

# about us

We are a progressive independent multi-disciplinary consultancy that delivers energy-efficient and sustainable engineering, design solutions, and advisory services that best serve our clients and the well-being of their local communities.

Our expert team of designers, engineers and technical consultants are committed to providing you with solutions and services that remit tangible and quantifiable value throughout the lifecycle of your project.

Our proven track record and portfolio of projects ranges from new construction, intervention and policy and advisory services. No matter the sector, size or type of the built environment, we embrace your needs and complexity with our unique skillset, and promise to provide efficient, functional, future-proof solutions and sound technical advice that drives transformative outcomes.

# our mission

To provide energy-efficient, progressive and functional engineering & design solutions for sustainable built environments



#### established in 2013



35+ team members in 2021



certified

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018

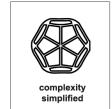


Active on the local and regional boards of Governors/Directors of **ASHRAE** and **CIBSE** 



Ex-board Member of Emirates Green Building Council

Our values reflect our true work ethic, philosophy, and delivery methods.



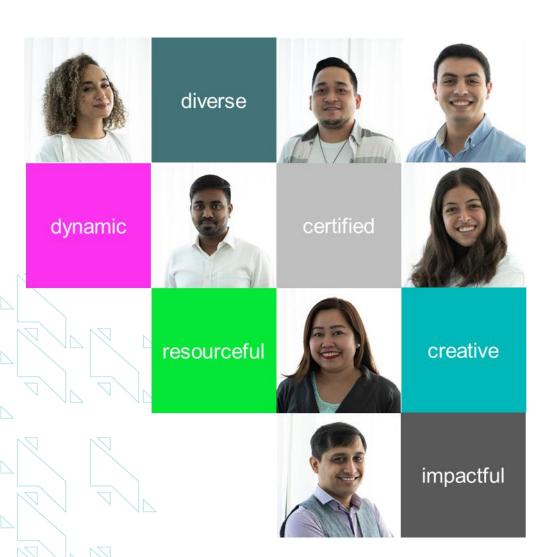








# our people



#### team certifications

#### **PMI**

Project Management Professionals

#### ASHRAE

Building Energy Modeling Professionals

#### **ASHRAE**

High-Performance Building Design Professionals

#### **ASHRAE**

Building Commissioning Professionals

#### **ASHRAE**

Building Energy Assessment Professionals

#### **ASHRAE**

Healthcare Facility Design Professionals

#### **ASHRAE**

Certified HVAC Designers

#### **ASHRAE**

Operations & Performance Measurement Professionals

#### ΔFF

Certified Energy Managers

#### AEE

Certified Energy Auditors

#### AEE

Certified Water Efficiency Auditors

#### **EVO/AEE**

Certified Measurement and Verification Professionals

#### **USGBC**

LEED AP Existing Buildings

#### **USGBC**

LEED APs New Construction

#### **WELL AP**

WELL Accredited Professionals

#### Estidama/UPC

Pearl Qualified Professionals

#### **BREEAM**

**BREEAM Assessor** 

#### certified trainers

- > ASHRAE Lecturers
- > Certified CÉM Trainers
- > Certified CMVP Trainers
- > Emirates GBC Course Facilitators
- > PMP Trainers

# awards

#### 2022

CIBSE Building Performance Awards- shortlisted

#### 2021

CIBSE BPA Retrofit Project of the Year- AD DoE Pilot Retrofit Project ITP Top 20 Middle East MEP Consultants

#### 2020

AEE ME Energy Project of the Year- AD DoE Pilot Retrofit Project CIBSE Building Performance Awards- *shortlisted* ITP Top 20 Middle East MEP Consultants

#### 2019

CIBSE Build2Perform- shortlisted
GITEX Energy Sustainability Champion
ITP Top 20 Middle East MEP Consultants

#### 2018

Retrofit Tech Energy Consultant of the Year ITP Top 20 Middle East MEP Consultants

#### 2017

Retrofit Tech Energy Consultant of the year ITP Top 20 Middle East MEP Consultants

#### 2016

ITP Top 20 Middle East MEP Consultants

#### 2014

ITP Middle East Boutique Consultancy of the Year

#### Office bases

UAE I Dubai, Abu Dhabi Egypt Lebanon

#### Project

UAE
Egypt
KSA
Bahrain
Pakistan
Kuwait
UK
Tanzania
Oman
Turkey



# **Energy Efficiency**

Applied Technologies
 Asset Assessment
 Building Surveying and Auditing
 Commissioning Management
emand Side Management Consultancy
 Energy Auditing
 Energy Efficiency Consultancy
 Energy Simulation
 Feasibility Studies
 Measurement & Verification
 Net-Zero Energy Consultancy
Operational Efficiency Consultancy
Portfolio Sustainability and Compliance
 Project Management
Technical and Regulatory Consultancy
Trainings and Capacity Building

# **Sustainability**

Air Quality Management
Building Rating Systems
EED, BREEAM, WELL, Estidama, DGBR, Sa'fat, et
Carbon Management
Commissioning Management
Corporate Sustainability and Compliance
Energy Simulation
Feasibility Studies
Health and Well-Being
Independent Commissioning Agency
Low Carbon Design
Passive Design
Portfolio Sustainability and Compliance
Project Management
Renewables Consultancy
Smart Cities
Soft Landing
Sustainability & Environmental Consultancy

# **Engineering**

Air Quality Management
Applied Technologies
Building Information Modeling (BIM)
Building Services Engineering
Electrical, ELV, Fire Protection, HVAC, LPG & Natural Gas, Plumbing, et
Building Surveying and Auditing
Commissioning Management
Computational Fluid Dynamics (CFD)
Concessions Advisory Services
Construction Management
Design Reviews
District Cooling Consultancy
Energy Simulation
Feasibility Studies
Operational Efficiency Consultancy
Planning and Permitting
Project Management
Soft Landing
Technical and Regulatory Consultancy

# **Interior Design**

Interior Design
Interior Renovation and Refurbishment
Project Management
Space Planning
Turn-key Fitout Solutions

# **Small Architecture**

Architectural Design
Conservation and Preservation
Construction Management
Feasibility Studies
Passive Design
Planning and Permitting
Project Management
Urban Enhancement and Intervention

Sectors

Infrastructure & District Cooling
Buildings High-rise and Low-rise
Villas
Oil & Gas
Retail, food & beverage
Corporate

## select clients

















دائيرة تنمية المجتمع DEPARTMENT OF COMMUNITY DEVELOPMENT



دائيرة التعليم والمعرفة DEPARTMENT OF EDUCATION AND KNOWLEDGE



هيئة أبوظبي للإسكان ABU DHABI HOUSING AUTHORITY









BY A.R.M. HOLDING









































# new construction



#### Al Ferdous 1, 2, 3, 4

AED400M B+G+1 Mixed Use Buildings (Retail + Residential + Offices). Total built-up area is 120,000 m2. Full MEP design and construction supervision

#### **ARYANA Five Star Hotel Tower**

AED250M Full MEP design of the five star landmark in Sobha Hartland consisting of B+G+4P+30.



#### Sabreen

AED195M 2B+G+8 residential building with retail spaces on the ground floor. Total built-up area is 18,000 m2. MEP redesign (18% cost savings) and construction supervision.

#### **UAE Pavilion for Expo2020**

LEED Independent Commissioning Agent to achieve LEED Platinum and Sa'fat Building Rating

#### Industrial Complex

AED65M complex comprising a yacht factory, labor accommodation, and administrative offices Full MEP design

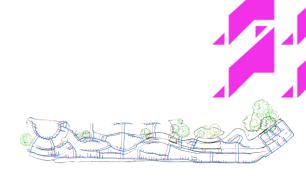
#### Jumeirah Heights District Cooling Expansion

Design and supervision of the expansion of the existing plants to accommodate new developments.

#### Masdar Sustainability Framework

Framework agreement for multiple sustainability-related projects





#### Tabreed- Al Raha Beach 250 ETS's

Consultancy services

#### **GEMS AI Reem Primary School**

Estidama Consultancy and Independent Commissioning Agency

#### **GEMS AI Reem Secondary School**

Estidama Consultancy and Independent Commissioning Agency

#### **Warehouses Complex**

AED105M warehouses complex located in Jebel Ali Industrial Area is composed of 39 buildings housing 52 warehouses, cold stores, and administrative buildings.
Full MEP design and construction

Full MEP design and construction supervision



#### **ADHA Near-Zero Sustainable Villa**

MEP design and Estidama consultancy (5 Pearl) for a near-zero villa prototype

#### **Bugatti Villas**

MEP design

#### Private Villa - Pearl Jumeirah

MEP design

#### Private Villa - Dubai Hills

MEP design

#### Private Villa - Sharjah

MEP design

#### Private Villa- Abu Dhabi

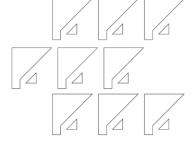
Interior design

#### **GEMS National Schools for Boys and Girls**

Energy Simulation and sustainability compliance

#### District Cooling Connection to School at Jumeirah Islands

District Cooling interface design and supervision



#### Al Khail Avenue

Peer review services and VAC design optimization

#### Nad Al Sheba Mall

Peer review services and VAC design optimization

#### Royal House in London

Interior design and fit-out management

#### Valentino Store at TDM

MEP design

#### **EXPO 2020 Site Office**

MEP design and commissioning management

#### **Zayed University Students Club**

Project management of MEP and interiors

#### **Advect Offices**

MEP design

#### Yinyang Spa

MEP design





#### **Adventure ParX**

Complete fit-out management including interior and MEP design and construction supervision

#### Ministry of Energy and Industry

Cooling load identification for the new HQ

#### Mamzar Hotel

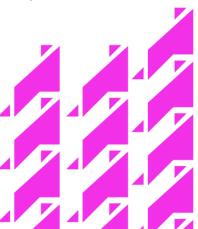
Cooling load identification

#### Residential Development on Plot C-008-009, TECOM

MEP peer review

#### Residential Tower in Business Bay

MEP peer reviewv



# intervention



#### **Burj Khalifa MEP Retrofit**

Design, supervision, and commissioning management for the modification of Chilled Water system above level 150 the burj, Domestic Water System pumps retrofit and Firefighting Pump Line upgrade.

#### Retrofit Management for the Abu Dhabi Department of Energy

Consultancy services to facilitate the energy retrofit of eight DoE buildings including solar installations and the establishment of a central smart monitoring station

#### **Retrofit Management for all ALDAR Buildings**

Consultancy services to facilitate the energy retrofit of all ALDAR buildings including solar installations

#### **Retrofit Management 198 TECOM Buildings**

Consultancy services to facilitate the energy retrofit of TECOM buildings

#### **Nakheel Energy Conservation Studies**

Detailed energy audit and simulation of all typical buildings in the five communities (Ibn Battuta Mall, The Gardens (129 bldgs), The Gardens Furnished Apartments (8 bldgs), Discovery Gardens (41 bldgs), International City (111 bldgs))

#### **Meraas Discovery Gardens**

Detailed energy audit and retrofit management for 59 buildings.

#### Emaar Energy Benchmarking 2016, 2019

Energy benchmarking of all of Emaar properties

#### **Etihad ESCO- Measurement & Verification**

Sole M&V consultant for energy retrofit projects

#### Saudi Tarshid NESCO

**Energy Audits and Retrofit Bid Management** 

#### **Project Solis**

Consultancy services for the 1,000MWh rooftop on-grid Solar Photovoltaic installation at Dutco Balfour Beatty labor camps



#### **Etihad ESCO- Energy Audits**

Walkthrough energy audit for select governmental entities

#### **Royal Winter House Renovation**

Complete retrofit of the architectural façade, interior, and MEP of a winter palace located in a nature conservation in the UAE to improve occupants experience, comfort, and views

#### **Tabreed Seawater Plant**

Technical audit

#### **Chilled Water Consultancy Services at City Walk**

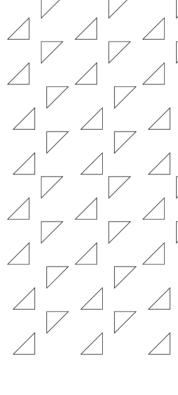
Identification of and supervising the implementation of optimization and corrective measures

#### **Emicool DCP 11**

Client representative services for quality assurance for energy retrofit at the district cooling plant

#### **Oman LNG**

Feasibility study for the implementation of a District Cooling system in an LNG plant in the Sultanate of Oman





#### **Dubai Festival City - District Cooling Plant Audit**

Identification of optimization and corrective measures at a 50,000TR district cooling plant

#### Dubai Festival City - Low Delta T

Identification of the causes to and mitigation measures of low delta

#### Fairmont the Palm-Low Delta T

Identification of the causes to and mitigation of low delta T syndrome

#### **Index Tower**

Energy Performance Contract management/ Low Delta T mitigation

#### Hilton Corniche Abu Dhabi (now Radisson Sas)

MFP technical audit

#### Humidity and Mold Mitigation in a Five Star Resort in Dubai

Engineering consultancy services to identify causes and advise mitigation measures

#### **Dutco Balfour Beatty Camps Energy Retrofit**

Client representative services to facilitate and supervise energy retrofits from inception to completion of EPC

#### **Transformers Rooms Study**

Engineering consultancy services to identify causes of transformers deterioration and advise mitigation measures across tens of district cooling plants

#### **Dubai Mall Aquarium**

MEP design modification and on site supervision to upgrade the chilled water system feeding the Dubai Mall Aquarium

#### **Dubai Mall Waterfall Fountain**

Engineering services for the upgrade of the chilled water system feeding the waterfall

#### Court of HH Crown Price of Abu Dhabi

Redesign for VAC system for improved thermal comfort

#### **Dubai Mall F&B Exhaust System Retrofit**

Rectification of F&B exhaust system in Dubai Mall's food courts for improved performance

#### **Masdar City Offices**

Redesign for VAC system for improved thermal comfort

#### **Emirates Nuclear Energy Corporation Offices**

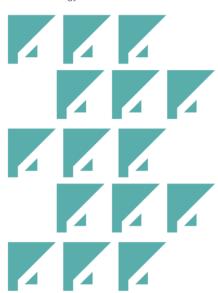
Redesign for VAC system for improved thermal comfort

#### **Honeywell Offices**

Identification of measures for improved thermal comfort

#### Zee Tower Energy Audit

Detailed energy audit and simulation



#### Raha Building Energy Audit

Detailed energy audit

#### **Hamza Tower Energy Audit**

Energy audit

#### **Sidra Tower Energy Audit**

Detailed energy audit and simulation

#### Golden Mile 1&2

VAC bill allocation

#### M&V at Park Place

Measurement & Verification services

#### Al Sahel Contracting Sustainability Policies

Development of a comprehensive sustainability policy and management of successful adoption across the business units

#### **Dubai Economic Department**

LEED Existing Buildings and WELL consultancy services

#### Fairmont the Palm Energy Audit

Energy simulation and energy reduction measures selection



# policy & advisory services

#### **Dubai Cooling Market**

Robust assessments of the size of the cooling market in Dubai, the extent of penetration by district cooling and other cooling methods, the actual efficiency of district cooling and the efficiencies of other cooling systems.

## Technical Consultancy for the Dubai Demand Side Management Strategy

State-of-the-art technical consultancy to support the review and upgrade of the Dubai Demand Side Management with a focus on detailed energy modeling and advanced engineering techniques

## Benchmarking for A Building Energy and Water Rating Scheme for Dubai

Technical consultancy and benchmarking to develop an energy and water benchmarking system for residential buildings, office buildings and hotels in Dubai



#### **Kuwait Cities District Cooling Feasibility and Guide**

Development of a comprehensive financial, legal, commercial, and technical guide to enable the adoption of District Cooling in Kuwait in addition to a concept level design of the network and plants in the new South Al Mutlaa City

#### **Cooling Assets Concession Advisory**

Concession advisory and technical due diligence for about 20 District Cooling and Chillers Plants. The plants are a mix of operational and under-construction plants, including both Water-cooled and Air-cooled plants with a total capacity of around 90,000TR.

#### **DFC District Cooling Concession Advisory**

Concession advisory for Dubai Festival City district cooling assets of about 50,000TR installed capacity and future expansion of around 40,000TR.



#### **CFC District Cooling Concession Advisory**

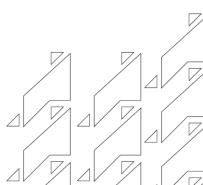
Concession advisory for Cairo Festival City district cooling assets of 15,000TR installed capacity and future expansion of 15,000TR.

## Abu Dhabi Department of Energy's Plan to Energy Retrofit Project 150 Governmental Buildings

Five year plan to retrofit 150 buildings selected from a pool of 2,500 eligible buildings that display the highest potential of energy savings and the highest likeliness of retrofit success

#### **Conventional Cooling Study**

Techno-commercial analysis of the benefits of District Cooling against other conventional cooling techniques. The study was a holistic and comprehensive one covering all aspects of construction and operational benefits and costs over the life cycle of the systems.



# **CSR**

We are enthusiastic about projects that improve the lives of **the people and their communities**. For many years, our core business has been to advise our clients on sustainable and energy efficient solutions, designs, and services to achieve their goals and requirements.

We actively identify how our projects can be delivered using the UN SDGs targets as drivers for improvement. Through this alignment, we are able to better identify innovative solutions and actions that we can implement in our projects that resonate with our clients' targets all while ticking the UN Sustainable Development Goals.





The United Nations Global Compact is

a voluntary leadership platform for the

practices in line with a set of principles

development, implementation and

disclosure of responsible business

that they have set forth under four broad topics: **Human rights, Labour, Environment** and **Anti Corruption**.

as well as the **17 SDGs**. With this signatory, **grfn** commits to taking

the world we all want.

responsible business action to create







# proudly joins United Nations Global Compact

# Orphanage & Community Center for 300 underprivileged children in Tanzania

Together with a group of architects, master planners, interior designers and engineers from various companies and universities to complete the design of a facility for 300 orphans and under-privileged children in Tanzania, East Africa. The function of the facility is a children's home, school and sports center.

# Improving indoor Air Quality in kindergarten schools

Promoting a healthy learning environment for children is of utmost importance and should be better communicated and relayed to school administrators and education providers. With this goal in mind, we have committed to actively improve indoor air quality in kindergarten and schools in Dubai, through measurements and consultancy.

## Mangrove Cleanup

grfn's team took on a voluntary challenge of cleaning up the mangroves of Abu Dhabi, as part of our team-building activities, encouraging a collaborative attitude towards environmental activism.

# knowledge transfer & other initiatives

# COMING SOON- grfn

grfn is in the process of launching a student development program that will focus on curated internship programs across our five verticals of Energy Efficiency, Sustainability, MEP Design, Architecture and Interior Design. The platform will also offer a variety of workshops targeting different age groups, and will host a collection of trainings and webinars held by the grfn team. This initiative is aimed at ensuring quality and consistency of our internship programs, as well as embedding knowledge-transfer as a pillar within our operations.













# #grfnKIDS

A series that we developed to simplify sustainability concepts and introduce them to our children. It is their <u>#future</u> that is threatened, and it is our responsibility to raise a generation that is aware, responsible and proactive in tackling some of the most pressing issues that face humanity.

<u>"Where have the Stars Gone?"</u> simplifies the concept of <u>#LightPollution</u>

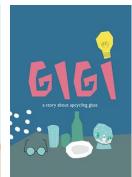
<u>"Beach Cleanup"</u> explains how <u>#PlasticWaste</u> is detrimental to marine life

"GIGI?" a story about #RecyclingGlass

**CLICK ON THE ABOVE TITLES TO READ** 

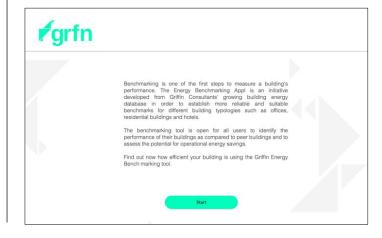






# COMING SOON- Energy benchmarking tool

With the lack of collated and published energy benchmarking references in the region, the firm has developed a free energy benchmarking tool soon to be rolled out on our website, free for use, as a means of our contribution to the energy efficiency movement. We hope that by giving the industry a tool to benchmark the energy use in their buildings, it will be a practical and true enabler to the energy efficiency drive in the UAE.



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