World Bank Group
Toward a New Energy Strategy

Tirana, June 2010
Timeline for Development of Strategy

2009

- Oct
  - Energy Strategy Approach Paper available on-line

2010

- Feb-Jun
  - First Round Consultations
    - web-based
    - face-to-face
- Jul-Sept
  - Drafting of Strategy
- Nov-Dec
  - Second Round Consultations
    - Web-based

2011

- Feb or March
  - Board of Executive Directors

TOWARDS A NEW ENERGY STRATEGY

World Bank Group Energy Strategy Consultations
About This Consultative Meeting

- As a basis for discussion, the Energy Strategy Approach Paper, available online, outlines the proposed approach.

- Input from consultation meetings and from people who comment via the Web site will be documented and used as an input to the strategy.

- We will prepare a summary of the comments received today, post it on the web, and accept additional written comments.

- By the end of July, we will prepare a summary of all of the feedback received during the consultation process with a response by the World Bank Group on how it is being considered.
Structure of the Presentation

- Context and challenges
- World Bank’s role in the energy sector
- Lessons learned
- Objectives
- Proposed areas of engagement
New and Old Challenges

- **Energy access, energy poverty**: 1.5 billion lack access to electricity, and many more use solid fuels for cooking and heating.

- **Climate change**: Meeting the energy needs of developing countries and arresting climate change will require global action and cooperation.

- **Managing uncertainties**: The recent oil price volatility pointed to the need to diversify the energy portfolio, conserve energy, and improve energy efficiency. The global financial crisis has increased uncertainty in investments, while reducing available resources for development assistance and investment flows.
Impending Energy Crunch

- The countries of Eastern Europe and Central Asia could face an energy crunch within the next five to six years.

- The financial crisis has created some breathing room and a window of opportunity to mitigate the impact of the anticipated crisis.

- To avoid the crisis, demand-side and supply-side responses are needed. The required investments will amount to 3% of cumulative GDP between 2010 and 2030, calling for both public and private sector investments.

- Countries need to take actions now to create an investment climate that can attract the needed financing to the energy sector.
Electricity Supply

- Widespread electricity supply disruptions, many diesel back-up generators, load shedding since 1997
- Electricity supply the top concern for businesses of all sizes and types according to 2008 Business Environment and Enterprise Performance Survey
- Among the highest technical and non-technical losses in the region
- Weak governance emerging as a barrier to improving tariff collection rates

<table>
<thead>
<tr>
<th>% loss</th>
<th>Countries</th>
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<tbody>
<tr>
<td>&lt;8</td>
<td>EU-15, Czech, Slovak, Slovenia</td>
</tr>
<tr>
<td>9-11</td>
<td>Bulgaria, Hungary, Poland, Romania</td>
</tr>
<tr>
<td>12-14</td>
<td>Armenia, Belarus, Georgia, Turkey, Ukraine</td>
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<tr>
<td>15-17</td>
<td>B&amp;H, Croatia, Serbia</td>
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<tr>
<td>20-30</td>
<td>Kazakhstan, Kyrgyz, Tajikistan, Uzbekistan</td>
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<tr>
<td>&gt;35</td>
<td>Albania, Kosovo, Moldova</td>
</tr>
</tbody>
</table>
Meeting the Challenges in the Power Sector

- Ensure through regulatory framework that tariffs are set to cover the long-run average costs of power supply
  - Increase average tariff by 15% in real terms from January 2010
- Ensure that regulatory framework provides incentives for reducing losses, increasing cash collection, and investing in the distribution network
  - Reduce distribution losses from 34% in 2009 to 17% by 2014
  - Increase the collection rate from 76% of billing in 2009 to 91% by 2014
- Assess options to guarantee basic levels of electricity consumption
  - Provide some protection to the poorest without subsidizing the rest of the population
- Facilitate serious investment in power generation capacity and strengthen transmission links with the regional energy network
Energy Sector Milestones

New Energy Sector Strategy – 2011

Strategic Framework for Development and Climate Change – 2008
(Climate Investment Funds)

2009 – Investment exceeds Bonn promise by more than three-fold

2005 – Clean Energy Investment Framework developed at G8’s request
(Low-carbon development strategies)

2004 – Bonn RE Conference (commitment of 20% annual increase between 2005 and 2009)

Key Instruments
- Project Investments
- Development Policy Lending
- Financial Intermediation
- Technical Assistance
• **40%** energy lending was for RE/EE in FY09—a **24%** increase from FY08

• Nearly $4.5 billion invested in programs directly dealing with energy access

• Bonn commitment of 20% annual increase exceeded three-fold
Observations and Lessons Learned

- An efficient, reliable, and low-cost energy sector is critical for equitable economic development.

- Sound operational and financial performance is essential.

- Improved capacity and governance are needed for better sector performance and ability to address climate change.

- For the very poor, the most important determinant of access to and use of modern energy is their cash income.
Bulgaria Energy Efficiency Fund

- PPP-based finance facility established in 2006
- Initial capitalization of $15 million ($10 million from Global Environment Facility)
- Three financing products (buildings, street lighting, co-generation) to municipalities and energy service companies
- By 2009, more than 75 projects valued at $21.9 million, with $11.5 million from the fund
Efficient Lighting

- Replacing incandescent light bulbs with high-efficiency compact fluorescent lamps (CFLs)
- Started in the mid-1990s with GEF support
- In the last 5 years, large-scale projects in Argentina, Bangladesh, Burundi, Ethiopia, Mali, Mexico, Morocco, Pakistan, Rwanda, Senegal, and Uganda
- Mexico (planned): 45 million CFLs to 15 million low-income households, reducing generation capacity requirement by 1400 MW
- MW savings at 1/40th the cost of electricity from diesel
- Prices of high quality CFLs falling from more than $7 each in 1995 to less than $1 in 2009.
- Significant CO₂ emissions reduction and lowering of consumer utility bills, with payback of less than 1 year
China: Increasing Energy Efficiency in Iron and Steel Manufacture

- “1000 Large Industrial Enterprises Energy Conservation Action Plan” launched in April 2006, targeting top 1,008 largest industrial energy consumers (30% of China’s total primary energy), including iron and steel
- Baotou Iron and Steel Energy Efficiency Project: Recover and use waste heat for power generation, with net power generation of 250 GWh per year
- Emissions Reductions Purchase Agreement for 900,000 Certified Emissions Reduction Credits at €9.5 per tonne of CO₂
The challenge is to balance the twin objectives of greater access and sustainability...

PROPOSED APPROACH

- Strengthen governance
- Improve operational and financial performance
- Improve access and reliability of energy supply
- Facilitate shift to more environmentally sustainable energy sector development
Across All Countries

• Supply-side and demand-side energy efficiency improvement
• Increased investment in renewable energy including large hydro projects
• Building institutional capacity to identify and implement affordable low-carbon projects
• Policy and institutional reforms
• Accelerating technology transfer
• Transmission and distribution
• Cross-border energy trade
• Thermal generation in accordance with the criteria outlined in the Strategic Framework for Development and Climate Change
• Selective investments in extractive industries in accordance with WBG management response to Extractive Industries Review
Low-Income, Fragile, Post-Conflict, and Middle-Income Countries with Low Access

- Access to reliable modern energy services will remain the top priority
- Explore all options: off-grid, cooperatives, pro-poor financing methods, affordable lifeline rates
- Hydropower with focus on integrated water resources management
- Cross-border trade
- Improve affordability by increasing supply efficiency and passing efficiency gains to consumers
- Help build capacity to access financing to make low-carbon alternatives affordable
Middle-Income Countries

- Help address local and emerging global challenges and increase support to innovation and transformation
- Support commercial-scale renewable energy, supply- and demand-side energy efficiency, and emerging clean technologies and related infrastructure facilities
- Help leverage climate finance, private sector financing, and other financing opportunities
Climate Investment Funds

Jointly run by MDBs to provide grants and concessional financing to developing countries to address urgent climate change challenges

Clean Technology Fund (CTF) ~ $4.3 b

Strategic Climate Fund ~ $1.9 b
  – Scaling up RE in Low Income Countries ~ $0.3 b

Carbon Finance

10 Carbon Funds ~ $2.2 b (200 projects)

Green Investment Scheme

Carbon Partnership Facility (CPF)
How We Work

- **In partnership** – with governments, donors, private sector, civil society, and communities

- **Scaling Up** - On average, each dollar WBG provides mobilizes an additional $4

- **Programmatic approach** – combining investment, policy advice, and technical assistance

- **In support of the poorest**

- **With the best technology for the job** – the WBG’s projects are technology-neutral

- **New clean technologies** – provide technical assistance and policy/regulatory advice to facilitate their deployment. Mobilize financing (GEF, CF, CIFs).
Questions for Your Consideration

1. Where do you think the help of the World Bank Group in the energy sector in developing countries is most needed?

2. Does the proposed approach adequately address the needs of the poor and marginalized? If not, how could it be strengthened?

3. Does the proposed approach strike the right balance between meeting the needs and priorities of low-income countries and those of middle-income countries?

4. Where there are trade-offs between meeting the local energy needs of individual countries and reducing global greenhouse gas emissions, what principles should the World Bank Group follow in resolving the trade-offs?

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?

6. What other suggestions or comments do you have?
Visit the World Bank’s website to share your views, stay updated, and get more information.

http://www.worldbank.org/energyconsultations

Thank you for participating.