ENERGY BRIEF

Background

- The Middle East and North Africa (MENA) region has about 57% of the world’s proven oil reserves and 41% of proven natural gas resources. MENA is also endowed with unique solar resources. However, great gaps exist between countries rich in natural resources and countries dependent on such resources;
- Many countries have close to 100% access to electricity, but an estimated 28 million people still lack access to electricity, especially in rural areas, and about 8 million people rely on traditional biomass for all their energy needs;
- In many MENA countries, petroleum product prices are distorted, cost recovery in electricity is low, efficiency of supply leaves a lot to be desired and energy intensity is relatively high. Carbon intensity is, on average, higher than in industrialized countries, and the potential for renewable energy is under-explored;
- The region is lagging behind in implementing reforms in the electricity sector and lacks private sector investment;
- Population growth, rapid urbanization and economic growth are putting pressure on existing infrastructure and relatively high demand for new investments. Over the next 30 years, the total investment needs in energy in MENA are estimated at over US$ 30 billion a year, or about 3% of the region’s total projected GDP (which is three times higher than the world’s average);
- The continued high and volatile prices of fuels are straining the finances of many net importing countries, both at the government and the utility level, and increasing costs of subsidized energy at home for the oil exporters.

Key Issues in the Sector

There are considerable differences in the situation of the energy sector in the MENA region and solutions have to be tailored to individual countries and situation. There are, however, a number of common issues:

- In most countries where oil and gas resources are large, price distortions are considerable and cost recovery in electricity is low. In many countries this has led to inefficient use of supply, high energy intensity in energy use, increasing environmental problems, and a rapidly increasing burden on government finances;
- In countries which are net importers of fossil fuels, price distortions are generally less and cost recovery in the electricity sector has been somewhat better. However, the challenges they face on how to cope with high oil prices while financing the rapidly growing demand for energy in general, and electricity in particular, remain;
- The MENA region is highly susceptible to the risk of climate change impact due to: water scarcity, concentration of economic activities in coastal areas and reliance on climate-sensitive agriculture. Despite relatively low total greenhouse gas emission as compared to other regions, MENA has the world’s third largest growth of carbon emissions compounding the risk of climate change. The high carbon emissions are predominantly from oil-producing countries which make up 74 percent of the region.
Overall in the region, there is much scope for improving the efficiency of energy supply and energy conservation, as well as the development of renewable energy resources. MENA has begun to exploit its renewable energy potential on a large scale and the Bank is fully supportive of this effort.

**World Bank Recommendations**

To respond to the many regional challenges, the World Bank’s lending, technical assistance and analytical work is focused on:

- Reducing the burden of the energy sector as a whole on government finances, a key prerequisite for fiscal stability in MENA countries;
- Ensuring the delivery of energy services in line with economic growth in a financially sustainable manner, and increasing access to energy services;
- Safeguarding the environment and its key natural resources by improving the efficiency of resources management, and increasing energy efficiency, and the role of renewable energy.
- Promoting intra-regional cross-border energy trade.

**World Bank Lending and Analytical Activities**

The Bank energy portfolio has shown substantial growth over the past year, reflecting the increasing client demand for its assistance in the sector, consistent with the Bank’s renewed emphasis on infrastructure services to alleviate poverty.

The Bank counts today seventeen investment projects under supervision aggregating to about US$2.1 billion [the Djibouti Power Access and Diversification project, the Egypt El-Tebben project, the Egypt Ain Sokhna Power project, the Egypt Natural Gas Connections project, the Egypt Giza North Project, the Egypt Windpower Development project, the Yemen Power Sector project, the Yemen Rural Energy Access project, the Iraq Dokan and Derbandikhan Emergency Hydropower project, the Iraq Emergency Electricity Reconstruction project, Iraq Integrated National Energy Strategy, the Lebanon Emergency Power Reform, the West Bank and Gaza Electric Utility Management project, the Morocco ONE Support project and the Tunisia Energy Efficiency project], plus a Partial Risk Guarantee for the Jordan Amman East Power Plant project, four Global Environmental Fund (GEF) operations amounting to a total of US$107.5 million (the Jordan Promotion of a Wind Power Market, the Tunisia Energy Efficiency Program project, the Morocco Integrated Solar project and the Egypt Kureimat Solar Thermal Power project).

With nine additional projects under preparation, the portfolio continues to grow. This growth is reinforced by the potential of recent developments in the carbon finance area. Of particularly great potential for climate change mitigation is the new Climate Investment Fund, the Clean Technology Fund which has allocated a total of US$1.2 billion for MENA: (a) US$750 million to design and implement a MENA Concentrated Solar Power (CSP) Scale-up plan; (b) US$275 million to develop wind power and energy efficiency in Egypt; and (iii) US$200 million to develop wind power and energy efficiency in Morocco.

In addition to its investment portfolio, the Bank is currently carrying out analytical and advisory energy work in most countries of the region, including a strategic dialogue on the sector with:

- Djibouti on developing an energy sector master plan;
• Egypt on a developing a commercial wind framework, energy pricing, the design of a load management program and review of risk allocation for private sector participation;
• Syria on developing a strategy for the electricity sector;
• Jordan on energy efficiency, developing a financial and institutional framework for energy and energy strategy;
• Lebanon on power sector reform,
• Tunisia on developing energy efficiency and renewable energy and reviewing energy management policy;
• Morocco on developing a framework for wind power, an energy supply strategy and an investment plan;
• West Bank and Gaza on electricity sector net lending, and
• Yemen on developing an institutional framework for energy efficiency, gas sector development, gas to power models and energy subsidy reform.

In addition to the already completed regional study on Energy Efficiency, the Bank is undertaking regional studies on the Maghreb Energy Market as well as Maghreb Energy Integration and Trade. Finally, the Middle-East and North Africa Energy Group is involved in a technical co-operation program with the GCC countries on a refundable basis, notably in Saudi Arabia, Kuwait, Oman, Israel, Malta and Libya.

While the MENA region uses a large range of trust fund and grant facilities [e.g. Public-Private Infrastructure Advisory Facility (PPIAF), Energy Sector Management Assistance Program (ESMAP), the Carbon Fund, the Gas Flaring Initiative, etc.], many of the activities above are also carried in close partnership with donors in the region.

All dollar figures are in US dollar equivalents. September 2010

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