

Stanford Mwakasonda

"Global Challenges toward Low-Carbon Society (LCS)

through Sustainable Development (SD) "

COP 12, Nairobi, Kenya. 6-17 November 2006



University of Cape Town

Sustainable development & Climate Change

- Sustainable development policies and measures have synergies with required action on climate change
- Now commonly referred to as SD-PAMs Sustainable Development (SD) policies and measures (PAMs)
 - Back cast from desired future state of development, not GHG reduction goal or cap
 - define more sustainable paths to meet development objectives
- Climate change as co-benefit of achieving SD
 - Developing countries (DC) focused on basic development needs more than climate change policy
- Basis in Article 3.4 of the Convention right to SD
- Hypothesis achieving development more sustainably also
 2 reduces GHG emissions

Recognition and advantages

- Recognized that many DCs have implemented policies that have resulted in emission reduction
- SD-PAMs provide opportunity for development and climate goals in a way that reduces their total cost
- SD-PAMs becomes an opportunity for DCs to engage in emission reduction effort and codify contribution
- SD PAMs provide opportunity for funding to come from any source
 - What constitutes an eligible "SD-PAM" cold be pledged under the UNFCCC

 Commit to adopt new policy and / or implement existing

DCs and SD-PAMs

 Report show DCs to have significant policies that reduce emissions

- Brazil: biofuels, energy efficiency
- China: energy efficiency, coal to gas, afforestation
 - India: restructuring, clean air laws, renewables
 - Mexico: using gas, energy efficiency, reduce deforestation
- ◆ SA: access, energy efficiency, reform
- Turkey: sector and price reforms
- All of these policies are driven by national development priorities, not climate change

South Africa's example

Development objectives

Remove backlog of 2.6 million houses

Increased access to affordable energy services

Stimulating economic development

Securing supply through diversity

Possible shift to more sustainable development

Housing

All new low-cost houses built with energy efficiency measures

Energy

Implement free basic electricity (poverty tariff) of 20- 60 kWh / household / month for 1.4 million poor households National energy efficiency programme to ensure 5% reduction in electricity consumption by 2010 39 000 additional jobs R800 million add'l income Renewable Energy Portfolio Standard - 5% of electricity generation

- by 2010
- 20% by 2025

GHG reduction or increase relative to business-asusual (current stated policy)

0.05 and 0.6 MtCQ -equivalent per year, across all low-cost housing

Increase of 0.146 MtCO₂ (upper bound estimate)

Reduce CO_2 emissions by 5.5 million tons in 2010

Reductions in CO₂ emissions of

- 10 MtCO₂ in 2010 - 70 MtCO₂ in 2025.

Conclusions

- Start from development objectives, make development more sustainable
- Formalise through COP decision to establish SD-PAMs registry and review
- Important to build local capacity in developing countries
- Bottom-up, trust-building approach
 - Start with action rather than targets
- If successful could lead to more realistic quantified mitigation commitments for DCs
- Quantify emissions reductions versus "current policy" baseline
- Assess SD impacts qualitatively
- Allow host country to choose SD PAMS, with menu as reference
- Separate SD PAMs registry with UNFCCC Secretariat
- Mandatory monitoring, reporting, and review of SD PAMs



Stanford A.J Mwakasonda Energy Research Centre University of Cape Town stanford@erc.uct.ac.za www.erc.uct.ac.za