South Africa Draft Market Readiness Proposal (MRP)
Expert Group Feedback

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Outline

1. Expert group and its role
2. Addressing competitiveness issues: options and implications
3. Revenue recycling options
4. Other challenges going forward
PMR Expert Group for South Africa

- Tang Jin (Sinocarbon Ltd)
- John Ward (Vivid Economics)
- Ian Parry (IMF) (desk review only)
- Xueman Wang and Pauline Kennedy (PMR Secretariat)

- Desk review of draft MRP: early September 2014
- Country visit: September 22-23
Expert Group Feedback

- Expert group feedback also covered all building blocks, focused mainly on analytical work

- Key topics discussed during country visit:
  - Approaches for dealing with leakage/competitiveness concerns
  - MRV system, especially consistency with tax base
  - Offset scheme design
  - Interaction between carbon tax and other policy instruments

- South Africa’s revised draft MRP responds well to issues discussed with the expert group
  - And recognizes a range of important future analytical studies
Addressing leakage concerns: why?

- Most carbon pricing schemes are concerned about competitiveness impacts

- Addressing carbon leakage is not (always) the same as addressing competitiveness
  - Some contraction of output in EITE sectors would be expected even with global carbon price
  - Especially if carbon intensity of domestic production is higher than foreign production

- And some leakage may happen even with competitiveness protection measures
  - Policy measures will not address leakage through changing fossil fuel prices
Addressing leakage concerns: who?

- South Africa’s current proposal provides protection to sectors based on their trade intensity
  - The aspects of EU ETS leakage protection based only on trade intensity has been criticized

- Moving forward, MRP recognizes possibility of refinement
  - Take account of cost increases as well as trade intensity
  - Take account of carbon pricing among international competitors
    - Important to identify where competition is located
  - Greater sub-sectoral disaggregation

- Targeted approaches to protection enhance policy effectiveness and save revenue
## Addressing leakage concerns: how?

<table>
<thead>
<tr>
<th></th>
<th>Link to output – as output/emissions increase, provision of assistance increase</th>
<th>No-link to output – as output/emissions increase, provision of assistance is not affected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carbon-tax options</strong></td>
<td>Tax-free <strong>percentage</strong> thresholds (SA current approach)</td>
<td>Tax free thresholds with <strong>absolute</strong> amount (possible alternative in draft MRP)</td>
</tr>
<tr>
<td><strong>ETS</strong></td>
<td>Output-based free allowance allocation</td>
<td>Lump sum free allowance allocation</td>
</tr>
<tr>
<td><strong>Advantages</strong></td>
<td>More effective at reducing leakage/competitiveness concerns</td>
<td>Not very good at reducing leakage</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>Reduced incentive to mitigate (see SA modelling results)</td>
<td>Stronger incentive to mitigate</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>California, Australia (except electricity)</td>
<td>EU ETS, Australia (electricity)</td>
</tr>
</tbody>
</table>
Revenue recycling options and criteria

- South Africa’s MRP notes the need for more analytical work on revenue recycling and the need to protect low-income households

- Three broad approaches to doing this
  - reducing price impacts
  - reducing quantity of energy inputs (promoting energy efficiency)
  - lump-sum redistribution

- And three key criteria to assess these impacts
  - efficiency/impact on economic activity?
  - promote/maintain incentives to reduce emissions
  - targeted at those that need support
Choosing between the options involves difficult trade-offs

<table>
<thead>
<tr>
<th></th>
<th>Cost effective</th>
<th>Incentives for abatement</th>
<th>Targeted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reducing prices</strong></td>
<td>✗ - as indicated by the SA modelling</td>
<td>✗ ✗ - removing price impacts cuts off key abatement opportunity</td>
<td>? – varies by energy product and country circumstances</td>
</tr>
<tr>
<td><strong>Supporting energy efficiency</strong></td>
<td>✓ - typically cost effective, but may be large upfront costs; hypothecation is inappropriate</td>
<td>✓ ✓ - so long as designed well</td>
<td>✗ - maybe difficult to isolate support to affected households; difficult for energy reduction to fully offset price rises</td>
</tr>
<tr>
<td><strong>Lump-sum redistribution e.g. direct tax reductions</strong></td>
<td>✓ - depends on form of redistribution, but reducing other distortionary taxes can lead to double-dividend</td>
<td>✗ – general rise in economic activity will lead to some increase in emissions</td>
<td>✗ – depends on country circumstances but often difficult</td>
</tr>
</tbody>
</table>

Choosing between the options involves difficult trade-offs.
Challenges: Policy interactions

- South Africa carbon tax will be introduced in dynamic policy setting
  - Planned introduction of DEROs
  - Existing electricity tax
- In right circumstances, multiple policies can be mutually reinforcing and support overall objectives
- In wrong circumstances, multiple policies can create confusion, increase costs or render policies ineffective
- Consistency requires identification of the market failure each policy is designed to address and the separate role for each
Thank you for your attention