

**Consultation on ADB's Draft Energy Strategy  
Southeast Asia and the Pacific Islands  
ADB Headquarters, Manila, Philippines  
13 July 2007  
Summary of Participant Comments**

**I. Background**

ADB organized a consultation workshop on the draft energy strategy with representatives of government, civil society organizations, academe, donors, industry, and others from Cambodia, Cook Islands, Hong Kong, Indonesia, Fiji, Lao PDR, Philippines, Singapore, Thailand, and Vietnam.

In the first part of the workshop, participants heard a presentation on an overview of the draft energy strategy. This was followed by a period for clarification questions (not comments) related to the draft.

Participants then critiqued the draft energy strategy in break-out groups organized by stakeholder type. Groups were instructed that it was not necessary to reach consensus or agreement, and that divergent views should be noted. Each group's chosen representative reported the highlights of the group discussion to the workshop plenary; presentations were followed by a plenary discussion.

Following is a synthesis of the participants' recommendations and a summary of the plenary discussion.

**II. Break-out Group Discussions**

**A. Feedback from Government Representatives' Break-out Group**

**1. *Strengths of the Draft Energy Strategy***

- Comprehensive in its assessment of issues in Asia. Identifies good focus for strategy (pillars).
- Provides general guidelines/framework for the region.
- Took into account good prior policies that ADB has advocated and past experience has allowed best practices to be identified.
- Stakeholder consultation and participation is positive.
- Structure of the draft report and main contents should be maintained.

**2. *Recommendations for Improvement of the Draft Energy Strategy***

**Energy Data**

- Some arguments/basis for some content are unclear (e.g., data sources and data gathering methods which form basis for strategy's framework).
- Data does not reflect Asian situation and regional realities. (Note: on the other hand, specifics may be discussed during the formulation of country-specific strategy)

**Targets**

- Regional targets/indicators not specified; no measurable goals or timeframe.

### Energy Access for All

- Page 24, para 70 on pillars: energy access for all should focus on/target the poor.
- Reword second pillar to reflect two issues being addressed – access and affordability.

### Gender

- Gender issues not addressed; should target to simultaneously address industry and social demands in a sustainable way.

### Definitions

- Should define “sustainable way” clearly and concretely (e.g., sources).

### Relationship with other sector policies/strategies

- How does the strategy interlink with policies in other sectors? For example, energy sector vis-à-vis transport, water, agriculture, etc.; include general policies on these sectors (cross-sectoral approach) in order to provide a more comprehensive picture. Some energy problems can be solved through implementing the right close-related sector policies (i.e., transportation, agricultural (for alternative bio-energy supply) urban land use).
- How does the strategy impact other regional concerns, e.g., forest management, agriculture, etc.?

## **3. *Recommended Interventions by ADB***

- Technological assistance (skills training), especially in renewables.
- Would like to have large hydropower plants. ADB should:
  - Provide clear explanation of how to address social costs
  - Provide rehabilitation costs/efficiency improvement
  - Provide technical and financial assistance for countries with available hydro resources
- ADB should facilitate regional energy trade market.
- On energy sector reforms:
  - include all energy-involved institutions in reform initiatives (reform should not only include regulatory agencies)
  - technical assistance on efficiency (state owned companies, etc.) and how to implement sectoral reforms (e.g., studies)
- All areas have opportunities for ADB assistance; however, there was consensus among the group that there was no interest in nuclear energy development.

## **4. *Pillars of the Draft Energy Strategy***

- Group basically agrees on the 3 pillars, but feels they need more focus.
- Restate pillar # 2 to reflect affordability aspect and focus on access for poor people/remote areas/ border islands/off-grid/small demand areas.
- Define “sustainable way” to specifically take into account environmental concerns, social/gender issues.

## **B. Feedback from Civil Society/Labor Break-out Group**

### **1. *Strengths of the Draft Energy Strategy***

- ADB's non-support of nuclear energy
- Promotion of natural gas as a transition fuel (no consensus in the group)

- Emphasis on energy efficiency; but can be further strengthened by using recommendations from the Operations Evaluation Department report, particularly on exhausting energy efficiency before focusing on adding new capacity
- Recognition of importance of renewables, including biomass and specific applications particularly in cooking and off-grid electricity (para 39)
- Greater articulation of climate crisis – draft reflects greater understanding of issue; comprehensive discussion of this key environmental issue
- Expansion/enhancement of renewable off-grid applications, including para 87 on Energy for All

## **2. Recommendations for Improvement of the Draft Energy Strategy**

### Targets

- Draft has no timeframes, thresholds, targets, benchmarks, or hurdles. There is no transition roadmap to low carbon economy, nor plan to operationalize the strategy. Draft should have more articulation of what objectives ADB should be reaching for. There is nothing in the draft that compels ADB to reach its targets – to be accountable for its failures; or, to mark whether it succeeds in reaching its targets or not. Not having targets is considered a very serious flaw of the draft.

### Power Sector Reforms

- Para 43, page 77 (Appendix) contradicts para 89, page 28. Para 43 of the Appendix discussed the failure of privatization, and why it shouldn't be part of the overall aim, and it should be only one of the methods, and should not take a cookie cutter approach. Yet in page 28, para 89 the draft states that ADB should continue its restructuring, unbundling, essentially its privatization track. Draft was very poor in this regard because of this contradiction.
- Draft avoids discussion of failed and flawed policies, e.g., privatization in certain areas of Asia.
- Draft is weak on core labor standards and social protection.
- Draft does not mention that for fully privatized firms, the collective bargaining agreements should be respected and upheld.
- Draft has a very narrow definition of power sector governance, seemingly defining this only as unbundling when it should be much more than that, including public participation, encouraging bottom-up participation for designing power sector reforms in any given country.
- The power sector reform and governance section is simply a cookie cutter approach stated in new language.
- Draft should be more candid about the experience of stranded costs, particularly in the Philippines, because lessons not learned/stated would likely be repeated.
- There should be a full options approach to power sector reform.

### Low Carbon Economy

- The business-as-usual framework of ADB's Energy Strategy will negate ADB's recognition of the need to shift to low carbon economy and of providing energy for all. Based on experience, it will actually result in a more carbon intensive economy.

### Transport sector

- Draft was very weak in the transport sector section; little articulation, just stating the obvious.

### Hydropower projects

- Draft lacks definition of what constitutes large hydropower, when ADB will “selectively” engage in these projects, and when ADB will avoid them.

- Would ADB consider standards of World Commission on Dams? How transparent would the selection process be, whether ADB would support large hydro or not?

#### Coal

- Draft promotes the fantasy of cheap, clean coal. It does not discuss actual costs related to coal expansion, nor the fact that new technologies do not actually reduce carbon significantly and that most of the costs are transferred to taxpayers.
- When ADB promotes coal, it doesn't actually tell its DMCs that the balance sheet is actually more than just the price; coal is more expensive than what it seems.

#### Renewables

- Draft ignores the huge policy and market drivers and experience on renewables, e.g., policies which drove the spike in wind energy development in India, Spain, and Germany, and how that could be applied in terms of power sector reform in Thailand or the Philippines.

#### Externalities

- Draft ignored the key recommendations of the OED report, along with 1995 Policy and 2000 Energy Policy Review on externality costs. The 1995 Policy and 2000 Energy Policy Review explicitly stated that externality costs are implicit subsidies which should be in the balance sheet, and should be quantified when considering a project.

#### Integrated Resource Planning

- Need for integrated resource planning and allowing DMCs to make a choice in considering combination of projects, say instead of a 2000 megawatt coal plant, instead have a 100 megawatt coal plant and combine that with EE and RE.

#### Least Cost Accounting

- if you put all costs together, you will see which one is actually more expensive. It is unfair for ADB to say when it comes to renewable energy, we have to make the cost effective choices, but ADB does not apply the same parameters to fossil fuels.

#### Energy Efficiency

- OED report mentioned that the full efficiency potential of a country should be exhausted before adding new capacity.

#### Social Issues

- Draft had no mention of the baseline of inequality of rich and poor viz energy access.
- Draft was gender blind.
- Draft is weak on social protection and core labor standards, especially on restructured entities during power sector reforms. Draft did not incorporate strategies already outlined in ADB's Social Protection Strategy and in its Core Labor Standards Handbook. Public Services International will submit within the 60-day consultation period to ADB on how to integrate stronger language on core labor standards and social protection for workers in the draft Energy Strategy; hoping ADB will reply in written form as well.

### **3. Recommended Interventions by ADB**

- Was it deliberate that ADB included "nuclear" in question #3 [re recommended interventions by ADB] despite the fact the existing policy does not really agree with this? Was it actually deliberate in trying to influence minds to agree?
- Bank assistance should actually go to having an energy audit on ADB itself because it uses so much incandescent light bulbs in its HQ.

### **4. Pillars of the Draft Energy Strategy**

- Pillars were poorly formulated. They sounded more like advertising slogans.
- Pillars should be measurable/quantifiable.

- Quality of the draft: draft not fit for the purpose; seriously flawed; mediocre.

## **C. Feedback from Industry/Donors Break-out Group**

### **1. Strengths of the Draft Energy Strategy**

- Consultation process is positive element
- Necessary shift in emphasis to renewable and sustainable energy
- Recognized need for competition within the industry in the power sector and reform for the sector
- Awareness by ADB of changes globally and within the region and responding to those changes through the development of the draft strategy
- Strong emphasis on ADB's role in this part of Asia as key facilitator

### **2. Recommendations for Improvement of the Draft Energy Strategy**

#### Donor Coordination

- Draft does not describe how ADB strategy fits in with other donor agencies.

#### Biofuels

- Draft had limited discussion on biofuels.

#### Renewables

- Strengthen emphasis on renewables.
- Lacks emphasis of private sector role in providing renewable energy technology.

#### Targets

- Statement of vision is lacking. Document could be a tool for expressing vision of the energy future of the region by setting quantifiable goals and setting schedules for meeting them. ADB has an opportunity to take a real leadership role in setting those goals, e.g., percentages of renewables, or reductions in energy consumption. This needs to be added to the document to benefit DMCs.
- Strategy lacks in establishing priorities, such as the level of investment in each pillar, and/or providing rationale for them.

#### Definitions

- Clarity in definition between sustainable and renewable energy is lacking.
- Rule of law and good governance should be defined.

#### Hydro.

- Only small hydro was defined as being renewable. That is not appropriate – large hydro should be defined as renewable resource, but the emphasis should be on the development of sustainable hydro regardless of size.

#### Review of Strategy

- Document should include schedule for future revisions to the strategy and the timing should be sooner than every 5 years. Subsequent ADB policies need to have fast response time to changes to regional and global conditions. A shorter cycle time in terms of planning, or interim updates, would be appropriate.
- Twenty-three year projection of energy demand is unrealistic. Build flexibility into the draft when looking at energy projections 20 years in advance.

#### Energy Security

- Energy security is country-specific: what is energy security for a country that has large coal resources; and energy security for a country that has no coal and has no natural gas? Regional cooperation is important.

#### Energy for All

- Goal of poverty reduction and electricity for all are conflicting goals if the poor do not have an increase in income to pay for electricity.

#### Integrated Resource Planning

- Draft needs to take a larger scale look at the region in terms of an integrated resource plan for DMCs in total or by regional subgroups. It would be beneficial to have energy use and projected sector usage specifically related to member countries and not just global data to give better context for planning.

### **3. *Recommended Interventions by ADB***

- Promotion of transparent rate structures by members is especially important in developing the renewable energy sector so that businesses that want to develop renewable resources have a clear understanding of the return they would have on their investments.
- Provide stronger emphasis on external benefits of policy alternatives.
- ADB assistance in targeting initial investments would reduce risk and decrease investment risk.
- Would like to see ADB undertaking feasibility studies on hydropower investments to reduce the risk for developers. If the private sector is to invest in hydro, the initial work to decide whether the project will proceed or not is high risk. If ADB takes on that risk, the subsequent development risk profile will go down such that other investors are likely to follow.

### **4. *Pillars of the Draft Energy Strategy***

- The wording in the first pillar has a sense of being solely demand driven. Change emphasis to sustainable levels of production and meet those with efficiency and energy production. Could become ‘Meeting the energy *needs* in a sustainable way’
- Electricity for all: a concern that this might sway poverty reduction priorities. Must beware that this may lead to misallocation of resources. There are other factors to be considered in poverty reduction, e.g., health care. Setting a single goal here might be a misappropriation of resources for some countries.

## **D. Feedback from Donors/Academe/Institutes Break-out Group**

### **1. *Strengths of the Draft Energy Strategy***

- Made a solid attempt to deal with energy efficiency, renewable energy, and climate change
- Constant emphasis on sustainability
- Energy for All
- Comprehensive outline is springboard for comments and consultation
- Consultation is taking place; hopefully comments will make their way into final report

### **2. *Recommendations for Improvement of the Draft Energy Strategy***

#### Defining the “problem”

- Reconsider defining the “problem” as provision of service (public/private) vs. increased generation.

#### TA for policy development

- Draft lacks discussion/strategy for assistance to DMCs in developing own energy policies.

#### Climate change

- Given the prominence of energy issues in light of climate change, the draft strategy is not visionary enough.

- The strategy talks about growth in demand (capacity, or kilowatts), the growth in the need for investment, and the growth in the carbon footprint (consumption or kilowatt hours). The strategy needs to address both investment to meet the demand and carbon footprint (load profile – what kind of demand). The strategy’s data on growth should look at kw and kwh.

#### Human Resource Development

- Human resource development is not mentioned.

#### Relationship with Other Sectors

- Draft looks at energy sector as a stand-alone sector, but it is interdependent. For example, water impacts hydro power and cooling of thermal units.

#### Definitions

- Lack of definitions, e.g., “modern energy”, “modern fuel sources”, “clean”, “sustainable”

#### Country-Specific

- Specific country energy priorities – given the dominance of PRC and India (growth is a driver for these two countries, but not for the other countries)

#### Priorities

- In some respects, there are conflicting goals. There is tremendous demand for new capacity that has to be met, and a lot of it will be met by fossil fuels. If ADB is placed in a situation where it needs to choose between two projects, e.g., coal vs. EE or RE project, how will the priority be set in those competing projects?

#### Donor Coordination

- Draft has no mention of perspectives of other donor agencies and other global institutions (e.g., UN, UNESCO, OECD, WEC, bilateral donors, ILO charters). Since donors have limited resources, collaboration among donors and other global organizations should be part of the strategy to prevent overlap.

#### Energy Efficiency

- In energy efficiency, economic instruments (pricing) not explored - little discussion about economic instruments to force EE. Demand side management and demand side planning were driven by price in the past.

#### Energy sources

- The draft’s analysis of different sources of energy was not equal (e.g., coal was discussed but availability of water resources for hydropower was not; little on uranium and nuclear).

#### Nuclear

- Many – but not all – group members questioned, Why continued policy on non-involvement in nuclear energy? Why not at least talk about it?

#### Participation

- Draft should address how to put a community voice in ADB financed energy projects, not only during planning and construction, but also in the operational stages.

#### Environmental/Social Impacts

- Draft lacks a systematic way of monitoring/addressing environmental and social consequences of energy projects after completion.

#### Scope of Draft Strategy

- Draft has a one-size-fits-all approach, but the region is so diverse.

#### Biofuels

- Biofuels and the transport sector in general received very little attention in the draft.

#### Consultation Process

- Previous consultations not included in the current draft.
- Process of consultation is unclear; how participants were selected.

### **3. *Recommended Interventions by ADB***

- Donor coordination and cooperation
- Need for regional planning across a number of countries; technical assistance on capacity building on energy planning. Planning and load forecasting is critical, but not too many governments are strong in that area.
- TA is needed for specific countries:
  - Philippines: needs technical assistance on planning (not necessarily government)
  - Malaysia: needs technical assistance on preparing comprehensive energy policy
  - Thailand: needs technical assistance on sector planning, waste-to-energy
- Technical assistance needed for setting regional standards for equipment as it relates to EE. Many products from PRC may be inexpensive, but are not energy efficient.
- Need for technical assistance in capacity building, not only for regulators but also for regulated entities (e.g., distribution utilities, generation companies, etc.). ADB technical assistance is needed to raise capacity of all players.
- Bigger role for ADB in financing R&D, especially for renewable energy
- The energy sector is linked to other sectors; need to look at impact of other technology on energy sector. Energy technology roadmap – technical assistance is needed for appropriate technology, technology assessment, and technology transfers.
- Technical assistance for reducing distribution losses. This is huge in many countries, particularly the Philippines, resulting in many lost kilowatt hours. Whether it's technical or non-technical, it must be dealt with.

### **4. *Pillars of the Draft Energy Strategy***

- Should energy sector reform actually be a pillar? Sector reform is seen more as a delivery vehicle, a way to accomplish some of the overall strategies. It is not necessarily a strategy in and of itself.
  - In some areas, reforms are not appropriate (e.g., state-owned and operated better)
  - Electricity as a public good
  - Sector reforms balanced against community benefits and needs
- Do all pillars have equal importance? There is no discussion of priorities. Were the pillars intended to be of equal importance in the strategy?
- Definition of words in the pillars: sustainable, modern, access
- “Energy for all” sounds too absolute and ambitious.
- Having pillars is a good idea, but they could be presented in a different way based on what is really needed. Suggested three new pillars: energy investment; energy technology; energy institutions.

## **E. Feedback from Pacific Islands Break-out Group (government and industry)**

### **1. *Strengths of the Draft Energy Strategy***

- Consultative process
- Broader issues are well covered in the draft
- Flexibility
- Recognizing need for change since 1995
- Strategy reflects changes and shows a way forward for Asia and Pacific region

## **2. Recommendations for Improvement of the Draft Energy Strategy**

### Consultation Process

- In the Pacific Island Region, there is a need for regional organizations to be part of the consultation process. We have different platforms – one is the Pacific Island Forum which is made up of Prime Ministers. These are people who dictate the policies; hence there is a need to consult with them.

### ADB policies

- Strategy is confined by ADB policies.

### TA

- Lack of recognition of need for ongoing technical assistance.

### Energy data

- Energy data poorly reflects Pacific Island DMCs. Most of the references are from IEA, and we do not reflect well in IEA data. ADB needs get energy data directly from our countries.
- Draft needs to include energy data for PIDMCs.

### Targets

- Draft needs to have a wholistic approach that includes an implementation framework - timeframes, measurable goals.

### Nomenclature

- Use “Pacific Island Developing Member Countries” (PIDMCs), not “Pacific Developing Member Countries” (PDMCs) in the strategy.

### Gender

- Gender mainstreaming

### Strategy Components

- No mission statement - if they are pillars, what are they holding up? Mission statement should reflect both Asian and PIDMCs.
- Draft needs a monitoring and evaluation framework

### Review of Strategy

- Periodic review – minimum of 5 years or more to review strategies.

### For Pacific Island Developing Member Countries

- Need to include in the draft, for PIDMCs, bulk procurement of fuel oil and fuel price hedging.

## **3. Recommended Interventions by ADB**

ADB should provide technical assistance for PIDMCs in:

- Bulk procurement of oil
- Price hedging
- Legislative drafting – energy related issues, e.g., appliance labeling and standards, non-technical losses, etc.

## **4. Pillars of the Draft Energy Strategy**

- Without oil, the Pacific Islands will not have modern access to energy, and we cannot meet energy demand. That is the stark reality in the Pacific. An additional pillar relevant to PIDMCs is suggested: oil security (para. 80). Oil security reflects the decision of the Regional Energy Ministers Forum (June 2000).

### III. Plenary Discussion

Following the Break-out group presentations, workshop participants discussed a variety of issues related to the energy strategy.

**Quantifiable Goals/Targets:** Many of the break-out groups reported the lack of quantifiable goals or targets as a weakness of the draft strategy. Quantification and baseline data are important because it provides a basis on which you can account for your success or failure. These yardsticks should be clear to everyone. The level of specificity could be similar to that proposed by WWF at the Clean Energy Forum in June, which indicated the level of additional joules there would be due to a reduction in energy consumption, and how many additional joules would be converted from fossil fuel power sources to low emission technologies.

**Hydro:** On the matter of large hydro not being renewable, it is more important to talk about large hydro as being well managed or not well managed, in terms of being sustainable, rather than an arbitrary definition on whether large hydro is renewable or not. Will large hydro be sustainable in the future?

**Data:** The draft strategy needs more rigorous data sources; should not rely on Wikipedia or the Uranium Information Center of Australia.

One key investment ADB needs to make is to build up a database. This is very important and a significant amount of money has to go into building that data infrastructure.

**Energy Roadmap:** If there were an energy roadmap for the region, then the strategy could be more of a roll-up of all the scenarios that have been explored on the ground in the different countries. That should be the approach to take – the ADB should work bilaterally with all the countries, and as those strategies are firmed up, then they would all be rolled-up into a region-wide vision. That would be updated every five years or so in order to see progress against targets, and the tactics could be realigned to meet the targets accordingly.

**Power Sector Reforms:** The draft mentions some progress on power sector reforms in some Asian countries, but does not really give much information on the basis of progress. Recommendation that ADB undertake a multi-stakeholder review of power sector reform in the region. This review should be conducted by multiple stakeholder, not just ADB reviewing its own sector operations. One step towards a multi-stakeholder review would be leveling off a lot of information. We would be interested in ADB's data vis-a-vis progress on the reforms.

**Consultation Process:** After this consultation, we will have a summary in a matrix. We see that it will be submitted to management for approval and there will be no validation whether the assumptions are correct; there will be no further opportunity to refine this. What if there are glaring holes in the revised draft, as there were in the consultation draft? The next draft should be posted, with time allowed for validation of the draft.

## **Appendix 1: Additional Comments**

At the closing of the workshop, participants were each given a form on which they could write: (1) feedback on what they liked about the workshop, (2) what could be improved about the workshop, and (3) any additional concerns, issues, or suggestions they would like to share, which they did not have the opportunity to discuss during the consultation workshop. The answers to question 3 are summarized below.

### ***Draft Strategy***

#### National Energy Strategies

Link ADB's regional energy strategy with countries' national energy strategies.

#### ADB's Role

ADB should assist in providing technical and financial support to energy-involved institutions in each country.

#### Country-Specific

ADB should identify the problems and needs of each country.

#### Hydropower

ADB seems cautious in itself financing large hydro, but ADB encourages private sector in financing large-hydro by ADB's involvement in building transmission lines, guarantee project risks, enabling national legislation favorable to private finance. However, once a project attracts private finance, ADB should have role in ensuring accountabilities of private sector.

#### Sector Reform

Country power sector reform [is needed].

#### Tariff Policy

Tariff policy for sustainable sector development especially in electricity sector.

#### Energy Data

Data references are really bad. In research world, we were told NEVER to use Wikipedia as reference in important documents. Your sources need to be more reliable/respected institutions; data needs to be verifiable.

Table 3: Data is based on 2005 – too obsolete for “2007 Energy Strategy”

#### Renewable Energy / Energy Efficiency

- Renewable energy and energy efficiency – still expensive. This will lead to barriers for people's non-access to electric power.

### ***Consultation Process***

- There needs to be another consultation meeting to finalize document before presenting it to the board.
- Stakeholders should be given another opportunity to critique, comment on and/or validate the revised energy strategy paper before it goes to the Board and Management.
- Suggest ADB to include all comments/suggestions raised during the workshop as much as possible to the strategy.

- Feedback on the consultation is very important. We would like our concerns to be addressed and included in the final document on Energy Strategy.
- Continuing dialogue especially on impacts of power sector reforms (beyond the timeframe of consultation period).

## **Appendix 2: Workshop Participants**

### **GOVERNMENT**

#### **SOUTH-EAST ASIA**

##### **CAMBODIA**

1. Mr. Heng Kunleang, Deputy Director, Ministry of Industry, Mines and Energy
2. Mr. Cheap Sour, Director, Energy Development Department, Ministry of Industry, Mines and Energy

##### **INDONESIA**

3. Mr. Mohammad Salahuddin, Deputy Director for Energy Development and Utilization, Ministry of National Development Planning (BAPPENAS)
4. Mr. J. Rizal Primana, Deputy Director for Energy, Mineral Resources and Mining, (BAPPENAS)

##### **LAO PDR**

5. Mr. Sanhya Somvichith, Deputy Chief of Power Sector Planning Division, Ministry of Energy and Mines, Department of Electricity
6. Mr. Davong Phonekeo, Deputy Director General, Department of Electricity, Ministry of Energy and Mines

##### **PHILIPPINES**

7. Pia Corrina Romero Reyes, Senior Economic Development Specialist, National Economic and Development Authority (NEDA)
8. Marie Christine Tolaram Danao, Economic Development Specialist II, National Economic and Development Authority (NEDA)

##### **THAILAND**

9. Mr. Tawatchai Sumranwanich, Acting Head of Transmission Development Planning Sector, Electricity Generating Authority, of Thailand (EGAT)

##### **VIET NAM**

10. Mr. Tran Nguyen, Senior Expert, Department of Energy and Petroleum, Ministry of Industry
11. Mr. Pam Hung, Energy Expert, Ministry of Planning and Investment

#### **PACIFIC**

##### **COOK ISLANDS**

12. Mata Noora, Director of Energy, Energy Division
13. Steven Barrett, Senior Project Officer, Ministry of Finance and Economic Management, Aid Management Division

##### **FIJI**

14. Arieta Gonelevu, Senior Energy Analyst, Department of Energy

### **CIVIL SOCIETY ORGANIZATIONS (CSOs)**

15. Robert Anthony Knowles, Executive Director, SME Cambodia
16. Isagani Rodriguez Serrano, Vice President, Philippine Rural Reconstruction Movement (PRRM)
17. Maria Teresa Diokno Pascual, Board Member, Freedom from Debt Coalition (PHI)
18. Ana Maria Ronquillo Nemenzo, President, Freedom from Debt Coalition (PHI)
19. Dean Okol de la Paz, Freedom from Debt Coalition (PHI)
20. Hemantha Withanage, Executive Director, NGO Forum on ADB (PHI)
21. Ronald Masayda, Advocacy and Campaign Coordinator, NGO Forum on ADB (PHI)
22. Jelson Garcia, Coordinator, Bank Information Center Mekong/Southeast Asia Region (THA)
23. Leo Bottril, Infrastructure Program Officer, WWF International (USA)
24. Rean Dalisay Tirol, Climate and Energy Officer, WWF Philippines
25. Xiaozhi Liu, Regional Program Officer, OXFAM America, East Asia Regional Office (CAM)
26. Renato Redentor B. Constantino, Greenpeace International (PHI)
27. Abigail Jabines, Greenpeace Southeast Asia (PHI)
28. Violeta Corral, Researcher, Public Service International Research Unit (PSIRU) (PHI)
29. Greg Mclean, PSI-APREC- Utilities Network Coordinator and PSI-Public Sector Working Group Member, Public Services International (AUS)
30. Luis Manuel C. Corral, General Secretary, Association of Phil. Electric Corp. (APEC) and Asian Labor Network on IFIs (ALNI-Phil. Chapter)

### **ACADEME/INSTITUTES**

31. Quanchai Leepowpanth, Associate Professor, Department of Mining and Petroleum Engineering Faculty of Engineering, Chulalongkorn University (THAI)
32. Gurmit Singh, Chairman, Centre for Environment, Technology and Development, Malaysia (CETDEM)

### **INDUSTRY**

33. Ivanna Dela Peña, Vice President and Head, Utility Economics, Manila Electric Company
34. Orlando Del Rosario, Head of Forecasting/Senior Manager, Utility Economics, Manila Electric Company.
35. Roger Gill, Executive General Manager/International Vice President Hydro Tasmania/IHA (AUS)
36. Douglas Woodring, Vice President, Motorwave Co. LDT., Independent Power Producers' Forum (IPPF)
37. Anthony Edmund Neil, Executive Director, Pacific Power Association (FIJ)
38. Robert Schafish, Senior Consultant, R.W. Beck International Ltd. (SIN)
39. Sheng See Sim, Senior Hydropower Engineer, PB Power Asia. (PHI)
40. Joel Berk Laykin, Secretary General, Independent Power Producers' Forum (IPPF)
41. Wilbert Umali Billones, Manager, Energy Group, Electrobus Consolidated, Inc.

### **BILATERAL/MULTILATERAL DONORS**

42. Divina Bolos Chingcuanco, Country Director, Sustainable Energy Development Program, United States Agency for International Development (USAID) (PHI)
43. Michael Allen Pitlock, Project Director, Sustainable Energy Development Program, United States Agency for International Development (USAID) (PHI)
44. Allan Fruto Mesina, Development Assistance Specialist, United States Agency for International Development (USAID) (PHI)
45. Leonila Lucanas Gutierrez, Development Assistance Specialist, United States Agency for International Development (USAID) (PHI)
46. Aurelia Joanna Micko, Acting Chief, Office of Energy and Environment, United States Agency for International Development (USAID) (PHI)
47. Renato Goco, Chief of Party, Energy and Clean Air Project, (ECAP) (PHI)
48. Theresa Cruz-Capellan, Chief of Party, Alliance for Mindanao Off-Grid Renewable Energy (AMORE) (PHI)