Indicators as a way of improving energy access in the face of climate change

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What is HELIO?

- Non-profit, based in Paris, France
- It has:
 - a small secretariat
 - an independent, international network of leading of leading energy analysts
- It works on ecodevelopment and
- climate stabilisation/energy issues
 - SEW report series (since 1997)
 - 2006: The Ultimate Challenge
 - 2007 report
 - A preliminary assessment of energy and ecosystem resilience in ten African countries





Assessing Sustainability of Climate Projects

- Matrix to screen MDP projects (COP5)
- Creation of SouthSouthNorth (SSN)
- Matrix SSN
 - indicators: viability; feasibility; assessment
 → creation of the Gold Standard (COP9)
- Project VAR
 - Vulnerability Adaptation Energy Resilience
- Project MEDRES
 - assessing the impact of renewable energy electrification
 - rural regions Southern Mediterranean



Indicator Development

- Selection of criteria for each aspect of ecodevelopment with stakeholders input
- Choice of indicators which are:
 - meaningful
 - relevant to the local context
 - specific, clear and simple
 - measurable; monitorable
 - policy oriented
- Validation and local pilot testing



Policy Pre-conditions

- Analysis of policies and trends
- Study of the local context
 - understanding broader vulnerabilities
- Impacts of climate change to be taken into account
 - need for adaptation as well as mitigation measures



Climate-proofing Energy Supply Systems

- Objective: communicate information to decision-makers in clear/simple terms
- Process:
 - identify the vulnerability of existing energy systems
 - suggest resilient systems for adaptation strategies
 - outline specific capacity and institutionbuilding measures
 - assess results and process



Vulnerability Indicators

- Transmission and distribution systems
- Individual energy systems
 - climate driven impacts





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Implementation Indicators: capacity

- Monetary
- Technological
- Human
- Institutional
 - governance





Indicators of Increased Resilience

- Siting
- Regulation
- Technical
- Diversification
- Governance



Characteristics of Climateproof Energy System

- Good siting
- Diversification
- Better design and manufacturing
- Closeness of supply and demand → decentralisation
- Must be part of a genuine strategy of ecodevelopment:
 - devised with and adopted by citizens living in the area
 - environnementally sound
 - economically sustainable



More Information

 Methodology and indicators to identify adaptation projects that reinforce energy system resilience

www.helio-international.org



