



# **Report of break-out group on heavy industry Cement – Iron & Steel**

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## Three options, six dimensions

- SD-PAMs / Best practice, best technology / Binding sectoral targets
  - Data
  - Monitoring reporting and verification
  - Operational issues
  - International institutions and oversight
  - Implementation issues
  - Financing – including carbon market

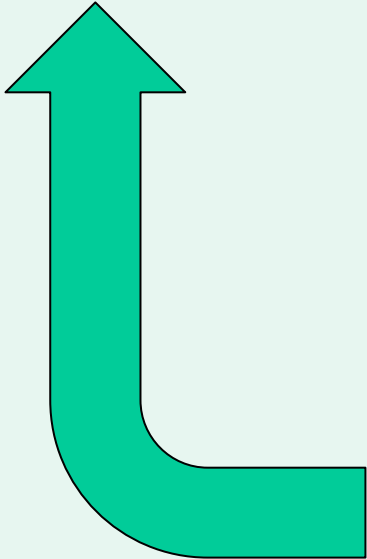


# Further elaboration on the three options for sectoral approach

- SD-PAMs
  - Barriers to good performance exist
  - Numerous policies in these sectors. Focus on best practice in *implementing* them
- Best practice / best available technology
  - Performance goals, not specific technology
  - Must be dynamic (today's BAT performance is not enough)
- Binding sectoral target
  - Leaves all options open on domestic implementation
  - Full market interaction may be difficult



# Data

| SD PAMs  | BAT/BP   | Sectoral target             |
|--|--|-----------------------------|
| Simpler: policies only?  | Performance objectives:<br>heavy needs   | Target setting: heavy needs |
|  | <p>Significant data requirements (energy, CO2, output)<br/>Boundary definitions (what is in the sector, what is not) are critical<br/>A need for projections<br/>Helpful to identify “aggregators” for the data/expertise<br/>Data collection to trigger / record action (registry of actions)</p> <p>Efforts under way:</p> <ul style="list-style-type: none"><li>- <b>Cement</b> - WBCSD Cement Sustainability Initiative, based on WRI GHG Protocol. Limited coverage in China and India. CMA in India.</li><li>- <b>Iron and steel</b> - International Iron and Steel Institute. Not full coverage but Chinese members. Aggregate (no distinction between production routes). China: statistics on energy efficiency performance, comparison with international performance.</li></ul> |                             |



# Monitoring, reporting, and verification of...

| SD-PAMs   | BP/BAT   | Sectoral target                                  |
|---|--|--|
| Based on the formulation of policy plans                | Relate to performance (energy and CO <sub>2</sub> ), not specific technology | Sector emissions per tonne of X.                 |
| Results: agree on indicators of progress at the outset  | Or could certain technologies be used as indicators?                         | Threshold for participation                      |
| Accountability, even if no precise achievement of goals |  | Verification (certification) of credits for sale |

Rely on National Communication process as one means to report on objectives.



# Operational issues

| SD-PAMs  | BP/BAT  | Sectoral target   |
|--|---|---|
| Information on best policy practice ought to be brought to bear on all three options       |   |   |
| May be difficult to ignore cross-sectoral issues (steel / cement competition in buildings) |   |   |
|  | Differentiate existing and new plants?  |   |
|  | Consider cost across sectors when defining BAT: cost-effectiveness                  | Cost-effectiveness an issue? Maybe, in spite of market mechanism? |
|  | Think more broadly about industry's role (upstream and downstream, lifecycle, etc.) |   |
| Agreement on all new plants following "BAT"  |   |   |



# International institutions and oversight

| SD-PAMs                 | BP/BAT  | Sectoral target   |
|-------------------------|---|---|
|                         | Panels (TEAP model)   | SBSTA negotiation on country/sectoral targets                                 |
| National communications | National communications   | National communications   |
|                         | More intrusive, to evaluate performance against agreed standard | More intrusive, because of negotiated targets (and carbon market credits)     |
|                         |   | Certification (although different from CDM, given scope and nature of target) |



# Implementation issues

| SD-PAMs  | BP/BAT                                    | Sectoral target   |
|--|---|---|
| Best practice in industry? Multinational companies share that information across frontiers – and will increasingly do that |   | Use benchmarks as a tool to allocate effort across installations  |
|  | Capacity building on best policy practice | Or do not ‘devolve’ and reward through credits <i>ex post</i> (or credits to budget)                                  |
|  |   | Not a KP issue, not an evolution of CDM   |
|  |   | Crediting: a supply-demand issue that will be hard to resolve politically and technically<br>(See Ecofys for options) |



# Financial support / Carbon market

| SD-PAMs  | BP/BAT  | Sectoral target                        |
|--|---|--|
| Continuum of options, from grants to soft loans, etc.<br>Do not forget domestic financing as complement. |   |  |
| Bid for funding on the basis of a national plan – ambition is the metric.                                | BAT for new plants may not be the issue.<br>Return on investment for retrofitting more costly: financing need?<br>Consider small vs. large industry players | Crediting, yes. But upfront financing? |
| Cost-effectiveness likely to, and should come into play, when allocating finances                        | Support to longer-term technology development (demonstration plants, etc.)  |  |
|  |   |  |
|  |   |  |



# Cross cutting issues

- Role of private sector under UNFCCC?
  - Data collection
  - Participation in sectoral “TEAP” – expert panels / Montréal Protocol
- “Best practice in all new plants” ...
  - ... how to address ‘poor’ performance in existing ones?
  - How to integrate this global industry picture in a discussion of common but differentiated responsibilities, etc.
    - ◆ Examples of CO2 mitigation efforts underway in industry outside Annex I.
- Private sector must talk to their governments soon
- Agreement on ends (goals, targets): useful to think about means (policy instruments) too?
- Sectors: sure. But think about national packages and plans – and how different sectors play out in the UNFCCC regime



## Cross cutting issues (2)

- One sector / one tool, or various treatment / eligibility depending on development level, etc.?
- Keep cost-effectiveness in the picture! Keep door open to some exposure to a carbon cost
- “Either / or”: consider “and”
- Financing: options are discussed, from auction revenues, to aviation, maritime. Wide country participation (a quantum leap)? Rely on UN rules?
- How is the money to be spent? Bidding? Eligibility
- Note: Technology transfer was not mentioned once...