

THE CENTER FOR
CLIMATE STRATEGIES

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**

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President and CEO
The Center for Climate Strategies
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The Center for Climate Strategies, Inc. (CCS)

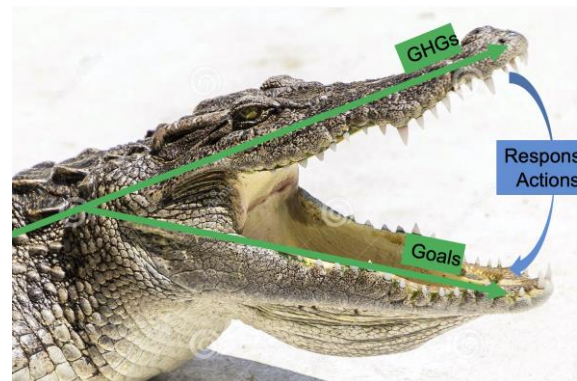
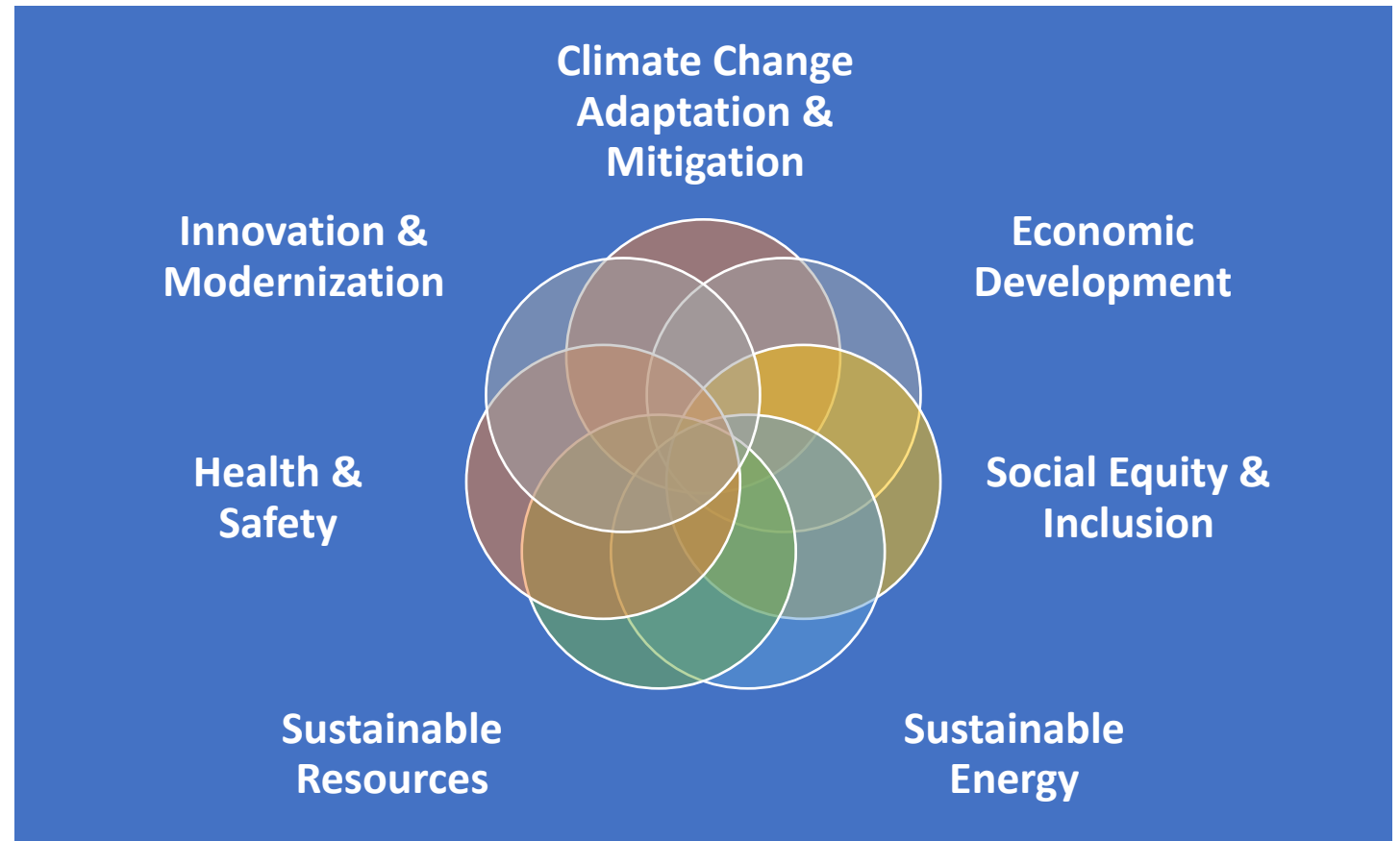


- ✓ Founded in 2004, non-partisan, international nonprofit
- ✓ Leading catalyst for public and private sector cooperation
- ✓ Development and implementation of actions at scale
- ✓ Expert training, capacity building, and deployment
- ✓ Multi-objective, participatory, decisions, design, analysis
- ✓ 100+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



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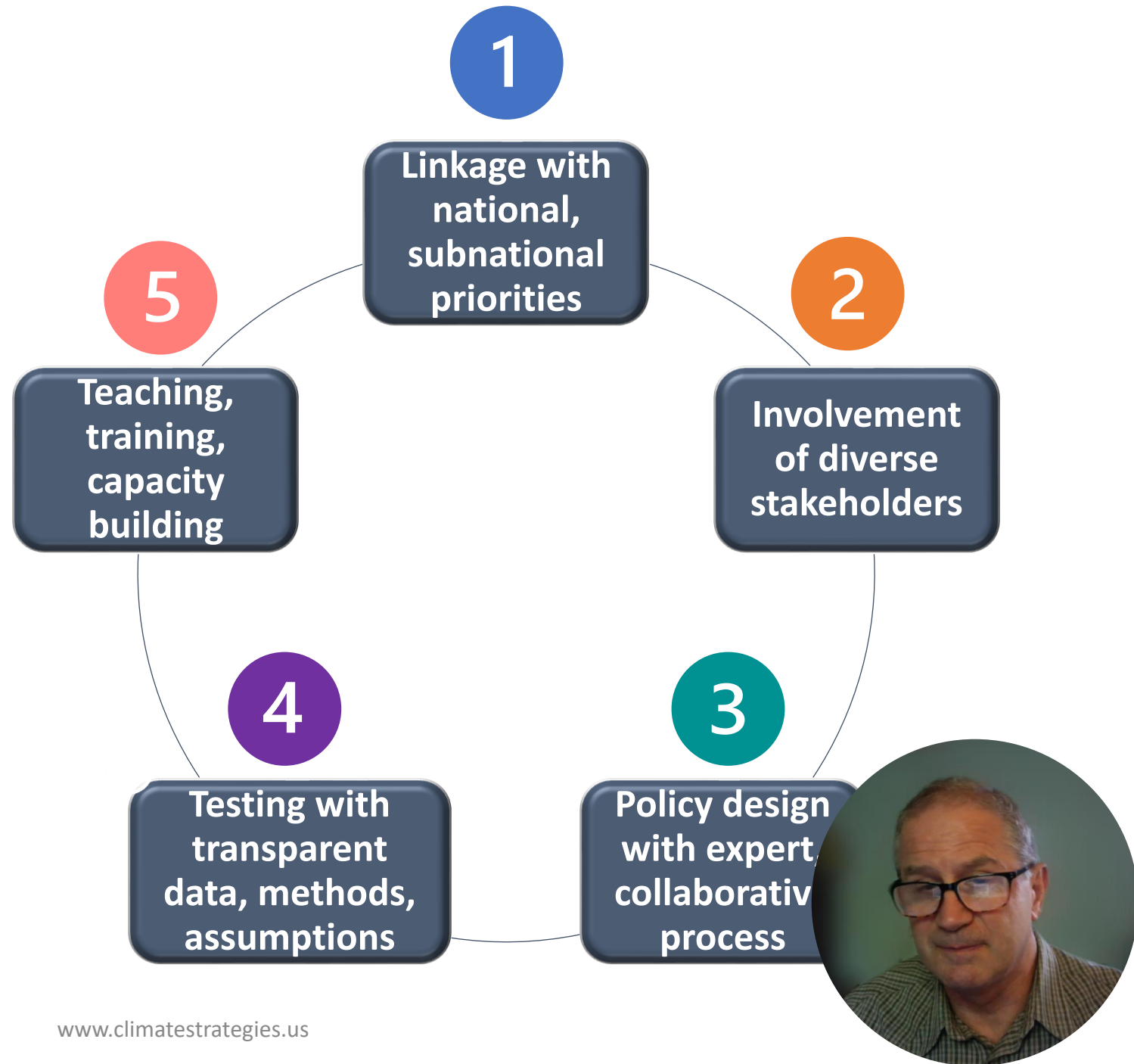
Multi-objective Approach



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How to Achieve Multiple Objectives



Example of Multi-objective Approach

US Inflation Reduction Act, Greenhouse Gas Reduction Fund

Multi-objective Policy & Investment

ADDITIONAL INFORMATION PROVIDED ON EPA.GOV/GGRF



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.



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 strategies to deploy solar for housing supported housing.**

The plans are designed to increase resilience and delivering electricity



Linkage with National Priorities

Rwanda Case Study

Rwanda's National Strategy for Transformation

Economic Transformation

- Accelerate **private- sector-led economic growth** and productivity
- 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 de



Linkage with National Priorities

Rwanda Case Study

Low-emission Strategy	Co-benefits
Expand Electrification of Rural Areas through mini-grid, solar home systems	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Avoid CO₂ 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	<ul style="list-style-type: none"> • Increase carbon sequestration • Increase climate resilience • Increase local supply • Increase jobs



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	<input type="text" value="High"/>	<input type="text" value="Medium"/>	<input type="text" value="Low"/>	<input type="text" value="Uncertain"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>
Residential -PV-Open Space-Fixed	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>
Residential -PV-Open Space-One-axis Tracking	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>
Residential -PV-Open Space-Dual-axis Tracking	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>	<input type="text" value="-- Please Select --"/>

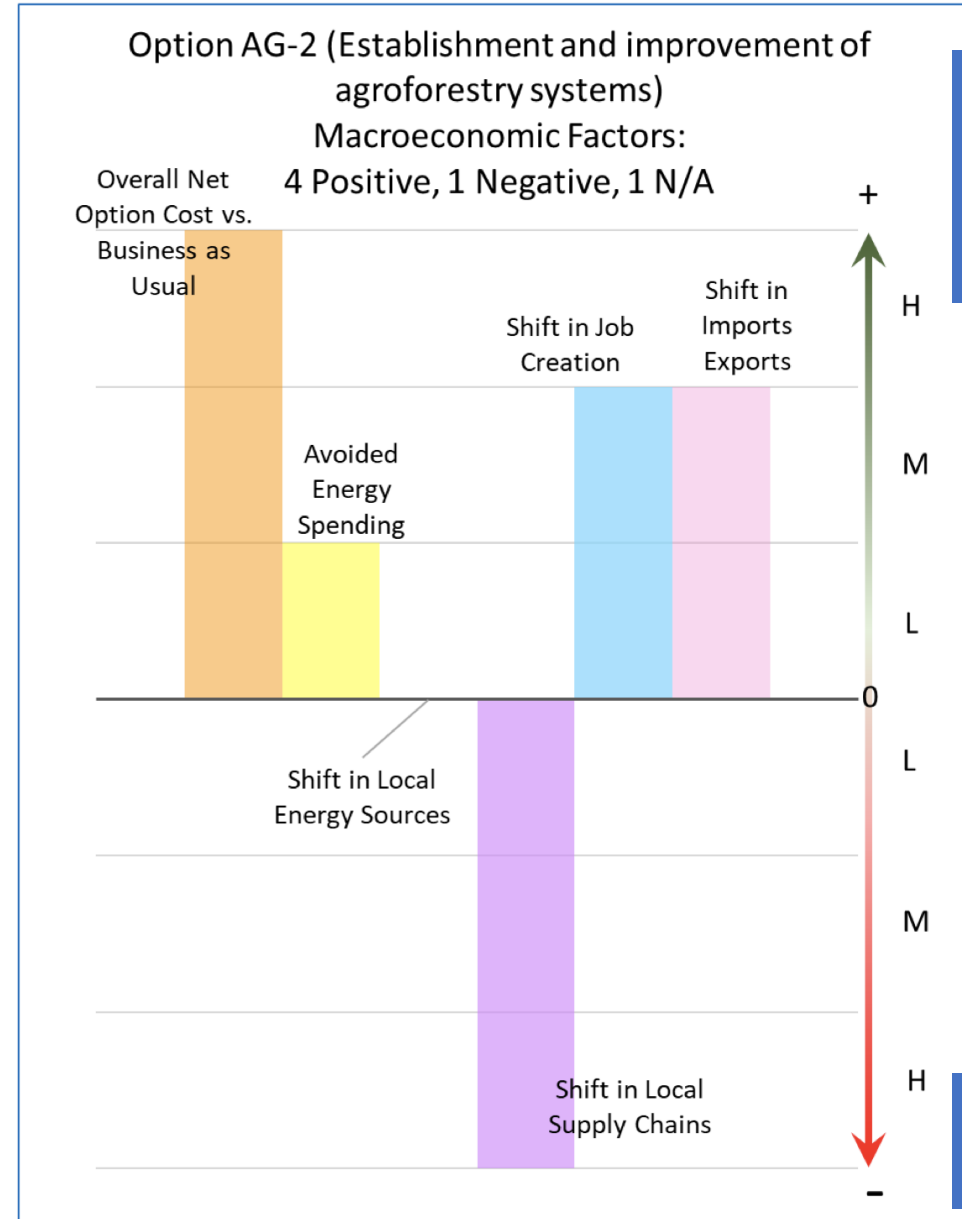
Low
Development



Stakeholder Engagement

Guatemala Case Study

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



Macroeconomic
Indicators
Assessment

Local
Development



Transparent Methodology and Tools

Cote d'Ivoire Case Study

Linked Modeling Tool

Analysis Phase	Tools	Notes
<u>Baseline Impacts</u> Forecasted reference case of key metrics	LEAP* Soft Links ArcGIS CCS Analytical Toolkit	<ul style="list-style-type: none"> • <u>LEAP</u> covers energy and some resource sectors (e.g., agriculture) • <u>CCS Analytical Toolkit</u> covers FOLU and Waste Management sectors not covered under LEAP and <u>EX-ACT</u> (EX-ACT is not designed to develop baseline) • <u>ArcGIS</u> is already in use in the country to support as needed
<u>Direct Impacts</u> (GHGs, energy and resource shifts, net costs/savings) Assessment of Component 1	LEAP Soft Links ArcGIS EX-ACT CCS Analytical Toolkit	<ul style="list-style-type: none"> • <u>LEAP</u> covers energy and some resource sectors (agriculture, waste management) • <u>EX-ACT</u> covers FOLU sector • <u>CCS Analytical Toolkit</u> as backstopping • <u>GIS</u> support as needed
<u>Indirect Impacts</u> (Socio-economic impacts, i.e., GDP, jobs, income) Assessment of Component 1	LEAP Soft Links CCS Macroeconomic Indicators Tool Additional Macro Model TBD (T21, iJEDI, or GTAP)	<ul style="list-style-type: none"> • <u>CCS Macroeconomic Indicators Tool</u> • Coupled with a macroeconomic model after further assessment for startup, public access (source), cost, and other
*LEAP serves as the platform for synthesis/integration of all results		



Training & Capacity Building

Bilateral Cooperation

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



US-China
Carbon





Thank You!

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