# PROJECT INFORMATION DOCUMENT (PID)
# APPRAISAL STAGE

Report No.: PIDA7482

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|---|---|
| **Project Name** | EG: Household Natural Gas Connection Project (P146007) |
| **Region** | MIDDLE EAST AND NORTH AFRICA |
| **Country** | Egypt, Arab Republic of |
| **Sector(s)** | Oil and gas (100%) |
| **Theme(s)** | City-wide Infrastructure and Service Delivery (40%), Urban services and housing for the poor (30%), Other economic management (30%) |
| **Lending Instrument** | Investment Project Financing |
| **Project ID** | P146007 |
| **Borrower(s)** | Government of Egypt, Ministry of International Cooperation |
| **Implementing Agency** | Egypt Natural Gas Holding Company (EGAS) |
| **Environmental Category** | A-Full Assessment |
| **Date PID Prepared/Updated** | 21-May-2014 |
| **Date PID Approved/Disclosed** | 30-Apr-2014, 25-May-2014 |
| **Estimated Date of Appraisal Completion** | 23-May-2014 |
| **Estimated Date of Board Approval** | 29-Jul-2014 |
| **Decision** | |

## I. Project Context

### Country Context

Egypt is in the midst of an historic socio-political transition following the January 2011 Revolution and ouster of the Morsi Government in July 2013. A 12 month roadmap was announced by the interim Government which is to usher in a democratic political system. A critical pillar of the roadmap has concluded with the approval of the new constitution by referendum in January 2014. A new Government was established in early March 2014 to oversee the completion of the presidential and parliamentary elections to be held in the summer of 2014.

The transition has been accompanied by rising fiscal pressures, dampening of the growth trajectory, and rise in the poverty rate. In Fiscal Year 2013 (FY13) the fiscal deficit reached 14 percent of GDP with public debt approaching 100 percent of GDP. The growth rate has averaged 1-2 percent in the three years since 2011 compared to 5% in 2010. Inflation reported a highest three-year average to about 11% in July-December, 2013. The unemployment rate continues to rise, disproportionately so for women and youth, and has reached about 13% in 2013.

As a result, poverty has also shown an upward trend at 26% in 2013 compared to 25% in 2011. In comparison to the national average, some regions are in worse shape – rural Upper Egypt reports a poverty rate of 50%. To support Egypt during this transition period, the Gulf States - Saudi Arabia, the United Arab Emirates (UAE), and Kuwait have pledged about $17 billion ($12 billion received so far) of exceptional financial assistance which has helped Government plan for development programs and stabilize markets. Stock markets index are at their highest levels and domestic cost of borrowing at the lowest level since 2011.

The focus of the interim Government has been to 'jumpstart the economy' that has been encapsulated in two stimulus packages equaling $8.5 billion, focused on creating jobs and improving public service delivery, which includes extending the natural gas grid to households. The expansion of the natural gas grid has registered impressive growth particularly since the mid-2000s and now reports 5.8 million consumers, primarily in urban and peri-urban areas. However, the highly subsidized Liquid Petroleum Gas (LPG) remains the most important cooking fuel for the majority of Egyptians. Therefore, the Government intends to increase household connections by 800,000 per year, and to promote greater access, as part of its economic development program

Extending the natural gas networks has multi-dimensional impacts. First, it replaces the highly subsidized, largely imported LPG with domestic natural gas hence reducing Government subsidy to LPG. Fuel subsidies, a substantial component of the Government budget, have reported a rising trend accounting for 18–20 percent of budget expenditures in recent years, amounting to 5–7 percent of GDP, and contributing to the ongoing fiscal strain. Even among the subsidized fuel items, LPG has been the most stagnating with the lowest cost recovery among the subsidized fuels. The rising international price of LPG has only worsened the situation. Second, rationalizing energy subsidies will become even more critical going forward as the constitution has explicitly stated allocating 11% of GDP to education, health, research and development. Switching one household from LPG to natural gas can bring in $201 in annual LPG subsidy savings. Third, connecting to natural gas networks provides for a safer and reliable gas supply and saves households from being dependent on a fuel that is marked by high prices in the informal market, and subject to supply shortages with concomitant social woes of long lines. Fourth, natural gas networks bring in direct and indirect job opportunities during construction and operation stages

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The World Bank has supported the GoE's efforts in increasing access to natural gas since 2008 with the Egypt Natural Gas Connection project. The project has successfully connected 355,000 consumers in the Greater Cairo area to support the Government's aim of reaching 6 million consumers by 2012. Governments worldwide have found it difficult to implement full cost recovery for LPG, as this commodity is invariably subsidized to some degree, and LPG is widely used among the poor. For historical reasons, Egypt's LPG prices are low even by global standards. More recently, natural gas networks have emerged as an alternate mitigation tool to move households away from LPG without creating undue hardship.

**Sectoral and institutional Context**

The gas sector in Egypt operates under the overall direction of the Ministry of Petroleum and Minerals (MoP) which also operates the oil, petrochemicals, and mining industries. The Egyptian General Petroleum Company (EGPC) was created by a law in 1957 to handle the exploration, production, processing, and transport and distribution activities of petroleum products. In 2001 the Egyptian Natural Gas Holding Company (EGAS) was created to organize and manage natural gas development in Egypt. EGPC has 100 percent ownership of EGAS and has been gradually delegating natural gas activities to EGAS, including those in domestic gas transportation, LNG exports, and more recently upstream gas explorations. The national gas transmission network is managed, operated, and maintained by the Egyptian Gas Company (GASCO). EGAS however maintains ownership of the transmission and distribution assets, including the natural gas grid. The operation and maintenance of the distribution system was opened up to private sector participation in 1997 and was divided into a number of concession areas. Concessions were awarded to fifteen Local Distribution Companies (LDCs) along geographical boundaries and nine of them are privately owned. The largest of the LDCs (with respect to number of consumers) are Town Gas and Egypt Gas, both publicly owned. The LDCs are responsible for providing operations and maintenance services of the distribution network as well as extending access to new household and commercial customers, while EGAS is responsible for financing expansion of the distribution networks.

During the 1990s and 2000s, Egypt made substantial new gas discoveries, tripling its proven gas reserves from 347 billion cubic meters (bcm) in 1989 to 2.2 trillion cubic meters (tcm) by 2010. The rise in gas reserves had led the Government to promote the domestic use of gas and to seek export options in the form of Liquefied Natural Gas (LNG) and piped gas. It successfully created a domestic market, built three LNG trains with a capacity of 18 bcm/year, and implemented the Arab Gas Pipeline system with an approximate capacity of 10 bcm/year. The demand for natural gas in Egypt reached 52.2 bcm in FY2012/13. The electricity sector was the largest consumer and consumed 29.6 bcm (57 percent of total). This was followed by the industrial sector 14.7 bcm (28 percent) the petroleum/petrochemical sector 5.7bcm (11 percent), the residential sector 1.5bcm (3 percent) and compressed natural gas (CNG) at 0.5 bcm (1 percent). In this same year, Egypt's exports of LNG reached an equivalent of 5.7 bcm and exports via pipeline reached 1 bcm.

Marketed production of natural gas increased at an average rate of 11.3 percent per annum (from 21 bcm in 2000 to 63 bcm in 2009) but declined to slightly less than 60 bcm in 2013. Domestic consumption increased rapidly from 20 bcm in 2000 to 45 bcm in 2010 and 52.2 bcm in 2013 at an average annual growth rate of 8.5 percent, mainly due to growing demand from the power sector fueled by low domestic gas prices. Gas consumption by the power sector has increased from 5 bcm in 1991 to 29 bcm in 2013 and is expected to reach about 50 bcm by 2017 when the present five-year generation expansion plan (FY12-17) is implemented. The volume of gas export has however significantly declined between 2010 and 2013 due to growing gas demand and decline in production.

Egypt's initial success in the promotion of natural gas use (to substitute for expensive oil) was focused on the power and industrial sectors, as in many other gas producing countries. These sectors are often considered as major vehicles for fuel substitution while fuel switching in the residential sector takes place at a much more gradual pace. In recent years, the GoE has emphasized the supply of gas in various sectors and in particular in the residential sector, and by end of 2013 it has completed residential connections to about 5.8 million household consumers through a dedicated program. The household gas connection program is being implemented at an accelerated rate: annual gas connections have increased from 350,000 in 2007/2008 to 588,000 connections in 2012/2013. EGAS has set the vision to increase the number of household connections to 800,000 annually during 2013/2014 and beyond. EGAS will annually require about US$400 million in network infrastructure investments to meet its targets. In the next three years the program aims at connecting 2.4 million households of which 1.5 million connections will be financed by IBRD under the proposed project and cofinancing arrangements with AFD, 400,000 connections by an ongoing loan from the Kuwait Fund for Economic Development and the remaining 500,000 connections by the GoE's own resources provided to EGAS.



## II. Proposed Development Objectives

The project development objective is to assist the Government of Egypt to increase household access to reliable, lower cost, grid connected natural gas supply.

## III. Project Description

**Component Name**

Component 1: Gas Network Expansion and Household Connections (1,395 MUSD).

**Comments (optional)**

This component will finance investments necessary to expanding the gas networks in the targeted areas and connecting 1.5 million households to the distribution network.  This component include
- Subcomponent 1.1: Gas Transmission Connections and Pressure Reduction Stations (PRSs)).
- Subcomponent 1.2: Gas Distribution Network and Connections
- Subcomponent 1.3: Strengthening Capacity for Connection Scale Up
- Subcomponent 1.4:  Establishment of Consumer Service Centers

**Component Name**

Component 2: Financial support for household connection charges in disadvantaged areas (40.80 MUSD)

**Comments (optional)**

The scale-up envisaged under this project will include relatively poorer areas of Egypt,  an EU Grant, managed by Agence Francaise De Developpement (AFD), is being consider to  support connection fees for households in disadvantaged areas.

**Component Name**

Component 3: Institutional Strengthening (13.60 MUSD)

**Comments (optional)**

This component will be financed by the EU Grant and will be jointly supervised under the Project. This component will contribute to the improvement of the governance structure and fiscal transparency and accountability at EGAS.  The institutional strengthening will be divided into two subcomponents as follows:
- Subcomponent 3.1 Development of a Financial Management and Information System (FMIS)
- Subcomponent 3.2:  Capacity Building for Establishment of the Gas Regulator

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## IV. Financing *(in USD Million)*

| | | | |
|---|---|---|---|
| Total Project Cost: | 1449.40 | Total Bank Financing: | 500.00 |
| Financing Gap: | 0.00 | | |

| **For Loans/Credits/Others** | **Amount** |
|---|---:|
| Borrower | 473.00 |
| International Bank for Reconstruction and Development | 500.00 |
| European Neighbourhood Policy | 54.40 |
| FRANCE  French Agency for Development | 96.00 |
| LOCAL  BENEFICIARIES | 326.00 |
| Total | 1449.40 |

## V. Implementation

EGAS will be the recipient of the proposed World Bank loan as it owns all assets in the natural gas network and is mandated to finance material costs related to expanding the network. The relevant LDCs will be responsible for undertaking the procurement activities of supply of good and work contracts financed by the proposed project. EGAS will be responsible for supplying materials and goods purchased under contracts financed by the proposed project to the other participating LDCs. EGAS has established a Project Management Unit (PMU) that will be responsible for the overall project implementation as well as coordination and reporting to the Bank.

Participating LDCs will be responsible for the implementation of the activities financed by the project including the supervision of local contractors for the installation and civil works and reporting to the PMU on progress of contract execution and completion of the project activities.

## VI. Safeguard Policies (including public consultation)

| **Safeguard Policies Triggered by the Project** | **Yes** | **No** |
|---|---|---|
| Environmental Assessment OP/BP 4.01 | ✕ | |
| Natural Habitats OP/BP 4.04 | | ✕ |
| Forests OP/BP 4.36 | | ✕ |
| Pest Management OP 4.09 | | ✕ |
| Physical Cultural Resources OP/BP 4.11 | ✕ | |
| Indigenous Peoples OP/BP 4.10 | | ✕ |
| Involuntary Resettlement OP/BP 4.12 | ✕ | |
| Safety of Dams OP/BP 4.37 | | ✕ |
| Projects on International Waterways OP/BP 7.50 | | ✕ |
| Projects in Disputed Areas OP/BP 7.60 | | ✕ |

**Comments (optional)**



## VII. Contact point

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