

ANNEX TO DOCUMENT 2 Useful Tables for Developing Country-Specific Strategies

This Annex to DOCUMENT 2: GUIDANCE FOR DEVELOPING COUNTRY-SPECIFIC STRATEGIES displays five tables that might be useful for developing your country-specific strategy. Please modify the five tables displayed below to best fit your country's specific needs when developing your individualized country-specific strategy.

In order to properly use each of the five tables, please reference the appropriate step in DOCUMENT 2 for instructions. A step-by-step flow chart for developing country-specific strategies, taken from DOCUMENT 2, is showing in Figure 1 at right. DOCUMENT 2 is available to download at: www.methanetomarkets.org/resources/coalmines/index.htm.

Additional Information Resources for Developing Country-Specific Strategies

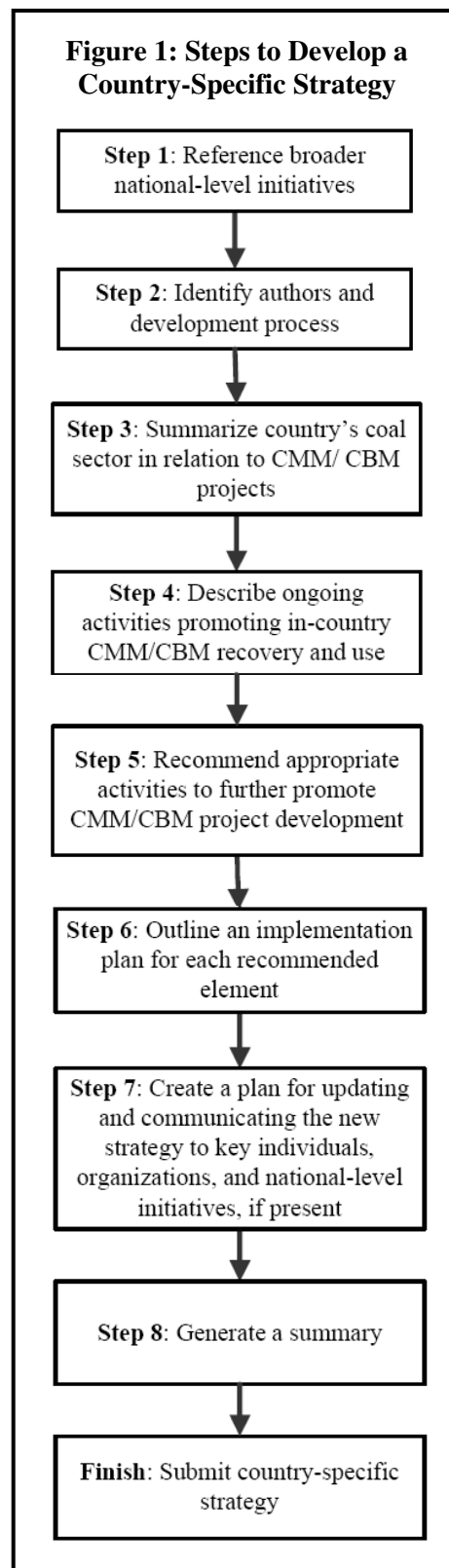
As referenced in DOCUMENT 2, there are additional resources available on the Methane to Markets Web site to help compile the necessary information to develop your country-specific strategies. These resources will be especially useful for Step 3: Summarize the country's coal sector in relation to CMM/CBM projects:

Coal Mine Methane Global Overview contains individual, comprehensive profiles that characterize the coal and CMM sectors of 18 Methane to Markets Partners. It is available at: www.methanetomarkets.org/resources/coalmines/overview.htm.

Methane to Markets International Coal Mine Methane Projects Database contains general and technical information on more than 200 current and planned CMM projects around the world. The database can be sorted by country and is available at: www2.ergweb.com/cmm. (Click on the "List of Projects" under the Methane to Markets logo.)

International Project Database lists a number of ongoing methane-related activities for members of the Methane to Markets Partnership. The database can be sorted by country and is available at: www.methanetomarkets.org/projects/index.htm.

Figure 1: Steps to Develop a Country-Specific Strategy



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Table 1: Description of Nigeria's Coal Sector (used in Step 3)

Overview of Coal Sector	Description	
Annual production (specify year) (<i>tonnes</i>):	2,712 (2002)	
Coal reserves (<i>tonnes</i>):	2 billion	
Percentage of coal mined from underground mines (%):	Not known	
Number of underground mines considered gassy:	Not known	
Regulatory framework: public or private ownership of coal mines, CMM, and CBM?	Government for coal mines. None for CMM and CBM	
CMM/CBM Project Status	Description	
Are there commercial-scale CMM projects at active and/or abandoned coal mines? If so, please estimate number of projects, total amount of methane recovered and used annually.	No	
Are there any pilot or demonstration CMM projects underway?	No	
Is there commercial scale CBM production? If yes, specify annual production (<i>cubic meters</i>).	No	
Are there efforts underway to establish CBM production, including test or pilot wells? Please describe.	No	
Barriers to Project Development	Rank Barriers (1 st , 2 nd , 3 rd)	Description
Legal/regulatory/ownership	3	Nigerian Coal Corporation monopolized coal exploration and exploitation from its inception in 1950 till 1998. Nigerian government is now working toward revitalization of the coal industry through privatization, hence, the laws, regulations and policies governing CMM are still lacking.
Market	2	Nigerian coals have great potential. Both domestic and international demands are significant. Export demand is estimated to 15 million tonnes per year. Until the joint venture is finalized, the market for CMM can not be fully exploited.
Technical	1	Nigeria lack all the aspects of technology i.e. recovery and utilization technologies.

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Table 2: Assessment of Ongoing and Potential Activities (used in Step 4 and Step 5)
(See DOCUMENT 1 for additional guidance)

Specific Activity	Guidance for Recommending Appropriate Activities						
	(A) Has the activity already been undertaken? <i>(Yes/No)</i>	(B) If already undertaken, describe/list extent <i>(e.g., number of workshops per year)</i>	(C) If already undertaken, does it need to be modified, updated, or expanded? <i>(Yes/No)</i>	(D) Can it be implemented in the near term? <i>(Yes/No)</i>	(E) How much would it cost? <i>(estimate \$/year, or indicate High, Medium, Low)</i>	(F) Are there any policy initiatives already promoting this activity? <i>(Yes/No)</i>	(G) Would this be a recommended activity for this country? <i>(Yes/No)</i>
1) Data collection/information products							
Inventory gassy mines on a national scale	No						Yes
Database of country-specific opportunities/project sites							Yes
Database of CMM related businesses	No						Yes
Technical reports addressing specific issues	No						Yes
Other?							
2) Capacity-building (general)							
Information center, clearinghouse, or organization to coordinate and disseminate information	No						Yes

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Table 2 (continued)

Specific Activity	(A) Has the activity already been undertaken? (Yes/No)	(B) If already undertaken, describe/list extent (e.g., number of workshops per year)	(C) If already undertaken, does it need to be modified, updated, or expanded? (Yes/No)	(D) Can it be implemented in the near term? (Yes/No)	(E) How much would it cost? (estimate \$/year, or indicate High, Medium, Low)	(F) Are there any policy initiatives already promoting this activity? (Yes/No)	(G) Would this be a recommended activity for this country? (Yes/No)
3) Targeted information exchange							
Web site dedicated to CMM issues	No			Yes	\$25,000/yr; Low	No	Yes
Newsletters	No			Yes	\$50,000/yr; Low	No	Yes
Roundtable workshops, conferences, Web-based seminars, etc.	No			Yes	\$160,000/yr; Medium	No	Yes
Other							
4) Specific training							
Intensive training (e.g., study tour, orientation visit) on technical, legal, policy, financial issues	No			Yes	\$120,000 Medium	No	Yes
5) Prefeasibility studies of potential CMM projects at specific sites	No (however, there is a project underway)			Yes	\$120,000 Medium	No	Yes
6) Feasibility studies of CMM projects at specific sites	No			Yes	\$200,000	No	Yes
7) Technology demonstrations at coal mines	No			No	\$600,000+ High	No	Yes

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8) Other (<i>describe</i>)							
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Table 3: Prioritizing Recommended Activities (used in Step 5)

Priority	Recommended Activities From Table 2
1 – <i>top priority</i>	Information exchange (workshops and conferences)
2 – <i>second priority</i>	Pre-feasibility studies
3 – <i>third priority</i>	Data collection/information products (inventory of gassy coal mines)
4 – <i>Fourth priority.</i>	Capacity building
5 – <i>fifth priority</i>	

Table 4a: Implementation Plan for Recommended Activity (used in Step 6)
(Consider completing one individual table for each recommended activity)

Recommended activity name: Information Exchange (workshop, clearing house, newsletters)	
Implementation Plan Essentials	Description
Resources required (<i>e.g., funding, equipment, training</i>)	Funds will be required to build the database for the information clearing house. Computer will be required. Personnel together and input the data will be required. Funds will be required to conduct the workshop.
Personnel/organization/agency to lead effort (<i>name, affiliation</i>)	Olubunmi Ogunsola, CPE/TEMEC
Expected opportunities/outcomes (<i>e.g., tonnes CMM abated, training materials</i>)	Free flow of information will be available to educate stakeholders and policy makers. Development of a roadmap for Nigerian CMM program and increase participation from Nigeria in the methane-to-market program.
Milestones/progress indicators (<i>e.g., emission reductions, draft documents</i>)	This is a near-term project that can be conducted within six months of starting. This will include initial ground work, planning, advertising and conducting the workshop.
Implementation timeline (<i>day, month, year – include milestones</i>)	This project can start in June of 2008 and end in December of 2008.
Plan for communicating results (<i>description</i>)	The workshop planning will be published on the web. Also press releases will be sent to local media. The outcome of the workshop will be posted on the website for several months. Newsletters will be published and mailed out to coal-related industry.

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Table 4b: Implementation Plan for Recommended Activity (used in Step 6)
(Consider completing one individual table for each recommended activity)

Recommended activity name: Pre-feasibility Studies	
Implementation Plan Essentials	Description
Resources required <i>(e.g., funding, equipment, training)</i>	Funds will be required to obtain data for the studies. Personnel are required to conduct the studies. Training of technical personnel on recovery of CMM and CBM is required. Equipment for CMM/CBM estimation is required.
Personnel/organization/agency to lead effort <i>(name, affiliation)</i>	Olubunmi Ogunsola, CPE/TEMEC
Expected opportunities/outcomes <i>(e.g., tonnes CMM abated, training materials)</i>	Provides information to potential investors to make informed decision. Reduction or elimination of CMM emissions.
Milestones/progress indicators <i>(e.g., emission reductions, draft documents)</i>	This will take 12 months to complete pre-feasibility studies on a mine.
Implementation timeline <i>(day, month, year – include milestones)</i>	Note: A pre-feasibility study of Enugu coals is going on.
Plan for communicating results <i>(description)</i>	The results of this project will be communicated through reports, press release and website posting.

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Table 4c: Implementation Plan for Recommended Activity (used in Step 6)
(Consider completing one individual table for each recommended activity)

Recommended activity name: (e.g., technical training)	
Implementation Plan Essentials	Description
Resources required <i>(e.g., funding, equipment, training)</i>	Funds will be required for arranging with experts in various areas of CMM recovery and use to train group of people in Nigeria. Training of technical personnel on recovery of CMM and CBM is required. Training can include study tour, visits to CMM recovery and utilization sites. Funds for travel expenses are required.
Personnel/organization/agency to lead effort <i>(name, affiliation)</i>	Olubunmi Ogunsola, CPE/TEMEC
Expected opportunities/outcomes <i>(e.g., tonnes CMM abated, training materials)</i>	Stakeholders will be more knowledgeable about CMM recovery and utilization, and CMM project development.
Milestones/progress indicators <i>(e.g., emission reductions, draft documents)</i>	This can be up to 8 months from start to finish. The benchmarks will include initial and final planning, selection of participants, conducting the training, conduct tour studies, evaluate the outcome, and writing the report.
Implementation timeline <i>(day, month, year – include milestones)</i>	February 2009 to September 2009.
Plan for communicating results <i>(description)</i>	The results of this project will be communicated through reports, press release and website posting.

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Table 5: Summary Template for Presenting Country-Specific Strategies in the CMM Sector (used in Step 8)

NIGERIA	
Eight Steps	Short Description
Step 1) Reference broader national-level initiatives	
Step 2) Identify authors and process (name, affiliation)	<p>Olubunmi Ogunsola, TEMEC/CPE (Point of Contact);</p> <p>Adeleke Oke, Federal University of Technology, Minna;</p> <p>Ayodele Agunloye, Centre for People and Environment (CPE);</p> <p>John O. Atabo, National Steel Raw materials Exploration Agency, Obi Nasarawa.</p>
<ul style="list-style-type: none"> ▪ Process for developing country-specific strategy 	<p>Information will be collected through literature review, personal contacts, and data from field work. Mode of communication will include e-mails, phone calls and meetings.</p>
<p>Step 3) Summarize country's coal sector in relation to CMM/CBM projects (see Table 1)</p> <ul style="list-style-type: none"> ▪ Coal production ▪ Coal mine types ▪ Gassy mines ▪ Regulatory framework (<i>ownership of coal/gas</i>) 	<p><u>Coal Production</u>: 2,712 (2002)</p> <p><u>Coal types</u>: Sub-bituminous and lignite</p> <p><u>Gassy Mines</u>: Unknown</p> <p><u>Ownership</u>: Nigerian government. Pending joint venture between NCC, national and international partners (2008)</p>
<ul style="list-style-type: none"> ▪ Are there commercial scale CMM recovery and use projects? ▪ Are there commercial-scale CBM production projects? 	<p>At present there are no CMM recovery and use projects going on in Nigeria. There are no CBM production projects either.</p>
<ul style="list-style-type: none"> ▪ Barriers to CMM Project Development 	<p>The major barriers to CMM project development in Nigeria are technical, funds, and lack of knowledge/education on CMM benefits.</p>

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<p>4) Describe ongoing activities promoting in-country CMM/CBM recovery and use</p> <ul style="list-style-type: none">▪ Data collection information products▪ Capacity building▪ Targeted information exchange▪ Specific technical training▪ Prefeasibility assessments▪ Feasibility assessments▪ Technology demonstrations▪ Other activities	<p>The only on going activity to promote in country CMM/CBM recovery and use is the pre-feasibility study that Centre for People and Environment and Tryby Energy and Environmental Corporation (TEMEC) are conducting on Enugu coals.</p>
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<p>Step 5) Recommend appropriate activities to further promote CMM/CBM project development (see Table 2)</p>	<p>Activities that will promote CMM/CBM project development in Nigeria include: (i) holding workshops to educate the stakeholders; (ii) have information clearing houses; (iii) pre-feasibility studies (iv) technical training</p>
<ul style="list-style-type: none"> ▪ Prioritize activities (see Table 3) 	<p>Workshop (most needed) Pre-feasibility studies Feasibility studies Technical training Information clearing house</p>
<p>Step 6) Outline implementation plan for each recommended activity (see Table 4)</p> <ul style="list-style-type: none"> ▪ Resources required ▪ Personnel/organization/agency to lead effort ▪ Expected opportunities/outcomes ▪ Milestones/progress indicators ▪ Implementation timeline (<i>start to finish; milestones</i>) ▪ Plan for communicating results 	<p>Funding for workshops, pre-feasibility and feasibility studies; technical training. Personnel are needed to implement the activities.</p>
<p>Step 7) Create a plan for updating and communicating the strategy to key individuals, organizations, and incorporating it into national-level initiatives, if present</p>	<p>The plan will be updated annually. The strategy will be reassessed as situation changes. By the time the privatization is completed all the new owners would have the opportunity to contribute to the updates.</p>