



BALANCING ENERGY & ENVIRONMENT FOR SUSTAINABLE DEVELOPMENT IN THE GREATER MEKONG SUBREGION

First Planning and Consultation Workshop on the GMS Energy Strategy

**31 July 2006, Monday
Bangkok, Thailand**

SUMMARY OF PROCEEDINGS

1. About 70 participants attended the First Planning and Consultation Workshop on the Greater Mekong Subregion (GMS) Energy Sector Strategy held in Bangkok, Thailand on 31 July 2006. The participants included senior government officials and policy makers from the GMS member economies,¹ as well as representatives from academia, civil society, development partners, and the private sector. The list of participants, workshop program and presentation materials are posted on the project website at <http://adb.org/Projects/GMS-Energy-Strategy>.

Opening and Welcome

2. Mr. Rajat Nag [Director General, Southeast Asia Department, and Special Advisor to the President, Regional Economic Cooperation & Integration, Asian Development Bank (ADB)] and Dr. Porametee Vimolsiri (Senior Advisor in Policy and Plan, National Economic and Social Development Board, Government of Thailand), welcomed and thanked the participants for attending the workshop. Mr. Nag also took the opportunity to offer the following suggestions for the study: (a) take into account the diverse needs of the GMS economies; (b) put together early in the planning process the varied, often conflicting, concerns of the different sectors of society, including those of the poor; and (c) strike a proper balance among them. Mr. Nag and Dr. Vimolsiri both underscored the importance of regional cooperation and integration in addressing the energy-environment challenge confronting the region.

Study Objectives, Scope, and Key Issues

3. Ms. Rita Nangia (Director, Special Projects, Southeast Asia Department, ADB) and Dr. Leo Schratzenholzer [study team leader, Integriertes Ressourcen Management AG (IRM) of Austria], presented an overview of the key challenges facing the GMS in the energy sector, the study objectives, scope, and timetable.

4. The key energy challenges identified included: (a) rapid energy demand growth; (b) population without access to modern forms of energy services; (c) quality of energy supply; (d) energy security; (e) energy efficiency; (f) environment issues; (g) expanding private sector participation; and (h) institutional and policy issues.

5. The study was designed to: (a) help articulate a clear a vision for GMS energy cooperation in the energy sector; (b) develop a strategy to meet energy challenges until 2020; (c) identify priority investment projects for the public and private sectors; and (d) draw up an operating framework for enhancing regional energy security.

¹ The Greater Mekong Subregion covers Cambodia, Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam, and the Guangxi Zhuang Autonomous Region and the Yunnan Province of the People's Republic of China.

6. The study would be undertaken over a period of 10 months. Regional workshops would be conducted following the completion of key reports, namely: (a) Inception Report in June 2006; (b) Interim Report (Results of Model Runs) in October 2006; and (c) Draft Final Report (Least-Cost Strategies) in February 2007.

7. Ms. Nangia explained that the “least-cost plus” approach would be adopted in defining the regional energy strategy. This approach considers not only financial and economic but also social and environmental impacts.

8. Ms. Nangia affirmed that the strategy would be developed in an open and participatory way. A series of regional and national workshops would be organized during the course of the study to give the stakeholders the opportunity to share their views and shape the strategy. In addition, a project website has been set up as another means of disseminating important information and gathering feedback.

9. Dr. Schrattenholzer presented a profile of IRM and introduced the key members of the study team.

Roundtable Discussion: Balancing Energy & Environment for Sustainable Development

10. Dr. Tariq Banuri (Director, Stockholm Environment Institute, Asia) emphasized the role of a strong, credible, and independent research community in achieving the right balance between energy and environment in GMS. He also suggested the following: (a) incorporate climate and clean development mechanism (CDM) directly into the framework and build a regional platform for benefiting from CDM; (b) adopt a framework that will accommodate usual criticisms against hydropower; and (c) address distributional issues, for example by showing the trends in fuel wood use, costs, and access to energy services.

11. Mr. Donald Dreier (Marketing Director for Asia, GE Energy) projected that renewable energy would become a major contributor to the world's primary energy mix in the long term. He pointed out, however, that this would require strong policy, institutional, and financial support.

12. Mr. Xaypaseuth Phomsoupha (Chief, Bureau of the Secretariat, Lao National Committee for Energy) asserted that hydropower is a feasible option for attaining efficient and affordable energy as shown by Lao PDR's experience in the Nam Theun 2 Hydropower Project. The project is a joint venture of the public and private sectors, with assistance from development partners. The tariff for its electricity output reflects not only financial but social and environmental costs as well.

Keynote Address: Sustainable Development in Asia: Challenges & Prospects

13. Dr. Mohan Munasinghe (Vice Chairman, Intergovernmental Panel on Climate Change) highlighted the importance of energy in sustainable development and put forward a possible framework for integrating energy policies into the overall sustainable development strategy. Applying the sustainomics framework, he made the following recommendations regarding the methodology and process of the study:

- a. **On Methodology.** The study should take a balanced consideration of the social, economic, and environmental aspects of energy development (i.e., the Sustainable Development Triangle). More particularly, this involves the following: (a) use of least-cost as benchmark for both regional and national analyses, drawing on cost-benefit analytical framework, economic opportunity costs, shadow prices, etc., valuing and internalizing environmental and social impacts, and incorporating transboundary effects; (b) use of non-monetary indicators for social and environmental impacts that are difficult to value; (c) identifying options where all indicators are better as well as trade-off situations; (d) mainstreaming by linking upwards to macroeconomic level and downwards to project level.

b. **On Process.** The study should give equal importance to the process of developing the strategy. It would be worthwhile to pursue the following: (a) a consultative process that allows participation of multiple stakeholders and establishes a neutral forum or community of knowledge to maintain a balanced view and provide sustained inputs to decision-making process well beyond the lifetime of the project; (b) a transdisciplinary approach where economic, environmental and social data gathering and analyses will run in parallel; and (c) mainstreaming by linking upwards to decision makers and downwards to concerned public and stakeholders. Lastly, the strategy should regard energy development as a continuing agenda and should therefore take a multi-phase approach to sustain early initiatives through a possible Phase 2.

Study Work Plan and Proposed Methodology

14. Dr. Schratzenholzer reiterated the milestones of the study and described the features and data requirements of the planning model that would underpin the regional energy strategy—the Model for Energy Supply System Alternatives and their General Environmental Impacts (MESSAGE), developed by the International Institute for Applied Systems Analysis (IIASA). As least-cost strategies are to be identified for various scenarios, MESSAGE is deemed appropriate since it is capable of optimization. It is also equally suited for different sizes of the underlying energy system and lends itself to integration of country results into a bigger system of collaborating countries and regions.

Comments and Issues Raised

15. **Expressions of Support.** During the open forum, several participants from all the sectors represented in the workshop expressed their appreciation for the valuable insights of the resource persons and pledged their support for the study. Organizations involved in similar work such as ASEAN indicated their willingness to contribute by way of information sharing, complementary analytical work, and allowing use of existing institutional set-ups.

16. **Participatory Process.** There was a broad agreement that a participatory approach would be essential in strengthening ownership among GMS countries, facilitating consensus building, and ensuring the sustainability of the regional energy strategy and the corresponding process. The study would serve its purpose well if it is geared towards decision makers and is able to clearly and succinctly present tradeoffs and sets of options, but ones derived through the participatory process.

17. **Right Assumptions and Accuracy of Data.** Civil society representatives stressed the importance of making the right assumptions and using accurate data as these would greatly influence the results of the modeling exercise. Questions centered on how externalities would be internalized and how data inputs would be validated. The study team leader clarified that the model does not distinguish among the different types of costs and would only capture externalities to the extent that they are identified and valued. The study would primarily rely on domestic experts and the country coordinators for the project in verifying accuracy of data but would also conduct plausibility checks using global data. It would also ensure uniformity in definitions (e.g. issue on conventional hydro as renewable energy). As to the suggestion to bring in perspectives other than that of economists, ADB confirmed that the study team does consist of international and local experts from multiple disciplines, including economists, social experts, and environment experts.

18. **Renewable Energy and Demand Side Management.** There were divergent opinions on other vital inputs to the study such as the future scenarios for renewable energy, with some participants being less optimistic than others on its contribution to total primary energy. There was, however, wide support for the proposal to establish a robust institutional and policy framework for renewable energy, and likewise to assimilate clean development mechanism into the energy strategy. Views also differed on the proper treatment of demand side management options—whether they constitute an additionality on the supply side or a reduction in demand. The MESSAGE model, as explained by Dr. Schratzenholzer, can incorporate energy efficiency either through a low demand scenario or improved technical efficiency of energy conversion technology.

19. **Perspective for PRC's Energy Planning.** A representative from the government of People's Republic of China (PRC) urged the study team to look at the whole country and not concentrate on the member economies of the GMS Economic Cooperation Program, namely PRC's Yunnan Province and Guangxi Zhuang Autonomous Region, consistent with the government's centralized approach to energy planning. As explained by ADB in a separate meeting with PRC representatives, however, the interface of ADB would be at the central level, but the geographic coverage of the study would be limited to the two provinces.

20. **Private Sector Participation.** A private sector representative called attention to the current lack of bankable cross-border projects such as Nam Theun 2. He suggested that the study examine impediments to private sector participation country by country and identify projects suited for collaboration to set good precedents. Moreover, it would be worthwhile to tap the private sector's growing interest in socially and environmentally responsible endeavors.

21. **Governance Issues.** Civil society representatives pointed out that governance is a critical challenge and should be a focus of the study. For one, the transparency of national energy planning process should be improved. Other participants encouraged development partners to help promote better governance but acknowledged that the responsibility ultimately rests with the countries themselves.

22. **ADB Response.** ADB indicated that the study would seek to address the comments and issues raised during the workshop. Issues such as capacity building and the creation of a research community would be taken up in a separate phase given constraints of time and resources. The study would serve as input to ongoing work that tackle broader challenges such as the GMS' Core Environment Program and the GMS Economic Cooperation Program as a whole.

Next Steps and Closing

23. Ms. Nangia thanked the speakers, participants, and the workshop secretariat for their contributions to the workshop. She informed the participants that the inception report and presentation materials would be posted on the web and further queries and comments may be sent through email. The consultative process would continue with more national and regional workshops. A significant next step for the study, as announced by Ms. Nangia, is the formation of a panel of experts in August 2006 to guide and enrich the process of developing the regional energy strategy. The panel would consist of renowned energy and environment experts, two from within and two from outside the region.