



SIEMENS
Ingenuity for life



Siemens BRI Summit 2018

Country Pavilion

CC China



Company in Egypt

-  Siemens HQ
-  Healthineers
-  Siemens GAMESA
-  Mentor Graphics



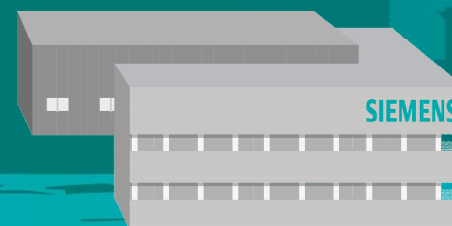
Employees:

~ **1100**



Manufacturing Facilities: 1

 NEM Alexandria Free Zone



Service and Training @ Suez Economic Zone

- q Siemens Service Center - Ain Sokhna
- q The Egyptian German Technical Academy – Ain Sokhna

Milestones in the history of Siemens in Egypt



1859



Laying of the first 5,600km telegraphic cables in the Red Sea, connecting Suez in Egypt with Karachi

1901



Siemens opened first office in Egypt

1936



Water Flow Drum Counter at Giza Agricultural Museum

1999



Suez Canal Crossing Towers



Siemens landmarks

in Egypt

1870



Laying of 11,000km Indo-European telegraph line from London to Calcutta through Egypt

1930



Laying of Air Cables at Cairo-Helwan

1958



Electrical Power Train Set Cairo-Helwan

2006



Children's Cancer Hospital Egypt

2006



Nubaria, Talkha & Kuraymat Power Plant

2015



Attaka Power Plant, Mahmoudia & Assiut GIS

2015



Egypt Megaprojects Deal

2017



4.8 GW connected to the grid

Siemens Landmarks in Egypt

Attaka Power Plant



- In 2015 Siemens was awarded the contract to supply four E-Class turbines to the 650MW Attaka power plant
- The project was delivered in a record breaking time; in less than six month
- The project was part of Egypt's Third Electricity Fast-Track Plan

Suez Thermal Power Plant



- In 2014 Siemens received an order to supply, install and commission major electrical components for the plant
- The oil-fired power plant was commissioned in June 2016
- The project is part of a national plan to enhance the power supply network across Egypt

Nagaa Hammadi and Samalout Control Centers



- Project received in 2014 for delivery of Supervisory Control and Data Acquisition (SCADA) systems
- The two Centers are located at Upper and Middle Egypt
- They will connect 150 substations to the national grid

Al Nouran Sugar Factory



- Located at Sharkia governorate, the facility is Egypt's first state-of-the-art sugar production facility with a total investment cost of EGP 2.5 billion
- Siemens will provide Complete DCS system and Instrumentation as well as steam turbines

Children Cancer Hospital Egypt



- In 2009, Siemens selected for the supply of Electromechanical works for the hospital
- Siemens also delivered hospital's healthcare technology including diagnostic imaging and radiation therapy
- It is the largest childrens' cancer hospital in the world and the first in the Middle East

Aswan Heart Center



- Siemens signed an agreement in 2006 with THE Aswan Heart Center to supply CT, MRI and imaging technology
- The Aswan Heart Center Project is a charity foundation and focuses on providing medical care to heart patients, especially the underprivileged

Egyptian Grand Museum



- The museum will be the largest and most important Pharaonic museum in the world
- Supplying the museum with electromechanical works; fire alarms and security systems as well as water treatment solutions
- It will house the most and latest security systems from Siemens to ensure the conversion and safety of all the artifacts

Aswan High Dam Power Plant



- Siemens was selected in 2009 to renovate and upgrade the High Dam switch yard on a turnkey basis.
- The project aimed at connecting the High Dam power plant to Egypt's unified 220kV network
- The High Dam produces one third of Egypt's total produced energy

Egyptian National Railways



- Siemens supplied wayside equipment of the automatic train control system ZUB including all components, spare parts and accessories for two lines in Upper Egypt
- Egypt National Railways has been using the Siemens ZUB ATC system for 25 years

Ashmoun GIS substation



- Installation and commissioning by Siemens in only two and a half months, including components and secondary equipment
- The turnkey gas-insulated 220 kV switchgear was ready for commissioning ahead of schedule
- Project was part of Egypt's plans to strengthen national electricity transmission network

Siemens Egypt Megaproject

A Business Model of Excellence

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Combined cycle power plants

- § Siemens EPC + Financing solution based on the state-of-art technology using H-Class turbines
- § Natural gas-fired combined cycle power plants encompassing 24 H-Class gas turbines, 12 steam turbines, and 36 generators
- § 3 x 500 kV GIS substations
- § High combined cycle efficiency ~ 61.2%



Financing

- § The proposal is based on EPC + Financing business model
- § Siemens together with Orascom & EISewedy facilitated a very competitive loan agreement backed up by the German Government represented by the German Export Credit Agency "Euler Hermes" and Italian Export Credit Agency "SACE" to solve the Country's financial obstacles
- § The projects are financed by more than 30 banks worldwide



Grid network study

- § Consideration of all existing and expected generation until 2025
- § Suggestions for necessary transmission network expansion drafted



Power Generation Services

- § 9-year service and maintenance agreements for the three power plants, supported by Siemens Digital Services
- § Ensures the long-term reliability, availability and optimal performance of the units
- § Construction of an Energy Service Center, providing the maintenance to all energy rotating equipment



Business to Society (Strategic Alliance and Training)

- § Provision of training to 600 f Egyptian engineer and technician with total amount of 600 Engineers & Technicians
- § Strategic Alliance with BMZ / GIZ to establish a training center, upgrade one technical institute and a dual education school of excellence



Total
volume:

~ 6 Mrd. EUR

TOGETHER, we have successfully mastered big challenges on a very aggressive timeline ...

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Sharm el Sheikh

March 2015

Egypt Economic Development Conference



Cairo

November 2015

Six substations signing



Cairo

February 2016

First Siemens H-Class turbines begin their journey to Egypt



Cairo

March 2016

Financial closing of Burullus and New Capital power plants



Cairo

April 2016

Start of training of 600 Egyptian engineers and technicians



Cairo

May 2016

Placement of 4 gas turbines on foundations at Beni Suef



Cairo

December 2016

First substations for Siemens Megaproject in Egypt ready for operation



Berlin

June 2015

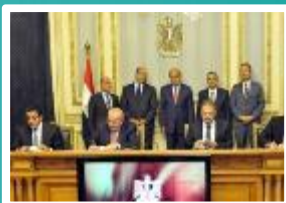
Signing ceremony for the Egypt Megaproject



Cairo

November 2015

Loan Agreements signed for Beni Suef



Mülheim

March 2016

The first generators for the largest order in Siemens' history are being sent to Egypt



El Adabiya Port

March 2016

Delivery of first key components to Egypt – just twelve months after signing



Mülheim

December 2016

First steam turbine for the Megaproject on the way to Egypt



Egypt

Dec. 2016 – Jan 2017

4.8 GW connected to the grid



Egypt

April 2018








8..6 GW Power to grid for Beni-Suef and Burullus Combined Cycle Power plants



Egypt Market Overview and Opportunities

Mega Projects – A Glimpse



Urban Development New Capital	8Bn 	Investment in 10 years	The new administrative capital will strengthen and diversify the country's economic potential by creating new places to live, work and visit for 7 million people.
Economic Zones Suez Canal	12Bn 	Annual Revenue	The Suez Canal Economic Zone is aimed at becoming a global trade hub and is projected to generate US\$ 12 billion annually.
Agriculture 1.5 Million Feddan	150M 	Fund Raised	To restore Egypt's status as a major agricultural state, this project will expand agricultural land by 20 percent in an effort to achieve full self-sufficiency of crops.
Mining Golden Triangle		Of Egypt's Minerals	The Golden Triangle, a new economic zone located between Qena & Qeft, and Safaga & Al Qusair, is considered one of the richest areas in mining sources accounting for 75% of Egypt's mining minerals.
Tourism New Al Alamain City	10 	Projects with signed MOU's	Al-Alamein region is now being developed to become a second Alexandria and will offer investment opportunities in tourism, healthcare, logistics, agriculture, industry, education and energy, estimated initial investment value of US\$ 10bn.
Tourism El Galala City	100 Acres 	Tourism Area	The development of Al Galala City is one of the largest Egyptian development projects. It has already attracted investments of more than US\$ 100 million in the last two years.
Industry Damietta Furniture City	51.6% 	Export increase	Damietta Furniture Complex is set to boost the furniture industry in Egypt, which is currently worth EGP 14 billion, with exports increasing by 51.6% during the last 5 years. Egypt's furniture sector is gaining a strong reputation across Europe and the Middle East.