







15

Years

Since 2009

**Expertise House** 

www.bahrawy-consult.com



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## A Word from the Managing Director

In these fast-changing and economically challenging times, effective, consultancy services of the projects are not an optional strategy anymore, but rather a vital component of any project's success.

At BAHRAWY, we strive to provide a holistic, integrated and analytical process for projects' performance and quality improvement that ensures all projects' aspects are considered, achieving the optimum cost, function and quality. Our goal is to build and maintain in collaboration with our partners and team.

We recognize the value of our contribution to our community and continually endeavor to develop and add value into reaching the greatest potential of our society. We are proud to preserve adding value, innovation, creativity ethical and high-quality solutions towards enabling a new higher level of professionalism.

Dr. Khaled El-Bahrawy

## **About BCG**

**Bahrawy Consultancy Group** - **BCG** is a multi-disciplinary design firm that offers a comprehensive design consultancy services in architecture, engineering and Infrastructure projects.

BCG started in Cairo - Egypt as a small-scale company in 2009 that was specialized in the field of Power Sector Projects, and soon the company has expanded and extended their services mainly to Saudi Arabia projects till it became one of the Top Three leading companies in this field, and accordingly established the Gulf Branch in Riyadh - Saudi Arabia.

Since 2019, BCG have been actively working on extending their services to other market sectors (not only the Power Sector), this is to introduce additional design consultancy services covering a variety of public and private projects types, such as residential, commercial, administration, mixed-use, and Infrastructure projects.



BCG provides an integrated scope of services from concept design to design development to construction supervision.

Since BCG's Buildings and Infrastructure Unit was Re-Structured by the end of 2023, BCG have managed to form a new team of a carefully selected and highly qualified Architects and Engineers with solid experience and varies backgrounds acquired through their involvement in many projects in Egypt and the Middle East to carry-out the potential various Buildings and Infrastructure projects design consultancy services.

## BCG at a Glance



International Branches Cairo, Riyadh and Jeddah



Countries of Activities In the Middle East



15 Years of Excellence Since 2009



200+
Professional

Employees
In different disciplines



350+

Projects Delivered
Successfully Meeting
Clients' Satisfaction



ISO Quality Certificates

QMS, HSE & EMS



8 B\$

Projects
Construction Value
In Billion Dollars



Approved
Consultant
From SEC & EETC
Electrical Companies



Accredited
Expertise House
From the Egyptian
Engineering Syndicate

### BCG's Vision

To align our professional consultancy services with the international practices, and to provide our clients' with their needs, while striving to exceed their expectations.

#### **BCG's Mission**

To be recognized as the "Employer's **Consultant of Choice**" that provides a varies consultancy services across design, construction supervision and other special consultancy services.



## **BCG's Values**

#### Client Satisfaction.

Is the optimum goal to Ideally build the trust, long-term relationship, and increase satisfaction and loyalty.

#### Commitment to Quality.

We regularly audit our projects design to ensure that our quality control procedures are followed.

### Ethics and professional integrity.

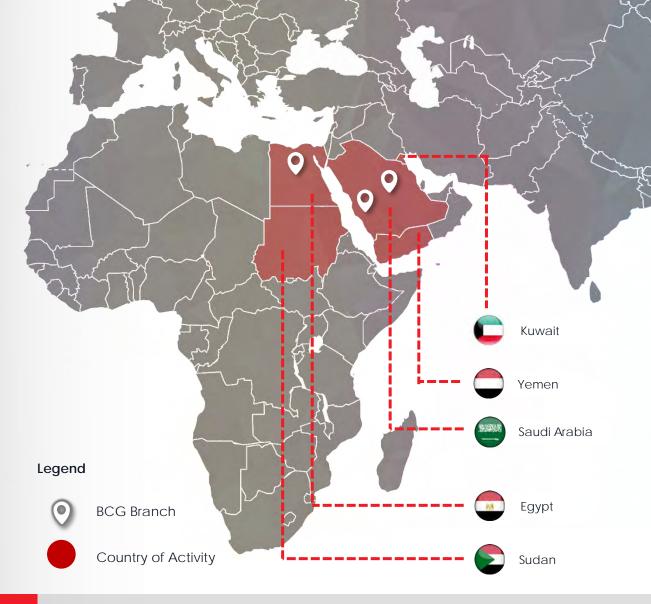
We adhere to BCG's code of ethics in all work aspects, showing strong moral character from all employees.

#### Teamwork.

We empower our employees' teamwork spirit in a creative environment to ensure meeting clients' expectations.

#### Continuous development.

We are a fast-learning organization, aiming to self-improvement, with a constant commitment to strengthening the firm, and our team through continuous development.



## **Branches**

### Cairo - Egypt (Head Office).

16 Joseph Tito St, El-Nozha El-Gadida.+202 262 18 712

### Riyadh - Saudi Arabia.

7905 Al Dhahran St, 2220 El malaz Dist. +966 560 279 556

#### Jeddah - Saudi Arabia.

Office No. S203 - Platinum Plaza, Al-Ruwais. +966 543 296 **654** 

## **Countries of Activities**

BCG has worked internationally in five Middle-East countries (<u>Egypt</u>, Saudi Arabia, Sudan, Kuwait, and Yemen), where BCG's projects can be found.

And BCG is now working on penetrating a new market in Libya.

## **History and Development**

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BCG's continuous development and achievements Success-Story can be summarized in the following Time-Line graph.





### **Accreditations and Certification**

Since 2017, BCG has been accredited as an Approved Consultant by **EETC** (Egyptian Electricity Transmission Company).

In 2024, BCG was accredited as an Approved Consultant by **SEC** (Saudi Electrical Company),

Also in 2024, BCG is accredited as an "Expertise House" in the Engineering Consultancy field, which is the highest-ranking of consulting firms in Egypt.





## **ISO Quality Certification**

In January 2015, BCG was registered as conforming to the requirements of ISO 9001:2015 quality certification (QMS) Quality Management System.

In 2018, BCG was registered as conforming to the requirements of **ISO 45001:2018** quality certification (HSE) Health And Safety Management System.

And in 2024, BCG was registered as conforming to the requirements of ISO 14001:2015 quality certification (EMS) Environmental Management System.



## **BCG's Projects Typology**

BCG has two (2) main projects typologies, which the company's hierarchy is constructed upon:



## **Power Sector Projects**

#### Substations (AIS / GIS).

- 500 kV.
- 380 kV.
- 220 kV.
- 132 / 115 kV.
- 110 / 66 kV.
- STATCOM / DRPC.

#### Renewable Energy.

Solar Stations.

#### OHTL / UGC.

- 500 kV.
- 380 kV.
- 132 / 115 kV.
- 110 / 66 kV.



## **Buildings and Infrastructure Projects**

#### **Buildings Projects.**

- Residential.
- Commercial.
- Mixed-Use.
- Health-Care.
- Office Buildings.
- Hospitality.
- Industrial.
- Sports Facilities.

#### Infrastructure Projects.

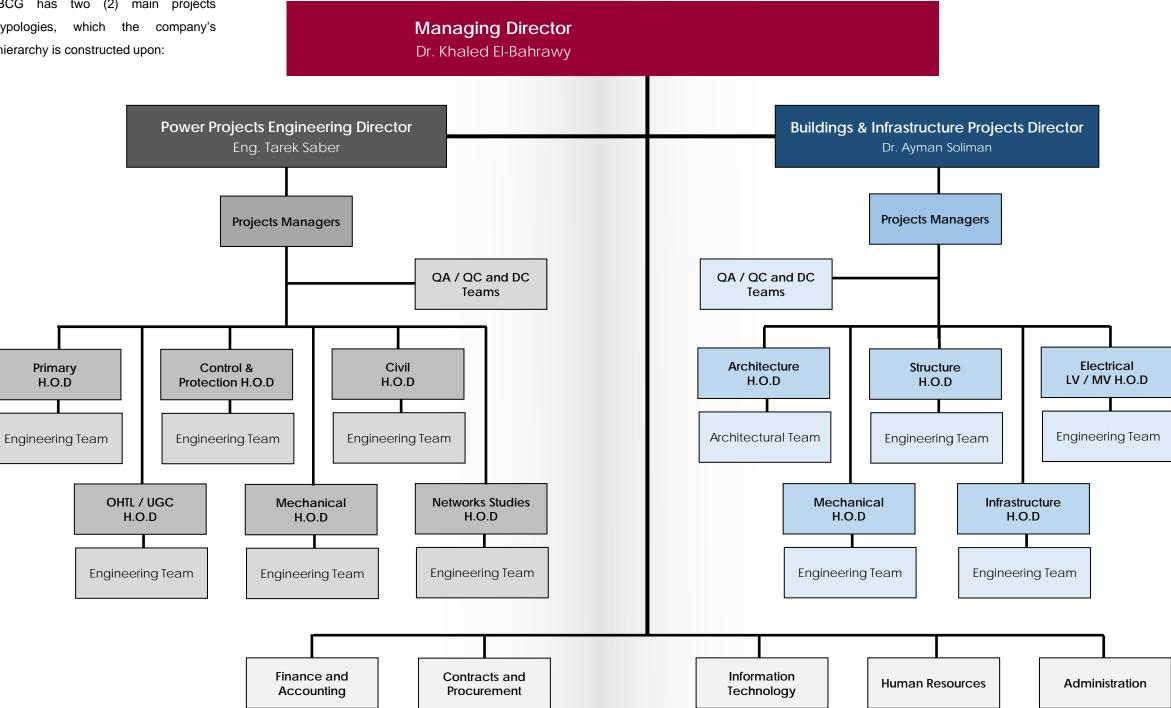
- Wet-Utilities (Water and Sewage) Networks.
- Roads Engineering.
- Electrical Networks.
- Telecommunications Networks.





## **BCG's Organization Chart**

BCG has two (2) main projects typologies, which the company's hierarchy is constructed upon:





## BCG's Design Consultancy Services



#### **Architectural Design**

BCG's Arch. Team covers the design scope starting from the conceptual design and design development, till the finalization of the IFC.



#### **Structural Engineering**

Our structural engineers, are expertise in both concrete and steel structure designs for a verity types of projects.



#### **Electrical Engineering**

Low / Medium Voltage electrical team covers a wide range of buildings and infrastructure electrical networks design.



#### **Mechanical Engineering**

BCG's Mechanical team covers the full scope of Mechanical engineering (HVAC, Plumping and Fire-Fighting).



#### Infrastructure and Civil Engineering

The Infra. & Civil team collaborate with all related engineering trades to provide innovative coordinated designs for wet-utilities and roads networks.



#### **Electrical Power Engineering**

 $\rm EHV$  / HV Power Engineering for high voltage substations (AIS / GIS) and Transmission lines  $\rm OHTL$  / UGC), and related protection.

## BCG's Other Consultancy Services



# Construction Supervision

To drive the construction project to successful completion within budget, time, and up to the highest standards.



#### Peer / Design Review

Third-party review for design works carried out by others.



#### Work-Shop Drawings

A set of drawings clarifying how the project elements will be fabricated, assembled, constructed, and installed.



#### Value Engineering

To optimize the design and maximize the value of the project while considering the lowest possible minimum cost.



#### On-The-Job Training

Train employees to do their jobs (Hands-On), to add value to the organization.



## Project Management

Project management services for leading the project during the design and construction phase.



## BIM Services and Modelling

To ensure conflict-free drawings, the right quantity take-off, and a reduction in construction time.



#### Special Network Studies

Studies of (Load flow, Short circuits, Protection settings, and Insulation coordination).

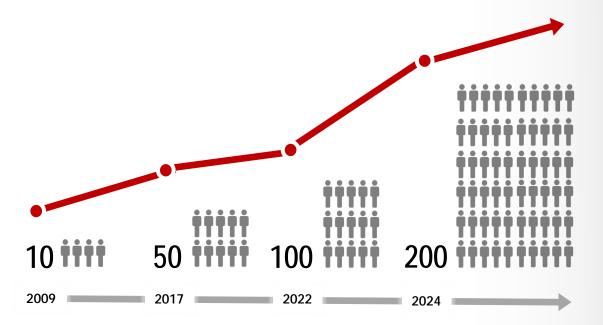


# **Quantity Surveying** and Specifications

Quantity Surveying, Bill of Quantities, and Specifications preparation services in CSI format.

## **BCG's Team Growth**

Our Team is our greatest asset and intellectual capital, and our success is attributed to the team's diverse expertise, skills, professionalism, and talent, offering a continued commitment to quality and professionalism.





## **BCG's Tools Of Project's Success**

Ensuring the success of a design project involves several management tools in BCG, from planning and execution to monitoring and reviewing.

More specific tools that play an important role in the success of the Project would include, among others, the following:



#### Project Management Plan

BCG Management team shall develop a detailed project management plan, including timelines, milestones, resource allocation, and budget while identifying potential risks and developing mitigation strategies.



#### **Effective Communication**

BCG team shall regularly communicate with the Owner / Project Manager / other project stakeholders to keep them informed and involved while providing transparent and regular progress reports to clients and team members.



### **Documentation and Reporting**

BCG maintains detailed documentation of all project activities, decisions, and changes while providing comprehensive reports (when required) summarizing the project status and outcomes.



#### QA/QC Quality procedures:

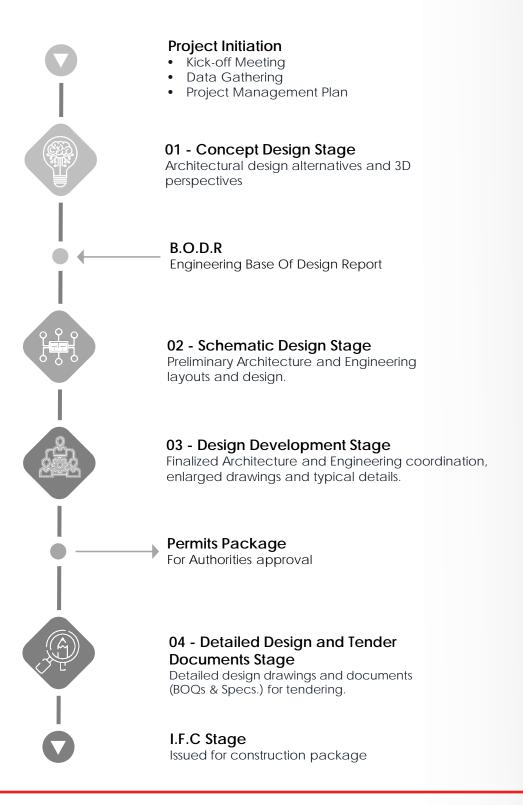
BCG QA/QC team reviews the project deliverables while following "BCG's Quality Control Procedures" to ensure the quality of the package before submission.



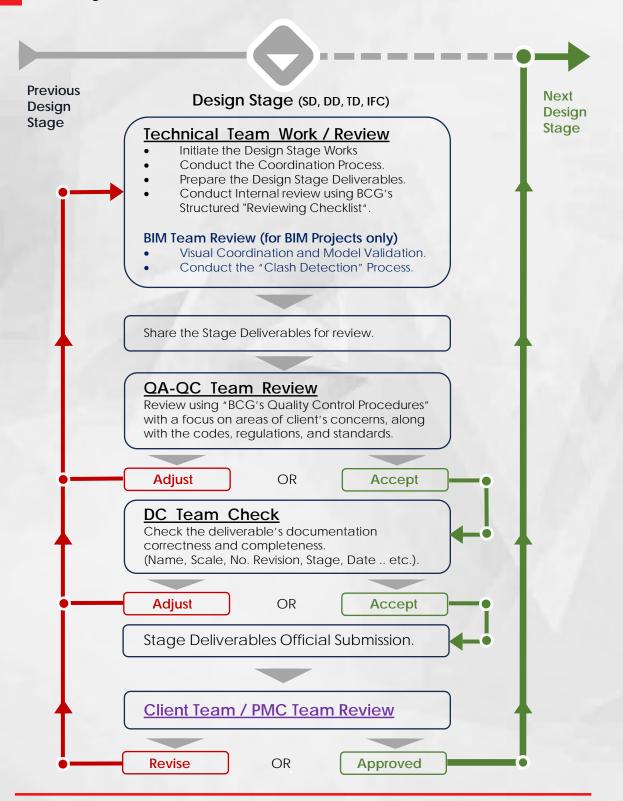
#### **BIM Modeling and Coordination**

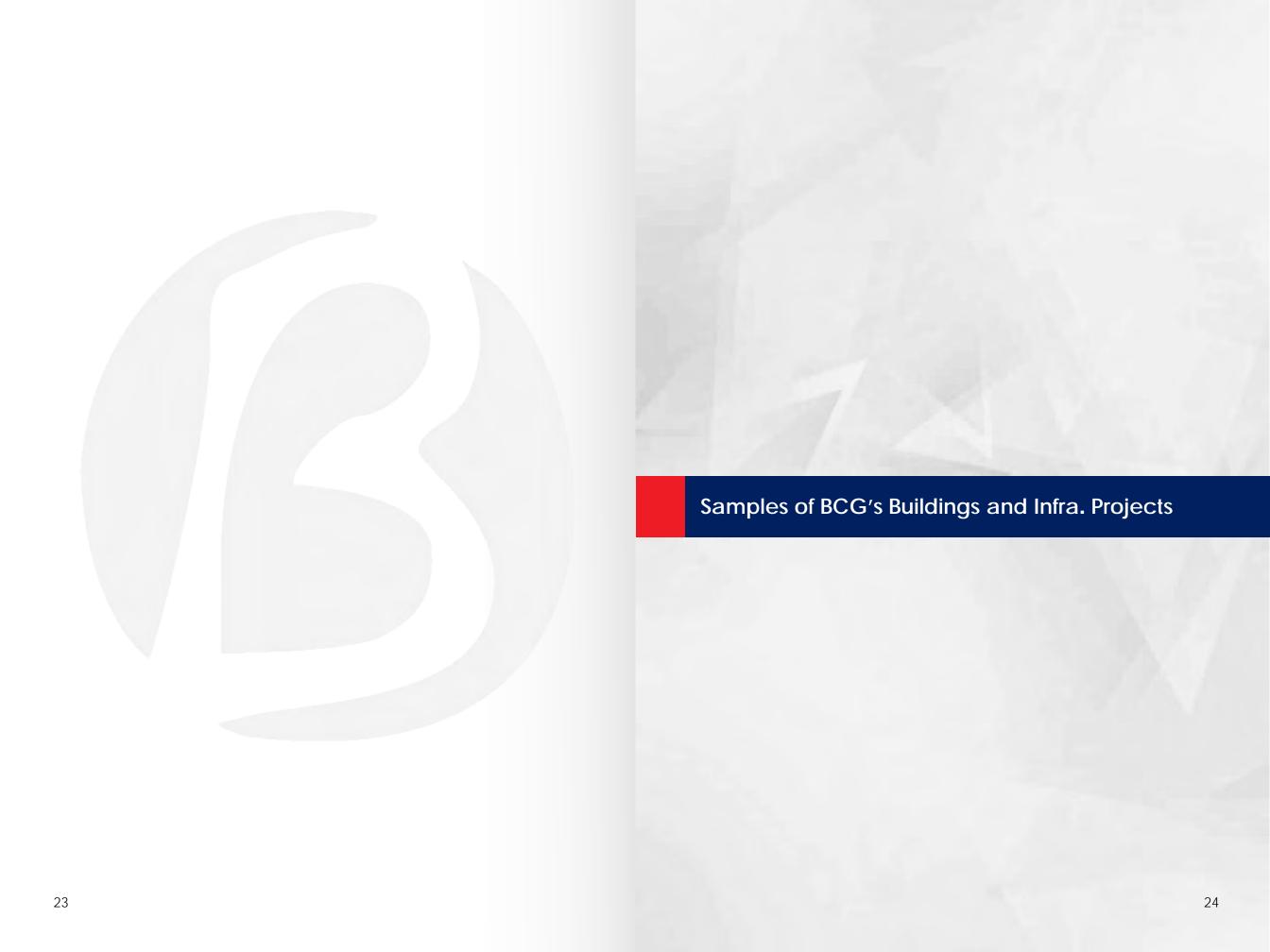
Most of BCG's new projects have been designed, developed, and coordinated using BIM modeling to ensure conflict-free drawings.

## **Design Methodology and Phases**



## **Quality Process flow-chart**







## **The Farmhouse Complex Project**

Owner: Private.

Location: Riyadh, Saudi Arabia.

**Type:** Residential

BCG's scope includes developing the Architectural, Structural and MEP design packages from Schematic till IFC.

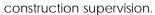


## **NBE (Qillin Branch) Project**

Owner: National Bank Of Egypt. Location: Kafr El-Sheikh, Egypt.

**Type:** Administration

BCG's scope includes preparing the Architectural and MEP re-design packages for renovation, in addition to Tendering support and





## **NBE (Kafr-Saad Branch) Project**

Owner: National Bank Of Egypt.
Location: Damietta, Egypt

**Type:** Administration

BCG's scope includes preparing the Architectural and MEP re-design packages for renovation, in addition to Tendering support and

construction supervision.



## **NBE (Badr-City Branch) Project**

Owner: National Bank Of Egypt. Location: Badr-City Branch

**Type:** Administration

BCG's scope includes preparing the Architectural and MEP re-design packages for renovation, in addition to Tendering support and construction supervision.

#### La-Mirada Plaza Mall Project

Owner: Grand Plaza Developments.

Location: New Cairo, Egypt

Type: Commercial.

BCG's scope includes preparing the Electro-

Mechanical design package...



### **Vivens Mall Project**

Owner: Vivens Developments

Location: El Shrouk City, Egypt

Type: Commercial.

BCG's scope includes preparing the Electro-

Mechanical design package.



### **Rock-Vera Compound Project.**

Owner: Al-Batal Development Location: New Cairo, Egypt

Type: Residential

BCG's scope includes preparing the Electro-Mechanical, Infrastructure, and Roads design

packages for the complex.



## **Rose-Hill Compound Project**

Owner: Rawas Group

Location: 6th of October, Egypt

Type: Residential

BCG's scope includes Electro-Mechanical value- engineering works, prepare the Electro-Mechanical re-design package accordingly,

and Site supervision.





### **Al-Sheikh Zayed Mosque**

Owner: Capital Group Properties. Location: New Cairo – Egypt

**Type**: Religious

BCG's scope includes conducting an Electro-Mechanical value- engineering works, and prepare the re-design package according

Electro-Mechanical.



## **King Abdullah International Gardens**

Owner: KAIG.

Location: Riyadh, Saudi Arabia.

**Type:** Entertainment

BCG's scope includes providing Structural Work-Shop Drawings for several pavilions within the Paleobotanic crescent biome building.



## La-Palma Admin. Building

**Owner:** : I2M developments.

Location: Cairo, Egypt

**Type:** Administration

BCG's scope includes provide an architectural concept design to convert this building into an administration building from inside, while preserving the heritage facade design.



#### **Kharafi National Head office**

Owner: Kharafi National. Location: Kaattamia, Egypt

**Type:** Administration

BCG's scope includes preparing the Structural

design package.

#### **NEOM Camp**

Owner: Al-Gihaz.

**Location:** NEOM, Saudi Arabia **Type:** Housing Complex I.

BCG's scope includes Planning the camp layout and preparing the Electrical Infrastructure design package.



#### **ICITY British School**

Owner: LEEDS British Schools.
Location: 6th October, Egypt

Type: Educational.

BCG's scope includes conducting an Electro-Mechanical value- engineering works, and prepare the Electro-Mechanical re-design

package accordingly.



## **HLM Office Building**

Owner: Private.

Location: Amman, Jordan.

Type: Administration.

BCG's scope includes provide an integrated Architectural and Interior concept design.



#### **HLM Club House**

Owner: Private.

Location: : Amman, Jordan

Type: Entertainment

BCG's scope includes provide an integrated Architectural and Interior concept design.





## **MavenCables Factory Project**

Owner: Al-Tabarak Group

Location: Badr city, Cairo, Egypt.

Type: Industrial

BCG's scope includes providing a Site construction Supervision services for the Steel Structure instillation within the factory



## **Al-Farafra's Solar Station Project**

Owner: Al Reef Al Masry Location: Al Farafra, Egypt.

**Type:** Solar System

BCG's scope includes providing the design and construction supervision for this solar plant Off-Grid system that supplies several buildings and

lands.



## **VB Nursery Project**

Owner: Private

Location: Zayed City, Egypt

**Type**: Educational

BCG's scope includes providing an integrated Architectural and Interior concept design.



## HD Bank (Soudan St. Branch) Project

Owner: HD Bank.

Location: : Cairo, Egypt

**Type:** Administration

BCG's scope includes preparing the

Architectural and MEP re-design packages for

renovation.

## Samples of BCG's Power Projects

#### **Power Projects**



#### Al-Huda 110/13.8KV Substation

Client / Owner: Al-Ojaimi / SEC Location: Makkah, Saudi Arabia

Type: 110kV GIS substation.

BCG's scope includes complete design

packages and necessary network studies.



## Al Bukairiah 132/13.8kV Substation

Client / Owner: Al Sharif Contracting (ASC) / SEC

Location: Qassim, Saudi Arabia

Type: 132kV GIS substation.

BCG's scope includes complete design

packages and necessary network studies.



#### Al Hada 132/13.8kV Substation

Client / Owner: Nesma (NIT) / SEC Location Riyadh, Saudi Arabia

Type: 132kV GIS substation.

BCG's scope includes complete design

packages and necessary network studies.



### Al Hamdaniyah 110/13.8kV Substation

Client / Owner: Nesma (NIT) / SEC Location Jeddah, Saudi Arabia

Type: 110kV GIS substation.

BCG's scope includes complete design

packages and necessary network studies.

#### Shuaiba110/13.8kV Substation

Client / Owner: Al Babtain / SEC Location: Makkah, Saudi Arabia

Type: 110kV GIS substation.

BCG's scope includes complete design packages and necessary network studies.



## **Dhahiat Sumou 110/13.8kV Substation**

Client / Owner: Al-Ojaimi / SEC

Location: Makkah, KSA.

Type: 110kV GIS substation.

BCG's scope includes complete design packages

and necessary network studies.



## Al Narjis 132/13.8kV Substation

Client / Owner: Al Sharif Contracting (ASC) / SEC

**Location:** Riyadh, Saudi Arabia **Type:** 132kV GIS substation.

BCG's scope includes complete design

packages and necessary network studies.



## Al Sharafiya 132/13.8kV Substation

Client / Owner: Nesma (NIT) / SEC Location: Riyadh, Saudi Arabia

Type: 132kV GIS substation.

BCG's scope includes complete design

packages and necessary network studies.





#### **Power Projects**



#### NIC Circle 380/132kV Substation

Client / Owner: Al-Gihaz / NEOM Location: Neom, Saudi Arabia.

Type: 380kV GIS substation.

BCG's Scope includes complete design and necessary network studies in addition to the special architectural requirements as per NEOM

standards.



### Nesma Pss-B 132/33kV Substation

Client / Owner: Al Sharif Contracting (ASC).

Location: Saudi Arabia

Type: 132kV GIS substation

BCG's Scope includes complete design

packages and necessary network studies.



### MISK 132/13.8kV Substation

Client / Owner: Al Babtin / SEC Location: Riyadh, Saudi Arabia

Type: 132kV GIS substation

BCG's Scope includes complete design packages and implementation of BIM LOD 300.



#### NIC North 132- 13.8kV Substation

**Client / Owner**: NESMA / NEOM **Location**: Neom, Saudi Arabia

Type: 132kV GIS substation

BCG's Scope includes complete design in addition to the special architectural

requirements as per NEOM standards.

## Neom Mountain PSS-B 132/33kV

#### **Substation**

Owner: Nesma For Infrastructure And

Technology

**Location**: Neom, KSA **Type**: Substation

Scope: ALL DISCIPLINES



### Al Henakiyah 380/110 kV Substation

Client / Owner: Al Fanar / SEC

Location: Al Hanakia, Saudi Arabia

Type: 380kV GIS substation

BCG's Scope includes complete design

packages and necessary network studies.



# Waad Al Shamal 380/132kV Substation

Client / Owner: Al Fanar / SEC

Location: Waad El Shamal, Saudi Arabia

Type: 380kV GIS substation

BCG's Scope includes complete design

packages and necessary network studies.



## Rua Al Madinah (RAMD) 110/13.8kV(x4) Substations Project

Client / Owner: Al Babtin / SEC Location: Madinah, Saudi Arabia

Type: 110kV GIS substation

BCG's Scope includes complete design

packages and necessary network studies.



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#### **Power Projects**



#### Al Kahfa; 380/132kV Substation

Client / Owner: Al-Babtin / SEC Location: Riyadh, Saudi Arabia. Type: 380kV GIS substation.



# Installation of Dynamic Reactive Power Compensation at Nagran 380kV BSP

Client / Owner: Al Fanar / SEC

Type: FACTS project

BCG's scope includes complete design packages to install DRPC to improve rapid voltage support/dynamic voltage stability in Nagran, KSA, and provide the necessary network studies.



# Extension of Sokhna; 500/220/22kV Substation

Client / Owner: L&T / EETC Location: Sokhna, Egypt Type: 500kV GIS substation

BCG's scope includes complete design

packages.



#### S4; 500-220/22kV Substation

Client / Owner: L&T / EETC
Location: New Capital, Egypt
Type: 500kV GIS substation

BCG's scope includes complete design

packages.

# Eqtesadia; 500/220/66/22kV Substation

Owner: XD-EGEMAC / EETC Location: Sokhna, Egypt Type: 500kV GIS substation

BCG's scope includes complete design

packages.



# Cairo West; 500/220/66/22kV Substation

Client / Owner: DAEWOO-Hyundai / EETC

Location: Cairo, Egypt

Type: 500kV GIS substation

BCG's scope includes complete design

packages.



# Installation of 4-Reactors at 380KV outdoor Al-Jouf & Hail Substations

Client / Owner: Al Fanar / SEC

Type: 380kV AlS substation

BCG's Scope includes complete design packages to control reactive power in the 380kV network by installing four 380kV reactors and

providing the necessary network studies.



# Kom Ombo 200MW PV power plant; 220/33kV AIS Substation

Client / Owner: ZTPC - ACWA Power /

Location: Aswan, Egypt

Type: 220kV AIS substation

BCG's scope includes complete design

packages.





#### Nagran-2; 380/132kV Substation

Owner: Al Fanar / SEC.

**Location**: Nagran / Saudi Arabia

Type: 380kV GIS substation

BCG's scope includes complete design packages and necessary network studies in addition to interconnection with 380kV network

transmission lines.



#### Zaraga-2; 132/13.8kV Substation

Owner: : Al Sharief / SEC

Location: Abha / Saudi Arabia

Type: 132kV GIS substation

BCG's scope includes complete design

packages.



# Expansion of Madinah East (MEDEA) 380/110-33KV BSP Substation

Owner: Al Mashareq / SEC

Location Medinah / Saudi Arabia

Type: 110kV GIS substation

BCG's scope includes complete design

packages.



# Jeddah Economic City (JEC) 110-13.8kV Substation

Owner: : NESMA / SEC Location Jeddah, KSA

Type: 110kV GIS substation

BCG's scope includes complete design packages in addition to special architecture requirements as per JEC standards.

# Howtat Bani Tameem 132/13.8kV Substation

Owner: Ibn Omairah / SEC

Location: Riyadh area / Saudi Arabia

Type: 132kV GIS substation.

BCG's scope includes complete design

packages.



#### Al Baha; 380/132kV Substation

Owner: Al Fanar / SEC .

Location: Al Baha / Saudi Arabia.

Type: 380kV GIS substation

BCG's scope includes complete design packages and necessary network studies.



# Kom Ombo 200MW PV power plant; 220/33kV AIS Substation

Owner: ZTPC / ACWA Power / EETC

Location: Aswn / Egypt

Type: 220kV AIS substation

BCG's scope includes complete design

packages.



## Um Al Jood; 380/110kV Substation

Owner: Al Gihaz / SEC

Location: Jeddah / Saudi Arabia

Type: 380kV GIS substation

BCG's scope includes complete design packages and necessary network studies.



## **BCG's Clients**























































CHNT



















بنك التعمير والإسكاد Housing & Development Bank











**AUVA** 

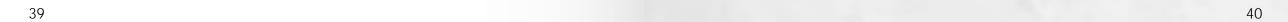


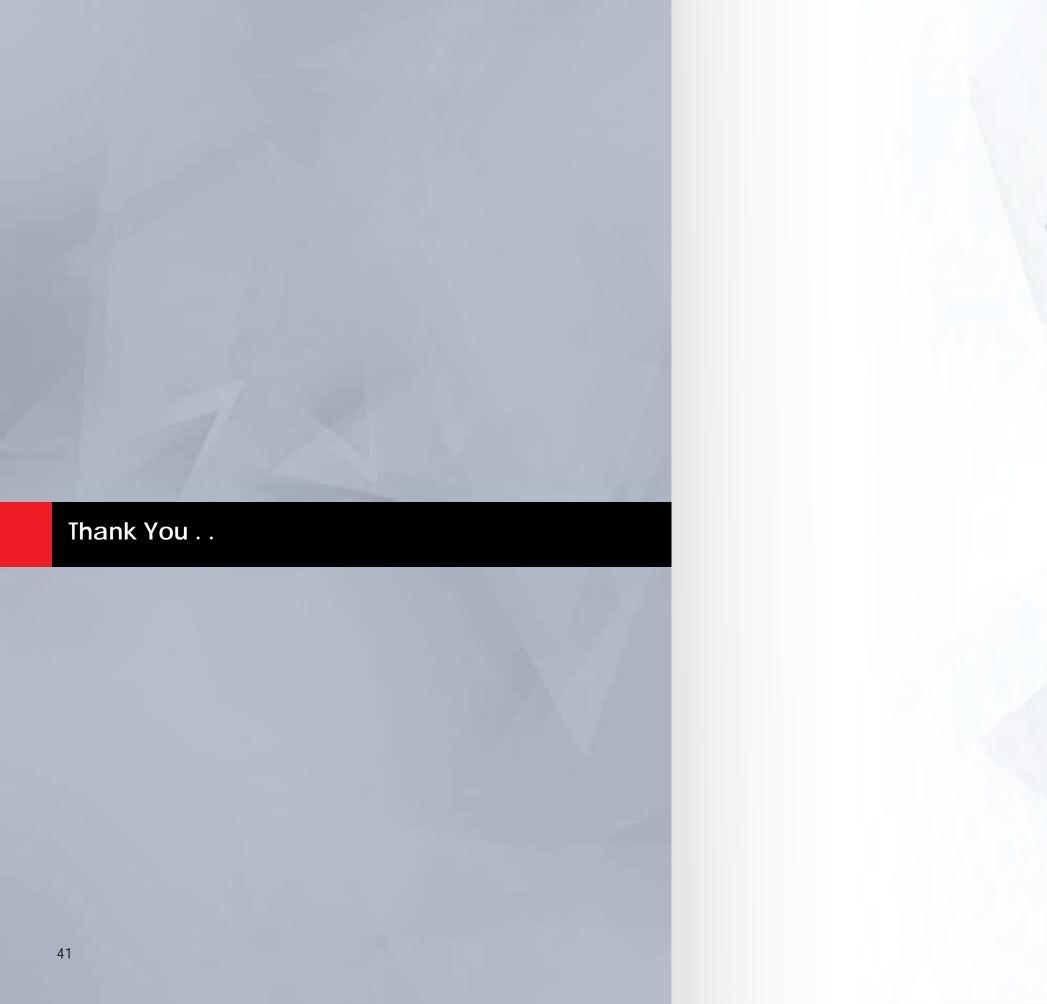














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