

Assessing Co-Benefits of Climate Action

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

David Rojas-Rueda
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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

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 *to be added*



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

- Improved air quality
- Reduction in road traffic noise
- Supports biodiversity
- Reduce 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



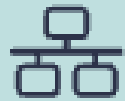
Stakeholder engagement

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

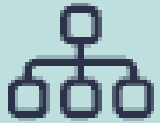


Context-specific design

Local adaptation meets community needs

Conclusions

Strengthening Foundations



Cross-Sectoral Coordination

Mechanisms bringing together climate, health, energy sectors



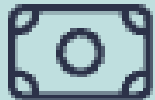
Capacity Building

National capabilities through training programs



Policy Integration

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



Dedicated Funding

Financing for assessment and just transition

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.



Thank You

Questions & Discussion

Sharing Experience and Best Practices in Assessing the Environmental, Social, and Economic Co-benefits of Climate Change Policies and Actions

David Rojas-Rueda | UNFCCC KCI | June 2025