



Environas

Leading the Future of Sustainable Design



Contents

- 01** Introduction
- 02** Vision & Mission
- 03** Our Services & Solutions
- 04** Our Projects
- 05** Contact Us





Introduction

Environas is a design consultancy delivering environmental design, assessment, and research services across the MENA region. It was founded in 2021 by Dr. Nihal Al Sabbagh to translate academic, research-based knowledge into practice — pairing scientific rigor with solutions tailored to each project and client.

The team is comprised of architects and engineers with strong backgrounds in both practice and research, reflecting the company's vision and commitment to growth. That scientific expertise positions Environas as a leader in environmental design solutions and interdisciplinary scientific research.



Introduction



DR. NIHAL AL SABBAGH

Founder, design director

Nihal is the founder and design director of ENVIRONAS. With over 20 years of experience in teaching and practicing architecture and urban design, she has worked with various institutions and consultancies in both Egypt and the UAE. She earned her Ph.D. from the AA School of Architecture in London and holds an M.Sc. in Sustainable Design of the Built Environment. Her publications focus on environmental urban analysis, thermal comfort assessments, promoting walkability, passive cooling strategies for hot climates, and architectural education.



Our Hope

See sustainable in every space
impacting the users for a
positive future.

What We Do

We bridge the gap of knowledge to create
environments that maximize user comfort
and reduce the environmental impact.



Vision & Mission

Vision

To redefine the urban and architectural design with innovative, environmentally sustainable spaces that enhance user comfort and seamlessly connect interior and exterior environments.

Mission

At Environas, we create tailored, high-performance designs that prioritize sustainability and comfort. Our commitment is to transform each project with research-driven, practical solutions that meet the highest standards of environmental responsibility and aesthetic excellence.

Our Service & Solutions



OUR SERVICES & SOLUTIONS

Our range of services is adaptable and can be customized to align with both the project's and client's requirements, ensuring environmental objectives are met without compromising quality of life.

We foster healthy environments that positively impact users through various collaborations and our in-house expertise, with our projects spanning both local and global contexts.

We design urban spaces that are not only environmentally sound but also user-friendly, ensuring equitable, efficient, and sustainable environments for all



ENVIRONMENTAL DESIGN

- Architecture & interior design
- Urban & master planning
- Landscape design



ENVIRONMENTAL ASSESSMENT

- Green certifications (LEED, ESTIDAMA, EDGE...)
- Microclimatic & thermal comfort analysis
- Life-cycle assessment



ENVIRONMENTAL RESEARCH

- Walkability & urban comfort studies
- Climate change & thermal stress research
- Environmental research methodologies

Environmental Design



Our environmental designs arise from sustainable and ecological principles, based on passive measures with contextual inspirations providing our clients with innovative forms.

ENVIRONMENTAL DESIGN

ARCHITECTURE DESIGN

Our architectural designs are carefully crafted to be both visually appealing and environmentally sustainable, utilizing passive design strategies to lower energy consumption and improve comfort.

We design according to any green certification requirements. Key Points:

- **Innovative forms:** We merge innovative shapes with passive design techniques to minimize our ecological footprint while emphasizing human comfort.
- **Ventilation, Cooling, and Heating:** We seamlessly incorporate passive design strategies for ventilation, cooling, and heating into the project's interior elements.
- **Efficient Lighting:** Our commitment to efficient lighting helps to ensure reduced energy consumption.
- **Acoustic Considerations:** We address acoustic considerations to enhance the quality of indoor spaces.
- **Energy Performance :** We perform comprehensive energy performance assessments to reduce the building's dependence on mechanical cooling and artificial light.
- **Sustainable Materials:** We prioritize the selection of sustainable materials and greenery, fostering a healthier ecosystem.

By focusing on these aspects, we strive to create environments that are not only aesthetically pleasing but also advantageous for the planet and its inhabitants.



ENVIRONMENTAL DESIGN

INTERIOR DESIGN



We implement passive strategies for natural ventilation and efficient mechanical cooling by thoughtfully designing the components within the space. This includes:

- Efficient lighting
- Choosing acoustic materials
- Conducting energy performance calculations
- Selecting sustainable materials
- Incorporating greenery

Our interior designs harmoniously blend sustainability with functionality. By utilizing energy-efficient lighting and optimized ventilation, we make certain that each element supports the project's environmental objectives.

Our emphasis is on using sustainable materials and crafting spaces that enhance user comfort.



ENVIRONMENTAL DESIGN

URBAN DESIGN

- **Urban Masterplans: We create masterplans that focus on:**
 - Equity: Ensuring fair access and opportunities for all residents.
 - Efficiency: Streamlining space usage for optimal functionality.
 - Environmental Friendliness: Designing with sustainability in mind.
- **Design Goals:** Our objectives include:
 - Promoting interaction between open spaces and green areas.
 - Optimizing building layouts to improve microclimatic conditions.
- **User-Friendly Environments:** Our urban spaces are:
 - Environmentally Conscious: Incorporating sustainable practices.
 - Equitable and Efficient: Ensuring accessibility and functionality for all.
 - Sustainable: Designed to support long-term ecological health.
- **Key Priorities in Urban Design:**
 - Incorporation of Green Spaces: Enhancing aesthetics and environmental quality.
 - Optimization of Layouts: Improving usability and functionality.
 - Microclimate Enhancement: Benefiting the health and comfort of inhabitants.

ENVIRONMENTAL **DESIGN** LANDSCAPE DESIGN

- **Beautiful Material Blends:** Our outdoor space designs combine the beauty of materials with local greenery.
- **Optimal Landscaping Solutions:** We create landscaping solutions that are mindful of water consumption for irrigation.
- **Microclimate Awareness:** Our designs consider the effects of the microclimate to enhance outdoor spaces.
- **Elevated Aesthetic Appeal:** Our landscape designs not only enhance visual beauty but also focus on environmental sustainability.
- **Prioritizing Local Flora:** We emphasize the use of local plants to support the ecosystem.
- **Efficient Water Usage:** Our designs promote efficient water usage to conserve resources.
- **Seamless Integration:** We ensure our landscapes blend harmoniously with the surrounding environment.

Visually Breathtaking and Sustainable: By considering irrigation and microclimatic factors, we create outdoor spaces that are both stunning and environmentally friendly.



Environmental Assessment



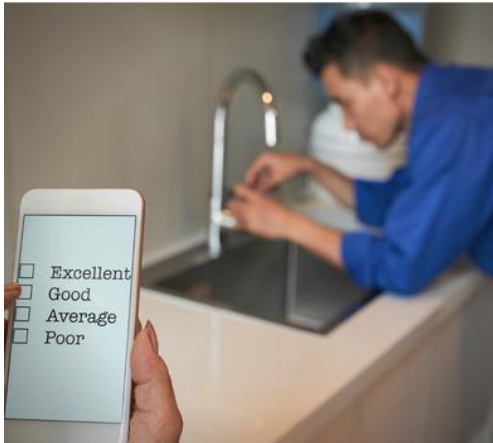
Our environmental assessments guarantee that every project achieves its sustainability objectives while enhancing user comfort. This is accomplished through energy audits, thermal comfort analysis, and post-occupancy evaluations.

ENVIRONMENTAL ASSESSMENT



1 POST OCCUPANCY EVALUATION

We analyze current urban projects and buildings by examining microclimatic factors and user comfort to identify issues like indoor air quality (IAQ), outdoor air quality (OAQ), urban hotspots, thermal stress, and discomfort. Our evaluation reports aim to enhance future project investments by ensuring optimal performance and minimal environmental impact, all while measuring the return on investment (ROI) of the proposed solutions.



2 GREEN BUILDING CERTIFICATIONS

We perform energy simulations for various green certifications, including EDGE, LEED, ESTIDAMA, MOSTADAM, and WELL, among others. Our focus is on buildings and urban areas, aiming to lower operational costs related to HVAC, lighting, and electrical systems while minimizing environmental impacts.

3 MICRO CLIMATIC & THERMAL COMFORT ANALYSIS

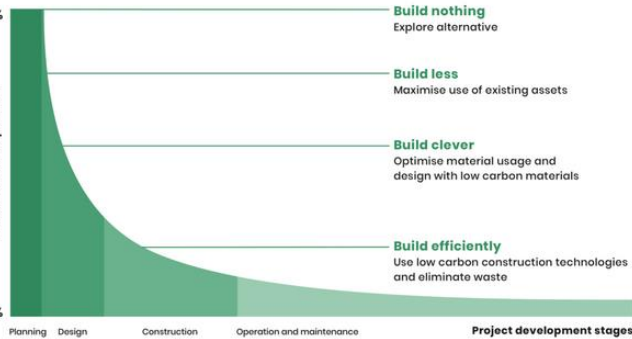


We perform microclimatic and thermal analysis for new urban developments, structures, and green spaces to identify high solar gains and wind flow patterns that influence both outdoor and indoor design.

Our predictions regarding thermal comfort in buildings and outdoor areas help shape design narratives tailored to optimal operational schedules and user needs. Our design recommendations encompass the thermal, visual, and/or acoustic aspects specific to each project.

4 LIFE CYCLE ASSESMENT

Carbon reduction potential



We assess the environmental impacts of buildings throughout their entire lifecycle, spanning from construction to demolition.

Our emphasis is on resource usage, energy consumption, emissions, and waste generation. This approach promotes sustainable design and construction practices, guiding decisions that reduce environmental footprints while improving building performance.

1. POST OCCUPANCY EVALUATION (POE)

POE is the process of understanding how well a building meets the needs of clients and building occupants. POE highlights if a building is meeting its design intention. Benefits include:

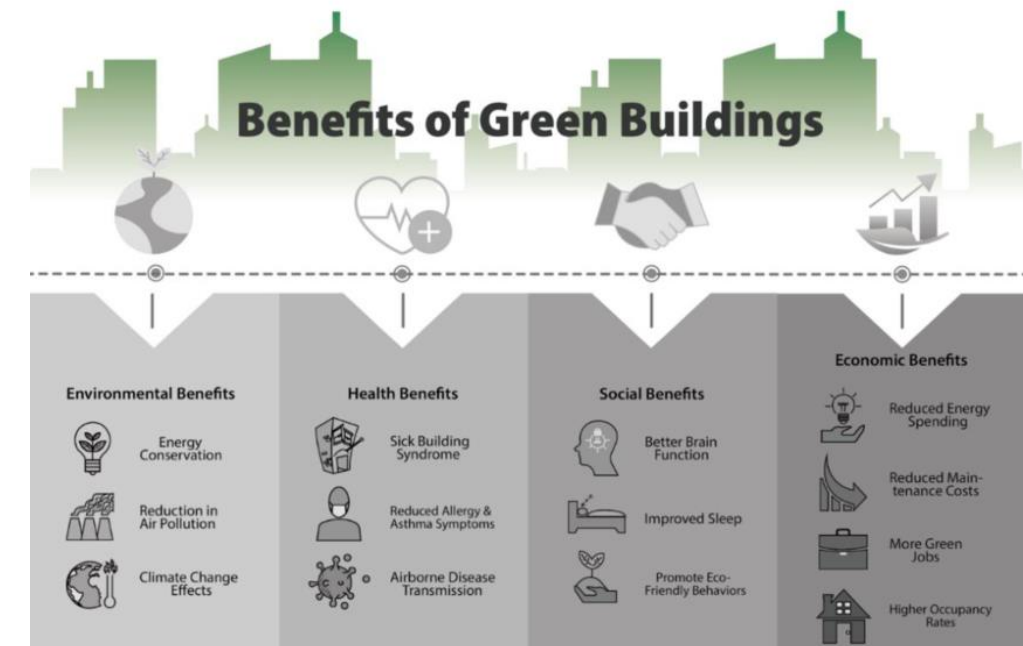
- **Making buildings greener and healthier**
- **Revealing how a building is used compared to its design intent**
- **Reducing operational costs from energy, water and waste**
- **Allowing for continuous improvement**
- **Reducing delays and overspends on future projects**
- **Increasing user satisfaction**



2. GREEN BUILDINGS CERTIFICATIONS

We assist in attaining the different categories of green certifications for buildings and urban complexes at any stage in your project for the following:

- LEED BD + C (Certified, Silver, Gold, Platinum)
- LEED ID +C (Certified, Silver, Gold, Platinum)
- LEED O + M (Certified, Silver, Gold, Platinum)
- ESTIDAMA (PEARL 1, 2, 3, 4)
- EDGE (Level 1, 2, & 3)
- ACTIVE SCORE & MODE SCORE
- MOSTADAM (Green, Bronze, Silver, Gold, Platinum)
- WELL (Bronze, Silver, Gold, Platinum)



3. MICROCLIMAT & THERMAL COMFORT ANALYSIS

SUSTAINABLE SOLUTIONS FOR URBAN AND BUILDING DESIGN

Our climatic analysis service helps identify the unique climatic strengths of your project's location. Through **analyzing heat maps** and **overlapping building dynamics**, we determine the **optimal benchmarks and green codes to enhance energy efficiency**

- Identify strengths of your climatic zone
- Overlapping your building dynamics to the climatic heat maps
- Identify suitable benchmarks and green codes for your project
- Allocation of renewable energy into your project at an early stage

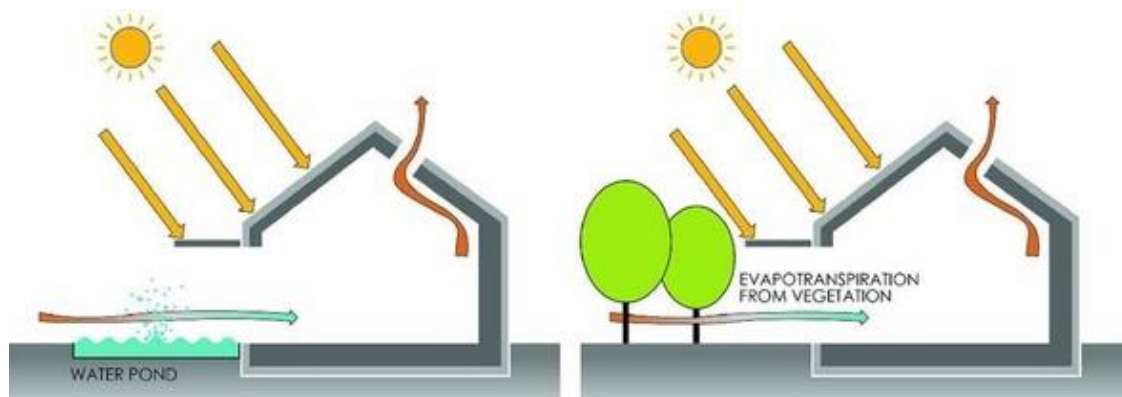


Project Stage Integration: Planning, Studies

4. LCA & LCC

Our life cycle assessment identifies emissions at every project stage, optimizing materials to reduce carbon footprint. We balance sustainability and environment considerations to enhance long-term efficiency and incorporate renewable energy.

- Identifying emissions throughout the overall project cycle
- Reducing emissions of the critical stages
- The role of materials in reducing the building carbon footprint
- Balancing sustainability and environment consideration through the life cycle
- Incorporating building management systems to optimize the running energy demand
- Calculating the influence of renewable energy on reducing the project carbon emissions

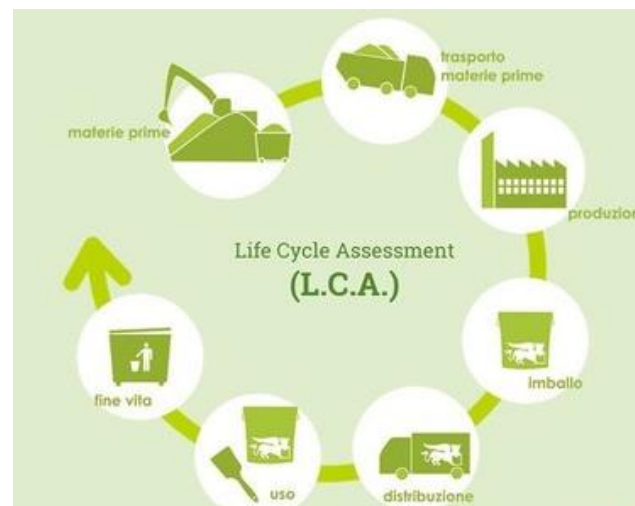


Project Stage Integration

Schematic
Design Development
Construction
Occupancy

Rating system :

Passive design buildings
Oneclick LCA



We calculate the economic and environmental impact to ensure sustainable and cost-effective project cycles.



Environmental Research

A grayscale architectural rendering of a modern building complex with multiple courtyards and rooftop gardens. A solid green vertical bar is on the left side of the image. A black arrow points down from the top left, and three blue arrows point upwards towards a central building structure.

Our continuous research is founded to guide our clients to the optimum environmental solutions and validate our designs.

ENVIRONMENTAL RESEARCH



CLIMATE CHANGE

This project seeks to address the impacts of climate change on a user and community level by examining various thermal comfort scenarios. **The heat rise effect in Egypt has been studied across eight cities within different climatic zones to assess the levels of thermal stress in alignment with the SDG goals for 2030.** We evaluate past and future projections of outdoor thermal comfort to emphasize the necessary mitigation and adaptation strategies to combat urban warming. The research primarily concentrates on thermal comfort and its relationship with the built environment.



ENVIRONMENTAL RESEARCH METHODOLOGIES

- The track focuses on diverse methods and techniques.
- Utilizes both digital and physical tools.
- Investigates environmental parameters of:
 - Outdoor settings
 - Indoor settings
- Explores the interrelationship between outdoor and indoor environments.
- Employs microclimatic simulation.
- Incorporates building performance tools.
- Utilizes environmental monitoring.

Aims to create strategies that bridge gaps between different approaches.



WALKABILITY

The study explores various built environments, focusing on their climatic conditions and urban factors that influence walkability. Previous research has been conducted in hot cities like the UAE, KSA, and Egypt. Key points include:

- Emphasis on the connection between social and environmental factors.
- Identification of urban design features that promote walking.
- Exploration of three key areas:
 - Dynamic thermal sensation.
 - Impact of thermal environments on human perception.

Commercial potential of the region.

Our Projects



Our Projects
**SUSTAINABLE
BUILDINGS**





COMMUNITY EDUCATIONAL CENTER

S U S T A I N A B L E B U I L D I N G S

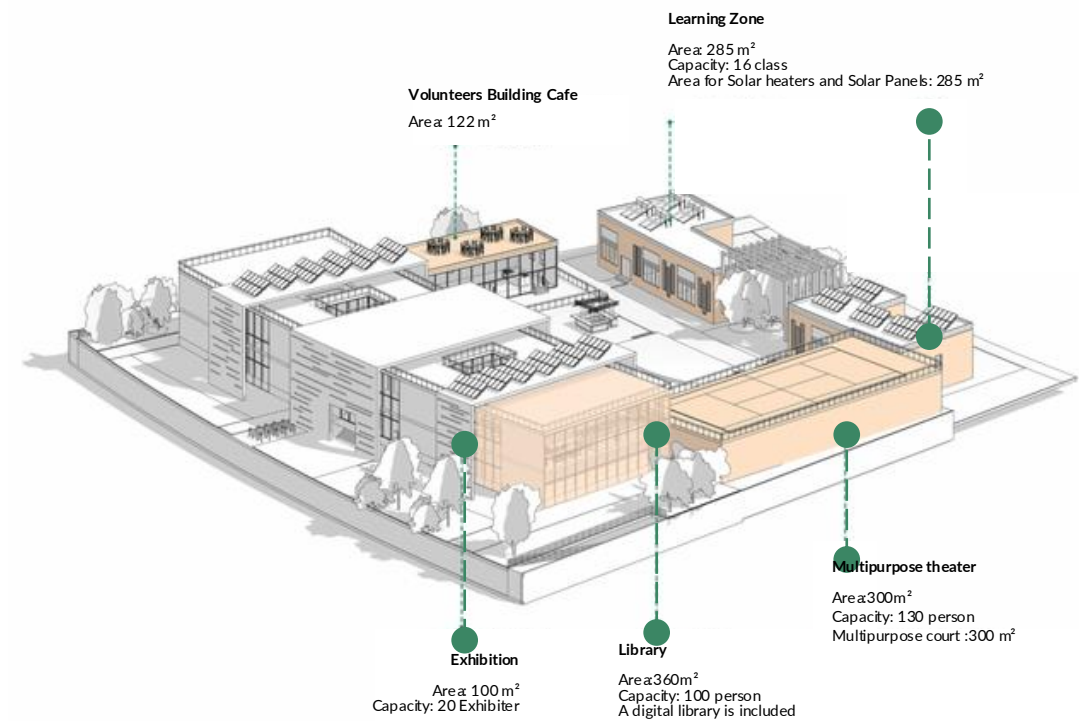
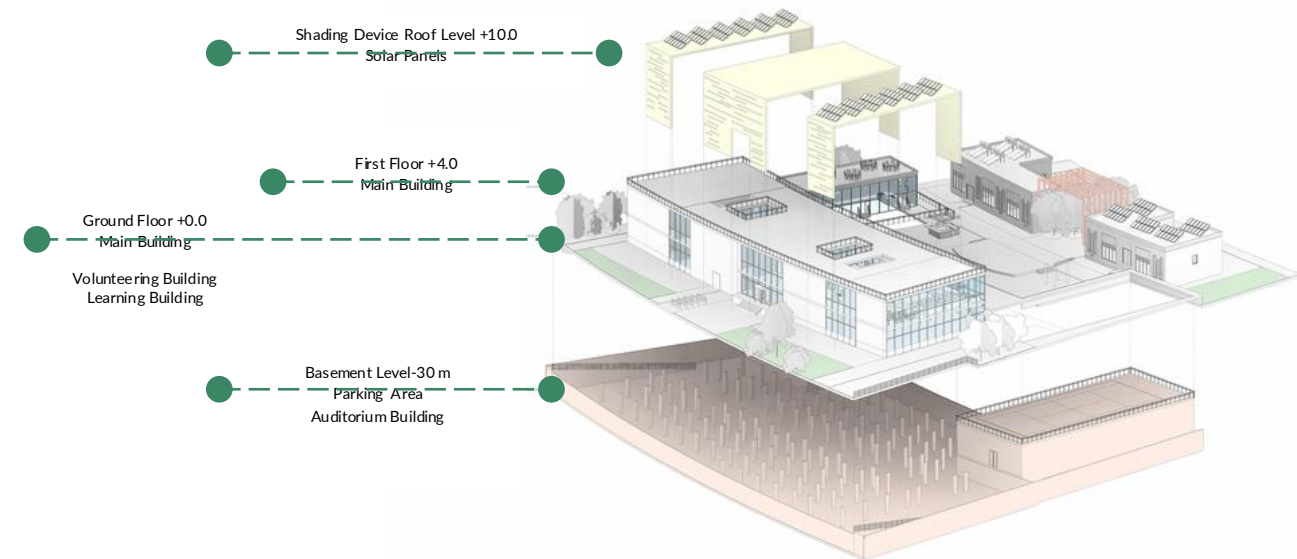
INSTITUTIONAL

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

Services offered:

- Investment analysis
- Net-zero sustainability planning
- Architectural concept design
- Analysis of social and environmental comfort



MARHABA

S U S T A I N A B L E B U I L D I N G S

MIXED-USE

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

Our services encompass:

- Conceptual design for architecture
- Development of design
- Landscape design
- Analysis of microclimates
- Green certification





SWANY HOSPITAL

S U S T A I N A B L E B U I L D I N G S

HEALTHCARE

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

Services include:

- Facade retrofitting design
- Energy performance analysis for left wing



MOSQUE

S U S T A I N A B L E B U I L D I N G S

RELIGIOUS

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

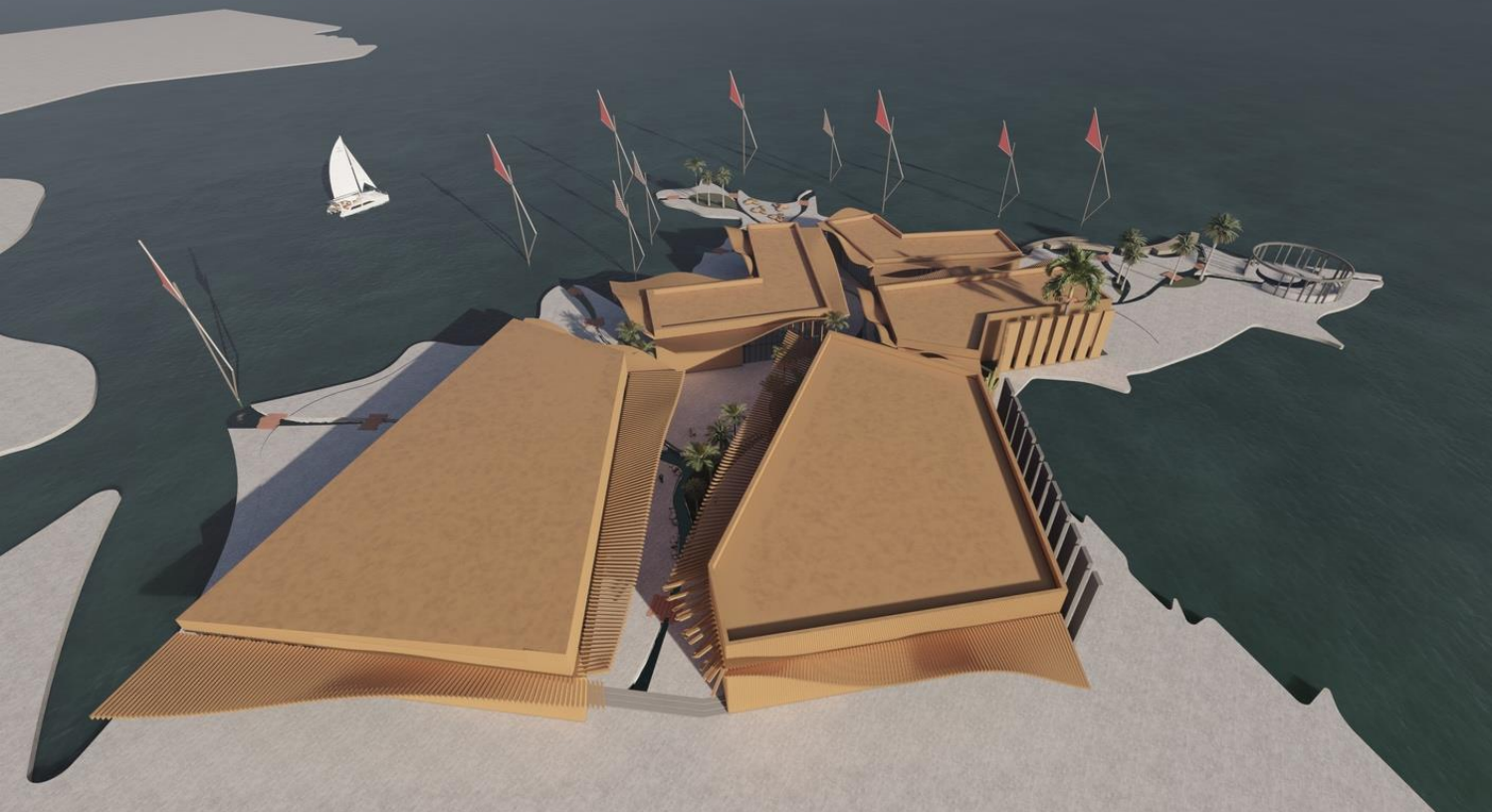
Services Offered:

- **Mosque Design Concept:** Our mosque designs blend traditional aesthetics with contemporary sustainability practices, creating a space that is spiritually enriching and environmentally mindful.
- **Glass Detailing Concept:** We emphasize energy-efficient facades, enhanced natural light, and sustainable materials to craft a tranquil and eco-friendly environment.



HEADQUARTERS OF THE ARAB - AFRICAN PARTNERSHIP FOR URBAN PLANNING AND DEVELOPMENT

S U S T A I N A B L E B U I L D I N G S



FORM GENERATION



INSTITUTIONAL

ENVIRONMENTAL DESIGN



LAYOUT



Due to the scarcity of wood, the two predominant building materials used in ancient Egypt were sun-baked mud brick and stone. Mainly limestone, but also sandstone and granite in considerable quantities.

The wind spins the propeller-like blades of a turbine around a rotor, which spins a generator and creates cooling and electric-

the spirit of modernity and contemporaneity as a symbol of the future of the Member States of the initiative.

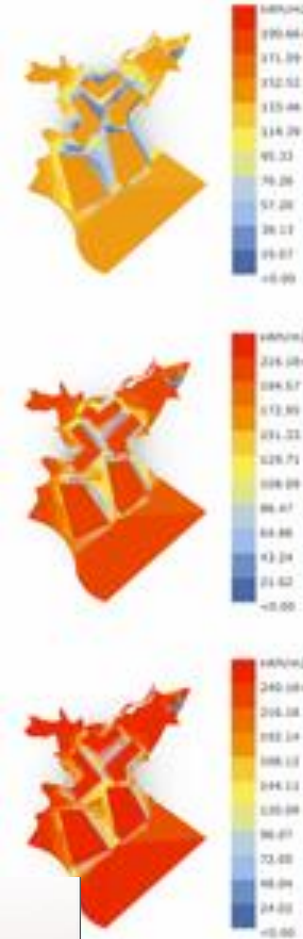
The energy-efficient double wall includes materials with low emissiveness and high reflectivity to limit the absorption of radi-

The Nile represents a design function to show the Egyptian-African connection as a lifeline for the people and a symbol of

Demonstrate the spirit of initiative and its purpose in parallel with the achievement of the functional aspects of the project.



MAIN ELEVATION



MARBLE SHOWROOM

PV integration

Base Case

Consumption Per Year: 491,904 kWh

PV Area Needed to cover 100%: 1639.68 m²

PV Total Cost: 2,732,800 EGP (Excluding Tax and Installation)

PV Payback Period: 4.83 years (Excluding Tax and Installation)

Optimized Case

Consumption Per Year: 403,515 kWh

PV Area Needed to cover 100%: 1,345 m²

PV Total Cost: 2,241,750 EGP (Excluding Tax and Installation)

PV Payback Period: 4.83 years (Excluding Tax and Installation)

The proposed design interventions will help the client save around 101,647 EGP every year based on the assumption that the building operating hours are 12/5



UAE Private Villa

RESIDENTIAL

ENVIRONMENTAL DESIGN



Our Inspirational Story:

The palm tree—**Al Nakhlah**—was more than just a pretty sight to the elders of the UAE. It was their first building block, their shelter, and even their air conditioner! In winter, they'd take its leaves (**Al Sa'af**), tie them tightly together, and craft (**Al Khaimah**)—a cozy home that kept the chilly winds out. But when summer blazed, they'd use those same leaves (**Al Sa'af**) differently, tying them loosely with gaps in between to let the breeze dance through, creating (**Al Areesh**)—a home that breathed. And when they needed something even smarter? They invented the (**Barjeel**)—a clever wind catcher perched on rooftops, with open sides to scoop up the wind from every direction and send it swirling down to cool the rooms below. Isn't it amazing? The same palm leaves (**Al Sa'af**) could block the cold, invite the breeze, or even turn wind into nature's AC—all because the people understood balance. **Inspired by the relationship between the elders of uae and the wind inspired us and taught us a lesson:** Life, like a palm-leaf home (**Al Sa'af**), works best when we know what to hold tight, what to let flow, and when to simply catch the wind and let it guide us.

SA'AF AL NAKEEL
Houses

بيت سعف النخل



Environmental Urban & Architectural Design



AN URBAN BREEZE

Harnessing the wind as a force of comfort and climate resilience, the design transforms the urban block into a living, breathing system. The proposed unit typology choreographs airflow through a network of shaded corridors and green pockets, creating a seamless flow of ventilation across pressure zones.

These wind corridors act as natural cooling channels, guiding the breeze through the fabric of the masterplan. By shaping the built environment to welcome and accelerate air movement, the design amplifies wind speeds at the pedestrian level—reducing urban heat and restoring the sensory pleasure of the desert breeze.

Here, wind is not an afterthought—it is an architect of experience, carving out a microclimate that makes the city not just livable, but breathable.



Palma Pyramids

C O M F O R T A B L E H O M E S

RESIDENTIAL

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

Our services enhance your environment by providing both comfort and efficiency, focusing on sustainable solutions that surpass energy standards.

- **Interior Renovation and Styling:** We offer creative design services that tailor your interior spaces to reflect your unique style.
- **Landscape Design and Implementation:** Our team crafts plans for serene gardens or vibrant outdoor areas that complement your lifestyle.
- **Smart Home Integration:** We seamlessly integrate smart technology, enabling you to effortlessly control lighting, security, climate, and entertainment.
- **Custom Cabinetry and Woodworking:** Our skilled artisans create bespoke cabinetry and woodworking that combine sophistication with practicality in your home.

Each service is tailored to fulfill your specific requirements, ensuring a personalized experience. Contact us to start transforming your space!

The project proposes an asset division units concept to ease the sale leasing. A set of environmental strategies are integrated within the project tailored for each apartment

ENVIRONMENTAL CHALLENGES



GREEN CERTIFICATES



Leading tool for
advancing health and
well-being in buildings



Initial Cost = 10% added
ROI = 10-15%

- Energy
- Water
- Habitat



Initial Cost = 20% added
ROI = 20%



Unit 1



Ground Floor Plan

The ground floor part has a very high solar exposure and radiation as it's located in the SE and SW facades so it needs a passive strategy to enhance the indoor thermal comfort

WHY PASSIVE DESIGN ?!

- It will revitalize the community
- Minimize Strain on local infrastructure
- Enhance Human health and comfort
- Reduce running cost





PROJECT PHASES



Phase one

- Archi tectural designs for the selected proposal
- Interior images and elevations
- Structural modifications
- Virtual tour

Design samples and evaluations of the unit



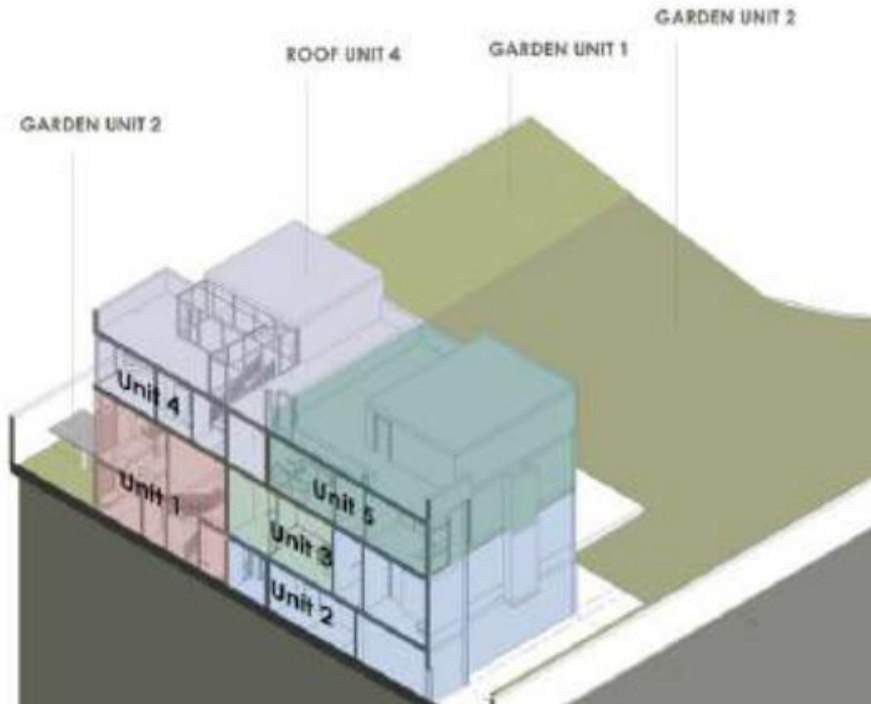
Phase Two

- General Environmental Strategies
- TARSHEED Guideline Credits
- Cost Estimation



Phase Three

- Conduct a detailed design analysis
- Perform a thorough lighting analysis
- Evaluate energy performance



Unit 4

Unit 1

Unit 5

Unit 3

Unit 2

GARDEN UNIT 2

ROOF UNIT 4

GARDEN UNIT 1

GARDEN UNIT 2

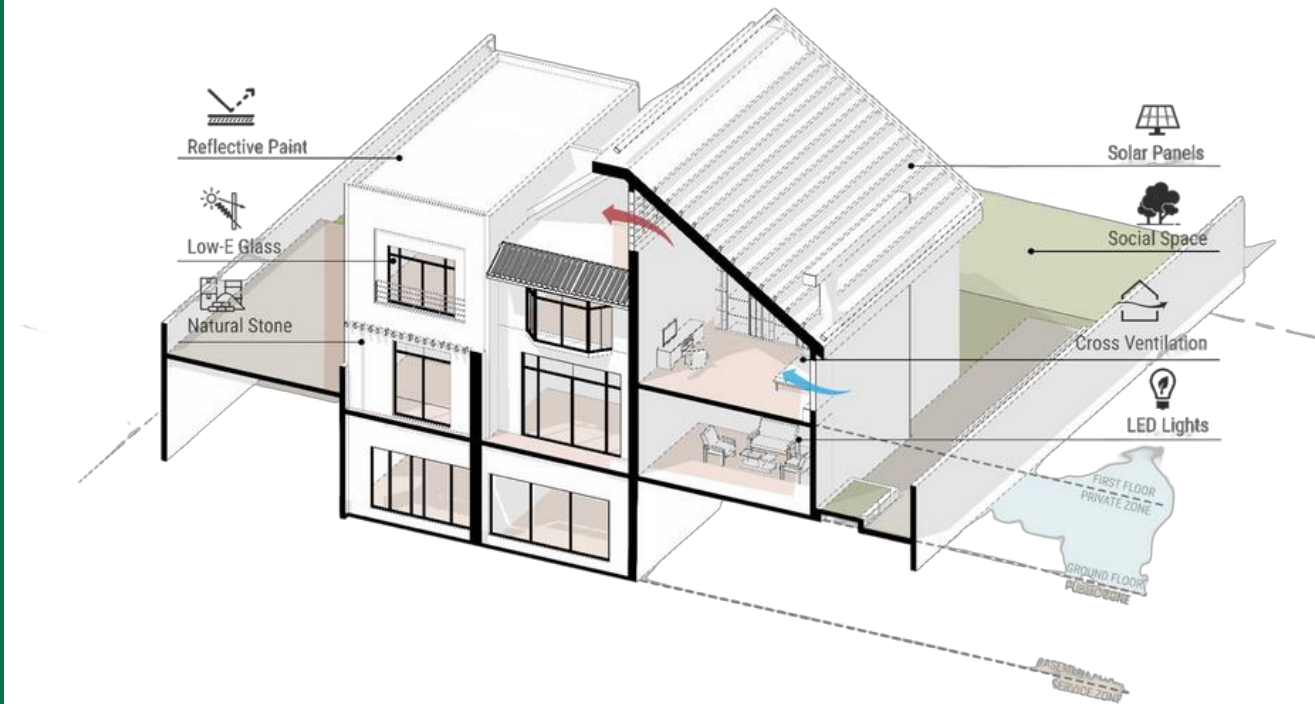
JUMEIRAH VILLAS

COMFORTABLE HOMES





PROJECT ANALYSIS



The services offered include:

- Conceptual design for architecture
- Development of design
- Summary of investment

PRIVATE RESIDENCE

S U S T A I N A B L E B U I L D I N G S

RESIDENTIAL

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT





Services include:

- Concept and preliminary design
- Design assessment (micro climatic and thermal comfort)

Our services encompass:

- Energy performance simulations aimed at minimizing electrical consumption, including P.V. design, installation, and solar heating systems.
- Lighting analysis focused on reducing operational costs based on function and user requirements.
- Microclimatic assessments of the site to evaluate how greenery and landscaping affect the building and its surroundings.
- Sustainable landscape design and irrigation systems tailored to decrease water usage.



Thermal Transition Space
Natural Cross ventilation provides thermal comfort by reducing heat and allowing air flow

Separate Wings
The energy efficiency approach evolves from allocating the spaces with highest operational hours in the basement level.

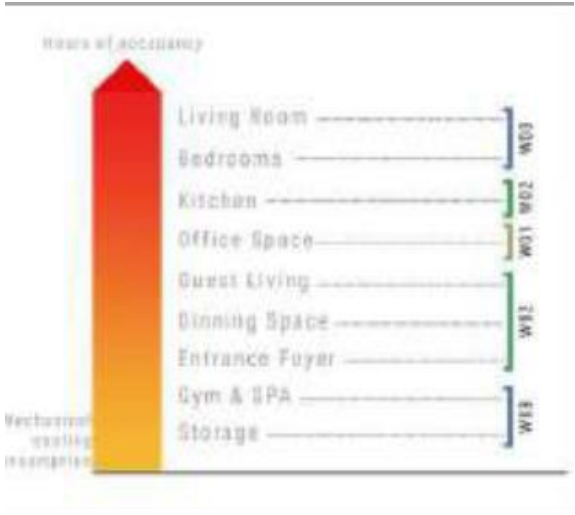
Heat Avoidance
Solid walls on the southern facade



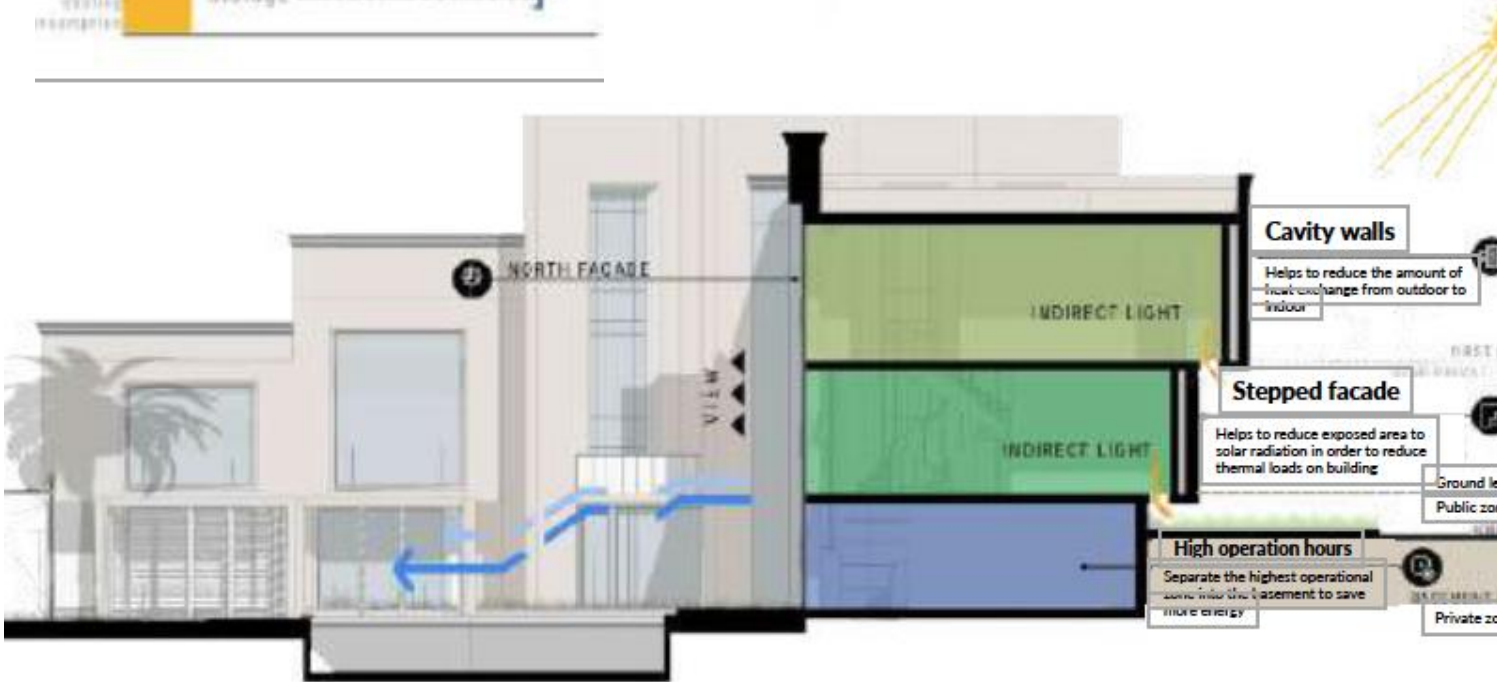
Private Residence

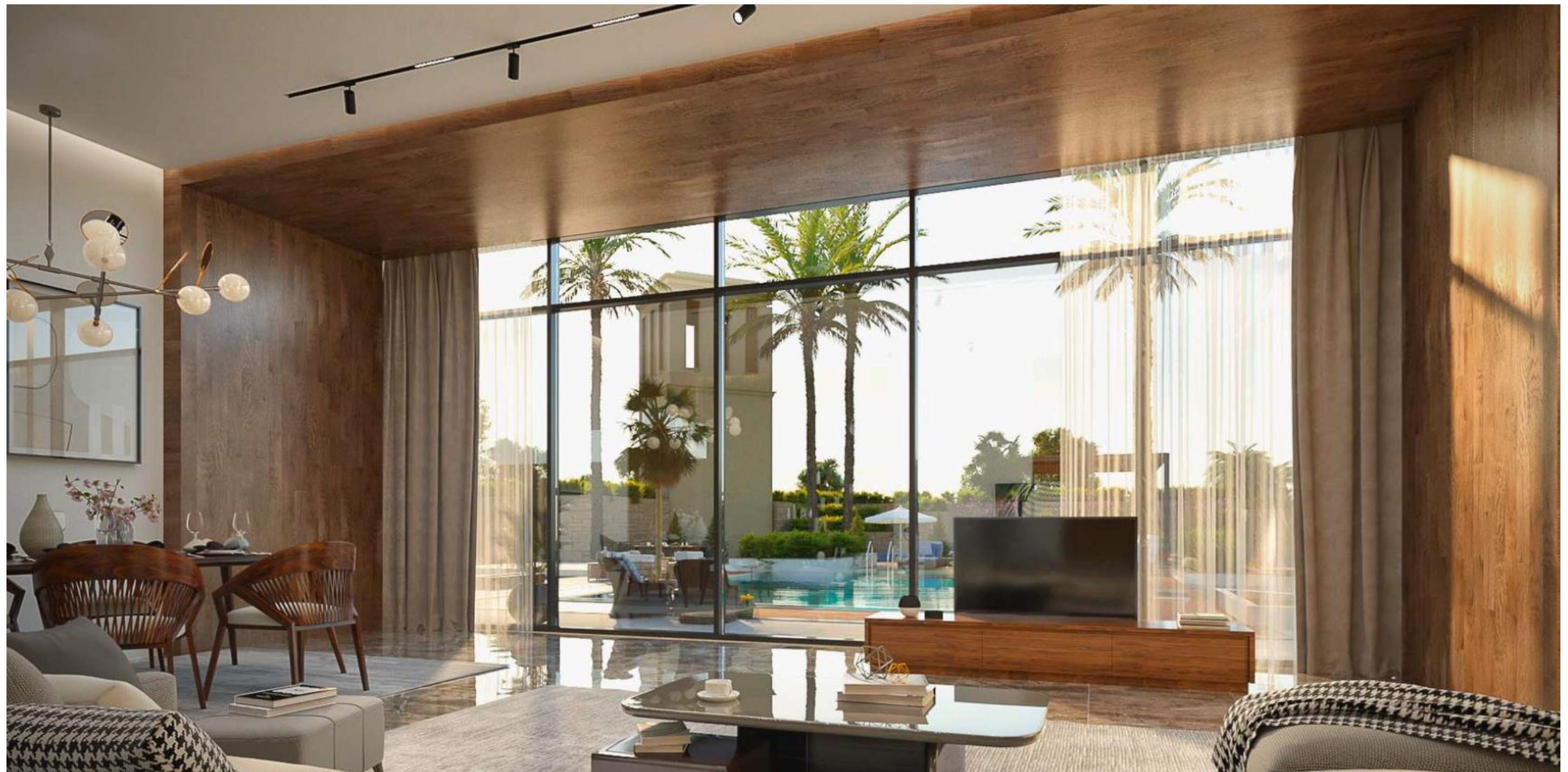
Wind Catcher
A passive cooling system which significantly influences the cooling loads and outdoor ventilation

Spatial redistribution



PROJECT ANALYSIS









GOLDEN GATES VILLA

C O M F O R T A B L E H O M E S

RESIDENTIAL

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

Our services encompass:

- Soothing and luxurious interior designs that seamlessly integrate natural elements.
- Utilizing architectural features and spatial design to enhance the health and well-being of occupants.
- Conducting thermal comfort analyses tailored to the activity levels within various spaces.
- Performing energy performance simulations aimed at reducing electrical consumption.

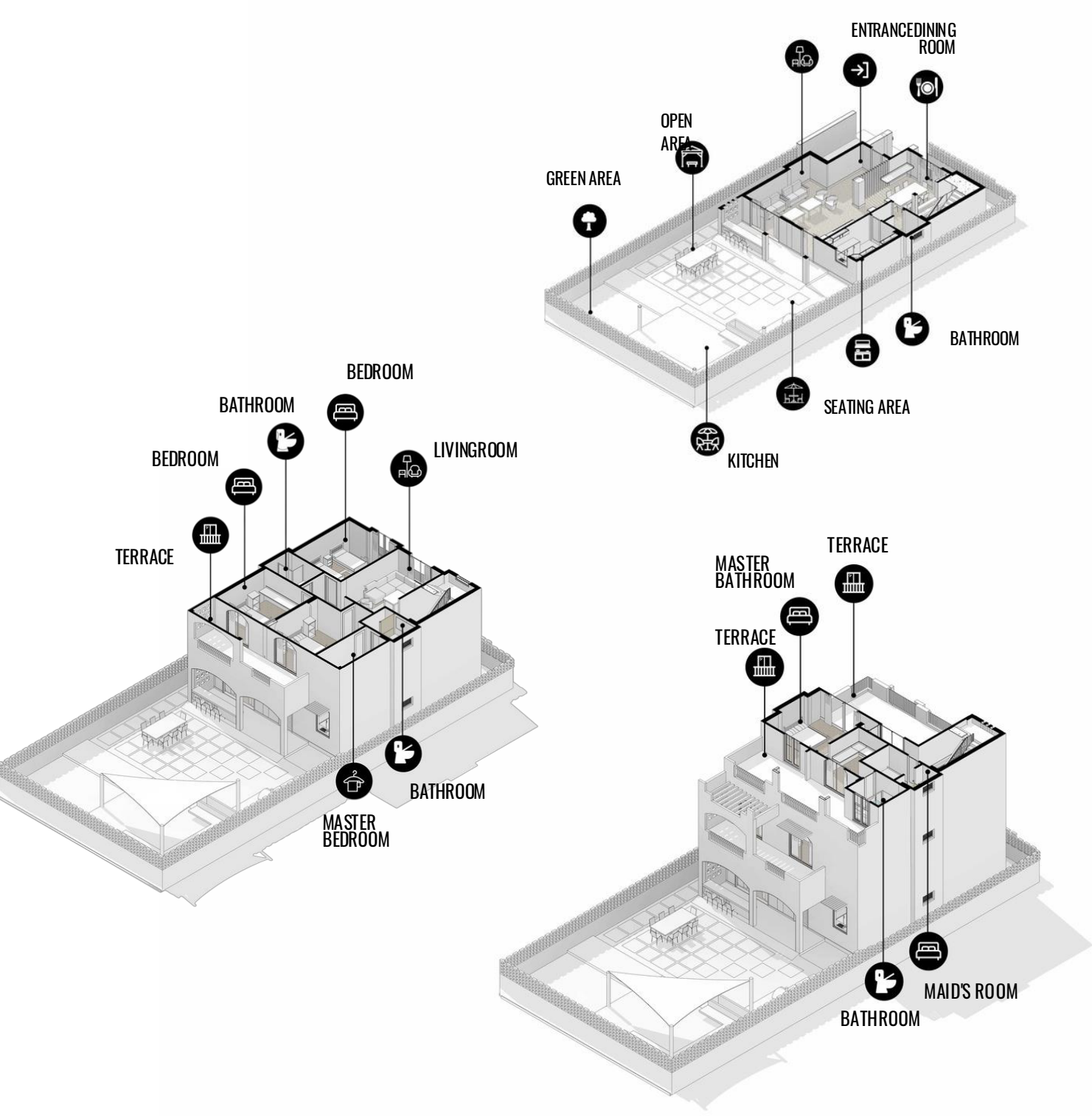
Executing lighting analyses to minimize operational costs based on functional requirements and user needs.



Services include:

Soothing and luxurious interior designs that integrates nature
Using building elements and space design to elevate occupants health and wellbeing
Green certification review and asset value assessment (TARSHEED, LEED, WELL, EDGE)
Thermal comfort analysis for users according to activity levels of spaces
Energy performance simulations for reducing electrical consumption
Lighting analysis for running cost reduction according to function and user analysis
Microclimatic analysis of site to asses influence of greenery and landscape within site or surrounding area
Efficient landscape design and irrigation systems to reduce water consumption





FACADE DESIGN

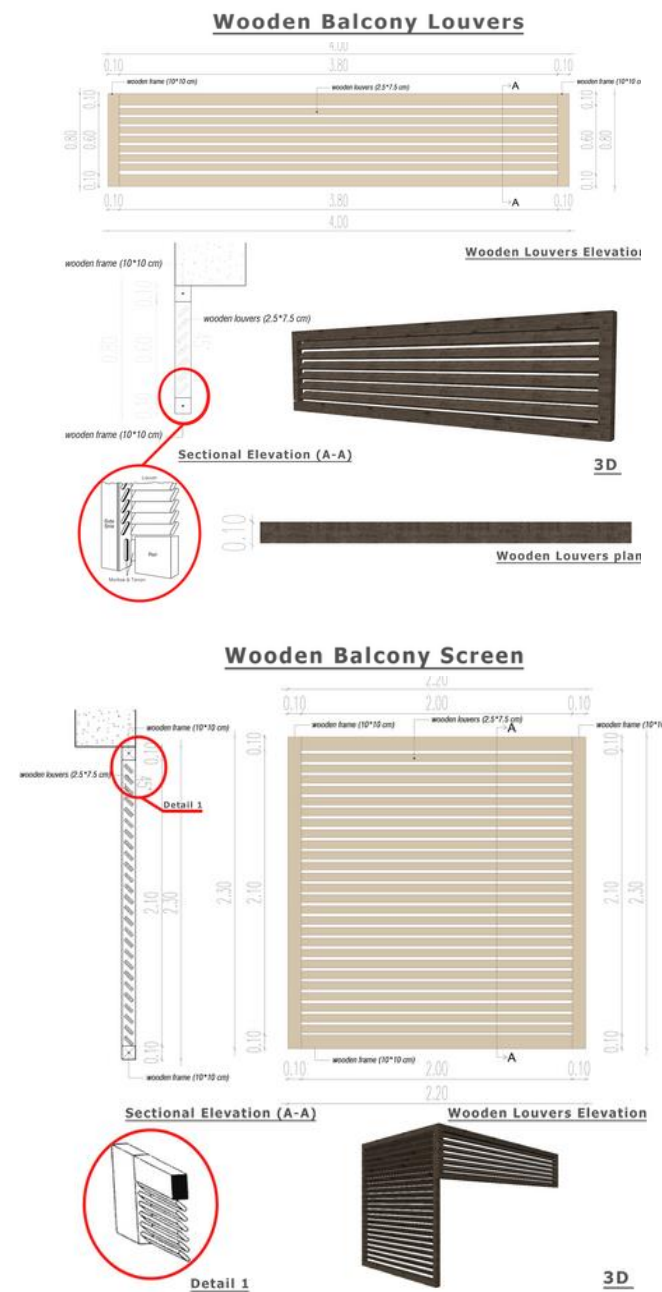
RESIDENTIAL

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

Services include:

- Facade retrofitting



NORTH COAST VILLA

RESIDENTIAL

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

Services include:

Façade design
Interior Design
Site supervision



NORTH COAST VILLA



Services include:

Façade design
Interior Design
Site supervision



NORTH COAST VILLA





NOUR EL REFAI Studio

PRODUCTIVE OFFICES

CORPORATE- CREATIVE WORKSPACES

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT

Service includes

- Interior design concept
- Digital gallery design concept

As we attempt to envision how future workspaces would look like, this one is special.

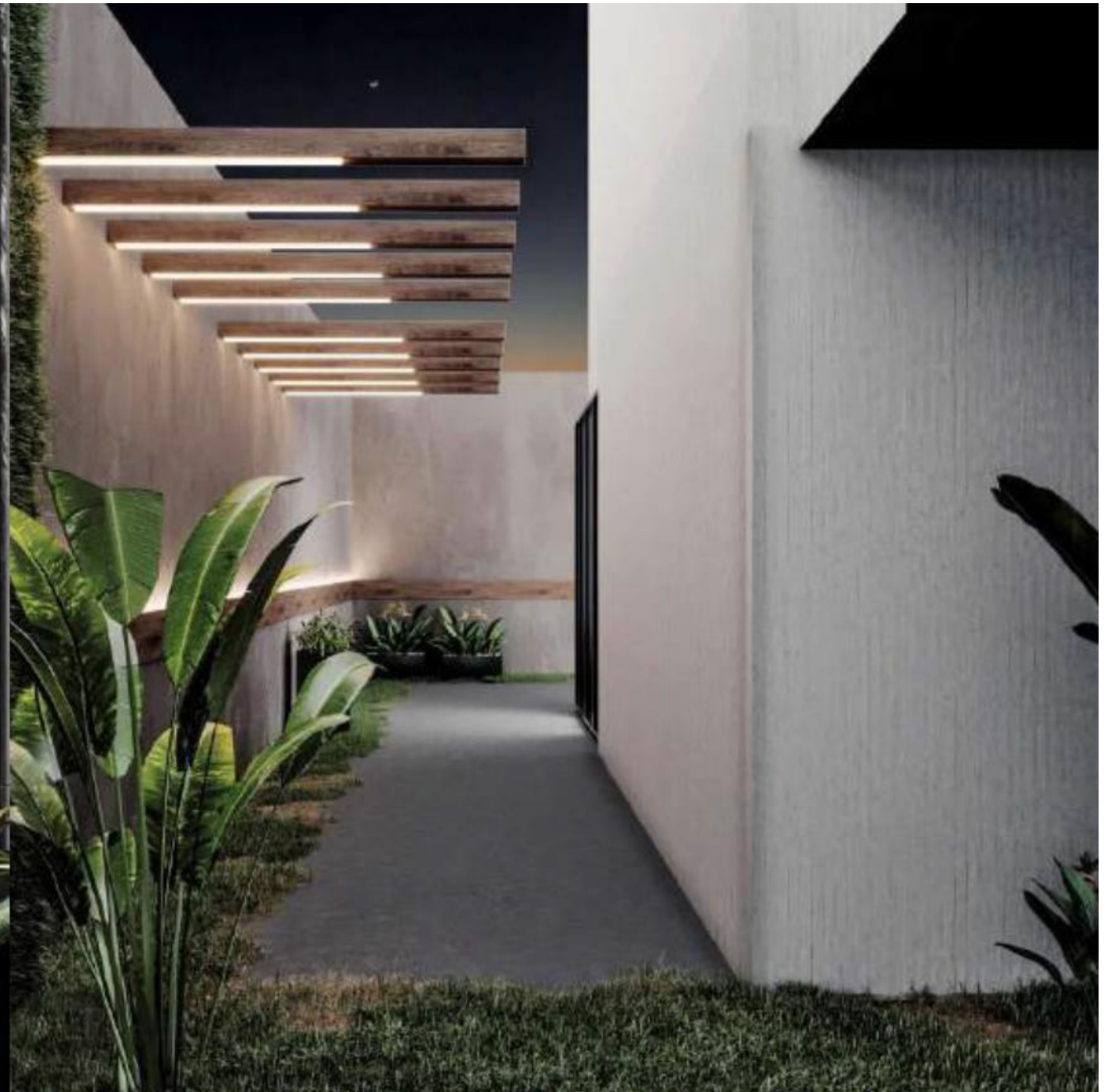
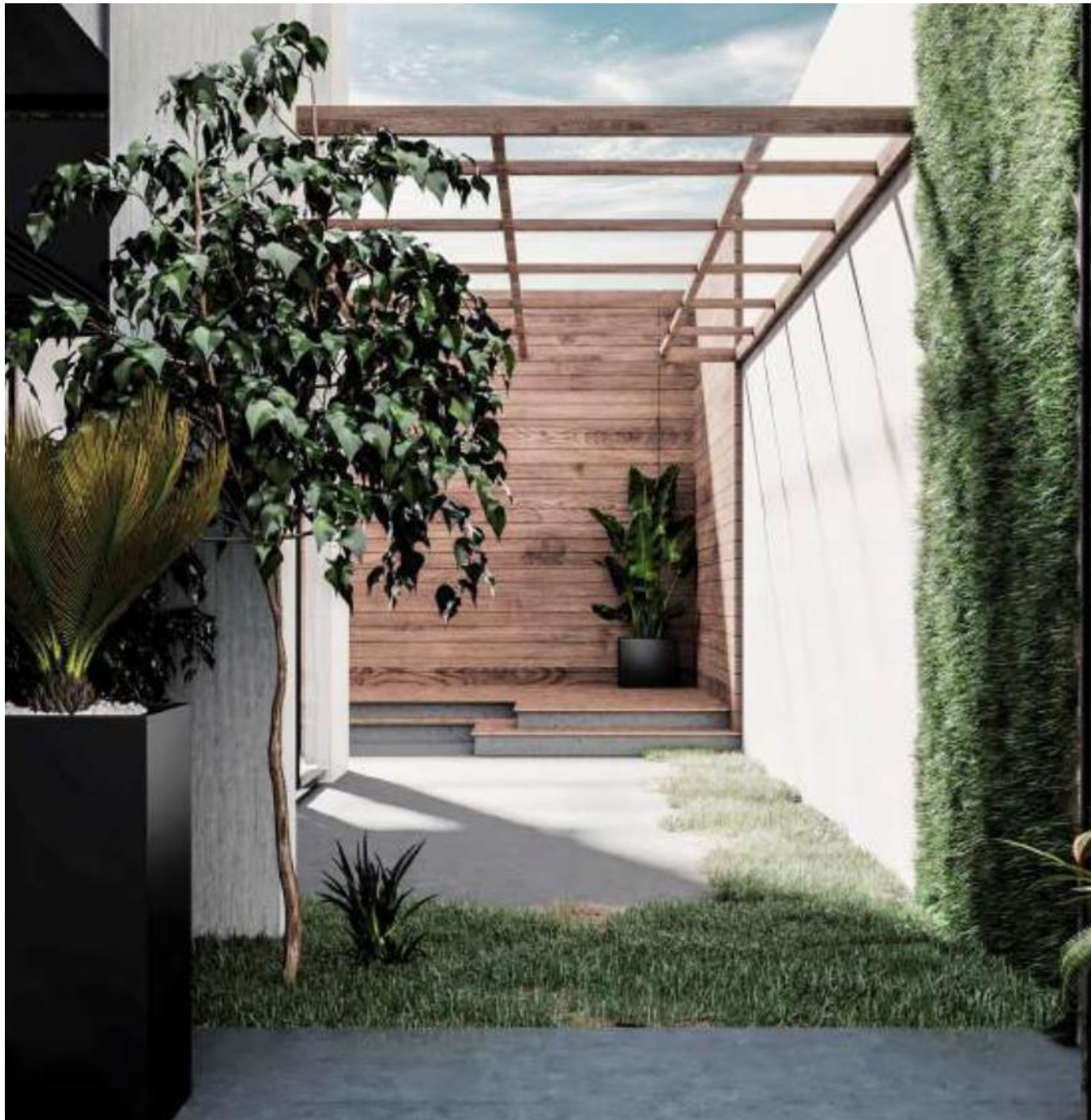
An immersive gallery and office for NOUR EL REFAI



We designed flexible spaces, shooting areas and lounges that integrates nature at every corner that are environmentally sound.

The lighting, acoustic, and thermal comfort analysis were conducted for an optimum performance of the spaces.





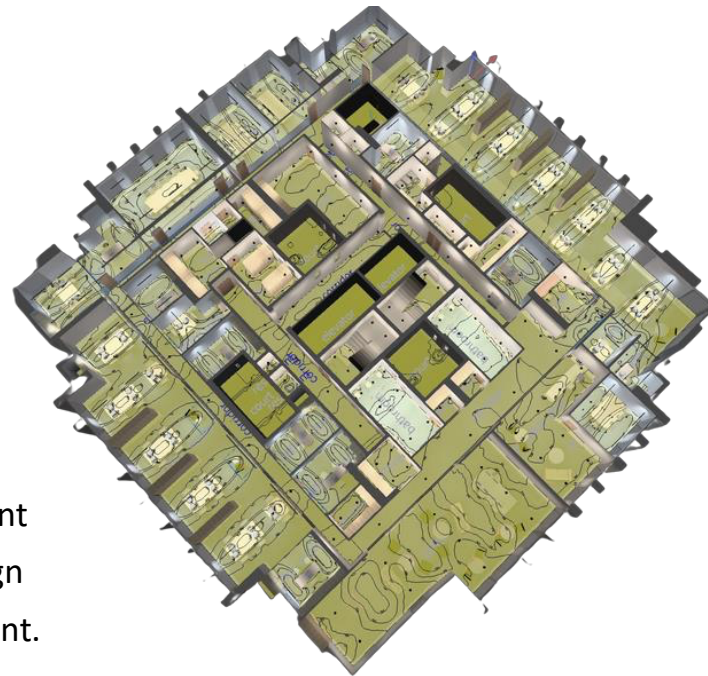
ILSERVIER

S U S T A I N A B L E B U I L D I N G S

COMMERCIAL

ENVIRONMENTAL ASSESSMENT

- Lighting analysis
- Acoustic analysis
- Visual comfort optimisation
- Acoustic performance assessment
- Energy-efficient workplace design
- Occupant wellbeing enhancement.



Services include:

- Lighting analysis
- Acoustics analysis

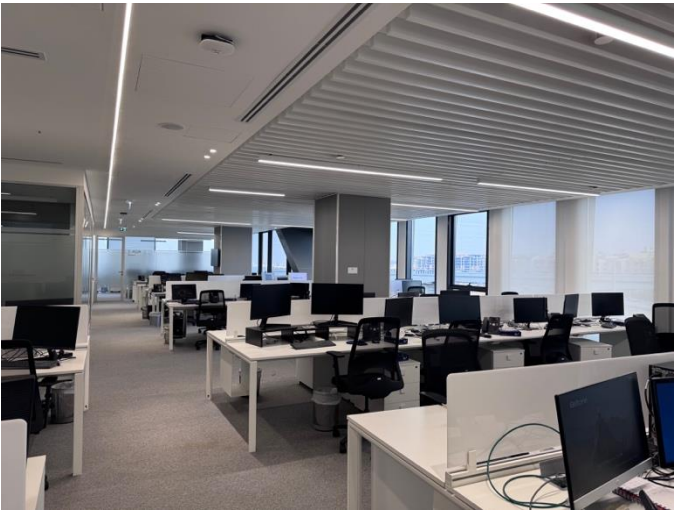
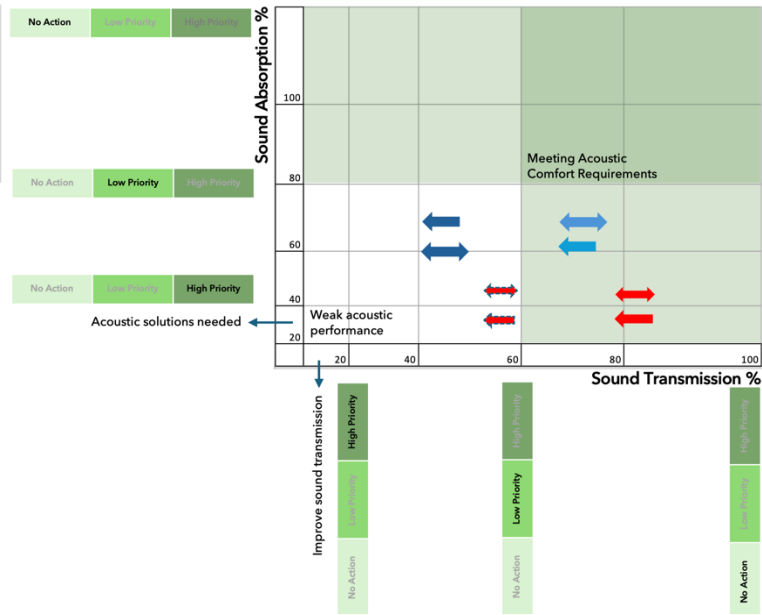


The role of energy efficiency and user comfort has been successfully achieved **at IlServier** through the collaboration of **Environas** and **Studioplus**.

Comprehensive lighting and acoustic analyses were performed to enhance the spatial qualities of the environment.

CORPORATE HEADQUARTERS

ENVIRONMENTAL ASSESSMENT



Services include:

- Acoustics analysis



The role of sound insulation and acoustic analysis was conducted for the BELTONE headquarters **in consideration to the** lighting and interior design installation.

ABC Bank

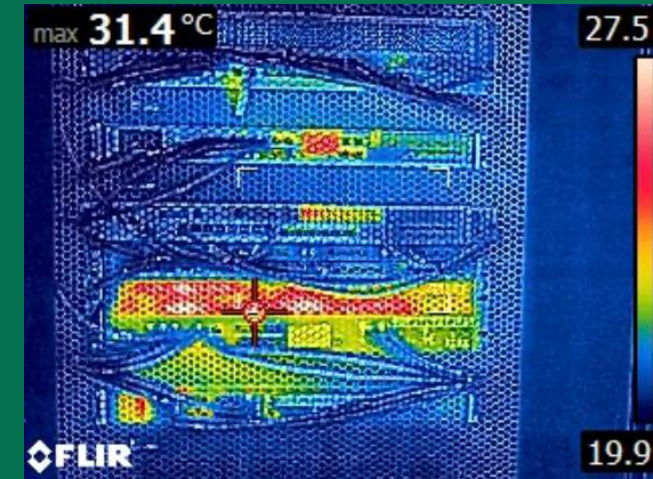
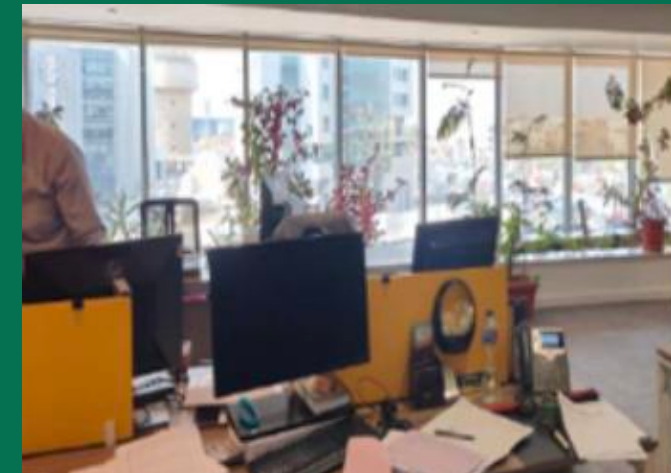
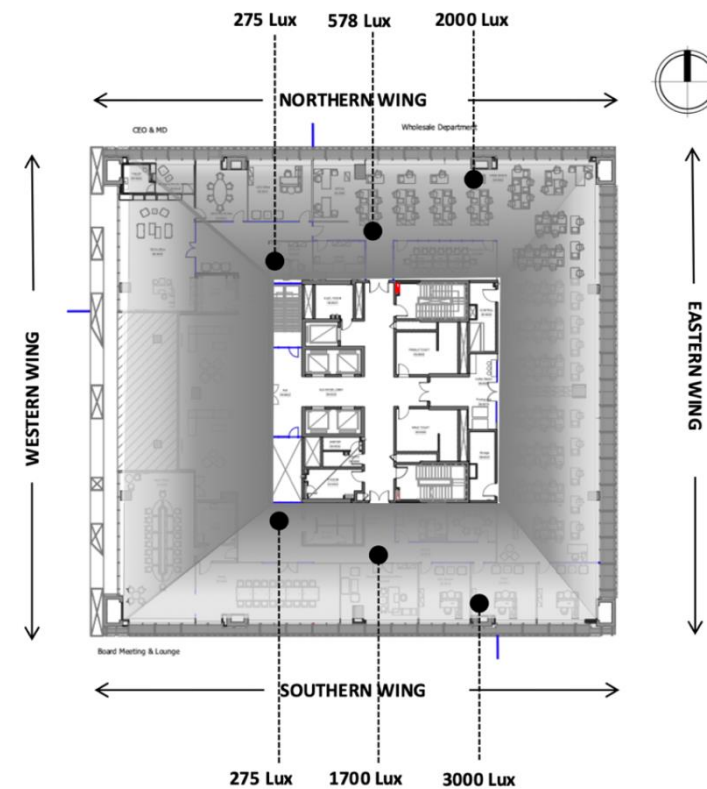
S U S T A I N A B L E B U I L D I N G S

CORPORATE HEADQUARTERS

ENVIRONMENTAL ASSESSMENT

Services include:

- Energy & water audit



Assessment for electrical, HVAC, plumbing and lighting systems for the building infrastructure to identify energy and water reduction strategies.



Global Solutions

MAF Office spaces, Cairo

CORPORATE

ENVIRONMENTAL ASSESSMENT



Project Highlights

- Gap analysis for LEED ID+C Platinum
- Certification LEED ID+C Platinum
- Designed to support LEED certification.



Commercial Spaces

CORPORATE

ENVIRONMENTAL ASSESSMENT



GOLD

Project Highlights

- Gap analysis for LEED BC+C Gold
- Certification LEED BC+C Gold

Our Projects **OUTDOOR SPACE DESIGN**



UPTOWN JEDDAH MASTER PLAN

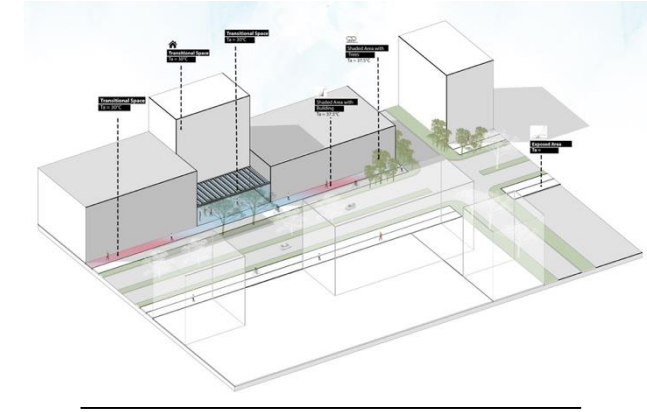
OUTDOOR SPACE DESIGN

URBAN

ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL RESEARCH





Shading

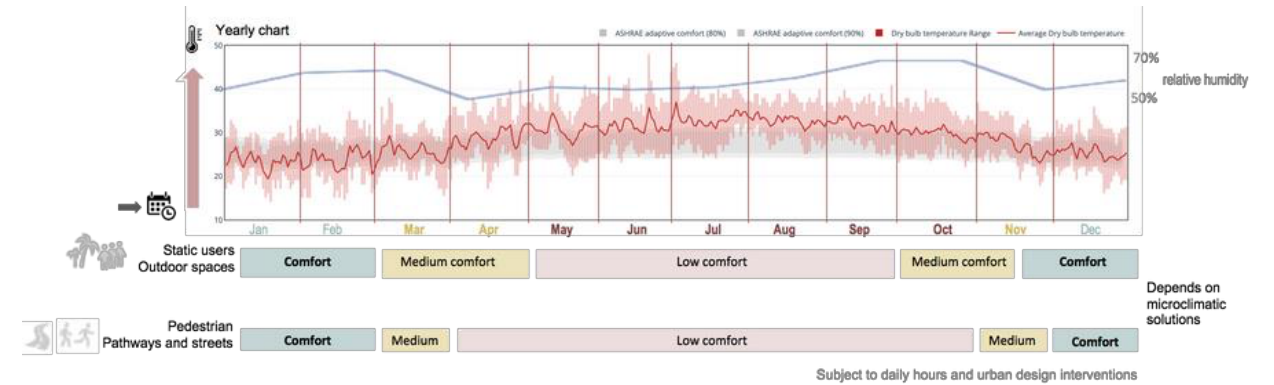


Ventilation



Materials

CLIMATE & COMFORT IN JEDDAH GENERAL GUIDELINES



Services offered include:

- Thermal comfort evaluation tailored to user activity levels in various spaces
- Microclimatic assessment of the urban master plan to analyze street orientation and geometry
- Analysis of walkability alongside thermal comfort

NEOM

URBAN

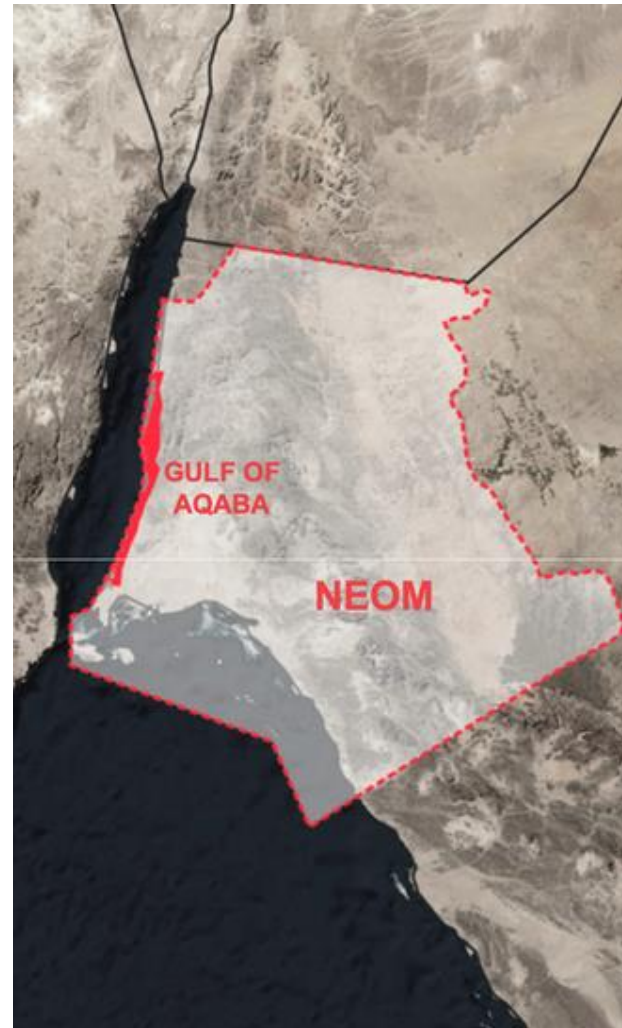
ENVIRONMENTAL RESEARCH



نيوم NEOM

Gulf of Aqaba
Mobility Strategy

THERMAL COMFORT
WALKABILITY AND CYCLING GUIDEBOOK



Venues Diagram

Primary, Secondary, Transitional, Residence and Refugee

Waste collection area:

- ❖ Avoid prevailing wind orientation for odor.
- ❖ Must be adjacent to vehicular service lane.

Commercial area: (Beverages/Market/Stores)

- ❖ Must be adjacent to vehicular service lane.
- ❖ Commercial lanes are in proximity of commercial area where importing purchases takes place.



Rentable bicycles/scooters area:

- ❖ This area provides rentable bicycles and scooters racks.
- ❖ Should be fully shaded to avoid overheating.
- ❖ Should be placed adjacent to the pedestrians and cycling routes.

Wet area:

- ❖ Avoid prevailing wind orientation for odor.
- ❖ Provide access to waste collection lane if moveable cabins or areas.

Sports area:

- ❖ Sports area preferably to be placed adjacent to the pedestrians and cycling routes and greenery areas.
- ❖ Provide full shading coverage.

Playground area

Seating areas:

- ❖ Seating areas should be at the center of the venues.
- ❖ Full shading must be ensured.
- ❖ Unobstructed prevailing wind penetration must be ensured for regaining thermal comfort.
- ❖ Proximity of the seating area to the playground.
- ❖ Seating area must overlook greenery areas to improve visual and thermal comfort.

Greenery areas:

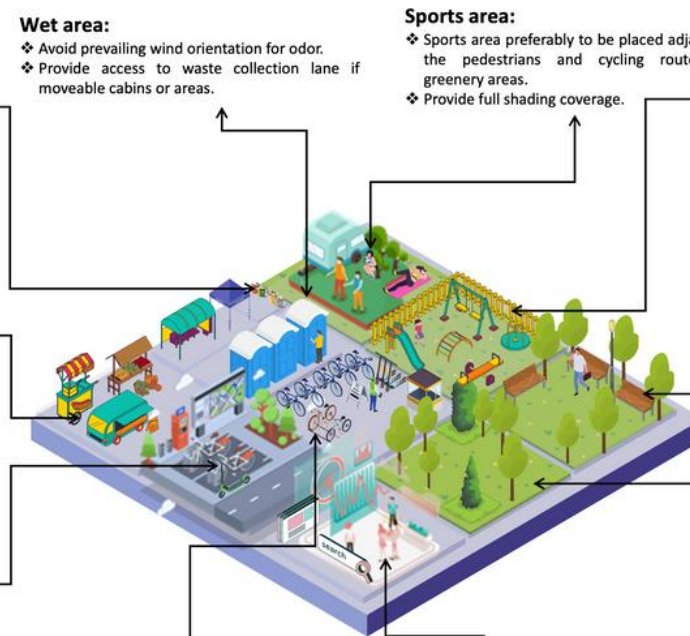
- ❖ Greenery areas should be placed on the edges of the venues facing prevailing wind with no obstructed ventilation to the rest of the venue.
- ❖ Greenery must be adjacent to seating areas to improve visual and thermal comfort.

Parking bicycles/scooters area:

- ❖ This area provides bicycles and scooter racks, e-racks with and charging pods and lockers.
- ❖ Should be fully shaded to avoid overheating.
- ❖ Should be placed adjacent to the pedestrians and cycling routes.

Tech (interactive screens) area:

- ❖ Tech area provides interactive screens and device charging docks, to engage different users to the venue.
- ❖ Must be placed at proximity to the seating areas.
- ❖ Should be fully shaded and ventilated.
- ❖ Proximity to E-scooters and E-bicycles to support charging areas. [slide 14]



COOLING STATION

OUTDOOR SPACE DESIGN

OUTDOOR • PUBLIC

ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT





LA POIRE

OUTDOOR SPACE DESIGN

OUTDOOR • HOSPITALITY

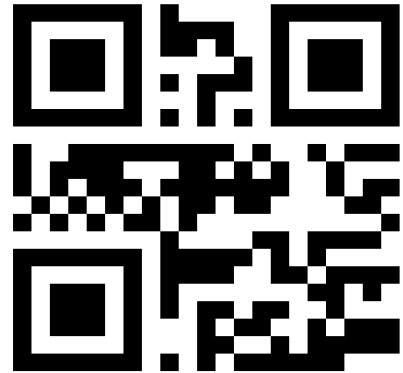
ENVIRONMENTAL DESIGN

ENVIRONMENTAL ASSESSMENT





Contact us



REQUEST A **MEETING** WITH US



contactus@environas.com
www.environas.com

We'd love to hear from you. Tell us more about your upcoming project goals, how we can meet your business objectives, and guide your environmental impact.

Find us on social media

 LinkedIn - Environas

 Youtube - Environas/youtube

Our locations

Egypt

16 Badr Buildings, El Maadi, Cairo, Egypt

UAE

Cloud Spaces, WTC, Abu Dhabi, UAE