

## COUNTRY ANALYSIS BRIEFS

# Egypt

Last Updated: August 2006

## Background

**Egypt is a significant oil producer and a rapidly growing natural gas producer. The country's first liquefied natural gas (LNG) export terminal began operation in January 2005. The Suez Canal and Sumed Pipeline are strategic routes for Persian Gulf oil shipments, making Egypt an important transit corridor.**

Energy will continue to play an important role in Egypt's economy in coming years. Though Egypt's net exports of crude oil and petroleum products have declined in recent years, higher prices on world markets have pushed Egypt's oil revenues upward. The country also began exports of liquefied natural gas (LNG) in January 2005, adding to its hydrocarbon revenues. Additionally, Egypt's economy is continuing its gradual recovery from the declining growth rates it experienced in 2001 and 2002, but with a growth rate still far below what was achieved in the 1990s. The country's real Gross Domestic Product (GDP) grew 4.9 percent in 2005, after achieving real growth of 3.6 percent in 2004. Real GDP growth is forecast at 5.7 percent for 2006.

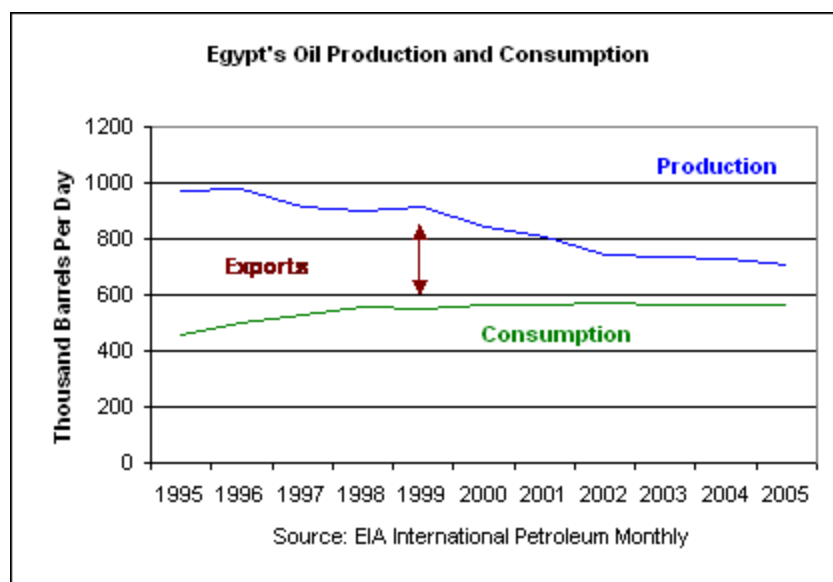


Remittances from Egyptian workers in the Persian Gulf region have risen with higher oil prices, and tourism has recovered to near pre-September 2001 levels. In a normal year, tourism revenues account for about 5 percent of Egypt's GDP, and are among the country's five main sources of hard currency inflows (the others being remittances from Egyptian workers abroad, hydrocarbons exports, Suez Canal tolls, and foreign aid). Over the long term, Egypt's macroeconomic prospects may improve, but Egypt's main challenge is reducing unemployment. Unofficial estimates put Egypt's unemployment rate in the 15-25 percent range, roughly twice the official figure. The government plans to accelerate its program for the privatization of state-owned enterprises (SOEs), though to date, the privatization program has moved slowly because of large SOE debt and severe overstaffing.

## Oil

**Egypt's production has continued to decline from its 1996 peak of 922,000 barrels per day (bbl/d) of crude oil.**

According to the *Oil and Gas Journal*, Egypt's estimated proven oil reserves stand at 3.7 billion barrels, or 0.3 percent of world reserves, while crude oil production averaged 579,000 bbl/d in 2005, less than 1 percent of world production. Egypt is hoping that exploration activity, particularly in new areas, will discover sufficient oil in the coming years to slow recent annual declines in output. Egyptian oil production comes from four main areas: the Gulf of Suez (about 50 percent), the Western Desert, the Eastern Desert, and the Sinai Peninsula.



### Consumption

Demand for petroleum products, after being relatively flat since 1999, is again rising rapidly. This increase is due primarily to high domestic subsidies. According to official figures, the value of government subsidies to petroleum products has continued to rise, from 14.3 billion Egyptian pounds (EGP) in FY2004 (ending June 30th), to 22.1 EGP in FY2006. Though the government hopes to reduce demand by gradually lifting subsidized prices and targeting subsidies more effectively, this is a politically sensitive issue that will take time to fully implement. The increased use of compressed natural gas (CNG) as a fuel for motor vehicles is one trend that may aid government efforts.

### Production

Oil from the Gulf of Suez basin is produced mainly by Gupco (Gulf of Suez Petroleum Company) under a Production Sharing Agreement (PSA) between BP and the Egyptian General Petroleum Corporation (EGPC). Production in the Gupco fields, with most wells in operation since the 1960s and 1970s, has fallen in recent years. Gupco is attempting to slow the natural decline in its fields through significant investments in enhanced oil recovery (EOR) as well as in increased exploration.

Egypt's second largest oil producer is Petrobel, which is a joint venture between EGPC and Eni of Italy. Petrobel operates the Belayim fields near the Gulf of Suez and also is undertaking an EOR program to stem declining production. Other major companies in the Egyptian oil industry include Badr el-Din Petroleum Company (EGPC and Shell); Suez Oil Company (EGPC and Deminex); and El Zaafarana Oil Company (EGPC and British Gas -- BG). In May 2003, BP announced a large new find, the Saqqara field, which represents the largest new crude oil discovery in Egypt since 1989. Located offshore adjacent to the existing El-Morgan field, it is expected to begin commercial production in 2007. With estimated peak production of around 40,000 to 50,000 bbl/d this find may stem the decline in overall Gulf of Suez production.

Egypt's overall oil production has been declining more slowly than in the Gulf of Suez fields, due to new output from independent producers like Apache and Seagull Energy at smaller fields, especially in the Western Desert and Upper Egypt. Since 2000, Western Desert production has risen substantially, accounting for roughly 27 percent of total oil production, more than double 2000 levels. Of additional significance is that oil in this area is on average cheaper to produce and lighter than other domestic crudes. Apache and Seagull also have developed the Wadi El-Sahl field in the South Hurghada block, which is producing around 20,000 bbl/d. A joint venture between EGPC and Eni also is producing about 40,000 bbl/d from an area in the Qattara Depression in the Western Desert, in the Meleiha and West Razzaq blocks. Khalda Petroleum, a joint venture between Apache and EGPC, produces around 50,000 bbl/d in the Western Desert in the Khalda and East Bahariyya areas.

### Upstream Activities

Firms are beginning to explore offshore oil production possibilities in the Mediterranean. The

largest concession was awarded to Shell in February 1999 for a large deepwater area off Egypt's Mediterranean coast. BP and Total also were awarded a large offshore block from the same bidding round. A smaller offshore concession was awarded to Eni. While most offshore discoveries in the Nile Delta have been natural gas, it is believed that there may also be significant quantities of oil in the area. Shell reportedly is optimistic about the prospects for its North East Mediterranean Deepwater (NEMED) concession, but drilling so far has yielded natural gas rather than significant quantities of oil.

EGPC awarded five exploration contracts in July 2004 to a newly-formed, state-owned upstream oil firm, Tharwa Oil. Four of the five concessions cover unexplored areas of the Western Desert, with the fifth covering an offshore block in the Mediterranean. Burren Energy of the UK also was awarded two blocks in the Gulf of Suez under the 2004 licensing round, which closed in January 2005. Other awards under the 2004 licensing round are still pending.

### Oil Transit: Suez Canal/Sumed Pipeline

In addition to its role as an oil exporter, Egypt has strategic importance because of its operation of the [Suez Canal and Sumed \(Suez-Mediterranean\) Pipeline](#), two routes for export of Persian Gulf oil. The Suez Canal Authority (SCA) offers a 35 percent discount to liquefied natural gas (LNG) tankers, with even deeper discounts for the largest LNG tankers, as well as other discounts for oil tankers. For 2005, the SCA reported that southbound crude and products traffic increased 11.7 percent over 2004 figures to 22,980 mn tons. Northbound totals increased 12.5 percent to 74,509 mn tons.

The SCA is continuing enhancement and enlargement projects on the canal. The canal has been deepened so that it can accept the world's largest bulk carriers, but it will need to be deepened further to 68 or 70 feet, from the current 58 feet, to accommodate fully laden very large crude carriers (VLCCs). The SCA has attempted to reach an agreement with its main competition for northbound crude traffic, the Sumed pipeline. Such an agreement could bar any tanker small enough to traverse the canal from transporting oil through the pipeline. The SCA offers incentives for tankers to off-load a portion of its cargo through the Sumed, allowing for passage through the canal, and reloading at the other end of the pipeline.

The Sumed pipeline is an alternative to the Suez Canal for transporting oil from the Persian Gulf region to the Mediterranean. The 200-mile pipeline runs from Ain Sukhna on the Gulf of Suez to Sidi Kerir on the Mediterranean. The Sumed's original capacity was 1.6 million bbl/d, but with completion of additional pumping stations, capacity has increased to 3.1 million bbl/d. The pipeline is owned by the Arab Petroleum Pipeline Company (APP), a joint venture between Egypt (50 percent), Saudi Arabia (15 percent), Kuwait (15 percent), the U.A.E. (15 percent), and Qatar (5 percent). The APP also has been increasing storage capacity at the Ain Sukhna and Sidi Kerir terminals.

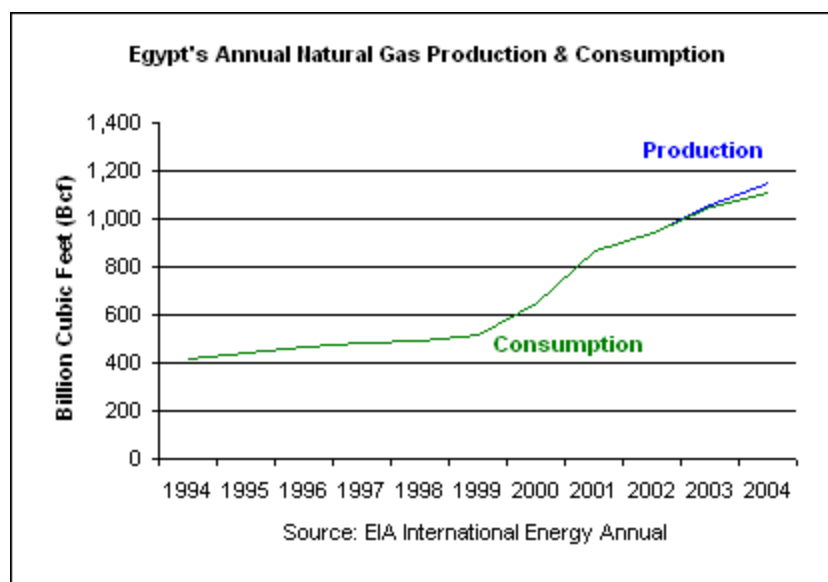
### Refining

Egypt's nine refineries have a combined crude oil processing capacity of 761,700 bbl/d. The largest being the 146,300-bbl/d El-Nasr refinery at Suez, which is owned by the Egyptian government through the EGPC and operated by its subsidiary, the El Nasr Petroleum Company. The government has plans to increase production of lighter products, petrochemicals, and higher octane gasoline by expanding and upgrading existing facilities. The oil refining sector in Egypt looks set for big expansion, with at least two new projects being promoted. One is a 500,000 bbl/d refinery to be built near the Suez Canal. The second is a 130,000 bbl/d refinery to be built at Ain Sukhna, on the Red Sea coast. The 500,000 bbl/d export-oriented oil refinery is to be a joint venture among Egyptian, Saudi Arabian and Kuwaiti investors; start up is scheduled for summer 2009.

### Natural Gas

Due to major recent discoveries, natural gas is likely to be the primary growth engine of Egypt's energy sector for the foreseeable future. Natural gas production in Egypt averaged 3.6 billion feet per day (Bcf/d) in 2004 (the latest year for which figure are available), while, according to the *Oil and Gas Journal*, Egypt's estimated proven gas reserves stand at 58.5 trillion cubic feet (Tcf), or roughly 1 percent of world reserves. Production is expected to rise to roughly 5.0 Bcf/d by 2007, with much of the increased volume being exported as LNG.

***Egypt is now the sixth largest LNG producer, with three LNG trains operating and several more under consideration by various firms.***



Beginning in the early 1990s, foreign oil companies began more active exploration for natural gas in Egypt, and very quickly found a series of significant natural gas deposits -- in the Nile Delta, offshore from the Nile Delta, and in the Western Desert. Today, Egypt's natural gas sector is expanding rapidly, with production having increased over 220 percent between 1999 and 2004. Estimates for 2006 production at 5.5 Bcf/d, if correct, would represent a further 150 percent increase since 2004. Major foreign companies involved in natural gas exploration and production in Egypt include BG, BP, Eni, and Shell. Apache also produces natural gas from its concessions in the Western Desert. The Egyptian government formed a new state-owned entity in August 2001 to manage the natural gas sector, Egyptian Natural Gas Holding Company (EGAS), separating those assets out from EGPC.

In order to support its goals of doubling natural gas exports by 2010-11, the government aims to add 30 Tcf to its proven gas reserves by 2010. Plans are for most of this increase to come from new natural gas discoveries offshore from the Nile Delta, and some finds in the Western Desert. In the Nile Delta, recent offshore field developments include Port Fuad, South Temsah, and Wakah. In the Western Desert, the Obeiyed Field is an important natural gas area currently under development.

The International Egyptian Oil Company (IEOC), a subsidiary of Eni, is Egypt's leading natural gas producer, operating in the Gulf of Suez, the Nile Delta, and the Western Desert regions. In cooperation with BP, IEOC has been concentrating its natural gas exploration and development efforts in the Nile Delta region. On November 4, 1997, BP announced plans to develop the giant Ha'py gas field in the Ras el-Barr concession of the Nile Delta region at an estimated cost of \$248 million. The field came online in February 2000, and has reached an output of 280 million cubic feet per day (Mmcf/d). In September 1997, IEOC tested the Temsah gas field (located offshore from the Nile Delta) at 11.6 Mmcf/d. In October 1998, BP (25 percent owner) and Eni signed a natural gas sales agreement with EGPC (50 percent owner) and IEOC (25 percent owner) for Temsah. Temsah's gas reserves are estimated at 4.3 Tcf, and the field is expected to reach production of 550 Mmcf/d in 2006 after a 2004 blow-out cut production and forced re-drilling. IEOC also operates several other smaller natural gas fields.

Two areas in the Western Desert -- Obeiyed and Khalda -- have shown great potential for increasing Egypt's natural gas production in the near future. This area is appealing as it has both lower development and operating costs than in the Mediterranean region and an expanding network of pipelines and processing plants by which to quickly transport production upstream. Obeiyed, with probable natural gas reserves estimated at 5 Tcf, is producing 300 Mmcf/d. Production in the Khalda concession is currently around 275 Mmcf/d. Apache reported two new natural gas discoveries in Khalda in 2003, and signed an agreement with EGAS in 2004 for development and sales of the output. Output from Obeiyed and Khalda is transported to Alexandria by a 180-mile pipeline. Apache also had one offshore concession, the West Mediterranean block, but it sold its 55 percent stake to Amerada Hess in order to focus on its onshore assets where development costs are relatively low. All of the offshore wells completed

thus far have shown commercial quantities of natural gas, with reserves in the Western Mediterranean block estimated at around 3 Tcf.

The Scarab/Saffron finds began commercial production in early 2003 and currently has a production capacity of 700 Mmcf/d. Edison's stake in the fields was sold to Petronas of Malaysia in April 2003. The Simian/Sienna fields, with a production capacity of 565 Mmcf/d, began production in April 2005, and are linked into the same pipeline to the Egyptian coast as the Scarab/Saffron fields. Shell has announced that probable reserves in its Northeast Mediterranean (NEMED) concession are 15 Tcf. BP and the IEOC also are preparing to bring several fields off the Nile Delta coast into production.

### **Domestic Demand**

Natural gas demand has grown rapidly in Egypt, mainly driven by increased demand from thermal power plants. Domestic natural gas consumers are to be served by several private distributors, franchises for which were awarded in late 1998. One of the franchises, awarded to a team headed by BG and including the Egyptian construction firm Orascom and Petronas, built distribution infrastructure in Upper Egypt as far south as Asyut, where no piped natural gas had been available.

The rapid rise in natural gas reserves has led to a search for export options, which has become particularly important to Egypt's future international balance of payments due to the decline in oil exports. However, in 2005, concerns about maintaining adequate future reserves for domestic production led the government to further limit gas reserves available for export to 25 percent, down from a third under previous regulations.

### **Exports**

#### *Pipeline Exports*

The export of natural gas to Israel, which has been under discussion since the mid-1990s, was finally agreed upon in June 2005. The deal calls for the East Mediterranean Gas Company (a consortium of EGPC, Merhav of Israel, and Egyptian businessman Hussein Salem) to supply \$2.5 billion worth of natural gas to Israel. The natural gas will travel via a new pipeline to be operational by late 2007.

A natural gas export pipeline to Jordan began commercial operation in July 2003, making possible Egypt's first exports of natural gas. Egypt was responsible for building the section from the existing pipeline terminus at El-Arish to Aqaba in Jordan, with a subsea section in the Gulf of Aqaba bypassing Israeli waters. A second section from Aqaba to northern Jordan became operational in January 2006, with an overall capacity of 1 Bcf/d. Egypt, Jordan, and Syria agreed in principle in early 2001 to extend the pipeline into Syria, with eventual natural gas exports to Turkey, Lebanon, and possibly Cyprus. As part of the above Arab Gas Pipeline project, Egypt and Turkey have signed an MOU with the intent to set up a Turkish-Egyptian joint venture, Tergas. It would pipe roughly 100-400 Mmcf/d a year of gas to Turkey and an additional 203-608 Mmcf/d to Eastern Europe, possibly through links with the planned Nabucco pipeline or through Romania or Bulgaria.

#### *LNG*

Egypt's other option for exports is LNG, for which it already has three operating trains. With LNG exports having already risen to 1.55 Bcf/d by 2005, Egypt has jumped into sixth position in global LNG production, with further expansions expected when reserves are located.

The Spanish firm Union Fenosa built a single-train liquefaction facility at Damietta, which shipped its first cargo in January 2005. In June 2006, partners Eni, BP and Union Fenosa signed a framework agreement for the expansion of the plant to 1.4 Bcf/d from current levels of 770 Mmcf/d by 2009. Unlike most previous LNG projects, this one is not tied directly to an upstream natural gas project. Union Fenosa has contracted with EGPC for the supply of natural gas from its distribution grid, and will take 60 percent of the LNG output itself for use at the company's power plants. Eni also has become involved in the project, purchasing a 50 percent stake in Union Fenosa's natural gas business in December 2002. BP signed an agreement for sales of natural gas from its offshore fields to supply the second train at Damietta in July 2004.

The second LNG export project called Egyptian LNG, at Iduku, was built by BG in partnership with Petronas. The project is tied in to natural gas production from BG's Simian/Sienna offshore fields, and the two 500 Mmcf/d trains began production ahead of schedule in March 2005, with the



second train becoming operational in September 2005. In February 2006, BG announced plans to increase production at Train 1 and Train 2 by 5-10 percent over the next three years. Gaz de France is to be the main offtaker for the Idku LNG project's first train. An agreement to purchase LNG from the second train was signed in September 2003 by BG LNG Services. The LNG will initially be delivered to the Lake Charles, Louisiana import terminal for the U.S. market in mid-2006. Later, BG plans to switch the output from Idku to an import terminal at Brindisi, Italy. BP and Shell both are also contemplating potential LNG projects in Egypt. BP appears likely build a second train at the Damietta complex and is reported to be evaluating a field that would be sufficient to support a third train at the Idku facility.

Another potential use for Egypt's natural gas reserves is gas-to-liquids (GTL) projects. Shell has proposed a 75,000-bbl/d GTL plant to be co-located with its planned LNG export terminal using natural gas production from its offshore NEMED field. GTL discussions had stalled but, in October 2005, plans for a facility were restarted when Canadian firm Ivanhoe signed a memorandum of understanding with EGAS for a feasibility study for a plant.

## Electricity

***Egypt's installed generating capacity stood at 17.06 gigawatts (GW) as of 2004, and all oil-fired power plants have been converted to run on natural gas as their primary fuel.***

Egypt's installed generating capacity stood at 17.06 gigawatts (GW) as of 2004, with plans to add 4.5 GW of additional generating capacity by 2007 and 8.38 GW by mid-2012. Around 84 percent of Egypt's electric generating capacity is powered by natural gas, with the remaining 16 percent hydroelectric, mostly from the Aswan High Dam. All oil-fired plants have been converted to run on natural gas as their primary fuel, and thermal power plants now account for roughly 65 percent of Egypt's total gas consumption. Overall, natural gas fuels 85 percent of Egypt's electricity production.

With electricity demand growing, Egypt is building several power plants and is considering limited privatization of the electric power sector. Egypt's power sector is currently comprised of seven regional state-owned power production and distribution companies, which were held by the Egyptian Electricity Authority (EEA). In July 2000, the EEA was converted into a holding company, though still owned by the state. Previous privatization plans have stalled, and the future direction of government policy in the electric utilities sector is unclear. Egypt has several privately-owned power plants currently under construction which were financed under Build, Own, Operate, and Transfer (BOOT) financing schemes. The first BOOT project was a gas-fired steam power plant with two 325-megawatt (MW) generating units, located at Sidi Kerir on the Gulf of Suez. The plant cost \$450 million, and began commercial operation in late 2001. U.S.-based InterGen (a joint venture of Bechtel Enterprises and Shell Generating Ltd.), along with local partners Kato Investment and First Arabian Development and Investment, have the 20-year BOOT contract for Sidi Kerir. The second BOOT power project award went to Electricite de France (EDF), for two natural gas-fired plants located near the cities of Suez and Port Said. The two plants, which came online in 2003, have a total capacity of 1,366-MW. However, these assets now belong to Tanjong's Powertek, who in early 2006 formalized a sales agreement with EDF. Additionally, in February 2006, the World Bank agreed to fund a 700-MW plant expected to cost roughly \$260 million which will contain two 350-MW steam turbines.

EEHC-owned projects currently under construction include the 1,500-MW plant planned at Nuberiya in the western Nile Delta near Alexandria. The 64-MW Nag Hammadi hydropower project is under construction, with financing from the European Investment Bank, and is scheduled for completion in 2006. After several years of delays, the 1,500-MW capacity expansion at the Cairo North power complex came online in mid-2004. A contract has been awarded to Russia's Power Machines Group for the refurbishment of the turbines at the Aswan High Dam. The project will extend the operational life of the turbines by about 40 years and increase generating capacity at the dam from 2,100 MW to 2,400 MW.

### Other Sources of Electricity Generation

Egypt also is planning to build a part-solar power plant at Kureimat as a BOOT project, which will have 30 MW of solar capacity out of a total planned capacity of 150 MW. The World Bank will provide a financing package from its Global Environmental Facility which will offset the cost difference between the solar capacity and thermal capacity. A Netherlands-funded project is building 60 MW worth of wind power units in the Suez Canal area. Egypt also has a 22-MW nuclear research reactor at Inshas in the Nile Delta, built by INVAP S.A. of Argentina, which began operation in 1997.

### International Connections

Work has been completed on the interconnection of Egypt's electric transmission grid with other

countries in the region. The Five-Country interconnection of Egypt's system with those of Jordan, Syria, and Turkey was completed by 2002. Egypt also activated a link to Libya's electric grid in December 1999.

## Profile

### Country Overview

<b>Chief of State</b>	Mohammed Hosni Mubarak (since October 1981)
<b>Head of Government</b>	Ahmed Nazif (since July 2006)
<b>Location</b>	Northern Africa, bordering the Mediterranean Sea, between Libya and the Gaza Strip, and the Red Sea north of Sudan, and includes the Asian Sinai Peninsula
<b>Independence</b>	28 February 1922 (from UK)
<b>Population (2006E)</b>	78.9
<b>Languages</b>	Arabic (official), English and French widely understood by educated classes
<b>Religion</b>	Muslim (mostly Sunni) 94%, Coptic Christian and other 6%
<b>Ethnic Group(s)</b>	Eastern Hamitic stock (Egyptians, Bedouins, and Berbers) 99%, Greek, Nubian, Armenian, other European (primarily Italian and French) 1%

### Economic Overview

<b>Currency/Exchange Rate (6/29/06)</b>	Egyptian Pound (LE) / LE 5.7 = \$1 U.S.
<b>Inflation Rate (2005E)</b>	4.3%
<b>Gross Domestic Product (GDP, 2005E)</b>	\$92.6 Billion
<b>Real GDP Growth Rate (2005)</b>	4.9%
<b>Unemployment Rate (2005)</b>	10%
<b>External Debt (2005E)</b>	\$28.95 Billion
<b>Exports (2005E)</b>	\$14.33
<b>Exports - Commodities</b>	crude oil and petroleum products, cotton, textiles, metal products, chemicals
<b>Exports - Partners (2004E)</b>	Italy 13.1%, US 11.6%, UK 7.5%, Germany 5.1%, Spain 4.5%, France 4.2%
<b>Imports (2005E)</b>	\$24.1 Billion
<b>Imports - Commodities</b>	machinery and equipment, foodstuffs, chemicals, wood products, fuels
<b>Imports - Partners (2004E)</b>	US 13.2%, Germany 7.2%, Italy 7.1%, France 6.1%, China 5.5%, UK 4.9%, Saudi Arabia 4.4%
<b>Current Account Balance (2005E)</b>	2.9 Billion

### Energy Overview

<b>Proven Oil Reserves (January 1, 2006E)</b>	3.7 billion barrels
<b>Oil Production (2006E)</b>	684 thousand barrels per day, of which 81% was crude oil.
<b>Oil Consumption (2005E)</b>	595.5 thousand barrels per day
<b>Crude Oil Distillation Capacity (2006E)</b>	726.3 thousand barrels per day
<b>Proven Natural Gas Reserves (January 1, 2006E)</b>	58.5 trillion cubic feet
<b>Natural Gas Production (2004E)</b>	1.1 trillion cubic feet
<b>Natural Gas Consumption (2004E)</b>	1.1 trillion cubic feet
<b>Recoverable Coal Reserves (2003E)</b>	23.1 million short tons

<b>Coal Production (2003E)</b>	0.1 million short tons
<b>Coal Consumption (2003E)</b>	1.2 million short tons
<b>Electricity Installed Capacity (2003E)</b>	17.7 gigawatts
<b>Electricity Production (2003E)</b>	84.3 billion kilowatt hours
<b>Electricity Consumption (2003E)</b>	78.2 billion kilowatt hours
<b>Total Energy Consumption (2003E)</b>	2.3 quadrillion Btus*, of which Oil (50%), Natural Gas (41%), Hydroelectricity (6%), Coal (1%), Nuclear (0%), Other Renewables (0%)
<b>Total Per Capita Energy Consumption (2003E)</b>	32.3 million Btus
<b>Energy Intensity (2003E)</b>	9,212.9 Btu per \$2000-PPP**

## Environmental Overview

<b>Energy-Related Carbon Dioxide Emissions (2003E)</b>	135.2 million metric tons, of which Oil (58%), Natural Gas (40%), Coal (2%)
<b>Per-Capita, Energy-Related Carbon Dioxide Emissions (2003E)</b>	1.9 metric tons
<b>Carbon Dioxide Intensity (2003E)</b>	0.5 Metric tons per thousand \$2000-PPP**
<b>Environmental Issues</b>	agricultural land being lost to urbanization and windblown sands; increasing soil salination below Aswan High Dam; desertification; oil pollution threatening coral reefs, beaches, and marine habitats; other water pollution from agricultural pesticides, raw sewage, and industrial effluents; very limited natural fresh water resources away from the Nile which is the only perennial water source; rapid growth in population overstraining the Nile and natural resources
<b>Major Environmental Agreements</b>	party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Marine Dumping, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands signed, but not ratified: none of the selected agreements

## Oil and Gas Industry

<b>Organization</b>	
<b>Major Oil/Gas Ports</b>	Alexandria, Port Said, Sidi Kerir, Ras Shukheir, Suez, Ain Sukhna
<b>Foreign Company Involvement</b>	Apache, British Gas, BP-Amoco, Deminex, TotalFina-Elf, ENI-Agip, Exxon-Mobil, Marathon, Norsk Hydro, Novus, Repsol, Royal Dutch Shell, Samsung, Texaco
<b>Major Oil Fields (production, bbl/d)</b>	Belayim Marine (164,000 bbl/d), October (85,000 bbl/d), Khalda (71,000 bbl/d), Morgan (40,000 bbl/d), Qarun (25,000 bbl/d), Ashrafi (16,000 bbl/d)
<b>Major Natural Gas Fields (production, Bcf/d)</b>	Abu Madi, Abu Qir/North Abu Qir, Shukheir, Badreddin
<b>Major Pipelines (capacity, Mmcf/d)</b>	Sumed pipeline (3.1 million bbl/d)
<b>Major Refineries (capacity, bbl/d)</b>	Cairo Petroleum Refining Company -- Mostorod (145,000 bbl/d), Tanta (54,000 bbl/d); El-Nasr Petroleum Company - Suez (146,300 bbl/d), Wadi Feran (10,000 bbl/d); Alexandria Petroleum Company - El Mex (115,000 bbl/d); Ameriya Petroleum Refining Co. (78,000 bbl/d); Suez Oil Processing Company - Suez (66,400 bbl/d); Assiut Petroleum Refining Co. (47,000 bbl/d); Middle East Oil Refinery (MIDOR) (100,000 bbl/d).

\* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar, wind, wood and waste electric power. The renewable energy consumption statistic is based on International Energy Agency (IEA) data and includes hydropower, solar, wind, tide, geothermal, solid biomass and animal products, biomass gas and liquids, industrial and municipal wastes. Sectoral shares of energy consumption and carbon emissions are also based on IEA data.

\*\*GDP figures from OECD estimates based on purchasing power parity (PPP) exchange rates.

## Links

### EIA Links



[EIA - Country Information on Egypt](#)  
[EIA - Energy in Africa Special Report](#)

### **U.S. Government**

[CIA World Factbook - Egypt](#)  
[U.S. Department of Energy - Office of Fossil Energy](#)  
[U.S. State Department Background Notes](#)  
[U.S. State Department Consular Information Sheet - Egypt](#)  
[U.S. State Department Country Report on Economic Policy and Trade Practices](#)  
[U.S. Government Export Portal - Country Information: Egypt](#)

### **General Information**

[The Center for Middle Eastern Studies - Egypt](#)  
[University of Pennsylvania African Studies Program - Egypt](#)  
[ArabNet: Egypt](#)  
[MBendi Information Services Country Profile - Egypt](#)  
[AME Info Middle East Business Information](#)

### **Foreign Government Agencies**

[Egypt Economic Bulletin](#)  
[Energy Statistics About Egypt](#)  
[Egyptian Geological Survey](#)  
[Ministry of Economy](#)  
[Egyptian Atomic Energy Authority](#)

### **Oil and Natural Gas**

[Egyptian Natural Gas Holding Company \(EGAS\)](#)  
[OILEgypt.com](#)

## **Sources**

CIA World Factbook 2004  
CWC Africa Energy Alert  
Dow Jones News Wire service  
Economist Intelligence Unit ViewsWire  
Global Insight Middle East Economic Outlook  
Hart's Africa Oil and Gas  
Middle East Economic Digest  
Oil and Gas Journal  
Petroleum Economist  
Petroleum Intelligence Weekly  
International Market Insight Reports  
U.S. Energy Information Administration  
World Gas Intelligence

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