

WORKING TOGETHER TO CREATE A BETTER SAFER AND MORE JUST WORLD

# Practical Approaches to Economic Diversification and Transformation

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## **Climate Policy Objectives**

#### **Economic Security and Sustainability**

- Economic diversification (broadening and shifting mix) \*
- Economic transformation (refocusing direction and value) \*
- Economic recovery (expanding jobs, income, growth) \*

### Justice and Equity (Gender, Minorities)

- Avoidance of Harm
- Access to Opportunity

### **Environmental Security**

- Climate mitigation (stabilization through decarbonization)
- Climate adaptation (vulnerability reduction through resilience

### Energy and Resource Security and Sustainability

- Resilience
- Longevity
- Value Added
- Access

- Comprehensive, multi objective, multi sector planning format
- Tools and Templates widely available and applied
- Many case examples, success stories, lessons learned

### Minnesota – Clean Economic Strategies





Analysis of Macroeconomic Impacts of Comprehensive Policies and Measures, 2016-2030

# US States -- Low Carbon Economic Diversification

12% 10% % change - all positive values indicate improvement Imported Oil 8% Fuel Diversity Electric Diversity 6% Grid Stability 4% Energy Intensity Direct Cost/Savings 2% 0% -2% Heat and Power Residential, Commercial, Industrial Transportation and Land Use Agriculture, Forestry and Waste

**Energy and Economic Performance** 

Changes in Energy Security Metrics in Economic Sectors from 20 Low Carbon Technology Actions at the US States Subnational Level

# Low Carbon Macroeconomic Drivers and Mapping

Cost effective approaches increase economic efficiency and expansion

*Energy savings* cut energy costs, stimulate labor investment

Shifts to *domestic vs. imported* resources cut job outflows Actions supported by *local supply chains* expand domestic production and employment

New investment from outside sources stimulates labor investment at home Labor intensive activities create more jobs, even if at higher cost (up to a point)

Indicators Enable Option Selection and Design of New Actions

# Cote D'Ivoire – Sustainable Economic Diversification and Transition





Indicators Enable Structural Review and Design of New Actions

### Ghana – NDC, Diversification, Investment





Net Results		
DCF Based Financials		
NPV	GHS	1,796,310
IRR		18.2%
Payback Period (years)		5.2
WACC		17.7%
Total Discounted Benefits	GHS	25,627,216
Total Discounted Costs	GHS	(23,830,906)

Benefits		
<u>Financial</u>		
Product Sales	GHS	18,607,622
Residential Service Fees	GHS	2,652,250
Asset Sales	GHS	7,172
Public Financing	GHS	1,910,172
Private Financing	GHS	2,450,000
Total Benefits	<u>GHS</u>	25,627,216

#### Integrated Waste Management System Pilot

Mato Grosso, Brazil – 2050 Pathway Economic Diversification

AFOLU Mitigation Actions	Structural Macro Analysis	Indicators and Net Effects
All Actions Predominantly Positive	Guidance for Mechanisms	Targets for Design and Testing

AFOLU-1. Manutenção do ativo florestal AFOLU-2. Manejo florestal sustentável	-	+				
AFOLU-2. Manejo florestal sustentável			T	+	+	+
AFOLIL-3 Regularização	+	-	+	+	+	+
fundiária	2	+	+	+	+	+
AFOLU-4. Criação, ampliação, e melhoria da gestão de Áreas Protegidas	-	+	+	+	+	+
AFOLU-5. Reflorestamentos comerciais	+		+	+	+	+
AFOLU-6. Restauração da paisagem florestal	-	14 <u>0</u> 0	+	+	+	+
AFOLU-7. Redução do risco de incêndio florestal	-	+	+	+	+	+
AFOLU-8. Boas práticas de manejo ag-ropecuário (BPA)	+	+	+	+	+	+
AFOLU-9. Proteção da vegetação secundária	-	+	+	+	+	+
AFOLU-10. Recuperação de pastagens degradadas	+	+	+	+	+	+
AFOLU-11. Integração Lavoura-Pecuária-Floresta (ILPF)	+		+	+	+	+

Indicators Enable Selection and Design of Long-Term Strategies

## Thank You!

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