

WORLD ENERGY OUTLOOK 2005: FACT SHEET- IRAQ

WHAT WILL BE THE POTENTIAL ROLE OF IRAQ AS IT RETURNS TO WORLD MARKETS?

The WEO-2005 takes an unprecedented look at individual producer countries in the Middle East and North Africa. Its analysis of Iraq explores the potential for the country's energy sector to rebound from years of neglect and war and to develop its abundant oil and gas resources.

- **Primary energy demand in Iraq**, under the Reference Scenario, is expected to increase by 3.3% per year, doubling by 2030. This growth is driven by economic recovery and population growth, but it assumes stability.
- **Fossil fuels** dominate domestic energy use.
 - **Oil** accounted for 95% of Iraq's primary energy demand in 2003 and is expected to fall to 79% by 2030.
 - **Natural gas** accounted for 5% in 2003 and is projected to grow to 20% by 2030.
- Iraq's economy remains heavily dependent on oil and natural gas revenues which currently account for 76% of GDP.
- Iraq's **oil reserves** -- 115 billion barrels -- are the fourth largest in the world.
 - **Oil production** which has fluctuated over the past decades as a result of political turmoil, averaged 2mb/d in 2004. Continued attacks by insurgents have limited production this year, which is likely to average 1.9mb/d. Under the Reference Scenario, Iraqi crude oil production is projected to grow to 3.2mb/d in 2010, 5.4mb/d in 2020 and 7.9mb/d in 2030.
 - **Oil exports** are up from 0.9 mb/d in 2003 to 1.4mb/d in 2004 but have been hampered by insurgent attacks. They are expected to climb to 2.5mb/d in 2010 and 6.9mb/d in 2030.
 - **Oil refining capacity** was 587kb/d at the beginning of 2005 and is projected to increase to 1.2mb/d by 2030.
 - **Oil investment needs** in Iraq are estimated at \$59 billion over 2004-2030, more than 85% for upstream projects. Much of this capital is likely to come from foreign investors.
- Iraq's **natural gas resources** are substantial. Proven reserves are estimated at 3.1 tcm, representing 2% of world reserves. Undiscovered resources may be even greater.

- **Gas production**, under the Reference Scenario, is expected to grow rapidly, from 1.6 bcm in 2003 to 3.8 bcm in 2010 and 32 bcm in 2030. Domestic demand will be driven by power generation and petrochemicals.
- International sanctions prohibited Iraq from **exporting gas** before 2003. While oil will most likely remain the priority, gas exports are expected to recommence and reach 0.6bcm – all to Kuwait -- in 2010 and 17bcm – to Kuwait and through Turkey to the European Union – by 2030.
- **Gas investment needs** in Iraq are estimated at \$11 billion over 2004-2030, 60% in the 2020s.
- Iraq's **electricity generation** is estimated at 28 TWH in 2003 and is based almost exclusively on oil.
 - The power sector has limited **available capacity** resulting from war, sanctions and lack of investment. Efforts are underway to restore the power capacity and the grid. Current available capacity is estimated at 5GW.
 - **Electricity generation** is expected to grow by 4% per year between 2003 and 2030. Total new capacity requirements over this period will be 12 GW. The share of natural gas in the generation mix is expected to increase to 53% by 2030.
 - **Investment requirements** in the Iraqi power sector will amount to \$26 billion over 2003-2030.
- Under the **Deferred Investment Scenario**, Iraq's cumulative upstream spending would be reduced by 41% over 2004-2030 compared to the Reference Scenario. The decline is larger than in most other MENA countries since – in the Reference Scenario -- investment was projected to increase more relative to GDP.
 - Demand growth over the projection period would fall from 3.3% to 3.0%.
 - Oil production would be 3.8mb/d – or 48% -- lower in 2030 than the Reference Scenario. Gas production from associated fields would also be affected, falling to 15bcm or 47% lower than the Reference Scenario.
 - Oil exports would be 3.2mb/d – more than half -- lower in 2030. Gas exports would be 3.3bcm in 2030, 13.3% less than under the Reference Scenario.