



T0: World Bank Group
FM: Randy Hayes, World Future Council (WFC)
RE: Recommendations: Energy Strategy Consultation in Washington, DC

March 5, 2010

Thank you for the opportunity to comment on the emerging energy strategy and to speak at the Washington, DC consultation. Some of my initial comments and the conclusion relate to the general framing of the energy strategy effort. Most recommendations relate to consultation question #5.

Regarding question #5: **What should be the role of the World Bank Group in promoting new technology and/or helping to transfer existing technologies to new markets, and how much weight should the Bank Group give to each?**

This of course fits into the Bank's two key energy strategy goals to:

1. Improve access and reliability of energy supplies and
2. Strengthen governance of the energy sector to improve the contribution of energy to equitable economic development

The WB-stated objectives to help achieve these two goals are:

- Improving the operational and financial performance of the energy sector
- Strengthening governance of the energy sector to improve the contribution of energy to equitable economic development.

First of all, the WFC would like the energy strategy drafting team to consider the following: As was pointed out by Randy Hayes and several others at an NGO/WBG discussion in Copenhagen in the WB conference center headquarters, there is a heinous energy activity inconsistency in the World Bank Group's work. The WBG is a major funder of fossil fuels, while the WB expresses a desire to be of major help in addressing climate change issues. It is clear that there is a strong desire to shift energy paradigms to fit the new world contest by the energy strategy team and Jamal Saghir's leadership. However, the political nature of WBG decisions must not undercut any constructive efforts for a mid-course correction in energy strategy.

Recommendation #1: Formally recognize that two of the fundamentals for achieving an ecologically sustainable society (good for all future generations) are that:

1. Society is powered by renewable energy
2. Society doesn't waste non-renewable resources and therefore it embraces a zero-waste, closed-loop sustainable production and consumption system.

This is part of the paradigm shift that is required to sustaining human communities as well as the ecological communities -- over all future generations.

Nature's energy systems mimic a cyclic metabolism, not a linear flow. Our energy systems need to do the same. As has been said, linear energy systems and growth for the sake of growth is the ideology of the cancer cell. WBG energy policy, economic policy, and other key policies need to shift from a linear growth model to a cyclic model as represented in the zero-waste, closed-loop sustainable production and consumption system approach.

Recommendation #2: Rectify that inconsistency by fast-tracking out of virtually all fossil fuel funding and shifting that funding to energy efficiency and renewable energy work.

Recommendation #3: Reword question number 5, the goals, and objectives as follows:

Reworded question #5:

What should be the role of the World Bank Group in getting out of funding fossil fuels and in promoting new energy efficiency/renewable energy related technology and/or helping to transfer existing energy efficiency/renewable energy technologies to new markets, and how much weight should the Bank Group give to each?

This needs to fit into the Bank's two key energy strategy goals to:

1. Improve access and reliability of energy efficiency/renewable energy supplies
2. Strengthen governance of the energy sector to improve the contribution of energy efficiency/renewable energy to equitable zero-waste, closed-loop sustainable production and consumption economic systems.

The WB stated objectives to help achieve these two goals are:

- Improving the operational and financial performance of the energy efficiency/renewable energy sector
- Strengthening governance of the energy efficiency/renewable energy sector to improve the contribution of energy to equitable zero waste closed loop sustainable production and consumption economic systems.

To credit the WBG, there are some departments, programs, and publications that are essentially in synch with this mindset. An example (excluding large hydro/dams) would be "Low-carbon development for Latin American Response to Climate Change" published by the WBG. LCA is developing low carbon technologies. Large hydro is addressed in recommendation #12. The Africa department team is doing good work on renewable energy based rural electrification (Fanny Misfeldt) and the team at ESMAP (Jonathan Coony and Jane Ebinger).

Recommendation #4: It is essential to foster the rural energy efficiency/renewable energy industry rather than to merely provide a system that relies heavily upon foreign investment and technical assistance. The multi-benefits derived from locally developed entrepreneurship are profound in terms of natural resource management, increased local employment, improved economic income as well as secure and sustainable energy efficiency/renewable energy supply. This will not only provide energy efficiency/renewable energy to the poor but will also simultaneously enhance development outcomes.

Recommendation #5: Technology transfer: The WBG must facilitate international/regional cooperation on energy efficiency/renewable energy and climate with the aim of accelerating technology transfer, institutional development, capacity building and knowledge sharing.

Recommendation #6: As some Southern countries develop faster than others, their energy efficiency/renewable energy technologies are often relatively advanced, respectively. This disparity in energy efficiency/renewable energy technologies can be a window of opportunity for technology transfer between Southern countries.

Recommendation #7: Over the past several years, increasing flows of assistance took place among countries of the South. South-South collaboration on sustainable energy (i.e. energy efficiency/renewable energy) should be encouraged and supported. To this end, the WBG must provide/leverage necessary financing resources to facilitate this process.

Recommendation #8: The WBG must also facilitate dialogue among members who are involved in the trans-boundary energy efficiency/renewable energy trading business and must share and disseminate good practices among member nations.

Recommendation #9: We recommend that you work with recipient countries to foster national policies, such as the German “Feed-in Tariff” policy, that help build new markets. This is key to any transfer of technologies to markets. The German renewable energy policy is called a Feed-in Tariff. This has been replicated in many other countries. The Feed-in Tariff name refers to feeding any type of renewable energy into the grid and getting paid a reasonable fixed price. There can be an incremental cost increase, but we propose a strategy to deal with that increase (see the next recommendation). This policy can be passed at various political levels: federal, state/provincial, or a city government with a municipal utility and can be applied to less developed countries. Countries such as Ethiopia, Nigeria, and South Africa have looked seriously at the advantages of this type of domestic policy. Faced with the desperate need to increase electricity generated by renewable energy systems, governments must choose from a range of policy options.

Studies show that a Feed-In Tariff policy is the best available policy mechanism for accelerating renewable energy in grid-connected areas. When you are racing against time, this is particularly important. The energy payment contract is typically for 20 years. This reduces risk in the up-front investment and attracts private capital. The clean-tech venture capital crowd loves this approach. Additionally, a good renewable energy payment policy democratizes energy production. It becomes cost-effective for low-income homeowners, farmers, and small businesses to generate clean electricity and get paid. With this approach we can change from a nation of energy consumers to a nation of energy producers making an entrepreneurial profit. This policy is a key driver to create green collar jobs. In Germany it created over a quarter of a million good jobs. Imagine what we could do in all of the less developed countries. The World Bank Group is involved in fostering policy and governance and should be organizing feed-in tariff roundtables and feed-in tariff workshops to popularize this exciting approach. The benefits are synergistic with WBG goals and objectives and include:

- **Rapid Deployment of Vast Quantities of Clean Renewable Energy**
- **Green House Gas Reduction**
- **One million Green Jobs in under three years**
- **Community power ownership**
- **Sustainable Economic Development/Manufacturing**
- **Cheaper and more predictable energy rates over time**
- **Decentralized Clean Energy Security (Nuclear is a terrorist target)**
- **More of a True-Cost Energy System (For example, Coal does not internalize the cost for its many dangerous pollutants: asthma causing particulate, sulfur, NOx, GHGs)**

Recommendation #10: We recommend that to alleviate any incremental cost increase problem, the WBG could cover that increase or work with the Global Environment Facility to do so as that is key to GEFs mission. Additionally, The World Future Council proposed a renewable energy policy fund for less developed countries in Copenhagen (report will be submitted with this document and an online search by the main title will pull up a PDF). The title is “Unleashing renewable energy power in developing countries: Proposal for a global Renewable Energy Policy Fund.” The report clarifies how this fund could be financed by industrialized countries and would provide an easy-to-use, flexible and self-sustainable support mechanism for renewable energy development in developing countries. Incremental cost increase is not typically onerous, for example, it is approximately one euro per household per month in Germany. This is not a show stopper for low or middle income countries.

Recommendation #11: Clarify what “**existing technologies**” really mean -- ASAP. This should have been done in documents leading up to consultations. Is this coal power? Something else? As well, what does “**new technologies**” cover? Does this include carbon capture and storage or other technologies, which we consider as false solutions? As you can imagine, the World Future Council does not recommend that approach at all (see recommendation #12).

Recommendation #12: Question #5 asked: how much weight should the Bank Group give to:

- Promoting new technology and/or
- Helping to transfer existing technologies to new markets.
 - A. We recommend that the WBG not expand existing technologies such as coal, other fossil fuels, or large hydro.
 - B. We recommend that large hydro should follow the recommendations of the World Commission on Dams, which may mean it should never be considered renewable energy as it destroys river ecosystems forever and emits significant GHGs.
 - C. We recommend that the WBG take large hydro out of its renewable energy calculation.
 - D. We recommend that your definition of “**existing technologies**” and “**new technologies**” be consistent with energy efficiency/renewable energy technologies.
 - E. We recommend that at least 2/3s if not all of the weight be placed on **helping to transfer existing energy efficiency/renewable energy technologies to new markets**. This is because Rocky Mountain Institute and the Union of Concerned Scientists have shown that off-the-shelf technologies are ready for the market and can meet our needs now.

Recommendation #13: We recommend substantial staffing increase for energy efficiency/renewable energy. Hiring just one renewable energy person (as is the current plan) is vastly insufficient.

Recommendation #14: We recommend the WBG coordinate with the newly established and funded IRENA (International Renewable Energy Agency) as it has expertise in fostering new renewable energy markets. Consider a formal agreement to share information and assistance. Orient your existing staff, especially your economists, to the fact that IRENA is in existence, funded, and functioning.

In conclusion: Your new energy strategy needs to be synergistic with shifting out of fossil fuel funding, increasing energy efficiency/renewable energy funding, alleviating poverty, addressing climate change (including halting deforestation*), and long-term deep ecological sustainability. If such synergy is not achieved, we will not foster a better world for this or future generations. We will certainly not foster a better world for the plant and animal communities and natural systems that we humans depend upon for survival. While the WBG must make some major changes, we need you to do what is required to help ensure survival from the likely climate disruption and extreme weather events of the next several decades as well as the ones that have already begun. We want you, as key employees of the WBG, to choose to help orchestrate a great societal U-turn. This can be your greatest achievement; otherwise the WBG does not deserve to continue.

The US authorization is coming up on the clean tech fund and we, the NGO community, need to know if a major course correction is in the works or not. If the “new” energy strategy is written such that most anything (read major centralized coal) can be funded under it, we will see through the waste of people’s time. The NGO community will fight hard against increased funding for the WBG. We are available to consult on the above recommendations.

* Note: Given my work founding and running the Rainforest Action Network, I would be remiss to not mention that up to 20% of climate change causing GHGs come from deforestation. Climate change is not just about shifting out of fossil fuels. The WBGs forest policy must be synergistic with the above goals. This is especially important given the proposed forest policy changes at IFC.