

Standardized Baselines using a benchmarking approach

Gareth Phillips Chief Climate Change Officer

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Benchmarks and stratification

- Stratification of a population into "homogenous" groups is essential for benchmarking to succeed
- The benchmark needs to be set outwith the current range of performance
 - If the benchmark is within the existing range of emissions, it creates winners and losers
 - Politically this is un-acceptable
- Example: population of facilities
- Divided into 5 arbitrary strata
- Benchmark is midpoint of the previous stratum
- Achieved by marginal improvements in performance or when the time comes via significant re-build using BAT



Performance T CO2 per units output

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Applying the benchmark arbon capital to one stratum of the population • A be star



- A benchmark is a performance standard which must exceed the current level of performance for the population in question
 - existing CDM or ODA demonstration projects may need special treatment
- Works well with homogenous populations; heterogeneous populations will need stratification
 - Either way, you need good institutional infrastructure
- Measure performance amongst a sample of the population and set a benchmark with lower emissions
- Benchmark can be achieved via better management, retrofit, new equipment... whatever.
- Only measure total emissions and total production



Benchmark methodology

Generic methodology

- Describe how to create benchmark actual performance, performance standard, regulation, policy goal
- Determine lifespan and static / dynamic
- Define monitoring requirements (refer to EU ETS style monitoring guidelines)
- Host country Annex
- Host country prepares technology / sector specific benchmark and submits to CDM EB for validation prior to use.



Benchmarking applied to the Coal Mining Sector

- Could perhaps also apply to LFG methane, avoided gas flaring and biogas?
- Four steps:
- 1) Survey of the current percentage of total methane drained and vented from mines in country / province
- 2) Increase this figure to a "crediting baseline" such that it is higher than (almost) all mines. Could use a lower 95% CI
 - This creates a "buffer" between the actual level of abatement and the level at which credits start to be earned, ensuring environmental integrity
 - The difference between actual abatement and the crediting baseline constitutes the host country's "own action", perhaps for domestic offset sector
- 3) Decide whether the crediting baseline is static or dynamic
- 4) Approve the standardized baseline and submit to the CDM EB



CERs under a standardized baseline





Benchmarks and NAMAs

- Benchmarks can fit under a NAMA crediting mechanism or a standardized baselines under CDM
- Benchmarks can create a blend of domestic and international offsets
- They help to implement domestic policy by ensuring that host country targets are met before any offsets are created
- But they need significant host country infrastructure compared to CDM which only needs a host country LoA
- So perhaps domestic sector BM, for example, could fit better under CDM whilst industrial level BM could fit better under a crediting NAMA



Further challenges to developing a benchmark

- BM can only be developed if you have information about the population or undertake sufficient surveys
- Requires significant host country infrastructure
- Eg permitting system
- Existing reporting system
- Ability to regulate
- Ability to stratify based on technology / size or in an arbitrary manner
- Once established, under a BM project, PPs only measure total output and total emissions and any activities are eligible

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Benchmark vs sectoral

- Benchmarking is not sectoral crediting
- It's a voluntary exercise setting a performance standard based on peers
- BM demonstrates additionality by meeting and then exceeding a standard which is set by reference to peers
- BM addresses individual plants in a sector whilst a sectoral scheme would address performance across the whole sector
- A sectoral scheme may take the form of an ETS with allowances issued to participants ex ante
- BM are country specific, reflecting national and regional circumstances, practices and technologies



THANK YOU

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