Assessing Co-Benefits of Climate Action

Sharing Experience and Best Practices in Environmental, Social, and Economic Co-benefits Assessment

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UNFCCC KCI Meeting

September 2025

Outline of Concrete Example Paper

1. Executive summary

2. Introduction

3. Understanding co-benefits

4. Assessing and analyzing co-benefits

5. Concrete examples and best practices

6. Measuring and monitoring co-benefits

7. Challenges, barriers and lessons learned from case studies

8. Conclusions

Feedback from KCI members

Case examples

- Africa
- Small Island Developing States (SIDS)

Trade offs

- International/ regional cooperation
- case studies and
- recommendations

Africa - Case Examples

GHANA

- *Climate Smart Agriculture in Cocoa*: Enhancing Production and Resilience while Mitigating Emissions

KENYA

- *Carbon Financed Water Filters*: Health Co-Benefits and the Imperative of Independent Monitoring

SIDS - Case Examples

BARBADOS

- *Solar Water Heater Industry*: Fostering Sustainable Energy and Economic Growth

CURAÇAO

Rooftop Solar PV: Overcoming Obstacles for Successful Implementation

Trade-offs

3. Understanding Co-benefits

- 3.2.1. Understanding Trade-offs in Co-benefit Assessment
  - Economic, social, environmental, and temporal trade-offs

- 3.3.1. International and Regional Cooperation for Co-benefits and Trade-off Management
  - Technology transfer/sharing, regional coordination mechanisms *(e.g., EU, CARICOM)*, and financial cooperation *(e.g., Green Climate Fund)*

Trade-offs

4. Assessing and Analyzing Co-benefits

- 4.3.3. Addressing trade-offs
  - Types of trade-offs in climate action
  - Strategies for managing trade-offs

5. Case examples

- Economic, environmental, social, and/or land use trade-offs
- Examples of trade-off management strategies

6. Measuring and monitoring co-benefits

- Trade-off indicators

Thank You

Questions & Discussion

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What Are Co-Benefits?

Environmental

- Improved air quality
- Biodiversity conservation
- Better water resource management

Social

- Health improvements
- Job creation
- Enhanced energy access
- Greater gender equality

Economic

- Significant cost savings
- Spurs innovation
- Economic diversification
- Increased competitiveness

Assessment Methodologies

📈 Quantitative

- CGE Models
- Health Impact Assessment
- Cost-Benefit Analysis

🗣️ Qualitative

- Stakeholder Interviews
- Focus Groups
- Community Surveys

✍🏽 Mixed Methods

- COMBI Framework
- Integrated Assessment
- Triangulated Findings

Mixed-methods approaches provide the most comprehensive insights

CGE :Computable General Equilibrium (CGE)
COMBI : Calculating and Operationalising the Multiple Benefits of Energy Efficiency

Assessment Methodologies

📊 Data

- Economic
- Environmental
- Social
- Demographic
- Health
- Policy
- Technology

🗂️ Data Sources

- National
- International
- Research
- Proxy measures
- Expert judgment
- Modeling

⚖️ Trade-offs

- Potential adverse effects
- Distribution of benefits and costs
- Compensatory measures
- Enhance positive outcomes

Case Studies

Sectors

- Energy
- Transport
- Agriculture and land use

Regions

- Europe
- Asia
- America
- Africa
- SIDS

Information

1. Policy information
2. Assessment methodology
3. Data sources
4. Results
5. Lessons learned

Results from Case Studies: Co-Benefits

Social

- Increased energy access
- Improve public transport services
- Traffic safety
- Reduced premature mortality

Economic

- Revenue for individuals and communities
- Job creation
- Reduction of costs related to climate disasters
- Less health care costs

Environmental

- Enhanced air quality
- Decreased road traffic noise
- Support for biodiversity
- Minimized soil erosion

Measuring and Monitoring Co-benefits

Indicators

- Relevance
- Measurability
- Specificity
- Timescale
- Disaggregation
- Comparability

Framework

- Theory of change
- Baseline assessment
- Systematic data collection
- Adaptative
- Transparent

Technology

- Digital platforms
- Remote sensing
- Existing tools
- Modeling approaches

Assessment Challenges

Data Limitations

Incomplete datasets, quality issues, accessibility constraints

Methodological Complexity

Difficulty quantifying indirect impacts

Institutional Silos

Lack of cross-sectoral coordination

Equity Concerns

Uneven distribution of benefits

Lessons Learned

Stakeholder engagement

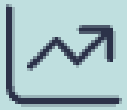
Community participation enhances relevance

Equity & Just Transitions

Benefits reach vulnerable populations

Integration across sectors

Energy, transport, health coordination



Long-term monitoring

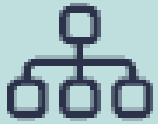
Co-benefits evolve over time

Context-specific design

Local adaptation meets community needs

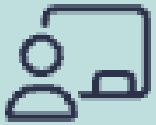
Conclusions

Strengthening Foundations



Cross-Sectoral Coordination

Mechanisms bringing together climate, health, energy sectors

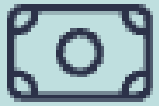


Capacity Building

National capabilities through training programs

Policy Integration

Mainstream co-benefits in NDCs, NAPs, LT-LEDS



Dedicated Funding

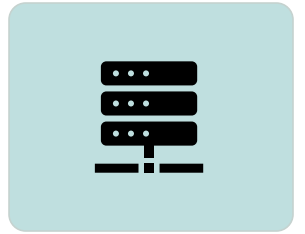
Financing for assessment

Conclusions

Data & Stakeholder Engagement

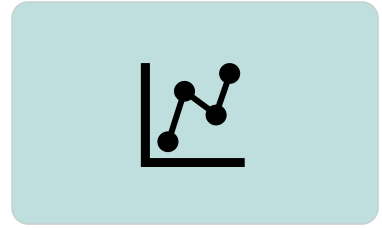
Enhance Data Systems

Leverage existing infrastructure, develop open platforms, and utilize new technologies.



Standardize Indicators

Use existing metrics (SDGs) while maintaining context-specific flexibility.

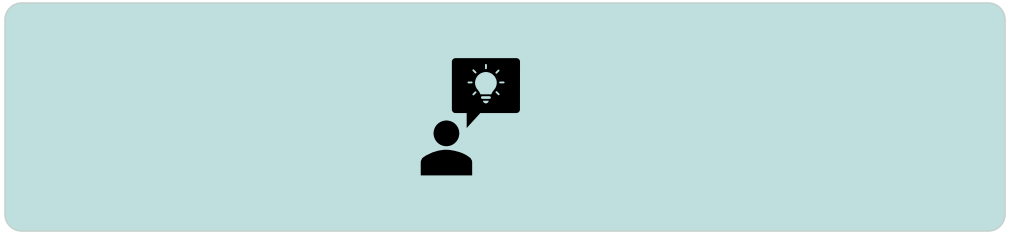


Inclusive Engagement

Involve workers, communities, Indigenous Peoples, and vulnerable groups.

Knowledge Exchange

Platforms for peer learning and methodology sharing.



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