Using realist synthesis to overcome evaluation challenges in the uncertain landscape of carbon finance

- Lisa Keppler, Callum Murdoch
- Arepo Consult, LTS International
- Evaluation Approaches
Evaluation of the UK’s Carbon Market Finance Programme (CMFP) implemented through the World Bank’s (WB) Carbon Initiative for Development (Ci-Dev)

| Approach | • Carbon-funded results-based finance  
|          | • Readiness grants |
| Objective | • Support climate change mitigation and poor peoples’ access to clean energy and other poverty reducing technologies (12 projects)  
|          | • Capacity building and carbon-related administrative support |
| Region | • Least Developed Countries (LDCs) - with a focus on Africa |
| Methodological Framework | • Clean Development Mechanism (CDM) |

<table>
<thead>
<tr>
<th>Year</th>
<th>Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Inception Report</td>
</tr>
</tbody>
</table>
| 2016 | Baseline Report  
| 2017 | First Formative Evaluation  
| 2019 | Mid-term Evaluation  
| 2024 | Final Evaluation |
Challenges

- Multi-level transformation approach
  - Project level
    - Local energy access markets are unpredictable
    - Diverse project portfolio with various business models
    - Development impact and poverty targeting
  - Programme level
    - Impact of CMFP/Ci-Dev on carbon financing
  - Uncertain future of the carbon market and ongoing negotiations around Article 6 of the Paris Agreement
  - Limited data availability and confidentiality
  - High need for traceability in data

Arepo Consult
Realist Evaluation Framework

How and why does the project work or not work, for whom and in what circumstances?
How and why does the project work or not work, for whom and in what circumstances?

- **Intervention**: Under the control of the project
- **Context**: Important influences on whether an intervention activates a mechanism
- **Mechanism**: Response of the intervention target to the intervention
- **Outcome**: Desired end result
ICMO Development Cycle

Realist Evaluation: ICMO

Hypothesis Development
- ICMOs developed based on TOC and Literature review

Refining Hypothesis
- Consultations with stakeholders to refine initial ICMOs
- Additional ICMOs developed through consultation (if required)

Testing Hypothesis
- Realist synthesis of collected primary and secondary data
- Additional consultations as required

Revising Hypothesis
- Strengthening original ICMOs with respect to testing and evidence
Development of ICMO statements to address the different levels of transformational change targeted

<table>
<thead>
<tr>
<th>ICMO 1</th>
<th>Direct results for the carbon market</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICMO 2</td>
<td>Development, impact and poverty targeting</td>
</tr>
<tr>
<td>ICMO 3</td>
<td>Barrier removal in local energy access markets</td>
</tr>
<tr>
<td>ICMO 4</td>
<td>Market transformation and replication in carbon markets</td>
</tr>
</tbody>
</table>

Analysis of ICMO evidence with 3-stage scoring to increase robustness

- how strongly the evidence supports or contradicts ICMO statement
- how plausible or verifiable is the evidence
- what is the convergence of the data
Market barrier analysis of case study projects based on the Theory of No Change (TONC) by Woerlen et al. (2011)

Legend

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Barrier non existent</td>
</tr>
<tr>
<td>1</td>
<td>Barrier non existent, but potential for change</td>
</tr>
<tr>
<td>2</td>
<td>Not a favourable situation, but no significant barrier</td>
</tr>
<tr>
<td>3</td>
<td>Not a favourable situation and significant barrier</td>
</tr>
<tr>
<td>4</td>
<td>Slowing down the market change significantly</td>
</tr>
<tr>
<td>5</td>
<td>Impeding market change</td>
</tr>
<tr>
<td>6</td>
<td>Show-stopping barrier</td>
</tr>
</tbody>
</table>
Theory-based approach to confirm that an intervention has a contributory cause to a given outcome

- Case study projects
- Did the intervention contribute to the outcome?
- What is the influence of external factors?

Intervention → Outcome →

- Unexpected market volatility or trends
- Regulatory and political change
- Other programmes
- Public or social perception
We have discovered the programme theory black box. Now comes the hard part. We have to get into it.
Challenges faced during the application of the Evaluation Framework Approach

- ICMOs can constrain creativity. Settling on the “wrong” ICMOs can lock teams into unproductive analysis
- ICMOs might appear too linear or too simplistic in very complex contexts
- Saturation of evidence in a limited portfolio
- Case studies only reflect half of the project portfolio (i.e. biased evidence for ICMO statements)
- Limited availability of external literature and data, i.e. for Benchmarking and QCA
- Limited explanatory value of VfM and benchmarking due to redefinition of programme expectations