

Aligning Climate Change and Sustainable Development Objectives

South Africa example

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“Developing Visions for a Low-Carbon Society
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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” could 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

Example: South Africa

Development objectives	Possible shift to more sustainable development	GHG reduction or increase relative to business-as-usual (current stated policy)
<p>Remove backlog of 2.6 million houses</p> <p>Increased access to affordable energy services</p> <p>Stimulating economic development</p> <p>Securing supply through diversity</p>	<p>Housing</p> <p>All new low-cost houses built with energy efficiency measures</p> <p>Energy</p> <p>Implement free basic electricity (poverty tariff) of 20- 60 kWh / household / month for 1.4 million poor households</p> <p>National energy efficiency programme to ensure 5% reduction in electricity consumption by 2010</p> <p>39 000 additional jobs</p> <p>R800 million add'l income</p> <p>Renewable Energy Portfolio Standard</p> <ul style="list-style-type: none"> - 5% of electricity generation by 2010 - 20% by 2025 	<p>0.05 and 0.6 MtCO₂-equivalent per year, across all low-cost housing</p> <p>Increase of 0.146 MtCO₂ (upper bound estimate)</p> <p>Reduce CO₂ emissions by 5.5 million tons in 2010</p> <p>Reductions in CO₂ emissions of</p> <ul style="list-style-type: none"> - 10 MtCO₂ in 2010 - 70 MtCO₂ in 2025.

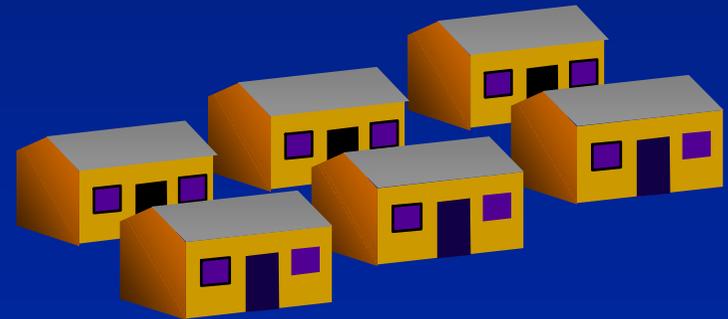
Example: Industrial energy efficiency in South Africa

- National policy
 - ◆ saving of 12% over a BAU scenario within 10 years
- Specific measures in industry
 - ✂ Variable speed drives in electrical motors
 - ✂ Efficient motors: higher costs, but reduced power consumption
 - ✂ Efficient lighting
 - ✂ Heating, ventilation and cooling
 - ✂ Thermal saving, e.g waste gas stream recovery and utilization and improved maintenance



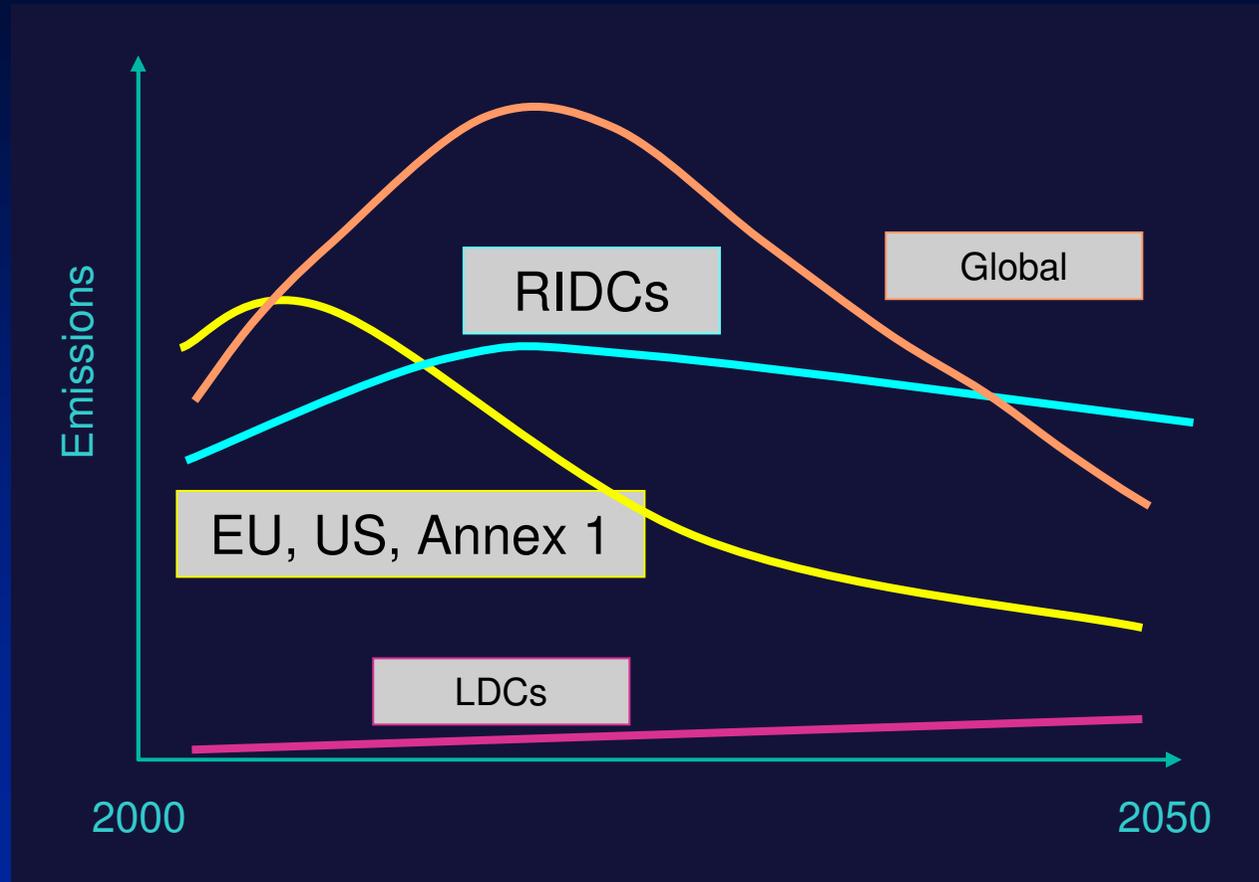
PAM with synergy SD-CC: housing development

- Development objectives
 - ◆ remove backlog of ~2.6 million households
- Current policy
 - ◆ annually build 300 000 'RDP houses'
- Possible shift to more sustainable development path
 - ◆ All new RDP houses built with a range of energy efficiency interventions
 - ☞ Insulation, ceilings, orientation, window size
 - ☞ Barrier is pressure on subsidy; enforce through codes
 - ☞ Incremental cost ~R 2000 / household – needs incentive
 - ◆ Local benefits
 - ☞ Energy savings to household
 - ☞ Increased thermal comfort
 - ☞ Reduced indoor air pollution
- Potential GHG emission reduction
 - ◆ 50 – 600 kt CO₂-eq across all houses over period



Our common but differentiated future

- All Annex I emissions need to reduce, starting now
- Some developing countries need to start taking action



Political issues

- What incentive do developing countries have to participate in SD PAMs?
 - ◆ Access additional financing for SD
 - ◆ Part of trust building 'package' to further reduce global emissions without binding caps for DCs
 - ◆ Building capacity to make future actions easier to implement (?)
- Will SD PAMs for developing countries be enough for Annex I countries to take on more stringent targets?
- Will SD PAMs benefit the global environment?

Depends on the design and implementation

Steps in implementing SD PAMs

1. Country outlines future development objectives
2. Identify PAMs to achieve development objectives more sustainably
 - a. Existing policy not fully implemented; or
 - b. New policies and / or more stringent measures
3. Mobilise investment and implement SD-PAMs
 - a. Could include mutual pledges to mobilise domestic investment
4. Record SD-PAMs in a registry
5. Set up national monitoring system to track implementation of SD-PAMs

Steps in applying SD PAMs....cntd

6. Review SD-PAMs in SD units, either as part of national communication or a specific review
7. Quantify the changes in GHG emissions from individual PAMs
8. Identify PAMs with synergies or conflicts between SD benefits and GHG limitations
9. Summarise the net impact of a basket of SD-PAMs on development and GHG emissions

Key design issues for SD PAMs

- Would countries have unlimited **choice** on which SD PAMs to implement?
- Would the **emissions reductions** from SD PAMs be **quantified** ex-post? How rigorously?
- Would the **SD impacts** of SD PAMs be assessed? Quantitatively or qualitatively?
- Would SD PAMs be **mandatory** for some developing countries, or entirely voluntary?
- Would emission reductions from SD PAMs generate **tradable** carbon credits?
- How do these choices affect financing, and what **technologies** and **sectors** will benefit?
- How would SD PAMs **link** to CDM and other mechanisms?

Would countries choose their SD-PAMs?

- Recall Annex I PAMs debate – strong resistance even to a ‘menu’ of PAMs, much less harmonized PAMs
- Recall CDM SD debate – focus is on host country sovereignty and development priorities
 - ☞ Very unlikely that countries would accept prescriptive list of SD PAMs or limited ‘menu’
 - ☞ Only drawback is that measuring only departure from current practice essentially penalises countries that have already taken early action - like CDM

Quantifying SD-PAMs emission reductions

- Process of choosing SD PAMs basket should look at GHG impacts
- Without quantification of some kind, little more than CSD submissions – limited coverage and substance
- Would not build much trust if not clearly reducing emissions growth
- Rigor of assessment, however, may depend on scale and scope of SD PAMs (see trading issue below)
- Assessing impacts of policies, as opposed to projects, will also necessarily be more uncertain

Assessing SD impacts

- SD assessment, however, is much more challenging than GHG assessment
- Recall CDM SD debate and monitoring requirements
- Compromise could be to assess direction qualitatively (checklist, public participation)

Would SD PAMs be mandatory?

- ‘Bottoms up’ approach is fundamental to concept of SD PAMs
- Entirely voluntary approach, however, may not satisfy Annex I that SD PAMs makes a real contribution to GHG abatement
- As with other policy options, SD PAMs could be mandatory for a group of countries
 - ◆ Challenge is defining who must act
- Mandatory participation in SD PAMS is NOT the same as mandatory implementation of a prescribed list of PAMs
- Could ensure comprehensive coverage by prescribing sectors that must be addressed, but not the actual PAMs

Would SD PAMs generate tradable credits?

- Some kind of trading could significantly increase resource flows through SD PAMs
- However, trading would require much more rigorous monitoring and institutional requirements for the host country (Articles 5,7)
 - ◆ Assessing policy and sectoral impacts more difficult than project level impacts
- Without trading, SD PAMs would be similar to GEF projects, which only attract limited funding but result in net emissions reductions

Monitoring and reporting requirements

- SD PAMs plans would be prepared by country focal points and submitted to the UNFCCC
 - ◆ Included in National Communication?- many countries not submitting and process highly politicized
 - ◆ Separate SD PAMs registry would be simple and clear, but could add to institutional burden on developing country
- Monitoring and review would be mandatory once a country had agreed to SD PAMs, even if taking on SD PAMs initially was voluntary
 - ◆ Could piggy-back on in-depth review of National Communications but with special SD PAMs expert group
 - ◆ Frequency linked to National Communication
 - ◆ Need to include qualitative assessment of SD impacts as well as GHGs

SD-PAMs and post-2012

- By itself, does not guarantee environmental outcome (still need quantified mitigation commitments) ...
- ... but important in mobilising action
- Only requires a decision by the COP, not a whole new Protocol
- Important as trust-building measure under the Convention
 - ◆ Could happen in parallel to other approaches
 - ◆ Together with tech transfer, finance, adaptation
 - ◆ Turn climate from 'threat' to development into genuine opportunity to make development sustainable for DCs
 - ◆ Initially voluntary, could become mandatory later

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



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