



27th July, 2007

Mr. Woonchong Um,
Director, Energy, Transport and Water Division,
Regional and Sustainable Development Department,
Asian Development Bank,
6 ADB Avenue,
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1550 Philippines

By email

Re: IRN Submission on ADB Draft Energy Strategy

To Mr. Woonchong Um,

In response to the Asian Development Bank's (ADB) invitation for comments on its Draft Energy Strategy, International Rivers Network (IRN) would like to submit the following analysis and recommendations.

Key messages

The draft Energy Strategy contains a number of commendable objectives, including increasing access to energy, promoting modern energy planning practices such as Integrated Resources Planning (IRP), and fighting climate change by emphasizing energy efficiency and renewable energy technologies. IRN also recognizes that the ADB has clearly acknowledged the high environmental and social costs of large hydropower projects (para 55) and correctly categorized large hydro as a non-renewable energy source (para 37).

However, the draft Energy Strategy and ADB's project pipeline ultimately convey a "business-as-usual" approach with continued support for large hydropower and fossil fuel projects. These are not the energy technologies that will propel Asia to a modern energy future, safeguard the climate and promote universal energy access. These are not the energy technologies that an institution tasked with sustainable development and poverty reduction should support.

Based on IRN's experience monitoring a number of ADB-backed dams, IRN concludes that the ADB's existing safeguards and operational guidelines are insufficient, its institutional incentives are skewed, and its environmental and social staff resources are inadequate to manage the risks of these projects. **If the ADB is to support large hydropower projects and avoid the major mistakes of the past, the ADB should only support dam projects that are demonstrated to comply with the World Commission on Dams (WCD) guidelines.**

Another major failure of ADB's energy interventions to date has been the externalization of environmental and social costs and a bias towards large, centralized investments in new energy

supply. The ADB's draft Energy Strategy should implement the main recommendations of the Operation Evaluation Department's (OED) May 2007 review of the 2000 Energy Policy¹ to address these shortcomings :

- **Make improving energy efficiency the single highest priority in the new energy strategy.**
- **Incorporate environmental and social costs into its economic analyses for energy projects.**
- **Undertake upstream strategic, sectoral environmental and social assessments in countries where ADB plays a significant role in the energy sector.**

The following sections expand upon the above key messages and provide a number of additional recommendations.

1. WCD-compliant large hydropower

As stated above, the draft Energy Strategy includes some welcome measures, such as the push for energy efficiency measures and renewable energy sources. However, these positive measures will be undermined by ADB's continued support for large hydropower and fossil fuel projects. Large hydropower and fossil fuel projects do not provide the poverty reduction, energy access and environmental benefits of decentralized renewable energy technologies.

ADB's pipeline reveals that from 2007 to 2009, the ADB plans to provide \$910 million to support hydropower projects.² Furthermore, even when the ADB is not directly involved in financing projects, it continues to promote large hydropower schemes through its policy advice, studies, regional meetings, and transmission line projects, all of which subsidize the hydropower industry.

Regarding the ADB's on-going support for large hydropower projects, the draft Energy Strategy writes:

... ADB will also selectively support large hydroelectric power plants requiring seasonal storage reservoirs with multipurpose benefits. However, such financing will be based on enhanced economic benefits and compliance with ADB's social and environmental safeguards requirements (para 77).

The ADB draft Energy Strategy acknowledges the numerous serious environmental and social risks associated with hydropower development (i.e. para 55). However, based on past experience, the draft Strategy is wrong to assume that ADB Safeguards Policies and related mitigation strategies are sufficient to address these impacts. ADB-supported large hydropower projects have created rather than reduced poverty for affected communities. In Laos, for example, the Theun-Hinboun, Nam Leuk and Nam Song hydropower projects have left a legacy of destroyed livelihoods and damaged ecosystems. At least 40,000 people in Laos are still suffering from reduced fish catches, increased flooding, drinking water shortages and greater food insecurity as a result of these ADB-funded dam projects.

¹ OED (2007) "Energy Policy 2000 Review: Energy Efficiency for a Better Future", published by ADB May 2007 <http://www.adb.org/Documents/SES/REG/SES-REG-2007-05/SES-REG-2007-05.pdf>

² Sharan D., Lohani, B.N., Kawai, M., and Nag, R. (2007) ADBs Infrastructure Operations: Responding to Clients Needs, Published by ADB, March 2007

Furthermore, the Nam Theun 2 hydropower project, which will negatively affect more than 120,000 people, is already struggling to fulfill its commitments regarding environmental protection and livelihood restoration. Whilst construction is proceeding apace, environmental and social programs are behind schedule and livelihood restoration programs are in jeopardy in all project-affected areas. Despite heavy monitoring on the part of the ADB and World Bank to ensure safeguard compliance, both the Government of Laos and the Nam Theun 2 Power Company are backtracking on commitments they made at project approval.³

The World Commission on Dams report is recognized as the most comprehensive evaluation of the development effectiveness of large dams and an important tool to guide sustainable water and energy planning. Some elements of the draft ADB Energy Strategy, such as promotion of energy efficiency and improving planning processes, are central components of the WCD recommendations. If the ADB is to support large hydropower projects, it should work with its borrowers to use the WCD recommendations to determine project selection, guide project design, and govern project implementation.

Recommendation: The ADB should commit to implement the WCD recommendations in its Energy Strategy and to support only hydropower projects that are demonstrated to comply with WCD guidelines.

2. Integrated energy planning processes and options assessments: incorporating environmental and social costs, assessing poverty-reduction benefits

At the root of sound energy development are transparent, accountable and participatory energy planning practices. To develop environmentally sustainable and socially equitable energy solutions, the ADB needs to work to strengthen and democratize the energy planning process in member countries. As noted in the draft Strategy, “OED has also opined that analysis of alternatives in project identification and selection has been a shortcoming in ADB’s operations” (para 23). Commendably, the draft Energy Strategy commits the ADB to conduct Integrated Resource Planning (IRP), which is common in many developed countries but has yet to be widely adopted across Asia (para 75).

Unfortunately, the draft Energy Strategy does not detail the type of IRP framework that will be promoted by ADB. According to international best practice, IRP considers a full range of feasible supply side and demand side options. Electricity infrastructure investments are chosen based on the criteria that they provide reliable electricity services at the lowest overall economic cost to *society* (including social and environmental costs as well as risk) - rather than the lowest commercial cost to investors.

Another important aspect of IRP, not identified in the draft Energy Strategy, is the central role that public participation should play in determining the values from which planning objectives are derived. Major decisions are made through a process that includes informed, rigorous and meaningful public participation. A competent, fair, and independent energy regulator would oversee the process. The World Commission on Dams’ Comprehensive Options Assessment methodology also provides a useful wider framework. The options assessment ensures that a

³ IRN (2007) Nam Theun 2 Trip Report and Project Update, *Published by IRN May 2007*
www.irn.org/pdf/namtheun/NT2TripReport2007_full.pdf

participatory approach to energy planning is adopted and considers a series of scenarios incorporating both demand-side and supply-side options to meet energy needs.

The recent OED review of ADB's existing Energy Policy makes further key recommendations to complement the IRP process: 1) incorporating environmental costs into economic analyses, and; 2) conducting strategic, sectoral level environmental assessments for the energy sector to guide project selection (OED, p. viii). Social costs must be considered alongside environmental costs and should also be incorporated as part of the sectoral or strategic environmental assessment process.

The OED review points to the critical "environment-energy nexus" questions that an upstream sectoral assessment should answer: "(i) Are the right kinds of projects being selected for ADB support? (ii) Are policy reforms preferable to investments in more energy infrastructure? (iii) Could energy efficiency initiatives reduce or eliminate the need for further investment in generation capacity? (iv) What needs to be done to promote renewable energy? (iv) Would regional cooperation in the energy sector be a way to reduce environmental costs?" (p. 126).

These tools are critical planning and assessment mechanisms to guide pro-poor, sustainable energy planning in accordance with ADB's mandate. ADB should ensure that renewables, including small-scale and decentralized technologies, share a level-playing field with large-scale centralized energy infrastructure investments in the planning process. At present, regulatory frameworks and political agendas usually discriminate in favor of large-scale centralized energy infrastructure.

Recommendation: The ADB should outline a definition of Integrated Resources Planning that meets international best practice and that clearly requires transparency and public participation as part of the IRP process.

Recommendation: ADB should implement the OED review recommendations by committing in the draft Strategy: 1) to incorporate environmental and social costs into its economic analyses for energy projects, and; 2) to undertake upstream strategic, sectoral environmental and social assessments in countries where ADB plays a significant role in the energy sector.

Recommendation: Work with borrowers to conduct comprehensive energy options assessments – in line with the recommendations of the WCD - that incorporate the results of strategic environmental and social assessments, cumulative impact assessments and IRP processes.

Recommendation: In its regulatory and policy work with member countries, when it is determined necessary to develop new energy supply, the ADB should work to promote a level-playing field between large-scale centralized energy infrastructure investments and decentralized renewable energy options.

3. Energy efficiency

The OED review calls for the ADB to do significantly more to promote energy efficiency through its operations:

From an engineering and project planning perspective, building capacity is simpler. However, correcting inefficiencies offers the potential for large financial returns and improved environmental outcomes. Improving energy efficiency by examining both demand side and supply side alternatives should be made the single highest priority in the updated energy strategy. Before investing in new energy generation capacity, all feasible efforts should be made to decrease the demand through energy efficiency initiatives and increases in system efficiencies (p. iv).

IRN strongly supports the position of OED on ADB's role in promoting energy efficiency. Whilst the draft Energy Strategy generally supports increased energy efficiency measures, it does not fully comply with the OED recommendation.

Recommendation: The draft Energy Strategy should reflect the OED review's recommendation to make improving energy efficiency the single highest priority in the ADB's new energy strategy. The draft Strategy should clearly state that opportunities for improving energy efficiency should be exhausted before investments in new capacity are considered.

4. Excluding large hydropower projects from renewable initiatives

IRN commends the ADB on its recognition that only small- and mini-hydropower projects should be classified as renewable, considering the significant social and environmental costs often associated with large hydropower projects (para 37). IRN agrees that large hydro should be excluded from the renewable energy category for the following reasons⁴:

- Including costly large hydro in renewables initiatives would likely crowd out funds for environmentally and socially sustainable renewable energy projects.
- Large hydro projects have major negative social and ecological impacts and efforts to mitigate these impacts typically fail.
- Large reservoirs can emit significant amounts of greenhouse gases, especially in tropical regions.
- Large hydro reservoirs are often rendered non-renewable by sedimentation.

In the main text of the draft Energy Strategy, however, a definition for small- and mini-hydro is not given. In appendix 3 (para 25) it is written that "Small hydropower is commonly defined as below 10 MW— mini below 1 MW, micro below 100 kW, and pico below 1 kW."

Recommendation: The ADB should adopt the small-hydro criteria given in Appendix 3, and include the definition in the main text of the draft Energy Strategy.

Recommendation: Even small-hydro projects have the potential to incur significant environmental and social impacts. The draft Energy Strategy should stipulate that small-hydro projects should be developed with appropriate due diligence, including an assessment of environmental and social costs and following the requirements of ADB Safeguard Policies.

⁴ See IRN (2003) "Twelve Reasons to Exclude Large Hydro from Renewable Initiatives", published by IRN <http://www.irn.org/programs/greenhouse/pdf/12Reasons.pdf>

5. Large hydro and climate change

An increasing body of scientific evidence indicates that hydropower reservoirs, especially tropical ones, can emit significant quantities of greenhouse gases (GHG). The ADB's draft Energy Strategy commits the bank to addressing climate change and acknowledges the significant volumes of GHGs that can be released from hydropower reservoirs (para 55). However, the draft Strategy does not explain how GHG emissions from hydropower projects will be assessed or how the results will be incorporated into ADB's project appraisal.

Recommendation: The ADB should factor hydropower GHG emissions into its decision-making on new large hydropower projects.

6. Regional integration and large hydropower

As first proposed in its 1995 Energy Policy, the ADB draft Energy Strategy continues to promote regional energy trading, and reflects favorably on the ADB's Greater Mekong Sub-region program (para 86). The draft Energy Strategy also outlines the ADB's ambitions for further regional energy trading schemes, mainly fueled by large hydropower (para 64).

Under its Greater Mekong Subregion (GMS) program, the ADB has pushed for regional power trade since 1994. In the "Mekong Power Grid" plan, electricity from some of the most controversial hydropower dam projects proposed for China, Burma and Laos – where hydropower potential is huge and community opposition is stifled – would be transmitted through the grid to the energy-hungry cities of Thailand and Vietnam. The ADB has expended enormous effort and investment in encouraging competitive market-based power trade between the Mekong countries through supporting studies and regional meetings, as well as offering favorable loans and risk guarantees.

Whilst the ADB portrays the GMS Mekong Power Grid plan as a model project to be emulated by other regions, in actual fact it has moved forward under an extremely poor development process. The ADB's justification for the Mekong Power Grid plan is based on narrow economic criteria. Even according to this analysis, the Mekong power grid would deliver only marginal benefits while carrying considerable risk⁵.

Furthermore, regional integration of the energy sector has been promoted by the ADB in the absence of strong environmental and social safeguards throughout the region that would be required to mitigate transboundary, environmental, and social risks. Finally, the plan does not take into account cumulative social and environmental impacts, and was prepared almost entirely without the participation of civil society stakeholders. Ignoring best practices in power planning, the ADB has set about promoting a large power grid that depends on the viability of projects whose social and environmental costs have not yet been assessed.

Recommendation: Where national governments hold insufficient capacity to address the social, environmental and economic challenges of developing regional power grids fueled by hydropower, the ADB should not promote regional energy integration as a development option.

⁵ Garrett, B.W., (2005). Comments on Study for a Regional Power Trade Operating Agreement in the Greater Mekong Subregion, TA 6100-REG, Final Report, Discussion document commissioned by Palang Thai, Bangkok

Recommendation: Regional integration should not be promoted until it has proven to be the best solution through a Comprehensive Options Assessment process as outlined in the recommendations of the World Commission on Dams.

7. Lack of targets and timelines

The draft Energy Strategy does not include targets and timelines to ensure its effective implementation. The draft Energy Strategy also fails to assess the challenges and risks that will be faced to operationalize the strategy.

Recommendation: The draft Energy Strategy should detail specific targets, milestones, and timelines especially as they relate to the three “pillars” of the strategy and the goal of scaling-up support for renewable energy and energy efficiency initiatives.

Recommendation: ADB should identify what resources will be required, from both an institutional (staff/expertise) and operational (for example, expanding renewable energy lending portfolio to achieve strategy goals) standpoint, to implement the Energy Strategy.

Recommendation: The draft Energy Strategy should identify indicators for monitoring implementation progress. The ADB should commit to regularly assess these indicators and publicly report the results.

Recommendation: An assessment of the major barriers and challenges likely to be faced in implementing the strategy should be prepared, and measures identified to mitigate these challenges.

8. Process

A number of stakeholders have requested that ADB release a revised draft Energy Strategy before the final document is submitted to the Board of Directors. This is a critical step to show how and if stakeholder input was incorporated, and provide the opportunity for additional comment if necessary.

Recommendation: ADB should release a revised draft Energy Strategy with a matrix showing how comments are or are not reflected in the new draft. The draft should be posted for an additional comment period before being finalized and sent to the Board of Directors.

In developing its new energy strategy, the ADB should strive to become a leader in innovative and sustainable energy solutions for Asia. As it stands, the draft Energy Strategy’s positive rhetoric is undermined by the ADB’s continued support for large hydropower and fossil fuel projects. Instead, the ADB should increase and prioritize support for energy efficiency and renewable energy projects, cease its support for fossil fuel projects, commit to the World Commission on Dams recommendations, work with its clients to improve energy planning processes, and strengthen its safeguards.

We expect that your team will give due regard to these comments and look forward to reviewing a revised draft of the ADB Energy Strategy.

Sincerely,



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Southeast Asia Campaigner
International Rivers Network



Shannon Lawrence
Lao Program Director/Policy Analyst
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