Strategies
September 11, 2024

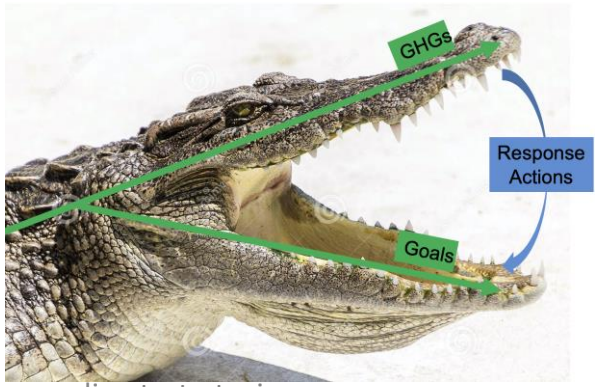
The Center for Climate Strategies, Inc. (CCS)

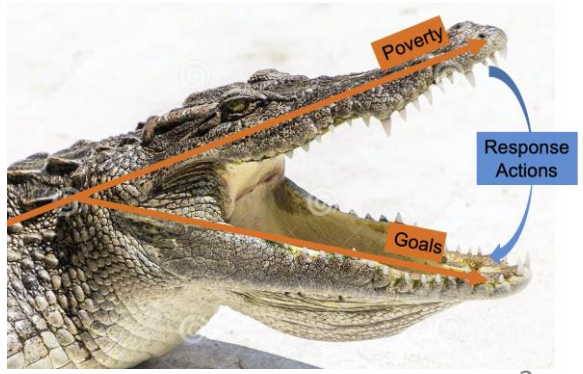
- Founded in 2004, non-partisan, international nonprofit
- Leading catalyst for public and private sector cooperation
- Development and implementation of actions at scale
- Expert training, capacity building, and deployment
- Multi-objective, participatory, decisions, design, analysis
- 100+ high impact national, subnational projects
- Key Regions of the World – Africa, Asia, Europe, Latin America, Middle East, United States



Multi-objective Approach







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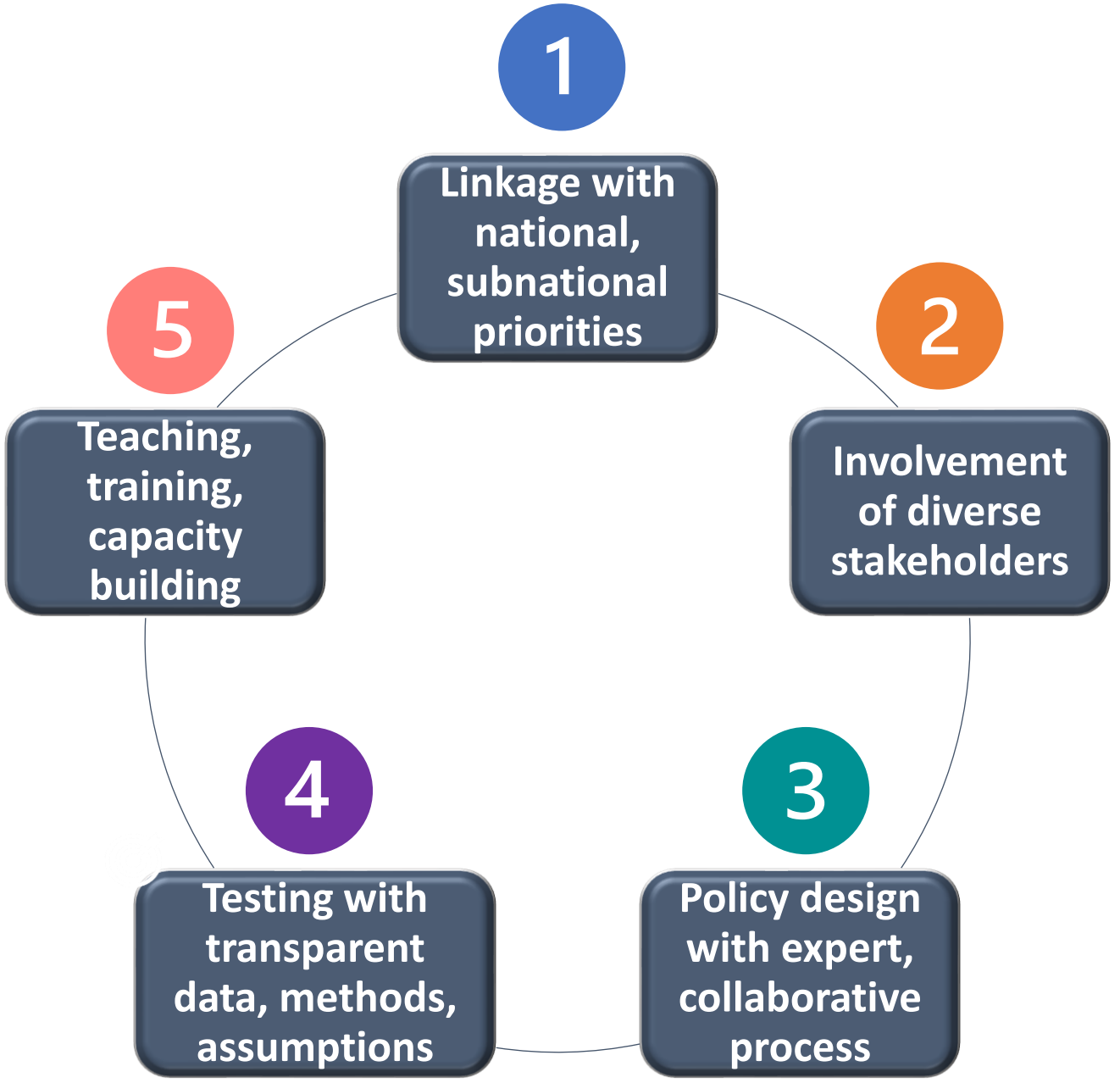
How to Achieve Multiple Objectives



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Example of Multi-objective Approach

US Inflation Reduction Act, Greenhouse Gas Reduction Fund

Multi-objective Policy & Investment

ADDITIONAL INFORMATION PROVIDED ON EPA.GOV/GGRF

EPA

EACH SELECTED APPLICANT PROPOSED UNIQUE PROGRAMS THAT ARE RESPONSIVE TO SPECIFIC MARKET CONDITIONS

Example program impacts sampled from the 60 Solar for All selected applicants

Meaningful benefits

Household savings

Solar for All will expand equitable access to solar by providing grants, low-cost capital, and technical assistance to projects, communities, and developers.

All selected applicants have committed to delivering **at least 20% cost savings** to all households who will benefit from their program.

Clean Energy Economy

Selected applicants will help develop a clean energy economy built on **strong labor standards, supports for domestic manufacturing and inclusive economic opportunity for all communities.**

All selected applicants will fund workforce development programs that expand equitable pathways into family-sustaining jobs.

Low-income and disadvantaged communities

Overburdened communities

Solar for All selected applicants prioritize historically overburdened communities including **energy communities, rural cooperatives, industrial communities, Tribal communities, and environmental justice communities.**

As the United States shifts to a cleaner economy, it is vital that no communities get left behind.

Affordable housing

Selected applicants **proposed dedicated strategies to deploy solar for households in federally-supported housing.**

The plans are designed to reduce energy costs and increase resilie
delivering elec

Solar For All Program

Linkage with National Priorities

Rwanda Case Study

Rwnada's National Strategy for Transformation

Economic Transformation

- Accelerate **private- sector-led economic growth** and productivity
- E.g., sustainable urbanization, productivity of agriculture and livestock, sustainable management of the environment and natural resources towards a green economy

Social Transformation

- **Universal access** to affordable, adequate infrastructure, services

Transformational Governance

- Equitable, transformational, sustainable national development

USAID Power Africa, East Africa Energy Program

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Linkage with National Priorities

Rwanda Case Study

Low-emission Strategy	Co-benefits
Expand Electrification of Rural Areas through **mini-grid, solar home systems**	• Increase energy access • Improve air quality • Improve education and health • Improve productivity and livelihood
Agro-voltaic technologies that allow use of the same land for agriculture and solar photovoltaic power systems	• Avoid CO_2 emissions by displacing fossil-based generation • Local electricity generation to support agriculture activities (e.g., food processing and storage) and population and economic growth • Benefits target specific rural area
Soil Management to **reduce tillage or no-till cultivation** on maize/sorghum; expand multi-cropping of bananas and coffee, terracing, and crop rotations	• Increase carbon sequestration • Increase climate resilience • Increase local supply • Increase jobs

USAID Power Africa, East Africa Energy Program

Stakeholder Engagement

Guatemala Case Study

Multi Criteria Screening & Policy Design

MCA Rating for Residential Solar Technology

3. Please provide a rate on each of the criteria for every Residential Solar technology listed below, based on the importance, status, and impacts of the technology on those criteria. *

	Solar Supply potential	Greenhouse gas reduction potential	Economic Development (GDP impacts, jobs, or sector-specific goals)	Financing potential and feasibility	Costs and savings (cost-effectiveness)	Energy diversity
Residential -PV-Rooftop - Fixed	High	Medium	Low	Uncertain	-- Please Select --	-- Please Select --
Residential -PV-Open Space-Fixed	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --
Residential -PV-Open Space-One-axis Tracking	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --
Residential -PV-Open Space-Dual-axis Tracking	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --	-- Please Select --

Low Emissions Development Strategy

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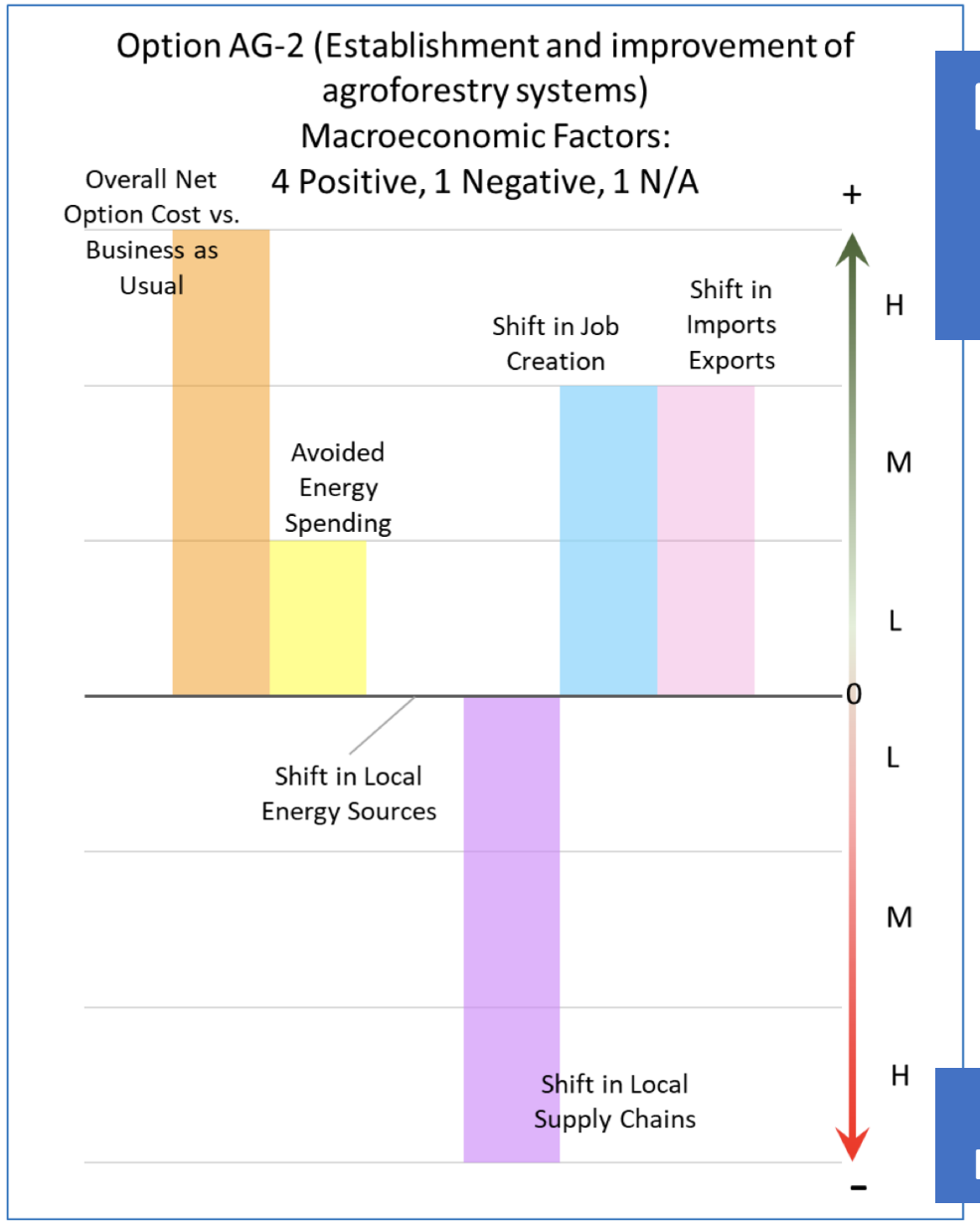
Stakeholder Engagement

Guatemala Case Study

Figure V.A-3. Example Results from the Qualitative Macroeconomic Assessment



Macroeconomic Indicators Assessment

Low Emissions Development Strategy

Transparent Methodology and Tools

Cote d'Ivoire Case Study

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Linked Modeling Tool

Analysis Phase	Tools	Notes
Baseline Impacts **Forecasted reference case of key metrics**	**LEAP** **ArcGIS** **CCS Analytical Toolkit** **Soft Link**	LEAP covers energy and some resource sectors (agriculture) CCS Analytical Toolkit covers FOLU and Waste Management sectors not covered under LEAP and EX-ACT (EX-ACT is not designed to develop baseline) ArcGIS already in use in the country to support as needed.
Direct Impacts **(GHGs, energy/resource shifts, net costs/savings)** **Assessment of Component 1**	**LEAP** **ArcGIS** **EX-ACT** **CCS Analytical Toolkit** **Soft Link**	LEAP covers energy and some resource sectors (agriculture, waste management) EX-ACT covers FOLU sector CCS Analytical Toolkit as backstopping GIS support as needed
Indirect Impacts **(Socio-economic impacts, i.e., GDP, jobs, income** **Assessment of Component 1**	**CCS Macroeconomic Indicators Tool** **Additional Macro Model TBD (T21, iJEDI, or GTAP)** **Soft Link**	CCS Macroeconomic Indicators Tool is coupled with a macroeconomic systems model in coordination with local team after further assessment on the time required for startup, public access of the model (open source), cost, and other key issues
LEAP serves as the platform for synthesis/integration of all results		

Africa LEDS Project

Training & Capacity Building

Bilateral Cooperation

- Technical team formation
- Tool & template development
- Up-front teaching and training
- Project based learning by doing

US-China Subnational Low Carbon Development

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Thank You!

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