

EDECS

SUSTAINABILITY DOCUMENT

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1. Introduction

Sustainability is the capability to equitably meet the vital human needs of the present without compromising the ability of future generations to meet their own needs by preserving and protecting the area’s ecosystems and natural resources. Building a sustainable future is at the core of EDECS activities. EDECS El Dawlia for Engineering & Contracting seeks to improve the quality of life for everyone in a meaningful lasting way, Whether it is through undertaking projects that directly save lives, nurturing future leaders, raising the bar for health & safety in the construction field in the region, or through other valuable forms.

2. Abbreviations

Unless elsewhere defined, the following acronyms and abbreviations may be applied.

Abbreviations/Acronym	Definitions
EDECS	El Dawlia for Engineering & Contracting
LEED	Leadership in Energy & Environmental Design
BREEAM	Building Research Establishment Environmental assessment method
GSAS	Global Sustainability Assessment System
CEEQUAL	Civil Engineering Environmental Quality Assessment & Award Scheme Manual
GHG	Green House Gas
FSC	Forest Stewardship Council for certified wood
EMP	Enviromental Management plan
EMS	Enviromental Management system
CSR	Corporate Social Responsibility
CGP	Construction General Permit
SDG	Sustainable Development Goals
EIA	Environmental Impact Assessment
CFC	chlorofluorocarbon based refregirants

3. Scope of work

We have set place sustainability performance as one of our main priorities and an integral element of our overall strategy. We seek to achieve sustainability in all the company’s aspects whether in the workspace or on the construction site. EDECS actively advocates the global sustainability agenda by supporting United Nations Sustainable Goals (SDGs) 2030 which outlines a long-term development plan to move toward sustainable development and achieve prosperity for all. EDECS supports the following 13 SDGs out of the 17 goals. And is fully committed to helping achieve them in every way possible through its sustainability policy and strategies; social, environmental, and economic.



Figure Error! No text of specified style in document...1 UN Sustainable Development Goals supported by EDECS

4. Sustainability Policy Statement

At EDECS we acknowledge our responsibility towards our employees, customers, business partners, community, and future generations. Therefore, we are committed to promoting sustainability through a continuous improvement of corporate governance, rigorous and transparent reporting of environmental metrics, and minimization of our impact on the natural environment when designing, building, and managing facilities. We aim to create a sustainable business in which continuous improvement and excellence are intuitive in everything we do.

We believe that balanced, responsible management of the three recognized pillars of sustainability –social, environmental, and economic is essential to achieving our vision of a business looking to tomorrow, thinking globally, and acting locally. We will empower our people and other stakeholders in promoting health and wellbeing, enhancing the communities we work in and the wider environment.

EDECS seeks excellence in every aspect of our business and is committed to minimizing our business operations' environmental impacts. In all company's activities, EDECS aims to:

- To comply with, and exceed where practicable, all applicable legislation, regulations, and codes of practice.
- Continuously improve our sustainability performance and integrate recognized best practices into our business decisions and operations.
- Operate with minimal environmental impact by improving resource efficiency whenever possible on job sites and in offices
- Create a comfortable and safe workplace for employees
- Respect human rights
- Adopt and encourage the philosophy of reducing, reusing, and recycling waste generated from our business operations.
- Ensure that any associates/ partners that we employ take account of sustainability issues in their work.
- Include a copy of our Sustainability Policy in all our proposals to clients.

5. Sustainability Strategies

To achieve these commitments, EDECS shall undertake the following strategies for the 3 pillars of sustainable development; environment, social, and economic:

5.1 Environmental Sustainability Strategy

- Conservation of natural environments as shore protection, and marine biodiversity conservation.
- Minimizing harm to the environment and living things during construction through planning and management of projects
- Ensure our sub-consultants and sub-contractors follow sustainability measures as part of their strategy.
- Sustainable usage of materials; local materials to decrease GHG emissions.
- Adopting the policy to reduce, reuse, and recycle all the materials used in our projects.
- Protection of cultural and historical environments whenever possible.
- Using FSC wood in our construction sites.
- Implement Waste Management measures that align with EDECS Environmental Management Plan EMP.
- Ensure Energy Efficiency through design, construction, and operation.
- Consider and actively promote the use of sustainable resources and materials.
- Provide relevant environmental/ sustainability training to EDECS employees, workers, and representatives.

- Reduce environmental impact wherever possible, using the best practices and standards such as LEED, BREEAM, ESTIDAMA, GSAS, and CEEQUAL.
- Undertake voluntary work with the local community and/or environmental organizations and make donations to seek to offset carbon emissions from our activities.

5.2 Social Sustainability Strategy

EDECS role extends to enhancing the communities where we operate around and providing values to stakeholders and people of all backgrounds. EDECS works to make people's lives better through the CSR program; which provides several services and activities to ensure equality and balance among generations.

- Provided basic requirements for our internal stakeholders.
- Ensure employees' health, safety, and wellness in various aspects and in the built environment to encourage them to contribute to the growth of the company's business.
- Community welfare support and investment through our CSR program :
 - Provide training programs for engineers, workers, and technicians.
 - Annual internships to cope with the international market.
 - Charity construction works to support the local community through NGOs and other charity organizations.
 - Financial support to local hospitals, and unprivileged villages.
- Contributing to events, and conferences, such as the annual sustainability conference held in Luxor under the slogan of "sustainability, economic and social transformations".
- Commit to conducting business ethically and maintain a zero-tolerance policy against corruption.
- Enhance the prospects of our workforce through skills, professional training, and education development.
- Promote diversity and inclusion of our employees; promote and take actions to achieve an absolute no-discrimination policy.

5.3 Economic/ Governance Sustainability Strategy

Economic sustainability is one of the most important subjects of sustainable development Sustainable economic development at EDECS includes:

- Creation of a forceful and stable construction business.
- Respect the applicable legislation concerning sustainability.
- Reducing operational costs by optimization of internal resources, efficient design and construction, and reduction of fixed costs all the while maintaining the quality of our services.
- adopting the reduce, reuse, and recycle initiative.

- Use local resources (Sub-contractors, employees, materials...etc.) on the site of work where applicable.
- Promote innovative thinking and practices to create sustainability solutions that support the overall sustainability policy.
- Promote and implement business ethics.
- Apply sustainable procurement practices.

Guiding Principles:

- To integrate sustainability considerations into all our business decisions.
- To ensure that all staff are fully aware of our sustainability policy and are committed to implementing and improving it.
- To minimize the impact on the sustainability of all office, site, and transportation activities.
- To make clients and suppliers aware of our sustainability policy, and encourage them to adopt sound sustainable management practices.
- To keep records of our environmental performance for review and continuous improvement as a step for the sustainability report.

IMAGE OF THE SIGNED SUSTAINABILITY POLICY

6. Sustainable Categories applied by EDECS in Construction

EDECS is committed to the application of sustainable development principles to the project life cycle from planning the construction, constructing, and mining raw material to production and becoming construction material, usage, destruction of construction, and management of wastes. It is a holistic process that aims to sustain harmony between the nature and constructed environment by creating settlements that suit humans and support economic equality. EDECS ensures that sub-contractors deliver sustainability measures in all the mentioned categories. More details on environmental measures are provided in the Environmental Management Plan (EMP).

6.1 Sustainable Sites

6.1.1. Construction activity pollution prevention:

Reducing construction activities pollution by controlling soil erosion, waterway sedimentation, and airborne dust.

- Create and implement an erosion and sedimentation control plan for all construction activities associated with the project. The plan must conform to the erosion and sedimentation requirements of the 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP) or local equivalent, whichever is more stringent. Projects must apply the CGP regardless of size. The plan must describe the measures implemented.
- Effective control procedures through standard mitigation measures to avoid altering soil properties, degradation of soil quality, and ground contamination.
- include safe storage and transportation of material (soil) and that it is reused, treated (where possible), and disposed of appropriately

6.1.2. Heat Island Reduction:

This can be achieved in constructed buildings through roof and non-roof measures. Roof measures include by integration of a high reflectance roof material. For non-roof; increase ground cover vegetation, or use high reflectance pavers with an SRI value of 0.28 or higher.

6.1.3. Light pollution:

Follow the BUG light method (backlight, upright, and glare) to avoid light trespass and meet light requirements to improve night visibility, and reduce negative impacts on wildlife and people.

6.1.4. Site development protect or restore habitat and cultural heritage:

- Strictly prohibit any harm to fauna by construction personnel.
- Vegetation Clearance and Ground Disturbance Permits will be prepared and implemented, whereby the groundworks Contractors seek written permission from the on-site environmental team to clear specific areas.

- Use preventive measures to avoid water contamination in marine construction works such as temporary protective fencing.
- The risk of encountering archaeological artifacts during construction works should be communicated to staff and workers to ensure mitigation measures as per EIA applied throughout the project.
- Archaeological resources if any identified must be fenced off to avoid accidental damage and unauthorized access.
- A heritage specialist must be called in to investigate the findings. The heritage specialist must provide management measures for the protection or removal of the find in consultation with the heritage authority. Work can only recommence in the area of the find once written permission from the heritage authority and the heritage specialist.

6.2 Water Efficiency

Responsible water consumption is an important factor in our gradual shift to eco-friendly practices and a sustainability strategy. Given the large infrastructure and nature of our operations, our efforts will be focused on effectively decreasing our consumption and reducing any negative impact it may have.

6.2.1. Water use reduction:

- Set reduction objectives for project water usage.
- provide water conservation education to staff.
- conduct regular checks on installations for leaks.
- maximize the use of recycled water.

6.2.2. Water metering:

Water used for consumption shall be tracked by using the metered connection at the consumption point and accounted into a monthly report.

6.2.3. Avoid Wastewater runoff:

Contamination of surface water from spills, dewatering, and runoff due to oil spills from vehicles, construction plants, and fuel storage areas, and contaminated stockpile runoff. Therefore preventive measures are taken at the construction site to prevent entry into water bodies.

6.3 Energy and Atmosphere

6.3.1. Minimum energy performance:

manage energy usage across the site by tracking consumption, losses, leakages, theft, and wastage of power through smart solutions. Project teams are required to minimize the

energy demand of building and infrastructure projects through the application of best practice energy-efficient design. Moreover using energy models when needed for optimized design.

6.3.2. Optimize Energy Performance:

- Usage of energy-efficient infrastructure lighting (e.g. road, public, traffic, signage) with the low power density and efficient control systems (e.g. photocells, timers...etc.).
- Green power and carbon offsets by using local suppliers to decrease GHG emissions, and integrate renewable energy into built structures whenever possible.

6.3.3. Refrigerant Management:

Avoid the use of chlorofluorocarbon (CFC)-based refrigerants in new heating, ventilating, air-conditioning, and refrigeration (HVAC&R) systems.

6.4 Materials & Resources

6.4.1. Construction & demolition waste management planning:

- We provide a waste management plan for both structural and non-structural waste.
- Provide a designated space on the construction site for the collection of waste.
- Segregate the waste according to its class (hazardous or non-hazardous) and train personnel for collecting, handling, transporting, or disposing of waste.
- Employ a specialized company for waste separation and conscious collection. The wastes are then either reused in other projects or sent to waste haulers for repurposing, and recycling.
- Wastes are disposed of at appropriately licensed facilities
- Develop a detailed Construction and Demolition waste management plan and commit to 50% diversion of construction and demolition waste from all infrastructures and construction-related activities.

6.4.2. Storage & collection of Recyclables:

- We set a recycling strategy for waste produced from the project's buildings.
- We encourage the segregation of waste by providing recyclable waste bins for each building
- We aim to have a recycling policy in our office by 2023 to increase the awareness of employees and encourage recycling.

6.4.3. Construction products disclosure & optimization:

We seek to deal with conscious suppliers of sustainability strategies, therefore our employees make the effort for optimum selection of suppliers and products. We look for

datasheets that communicate the product specs that abide by minimum environmental and sustainability standards.

6.5 Indoor/ Outdoor Environmental Quality

6.5.1. Construction work emissions:

Preventive measures are taken to avoid emissions from onsite/offsite construction plants, floating plants, and vehicles such as NO_x/NO₂, PM₁₀, PM_{2.5}, SO₂, CO, and VOCs within the vicinity of the terrestrial and offshore Works site.

6.5.2. Environmental Tobacco Smoke control:

We apply a no smoking policy in all our worksites, and offices. We have signages installed to communicate the policy to our employees, visitors, and the community. We provide designated smoking zones.

6.5.3. Low emitting materials and paints:

We seek to use low VOC materials, and paints in indoor built spaces.

6.5.4. Thermal comfort:

We seek thermal comfort according to standard measurements in our workspaces either on-site or at headquarters.

6.5.5. Acoustic performance:

Effective acoustic design for all occupied spaces, meet the following requirements for HVAC background noise, sound isolation, reverberation time, and sound reinforcement and masking where applicable.

7. Sustainability in Buildings

Buildings constructed and implemented by EDECS follow sustainability measures through the following strategies: Energy efficiencies through the use of appropriate thermal insulation, low-carbon building materials that require less energy in manufacture and optimized passive design features, such as using natural sunlight for lighting and natural ventilation. Moreover employ strategies that reduce power consumption, and identify opportunities to increase the use of renewable energy sources. Furthermore, we seek green building attainment by following world top rating systems such as LEED (Leadership in Energy and Environmental Design) in all building processes from design, construction, execution, commissioning, operation, and maintenance We seek to achieve credits in all the following categories:

- Water efficiency
- Energy and Atmosphere
- Materials and Resources

- Sustainable Sites
- Indoor Environmental quality

We even apply the sustainability strategy in our **Headquarters (B1-22)** Cairo Bussiness Park in New Cairo by applying the following strategy in building design, construction, and operation:

- Building premises selection within walking distance to various services decreases car dependency and CO2 emissions.
- Reduce the need for our staff to travel by supporting alternative working arrangements, including work from home, and promote the use of public transport by locating our office in accessible locations.
- underground parking and surrounding interlock pavers decrease the heat island effect around the building.
- All offices are soundproof against any outside noise. Windows are installed in thermally-treated double-glazed curtain walls to assure energy-saving.
- all light fixtures are LED lights and all spaces have motion sensors to decrease energy use,
- Partial AC Chillers to decrease energy load.
- Carrying out an environmental assessment for the building in 2021 by “Envirotrade Technology and Environment” -an Environmental consultant- to measure light intensity, noise level, and VOC in building spaces. The environmental assessment result follows the national Egyptian Environmental Code in all the previously mentioned aspects for workspaces.
- Avoid physically traveling where alternatives are available and practical, such as using teleconferencing, video conferencing, or webcams, and efficient timing of meetings to avoid multiple trips.
- Minimize our use of paper and other office consumables by double-siding all paper used, and identifying opportunities to reduce waste.
- Reduce the energy consumption of office equipment by purchasing energy-efficient equipment and good housekeeping.

8. Monitoring and Managing Direct Environmental Impacts

Environmental considerations, conservation, and improvement in the planning phase of a development project are crucial for sustainable development. At EDECS we are aware that the nature of our business has an impact on the natural resources and environment, therefore we seek to actively understand and manage the environmental impacts of our daily construction activities, operations, and project execution.

9. Supply Chain Sustainability

We deliver projects with high quality following international standards for environmental aspects, and human rights and wellbeing. We achieve these targets through the support of our stakeholders and partners including employees, suppliers, and subcontractors who share our values. The supply chain sustainability strategy assists to:

- Lower business risks
- Enhance EDECS's reputation in the marketplace
- Generate cost-saving methods by focusing on total Life Cycle Costs when sourcing services and goods rather than prices.

10. Accreditations

We understand the importance of standards, accreditations, and rating systems in organizing and achieving sustainability goals through measures in various aspects of the construction business. Therefore at EDECS we seek to be members of the US Green Building Council by 2025 a globally recognized symbol of sustainability achievement and leadership to instigate and support our employees to get accredited in LEED, and WELL rating systems. We aim to have 5% of our employees accredited as LEED Green Associates (GA) and LEED Accredited Professionals (AP) by 2030. Moreover in EDECS we have an outsourcing team of engineers in different fields; Architecture, Civil, and MEP, with a vast background in sustainability and environmental design, we deal with sustainability consultants when needed according to project size and requirements.

11.EDECS Sustainability Framework

Focus Area	Target	Action Plan
Economic	Facilitate sustainable economic growth	<ul style="list-style-type: none"> – Target sustainable structures projects – Maintain an enduring business – Expand business through diverse markets and geographical locations – Sustainable purchases
	Conduct business ethics and adhere to governance's highest sustainability standards	<ul style="list-style-type: none"> – Uphold corporate transparency and accountability – Educate employees on ethics and anti-corruption
Environment	Reduce environmental footprint	<ul style="list-style-type: none"> – Measure baseline performance based on previous projects – Reduce water consumption, CO2 emissions, construction waste, and wastewater discharge based on baseline performance with definite percentages – Target a zero plastic usage strategy
	Source sustainable materials	<ul style="list-style-type: none"> – Incorporate social, environmental, and ethical measures and performance in the selection of suppliers and subcontractors – Use regional construction materials – Use recycled construction materials from previous projects as in steel – Use certified FSC wood
Social	Provide safe and healthy workplaces for our employees	<ul style="list-style-type: none"> – Increase employee awareness of human health and wellbeing through training, events, and others – Increase HSE training – Develop workspaces to integrate high standards for employee wellness and comfort
	Promote a culture of diversity and inclusion	<ul style="list-style-type: none"> – Provide a safe, equitable work environment – Encourage and create opportunities for employee training and development – Allow the inclusion of employees through EDECS policies and actions
	Work on the socio-economic development of local communities and community engagement	<ul style="list-style-type: none"> – Generate local employment opportunities – Support local business – Engage with our communities through events, charity, CSR...etc.