



AFRICAN LEADER IN
ENERGY & INFRASTRUCTURE

QALAA HOLDINGS COMMUNICATION ON PROGRESS 2021

JANUARY – DECEMBER 2021



**BUILDING BUSINESSES SUSTAINABLY
AND RESPONSIBLY**

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Chairman's Note



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Our triple bottom line strategy has enabled us to invest in and build a diverse array of companies across sectors, working to fuel sustainable economic growth and job creation in Egypt and throughout Africa

To our stakeholders,

It gives me great pride to note that Qalaa Holdings is among the first regional adopters of a multifaceted business and investment strategy, positioning sustainability and environmental responsibility at its core and leading the change in creating long-term value and shared prosperity. For over a decade, we have worked to ensure that our investments are transformative and conducted in a responsible manner with a positive impact on the economic, environmental, and social ESG spheres. Our triple-bottom line strategy has enabled us to invest in and build a diverse array of companies across strategic sectors, working to fuel sustainable and inclusive economic growth and job creation in Egypt and throughout Africa.

Our vision falls in line with international best practices as outlined by the UN Sustainable Development Goals (SDGs) and the UN Global Compact (UNGC). We have continued to firmly support the ten principles of the compact, which we believe benefit both employees and employers. As part of our vision, Qalaa Holdings and its

subsidiaries adhere to and administer codes of conduct, regulations, and procedures that promote compliance with the principles drafted by the UNGC under the four fundamental areas of Human Rights, Labor, Environment, and Anti-Corruption. Our efforts and achievements thus far continue to demonstrate our reliability and dedication to making a positive, sustainable impact on our operations, our people, and the surrounding communities.

With the post-COVID-19 recovery underway, the world is faced with a new crisis, namely the Russia-Ukraine conflict, which brings forth a new set of macroeconomic challenges that we must overcome.

The current macroeconomic and geopolitical environment is highly challenging, with nations worldwide facing global supply chain issues due to global trade route disruptions and rising inflation across the world. Nevertheless, I chose to remain optimistic through it all. Amid challenges arise opportunities for those able to quickly shift gears

to conduct business differently through a more efficient business model. Throughout this period of uncertainty, I've been exceptionally proud of Qalaa's resilience and our ability to push forward with our responsible growth strategies across our portfolio. On the COVID-19 front, while lockdowns and travel restrictions continue to be a part of our lives to date, we are witnessing early signs of economic recovery with increased proliferation of vaccines and new treatments, albeit with a long road ahead as we grapple with resurging variants. As for the Russia-Ukraine conflict, the current crisis has underscored the importance of maintaining access to reliable and affordable energy, creating further opportunities for us to seize and utilize.

With so much change, resilience is the new name of the game, and "just-in-time" creed is giving way to "just-in-case" prudence. Change is tapping everything from manufacturing and agriculture to energy and climate change. Our robust investment strategy has guided us through transformative periods in the past: the global financial crisis, political turmoil, revolutions, and a local currency crisis to name a few. I am confident this period will be no exception as the world recalibrates following the pandemic and attempts to deal with the fallout from the Russia-Ukraine conflict, with Qalaa ideally positioned to offer a range of reliable and affordable energy solutions to mitigate climate impact and lead the clean energy transition, playing a central role in the region and Egypt's 2035 plan of producing its electricity through renewable sources.

Notable Highlights

The rising global urgency to tackle climate change and achieve net-zero emission by 2050 will drive demand and investments for solar and renewables. However, we need to recognize and acknowledge how complex the sustainability and energy transition is; if the world is to achieve net-zero emissions by 2050, we all need to partner to reimagine how we should power our businesses and the entire energy ecosystem. On that front, at the COP26 U.N. climate change conference,

a coalition of banks, insurers, and pension funds with USD 130 trillion in assets under management pledged to back clean technology and shift to renewable energy.

Since combatting climate change is no easy task and requires genuine efforts from governments and the private sector alike, we are wholly committed to doing our part, and I am proud of Qalaa's dedication to invest in renewable energy ventures, reducing its carbon footprint, and lowering emissions across its subsidiaries. While our portfolio mix currently contains traditional energy sources supplying energy within Egypt, we are committed toward continuously decarbonizing and substituting traditional energy sources with affordable, low-emission, more sustainable ones. However, we are aware that our efforts alone aren't enough. Private sector solutions need to be combined with progressive policies that create a suitable investment environment, well-structured bankable projects, investment in infrastructure, private-to-private projects, the introduction of carbon capture tax credit systems, and the involvement of EFIs and DFIs as well as and local bank green conditioned financing.

Qalaa will continue to utilize the necessary capital and tools needed to align our sustainability goals with our financial wellbeing, leveraging green conditioned financing to grow our portfolio in renewables, agri-carbon sequestration, dual-fueling, metal-grade virtual CNG solutions, water desalination, and solar hydrogen, all while carefully assessing and managing risks.

Our 2021 Communication on Progress (COP) highlights some of these important efforts and actions. We also commit to sharing this report and relevant information with all our stakeholders and public audiences through our primary communication channels and reaffirm our commitment to the UNGC and its message during the upcoming year.

Ahmed Heikal
Chairman and Founder

Qalaa Holdings at a Glance

Introduction

Ahmed Heikal and Hisham El-Khazindar founded Qalaa Holdings in 2004 as a beacon for sustainable investments that paves the way for economic growth in the region. Since inception, the Group and its subsidiaries have played an active role in driving the Egyptian economy forward. They have also constantly encouraged sustainable growth and managed their footprint by examining and adjusting their operational efficiency and optimizing resource consumption on a regular basis. With the continued prevalence of COVID-19, the Group and its subsidiaries remain committed to contributing to the development of a circular economy through an inclusive growth and development strategy.

Qalaa Holdings' multi-pronged investment strategy is also rooted in environmental, social, and governance (ESG) frameworks. Delivered through "win-win" partnerships, our pioneering ESG efforts fall under the pillars of people, planet, and prosperity, with the aim of supporting our employees, enhancing our communities, and offsetting our environmental impact. This triple bottom line approach has led to our accumulation of a diverse portfolio of companies spanning multiple strategic sectors that have positively impacted markets and economies in Egypt and Africa.

Our responsibility to lead by example is reflected in our choice to adopt sound, sustainable, efficient, and inclusive practices across our operations. We also set goals and targets that integrate sustainable and responsible practices into strategic business activities across Qalaa Holdings, its subsidiaries, and with various stakeholders. This commitment has enabled us to resiliently endure the unprecedented disruptions and challenges posed by COVID-19.

Moreover, as we remain deeply committed to incorporating international best practices across our

operations, our sustainability endeavors are guided by the United Nations SDGs. We continuously refine our practices to ensure full compliance with the SDGs and Egypt's Vision 2030, especially in the fields of education, human rights, labor, gender equality, governance, and environmental sustainability. Additionally, as proud members of the UNGC, we work to firmly uphold the global compact's 10 principles and contribute to the collective global action it seeks to achieve. To do so, we implement robust codes of conduct, regulations, and procedures that have been drafted in compliance with the principles at the holding and subsidiary levels.

Sustainability and Responsible Investment Is in Our DNA

2007

- Qalaa Holdings establishes the Qalaa Holdings Scholarship Foundation (QHSF)

2013

- ASEC Cement launches program for community development and educational support in Minya

2014

- Qalaa Holdings joins the UNGC
- Qalaa Holdings publishes its first Sustainability Report

2015–2017

- Qalaa Holdings becomes an early adopter of the United Nations SDGs
- 10th anniversary of QHSF, awarding c. 156 scholarships since establishment

2020

- Joins “Business Ambition for 1.5°C” campaign for climate action, among 177 pioneering early adopters of the campaign
- TAQA Arabia CEO Pakinam Kafafi named among Forbes Middle East’s Top 100 Power Businesswomen for her integral role in the development of the company’s growth and its recent push into Egypt’s promising solar energy sector
- Awarded 2019 EGX Sustainability and Corporate Social Responsibility Award and named among Egypt’s top 100 companies on the EGX
- Ghada Hammouda, Qalaa Holdings’ Chief Sustainability and Marketing Officer, named among top 50 regional storytellers on Forbes Middle East Magazine’s list of Most Impactful and Sustainable Marketing and Communications Professionals for her instrumental work in the field
- Egypt and World Economic Forum launch “Closing the Gender Gap Accelerator”, cochaired by private sector representatives, including co-founder of Qalaa Holdings Hisham El-Khazindar
- QHSF announces its 2020–2021 scholarship recipients for the 14th consecutive year, despite the challenges facing education due to COVID-19
- Qalaa Holdings participated in the introductory conference for scholarships at Mansoura University
- Qalaa Holdings held a virtual session to underscore the success of its “Mostakbaly for Teachers” program for achieving educational development and skill building, as well as its positive impact on distance learning during COVID-19

2021

- Recognized in Financial Regulatory Authority’s inaugural publication “Sustainability Champions: Leading the Way Forward”
- Qalaa Holdings co-founder Hisham El-Khazindar launched the executive plan for “Bridging the Gender Gap Catalyst” as co-chair of the initiative
- Amwal El Ghad awards Qalaa Holdings among Top 100 companies
- BT100 awards ERC as a successful investment project for Qalaa Holdings
- ECARU, Qalaa Holdings solid waste subsidiary, named among Forbes top 10 sustainable companies in the MENA region

Progress Through Sustainability

Our Sustainability Strategy

At Qalaa Holdings, we build sustainable and responsible businesses that better the lives and livelihoods of our employees and communities. All our investments aim to create long-term value and prosperity for stakeholders who we directly and indirectly impact through our operations.

Part and parcel of our mission is investing in companies that fuel sustainable development, economic growth, and job creation in Egypt and across Africa. We work diligently to support the delivery of a diverse scope of offerings that includes, but is not limited to, producing energy products and services for the benefit

of consumers and businesses, providing businesses with reliable and clean energy alternatives, fuel-efficient transportation solutions, adequate recycled solid waste, and promoting the utilization of renewable energy and waste management to preserve and add value to natural resources. We also grow and manufacture safe and healthy food, addressing food security needs and helping build critical national infrastructure.

Investments in people and human capital development are among our central priorities at Qalaa Holdings, as we continually prioritize understanding and addressing the needs of our employees and surrounding communities.

Building Businesses Sustainably and Responsibly – A Responsible Investing Model

<p>17</p> <p>Years of operations</p>	<p>40,000</p> <p>Jobs</p>	<p>17,000</p> <p>Employees</p>
<p>> 80</p> <p>Businesses founded and developed</p>	<p>44</p> <p>Civil society organizations as partners</p>	<p>+5</p> <p>Government organizations in Egypt</p>
<p>USD4.3BN</p> <p>Refinery to provide environmentally friendly Euro V diesel and refined products for the local market</p>	<p>+13</p> <p>Academic and international organizations</p>	<p>100,000</p> <p>Tons of 100% organic compost from feedstock manure produced annually at Tawazon/ECARU</p>

Our Environmental Scorecard

Production	Consumption	Waste Management
ERC produces Euro V diesel, which will eliminate c. 29% of Egypt's SO ₂ emissions	Dina Farms applies an efficient irrigation system and practices sustainable farming	Tawazon is a full-service solid waste management provider that recycles waste into environmentally friendly alternatives for coal and natural gas
El Baddar uses recycled material in the production of packaging and printing products	ERC employs a closed water circuit and sanitation system to minimize water consumption	

Qalaa Holdings is constantly working toward balancing our portfolio and taking steps to accelerate clean energy transition. As such, our portfolio offers range on mitigation solutions to climate change and toward environmental sustainability and clean energy transition:

- **Sustainable Transportation:** Qalaa's subsidiaries support sustainable transportation on a number of fronts, whether by reducing emissions through TAQA Arabia's Dual-Fuel technology—which allows fuel vehicles to run on a Dual-Fuel system mixing both diesel and natural gas simultaneously during the engine's compression process, thus delivering much better power and efficiency while reducing the truck's diesel consumption by 30%—or through Nile Logistics providing Nile River transportation services, a more environmentally friendly mode of transportation, to link producers, exporters, and importers to local and global markets.
- **Energy Security and Innovative Energy Solutions:** ERC reduces wasted emissions by transforming them into Euro V diesel, which is considered to be the cleanest fuel of its type in the world, preventing 186,000 tons of sulfur dioxide

(SO₂) and 96,000 tons of sulfur from being emitted into Cairo's air annually, as well as addressing the country's import substitution needs. Meanwhile, TAQA's 65 MW solar power plant in Benban, the largest solar park in the world, plays a crucial role in Egypt's 2022 plan of producing 20% of its electricity needs through renewable resources. Additionally, TAQA transmits and distributes natural gas connections to remote, off-grid customers through innovative virtual pipeline CNG technology. TAQA currently provides connections to more than 1.5 million customers across 18 governorates (48 cities) throughout Egypt, and it is expected to reduce emissions by c. 78,000 tons annually, as well as prevent 2 million GHG tons per annum from its solar plant.

- **Sustainable Buildings:** GlassRock's thermal insulation solutions can save up to 40% of the cooling and heating load and minimize the global carbon dioxide (CO₂) footprint from heating and cooling while using a calculated percentage of recycled materials. In insulated buildings, energy is saved as 80% of a building's energy needed for heating or cooling can be reduced, expanding the asset's life span.
- **Sustainable Waste Management:** Tawazon/ECARU has been operating at Dina Farms since 2016 in circular waste management, making 100% organic compost from feedstocks manure (average 100k tons annually) which serves as good input in organic farming, decreases reliance on chemical fertilizers, and reduces the water consumption rate by three times compared to other fertilizers. Meanwhile, El Baddar uses recycled papers and material in the production of packaging and printing products, and Tawazon has maintained strong efforts in providing cleaner and recycled alternative fuels from waste, such as biomass-derived fuel (BDF), solid recovery fuel (SRF), and refuse-derived fuel (RDF) to heavy consumers as a source of thermal energy.

- **Food Security:** Qalaa Holdings' subsidiary Dina Farms is Egypt and Africa' largest private sector fully integrated farm, making it a significant contributor to food security.
- **Water Security:** Since Qalaa recognizes the severity of water scarcity, we are currently in the process of finalizing a water policy to address and govern our water usage. Our water policy will be based on four guiding principles: operations' impact measurement and management, engagement, governance and transparency, and collaboration. Furthermore, in 2021, TAQA Arabia announced the launch of a brand-new subsidiary, TAQA Water, signaling TAQA Arabia's venture into the field of water treatment and desalination.

Responsible Operations

Since mitigating our environmental impact, our resource management and waste disbursement are key to furthering our commitment to the SDGs and overall climate change goals. To do this, we have developed a rigorous environmental policy that covers the full breadth of our operations. The policy covers the following:

- **Use of Materials:** To maximize efficiency and ensure sustainability. At Qalaa Holdings, we are cautious with our use of materials and make sure they are allocated in a manner that maximizes efficiency and ensures sustainability.
- **Use of Energy:** To ensure strategic allocation in all sectors. Pinpointing the different types of energy used by all the different sectors makes it easier for us to identify whether our use of energy is allocated strategically.
- **Facility Design:** To mitigate negative impact on residential communities and wildlife. Most of Qalaa Holdings' plants and facilities operate in industrial areas. Due to the fact that Qalaa Holdings is involved with heavy industries, the facilities are designed to ensure not to cause any

negative impact on residential areas and wildlife.

- **Use of Water:** To promote sustainability and invest in efficient use of local resources. Qalaa Holdings is committed to the sustainable use of water resources and to the investment in the efficient use of available local resources.
- **Refining Process:** The refining process to produce lighter products, such as Euro V diesel at ERC, removes sulfur from fuel oil. ERC is thus preventing the release of 96,000 tons of sulfur that are currently being emitted into the air and, accordingly, represents a reduction of 186,000 tons in annual SO₂ emissions. This equates to a 29% reduction in the total amount of SO₂ currently emitted in Egypt from the burning of sulfur-containing fuels, such as fuel oil and diesel.

Qalaa Holdings and its subsidiaries continuously work toward ensuring that energy efficiency is at the forefront of operations. On that front, ERC successfully prevents 186,000 tons of SO₂ and 96,000 tons of sulfur from being emitted into Cairo's air annually. Additionally, TAQA Arabia is in the process of tapping the energy efficiency sector, working on the design and implementation of energy saving solutions.

With the increased global focus on and need for renewable energy services and solutions, Qalaa Holdings' TAQA Arabia and Dina Farms are pioneering new green private-to-private energy projects in Egypt, establishing a fund with EBRD to construct a solar PV plant in Dina Farms.

Given the finite nature of natural resources, Qalaa Holdings' subsidiaries have deployed various systems to promote the efficient use of resources. Dina Farms applies an efficient drip irrigation system and adheres to international best practices to ensure the efficient consumption of water.

Qalaa Holdings' subsidiaries employ strict waste management policies, with some of them using waste as input to produce a variety of materials that range from clean alternative energy (Tawazon) to duplex boards (Shorouk, a subsidiary of the National Printing Company). ERC utilizes an environmentally friendly closed-circuit cooling system that makes the best use of a limited supply of water and reuses it efficiently in the cooling process with the aid of cooling towers. ERC performs upgrades, including the installation of environmental monitoring equipment at neighboring refinery CORC, as per the contractual agreement between both entities. Furthermore, TAQA has made significant strides in providing clean energy via mobile CNG and dual fuel.

Responsible Relationships

We take pride in the strength and diversity of our management team and our work environment, which promote inclusiveness by celebrating female leaders across our subsidiaries, with c. 25% of Qalaa Holdings' board members being women, 39.1 % of Qalaa's female employees are in senior management positions, and c. 50% of the direct and indirect beneficiaries of our community development initiatives being women. On that front, Qalaa Holdings became a signatory of the Women Empowerment Principles (WEPs), receiving the WEPs certification for its

women empowerment efforts, and it was part of an international network of high-performing companies that are advancing diversity and inclusion in the private sector. Additionally, our social initiatives have reached c. 600,000 direct and indirect beneficiaries to date, including the wide-ranging influence of the Qalaa Holdings Scholarship Foundation (QHSF), founded in 2006 and now Egypt's largest private sector scholarship foundation.

As part of its adherence to the highest levels of governance and corporate responsibility, Qalaa places significant emphasis on the importance of accurate and transparent reporting. As such, we continue to comply with FRA reporting requirements, as well as ESG reporting standards. Qalaa also joined UNGC in 2014 and has been reporting voluntarily about its sustainability and ESG practices since then.

Leveraging our position as a leader in energy and infrastructure in Egypt and Africa, we continue to build world-class businesses throughout Egypt and other high-growth markets across North and East Africa, responsibly and sustainably. With investments spanning 15 countries, our businesses add value and cater to the needs of more than 1.3 billion consumers across our footprint, and we continue to solidify our position as a leading regional energy and infrastructure investor.

Description of Actions – Wholistically Driving Sustainability and UNGC Principles

Human Rights

Respecting human rights is a prerequisite for ethical operations. We therefore uphold full and ultimate respect for individuals and their rights at Qalaa Holdings, working diligently to ensure that this value is incorporated into our practices. Our respect for human rights is reflected in our code of conduct, which endorses honesty, integrity, and hard work. In return, the company commits to making sure that everyone is treated with fairness and respect, and that employee rights are fully protected.

We acknowledge the importance of proper situational awareness, and so, we make sure that countries, governorates, and communities are researched thoroughly prior to the implementation of any of our projects. After breaking ground, we then proceed to strictly monitor operations and track performance across projects to ensure that human rights are not violated.

Labor

Qalaa Holdings prioritizes the delivery of complete and legal employee rights under the relevant laws of its countries of operation. We offer our people salaries and wages that facilitate decent living conditions, and provide benefits ranging from insurance (life, health, and social) to disability coverage, holidays, leaves, and more. Our compensation framework is regularly updated in accordance with changing economic conditions, and our human resources policies ensure that our people are well-cared for, well-trained, and given equal opportunities to excel and advance within the company.

Relevant to our strict adherence to labor laws, we continue to uphold zero-tolerance policies for child labor and all types of forced labor. All our workers are above

the legal working age and receive regular health and safety trainings and circulars that inform them on how to protect themselves against any outbreaks. We also enforce strict anti-discrimination policies among our people, prohibiting discrimination against potential or current employees for their race, religion, gender, nationality, age, or social status. The company's policies are regularly amended to comply with national labor laws and fully respect international human rights laws in providing employees with decent compensation and benefits.

In early 2022, Qalaa Holdings' board approved and published its amended Code of Conduct, which outlines the company's values and its commitments to all its stakeholders, including its valued employees, shareholders, vendors, and, last but not least, the communities in which the company operates.

As a strong advocate of diversity, inclusion, and equality, Qalaa Holdings has always created a conducive environment that encourages women to succeed and thrive in leadership positions and helps them unleash their full potential. We are proud to report that 39.1% of our female employees hold senior management positions and 13.04% are in middle management. Furthermore, 13.04% of our female leaders have been recognized as some of the most influential women in Egypt and the MENA region, receiving awards related to this recognition.

In terms of age groups, Qalaa Holdings continues to attract young calibers, with 31.4% of the company's employees falling between 30 and 40 years of age, 34.8% between the ages of 41 and 50, and 17.4% between the ages of 51 and 60.

The SAP SuccessFactors Talent Management System, launched by Qalaa Holdings in 2018, continued to play a vital role in assessing employee talents across the company in 2021. The platform is used to regularly review performance and career development, assisting in monitoring employee efficacy and identifying needed trainings. On that note, around 180 hours of employee trainings were recorded in 2021.

Environment

Operating in diverse volatile sectors, Qalaa Holdings is highly aware of its impact on the environment. Therefore, we are actively working to balance and offset the impact of our activities. We continue to make significant progress throughout our subsidiaries in terms of responsible production, consumption, and waste management, with the aim of achieving climate neutrality and zero carbon footprint.

The volatile nature of Qalaa's affiliated sectors has made the company highly aware of its impact on the surrounding communities. Accordingly, we have made and continue to make significant progress across our subsidiaries with regards to production, consumption, and waste management, with the aim of achieving climate neutrality and a zero-carbon footprint. Our subsidiaries have undertaken many initiatives in terms of environmental sustainability, such as ERC's decarbonization strategy, which falls in line with Egypt's 2030 vision and its climate adaptation strategy. At ERC, all refinery heaters are equipped with a low NOx burner, which maintains the concentration of NOx at low levels, in addition to using natural gas as a clean fuel. The company is also installing double sealing systems for floating surface tanks at CORC to reduce greenhouse gas emissions. Moreover, ERC has an environmental monitoring program in place for ambient air in the surrounding area of the refinery and stacks emissions to keep track of the air quality in surrounding communities.

As a partner of choice since our inception with like-minded DFI's, as well as bilateral, multilateral, and global

credit export agencies, our environmental sustainability commitment encompasses everything from product design to resource consumption, waste management, recycling, and upcycling. Accordingly, we bring to the market a mix of clean products, and we continuously aim to improve efficiency, optimize operations, and increase the mix of cleaner products in our portfolio. We also regularly monitor, report, and refine our performance and diligently bring together global guidelines, such as Shorouk's FSC certification and Tawazon's GIC certification, as well as pioneer in circular waste-to-energy solutions by recycling waste into environmentally friendly biofuels. In line with the government's strategy to create new, decentralized approaches for agri-waste collection and recycling to create "green jobs" and promote the efficient use of resources, Tawazon/ECARU has been operating in Dina Farms since 2016 in circular waste management, making 100% organic compost from feedstocks manure (average 100k tons annually, which serves as good input in organic farming, decreases reliance on chemical fertilizers, and reduces the water consumption rate by three times compared to other fertilizers. Moreover, applying biological treatment technology to feedstocks' manure helps in eliminating diseases and nematodes. As for the area of agri-waste/biomass businesses, Tawazon/ECARU provides collection, transportation, and processing of all types of agricultural residues (biomass). The company collects and processes approximately 500,000 tons of different types of biomasses annually to produce various types of products, such as biomass-derived fuel (BDF) for cement kilns with an annual capacity of 250,000 tons, organic compost with an annual capacity of 70,000 tons, and supplying purified biomass for MDF Pulp and Papers Industries with an annual capacity of 100,000 tons. We are rigorous in developing policies, standards, KPIs, and reporting across our subsidiaries and supply chains in the areas of health, safety, the environment, and governance.

Our subsidiaries have carried out many environmentally friendly solutions and initiatives. ERC, which addresses the import substitution

needs, is expected to eliminate a notable 96,000 tons and 186,000 tons of the country’s sulfur and SO₂ emissions annually, respectively, while TAQA’s expected emissions reduction is projected to be 78,000 tons annually.

TAQA Power has maintained environmental sustainability and green credentials through the implementation of the “GoGreen” environmental plan that includes the following management steps:

- Implementing a recycling strategy
- Maintaining hazardous waste management
- Investing in energy-saving appliances
- Procuring LED lamps
- Procuring environmentally friendly paper

TAQA Power has also implemented the Extended Product Responsibility (EPR) strategy through:

- Developing a waste management plan for solid waste, including minimizing plastic usage, the segregation and classification of waste, and transporting waste to safe disposals
- Implementing effective operation and maintenance plans to optimize and reduce emissions and applying preventive maintenance activities, all in accordance with original equipment manufacturer (OEM) guidelines carried out by TAQA’s professional team of engineers, supervisors, and technicians
- Avoiding inappropriate waste management and disposal methods, such as the open burn of waste, dumpsites, and uncontrolled landfilling in the surrounding area
- Signing an agreement with a waste collection service provider to safely dispose of hazardous waste, while recycling or reusing other solid waste, as well as contracting a certified service provider for the safe disposal of used oil

Qalaa’s commitment to environmental sustainability was made public at the 25th Annual United Nations Climate Change Conference (COP 25). We were a major contributor to the Climate Ambition Alliance, a growing multi-stakeholder group convened by the COP 25 that brings together countries, businesses, investors, cities, and regions working toward achieving net-zero emissions by 2050.

Governance – Measuring and Managing Our Progress

Governance and accountability are critical to ensuring alignment and prioritization across our business. At Qalaa Holdings, we hold our businesses accountable for their resource optimization and energy efficiency and completing benchmarking to set carbon reduction targets toward our net zero by 2050 ambition. Accordingly, Qalaa has set in place the necessary infrastructure to measure and manage its progress, such as its climate, water, and waste policies that play an important role in governing how it utilizes its resources.

Qalaa’s climate policy aims to minimize its carbon footprint and has seen Qalaa adopt a multifaceted strategy throughout its operations, placing sustainability, innovation, and value creation at its core. Our climate strategy is based on the strict compliance of all our subsidiaries to all climate laws and regulations featured in each of the countries in which we operate. Additionally, since Qalaa recognizes water scarcity as a global issue that surpasses regional and national boundaries and would have an effect on its subsidiaries’ activities across Africa, we are also finalizing a water policy based on the following principles: operations’ impact measurement and management, engagement, governance and transparency, and collaboration.

Qalaa Holdings recognizes water scarcity as a global issue across regional and national boundaries. Qalaa Holdings’ Water Compliance Strategy is based on the

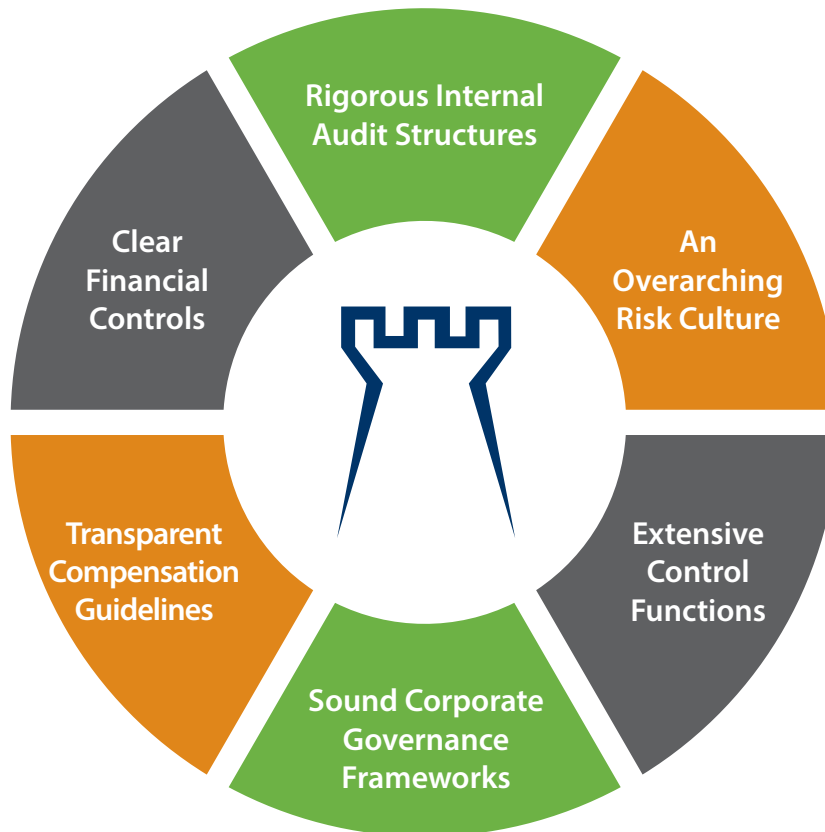
strict compliance of all subsidiaries to all national water laws and regulations featured in each of the countries we operate in the policy also ensures the adoption of various global guidelines, management systems, and standards at both the holding and subsidiaries levels when relevant.

Anti-Corruption

A pioneer in sustainable and ethical business practices, Qalaa Holdings views private sector leadership as crucial to promoting positive social change and economic development in Egypt. The company believes that high-quality governance is a fundamental enabler of superior corporate performance and that the components of effective governance can help reduce risk, identify internal and external threats, and assist in capturing profitable business opportunities. Over the years, we have

overcome many challenges and made significant headway in implementing comprehensive and effective corporate governance strategies. In mid-2017, the company took active steps toward sharing our experiences in this field with other companies in Egypt’s private sector by joining the Egyptian Junior Business Association’s Integrity Network Initiative (INI). This initiative connects Egypt’s leading companies with its most promising SMEs in a collective effort to combat corruption and create a culture of accountability and transparency.

Institutionalizing corporate governance processes is an ongoing, long-term objective across all of our platform companies. Equally important are the principles of fairness, openness, and transparency, which we have worked diligently to instill as part of our corporate culture.



ESG Integration – Weaving the Triple Bottom Line into Our Business

Qalaa Holdings is among the first regional adopters of a multifaceted business and investment strategy, positioning sustainability and environmental protection at its core. For over a decade, we have worked to ensure that our operations and investments are conducted in a responsible manner with a positive impact on the economic, environmental, and social spheres. This triple bottom line strategy has enabled us to invest in and build a diverse array of companies across multiple sectors, all working toward facilitating sustainable economic growth and job creation in Egypt and across Africa. Our vision falls in line with international best practices as outlined by the UN SDGs and the UNGC.

2021 Progress

Qalaa Holdings Co-Founder Hisham El-Khazindar launches the executive plan for “Bridging the Gender Gap Catalyst” as Co-Chair of the initiative.

Recognized in Financial Regulatory Authority’s inaugural publication “Sustainability Champions: Leading the Way Forward”

Ghada Hammouda, Qalaa Holdings’ Chief Sustainability and Marketing Officer, named among top 50 regional storytellers on Forbes Middle East Magazine’s list of Most Impactful and Sustainable Marketing and Communications Professionals for her instrumental work in the field.

Hosted Mostakbaly event for vocational training for teachers and students.

TAQA Arabia participated in Egypt’s Go Green Expo, where it showcased its latest technologies to support the state’s plan to expand the usage of natural gas by converting vehicle engines to run on dual fuel, using both natural gas and diesel.

TAQA Arabia and Dina Farms pioneer new green private-to-private energy projects in Egypt with a USD 10 million financing package from EBRD.

People – Inclusive Growth & Human Capital Development

Our social contribution is centered around inclusive growth, promoting holistic human capital development, and working toward a more inclusive economy. Our initiatives and programs contribute to the realization of multiple human capital development SDGs, and our milestones for 2021 include taking huge strides toward achieving SDG4, SDG5, and SDG10.

SDGs Milestones



Quality Education

- 36,900 beneficiaries from Qalaa’s education and human capital development initiatives
- 198 scholarships awarded by QHSF to Egyptian students, including three scholarships provided by ERC and two scholarships provided by TAQA Arabia
- 300 total scholarships with 115 recipients of Mostakbaly for students’ scholarships, three scholarships abroad, 130 recipients of Mostakbaly for Teacher, and 52 through Don Bosco
- More than 10,767 workers trained at ASEC Engineering Academy’s training program

Qalaa Holdings adopts a holistic approach to supporting education in Egypt. We have various programs that back all levels of education, ranging from vocational education across multiple industries through the Mostakbaly program in Don Bosco and ASEC Academy, to higher education in Egypt and abroad, teacher education for training trainers, employee education, and personal development. Through our approach, we actively work to train future generations and to build the capacity of the Egyptian workforce. As for Qalaa’s internal workforce, we place

significant focus on the personal development of our own employees. Our heavy investment in our employees plays an integral part in improving society through training future generations and providing them with the skills necessary to not only climb the corporate ladder but also give back to the communities in which they live and to the country as a whole.

Flagship Human Capital Development Investment:

Qalaa Holdings Scholarship Foundation (QHSF)

Funded by an endowment from Qalaa Holdings, QHSF is the largest scholarship program funded by the private sector in Egypt. It was developed to enable Egyptian students to access post-graduate education, and it has continued to grow sustainably under the guidance of its independent board of trustees and the management of its full-time executive director.

Over the past 16 years, QHSF has granted over 198 scholarships to exceptional Egyptian students pursuing graduate degrees at top universities abroad. These scholarships covered a variety of fields that include, but are not limited to, filmmaking, anthropology, global mental health, mechanical engineering, biotechnology, and architecture. The scholarship is provided on the condition that the students return to Egypt for employment and contribute to the country's development after completing their studies.

QHSF encourages its graduates to invest their newly acquired global knowledge by finding employment or launching their own businesses. Alumni scholars have started businesses that are already contributing to Egypt's economic growth, including Amina Abou Douma, founder of Teatro Eskendria; Randa Fahma, co-founder of KarmSolar; and Hisham Wahby, founder of over 18 startups. Additionally, the foundation fosters diversity and inclusion across the program, with 46% of the beneficiaries being female across 15 governorates in Egypt.

Since the launch of the foundation in 2007, QHSF has now awarded scholarships to 198 students in total, granting around 15 scholarships a year on average in almost 14 countries for the past 16 years. Despite the negative implications of the COVID-19 pandemic and the current Russia-Ukraine war and their global and local effects, QHSF has managed to continue awarding scholarships during these most challenging times.

For the 2020–2021 class, the Foundation has elected to limit the number of recipients to three following the COVID-19-induced disruptions. The reduction in the number of scholarships aims to curb the effect of potential disruptions to programs of study, which may leave students with the inability to reap the full benefits of their experience.

Qalaa Holdings Financial Services Center (QHFSC)

In line with our commitment to support education in Egypt, Qalaa Holdings and the American University in Cairo (AUC) founded QHFSC to help students develop the skills and qualifications needed to pursue careers in securities trading, risk management, and asset allocation. The center provides students with unique learning opportunities by integrating hands-on practical education with financial concepts. QHFSC remains one of Qalaa Holdings' central projects and is recognized as the first of its kind in the MENA region.

Qalaa Holdings donated USD 250,000 in seed funding to establish the center, as well as an additional USD 30,000 annually to ensure sustainability of operations. Throughout the years, Qalaa Holdings has invested USD 180 million in databases and software to ensure the center continues to operate seamlessly. To date, QHFSC has trained over 2,738 graduates, researchers, and faculty members across its expanding geographic network in Egypt.

TAQA Arabia Scholarship Program

To fulfill its commitment as a socially responsible corporation that prioritizes human and community development, TAQA Arabia, Qalaa Holdings' subsidiary, developed the TAQA International Scholarship program. The program enables the company to fully fund the studies of a master's student in the field of renewable energy. The company also grants additional scholarships to students working in the alternative energy sector who are looking to pursue graduate studies in alternative energy and related disciplines. TAQA Arabia has awarded a total of two scholarships as of December 2021.

Corporate Mentorship Program with HEI/AMIDEAST

Qalaa Holdings partnered with AMIDEAST and volunteered with the HEI Public University scholarship program to motivate and mentor Egyptian youth and help bridge the gap between university and employment.

ASEC Academy

Qalaa Holdings' subsidiary, ASEC, founded the ASEC Academy to shed light on the importance of vocational training. The Academy offers multiple programs designed to train engineers, chemists, geologists, and technicians employed in the cement industry. Graduates from the Academy will receive accreditation by the Arab Union for Cement and Building Materials. In 2021, the number of trainees reached 10,767.



SDG 5: Gender Equality

Gender balance and female economic empowerment are cornerstones of our human capital development programs. We believe in fostering a highly inclusive work environment that promotes women's influence and impact. Our female empowerment strategy is to support women in the workplace and ensure they are provided with fair and equal opportunities in leadership and management

positions, as per the principle of "Gender Fairness and Equal Opportunities". We also employ tailored employment policies that foster a supportive environment for women and provide them with benefits, such as flexible working hours during pregnancy and after maternity leave. At a portfolio level, we have several prominent women serving in top management roles and leadership positions. We currently have two CEOs, two CFOs, and two heads of functions. Additionally, six of our leading women are listed in Egypt's top 50 most influential women network. To continue empowering women, we are setting succession strategies by continually growing the number of women present in our middle management in an effort to provide them with a greater opportunity to hold senior leadership positions in the future. It's worth noting that the IFC has conducted a case study on "Exploring Client Approaches to Gender-Based Violence Prevention and Response" in TAQA Arabia's Benban Solar Park project, where the company recognized the need to consider specific risks for women as part of the project's environmental, social, and health and safety requirements. For example, the project location, a remote desert environment, and local socio-cultural gender norms were seen as specific threats to women's safety. As a result, TAQA implemented a number of steps to mitigate such risks. The company also implemented a number of measures to promote gender equality.

Qalaa's female empowerment strategy is built on four main pillars:

- Supporting and empowering women in the workplace as per the principle of "Gender Fairness and Equal Opportunities", where 25% of Qalaa's board members and 39.1% of Qalaa's upper and middle management are women
- Appointing and rewarding successful female executive leaders and positioning them as role models that lead by example in the local and international business arenas

- Launching diverse community development programs that target training and empowering women to fill the gender gap. Currently, c. 50% of our direct beneficiaries from our community development programs are women, reaching c. 300,000 direct and indirect female beneficiaries
- Participating and collaborating with international organizations on initiatives that aim to empower women and achieve gender balance and equality and pushing male workers to support and empower such initiatives.

Qalaa Holdings is an active participant in local and international institutions' initiatives that aim to enhance the status of women, achieve equality, and push for equal opportunities. An active participant in the Gender Accelerator, a UNGC initiative, Qalaa's management understands and has integrated the SDGs framework in its business operations, thinking, and practices, including prioritizing SDG 5 – Gender Equality. In 2020, and in line with the company's strategy, Qalaa's Co-Founder and Managing Director Hisham El-Khazindar co-chaired in "Closing the Gender Gap Accelerator" that was launched by Egypt and the World Economic Forum. Also, in early 2022, Qalaa Holdings became a signatory to the WEPs and was part of an international network of high-performing companies that are advancing diversity and inclusion in the private sector. The initiative is composed of a set of seven principles established by UN Women and the UNGC to improve gender equality at the company, marketplace, and community levels.

Diverse community development programs are regularly launched at Qalaa Holdings, all of which aim to train and empower women. 46% of QHSF scholars are women, and almost 50% of direct and indirect beneficiaries from Qalaa and its subsidiaries' community development programs are women,

bringing our total to c. 300,000 female beneficiaries. We also participate and collaborate with international organizations on female-centric initiatives that aim to achieve gender balance and equality, and encourage male workers to actively support them.



Reduced Inequalities

- EGP 690 million contributed to community development programs from 2004 to December 2021
- 13,551 people were trained in job market skills by ERC, QHFSC, and ASEC Academy as part of the vocational education initiative (2,642 ERC trainees, 90 ASEC Academy AUC diploma holders, 10,767 ASEC Academy trainees, and 52 Don Bosco graduates)
- c. 8,900 direct and indirect beneficiaries of the "Tamkeen" program and c. 113,000 direct and indirect beneficiaries of the "Mashrouy" program for economic empowerment and income raising
- c. 9,500 direct and indirect beneficiaries of the "Takaful" program for children with special needs
- c. 1,400 direct and indirect beneficiaries of the "Reyada" program for youth capacity building and voluntary work
- c. 26 specialized NGOs and success partners

The primary purpose of all our initiatives and projects is to contribute to reducing economic and social inequalities by building capacities through education and human capital development. Through our community development initiatives, Tamkeen, Mashrouy, Reyada, and Takaful, we empower women, youth, and individuals with special needs toward achieving that goal.

Community Development Initiatives

As part of our efforts to give back to, and support our residents and stakeholders, ERC has launched several initiatives geared toward the betterment of the communities in which we operate.

Tamkeen

Tamkeen provides training in economic empowerment projects and aims to support female entrepreneurs in developing their living conditions.

- **c. 8,900 direct and indirect beneficiaries – 100% women**
- **1,498 women trained to enter the labor market**
- **212 small projects supported for women empowerment**
- **85 grants for craft training**

Mashrouy

Mashrouy specializes in youth economic empowerment.

- **c. 113,000 direct and indirect beneficiaries – 15% women, 85% men**
- **1,144 youths trained to enter the labor market**
- **212 small projects for youth empowerment**
- **25 grants for craft training in the field of mobile maintenance**
- **Four computer centers supported to service youth in the Mostorod area**

Reyada

Reyada aims to train volunteers on managing social initiatives.

- **1,400 direct and indirect beneficiaries – 60% women, 40% men**
- **100 volunteers (30 active)**
- **Eight community development initiatives**
- **14 human capacity building trainings**
- **Three incentive activities**

Takaful

Takaful provides community members with special needs with the opportunity to integrate within and contribute to their communities.

- **9,500 direct and indirect beneficiaries – 50% women, 50% men**
- **Four childcare centers supported**
- **1,500 people with disabilities supported**
- **Four schools for people with special needs supported**

Mostakbaly

Mostakbaly, one of several community development initiatives launched by ERC falls within a cooperation agreement between ERC and the Ministry of Education, as well as educational directorates in the Cairo and Qalyubia governorates. The program is in accordance with ERC's sustainable development strategy, which aims to improve teaching capacities within Egypt's public education system. It is part of the company's ongoing initiative to advance public education in Egypt and achieve quality education for all in line with the UN's SDG #4.

- **c. 470,000 direct and indirect beneficiaries – 50% women, 50% men**
- **115 undergraduate scholarships, three scholarships for studying abroad, and 52 vocational training scholarships at Don Bosco**
- **8,173 prescription glasses for underprivileged students**
- **45 public schools in Mostorod area upgraded**

Planet

Each of Qalaa Holdings' subsidiaries plays a different role in working to balance and offset the impact of our investments and activities. The following are our environment and climate-related milestones.

NDCs

In line with Egypt's 2030 vision and Egypt's Nationally Determined Contributions (NDCs), Qalaa Holdings establishes green projects to support Egypt's transition into a green economy by conducting the following in core strategic sectors:

Qalaa Holding also contributes to Human Capital Development through access to Quality Education (SDG #4), Promoting Gender Equality (SDG #5), and Reducing Poverty and Inequalities (SDG #10):

The company supports all the interlinked 17 SDGs and integrates their values in its operations with great focus on the below SDG goals:

SDG #4 (Quality of Education):

Qalaa Holdings follows a holistic approach to supporting education in Egypt, which means that we have multiple programs that support all levels of vocational education in multiple industries, higher education in Egypt and abroad, teacher education to train the trainers, and the education and personal development of our own employees. Through this holistic approach, Qalaa heavily invested in training future generations across its own companies and fortifying the Egyptian workforce with the skills needed to not only climb corporate ranks but give back to the communities, where the total number of direct and indirect beneficiaries from Qalaa's education and human capital development initiatives have reached c. 36,900 beneficiaries.

As part of Qalaa's commitment to contributing to the ongoing development of human capital in Egypt, Qalaa Holdings established the Qalaa Holdings Scholarship Foundation in 2007. The foundation has awarded over 200 scholarships to pursue graduate studies abroad at leading global universities in the USA and Europe across 15 governorates, of which 46% of the beneficiaries were females.

On a subsidiary level, ERC began making a positive social impact on its surrounding community in Mostorod, with a particular focus on the areas of education, economic empowerment, youth capacity building, and special needs. In the field of education, ERC established "Mostakbaly" for student and teacher programs, and it has provided a total of 300 scholarships with 115 recipients of Mostakbaly for student scholarships, three scholarships for studying abroad, 130 recipients of Mostakbaly for teacher scholarships and programs, and 52 vocational training scholarships through Don Bosco.

SDG #5 (Gender Equality):

Qalaa believes in fostering a highly inclusive work environment that promotes women's influence and impact. Our female empowerment strategy focuses on supporting women in the workplace and ensuring they are provided with fair and equal opportunities in leadership and management positions, as per the principle of "Gender Fairness and Equal Opportunities". Qalaa is an active participant in local and international institutions' initiatives that enhance the status of women and achieve equality and equal opportunities between the sexes, such as being an active participant in the Gender Accelerator, UNGC initiative. Qalaa's management understands and has integrated the SDGs framework across the company's operations, mindset, and practices, including prioritizing SDG 5 – Gender Equality. In 2020, and in line with the company's strategy, Qalaa's Co-Founder and Managing Director Hisham El-Khazindar co-chaired the "Closing the Gender Gap Accelerator" model launched by Egypt and the World Economic Forum. Additionally, in early 2022, Qalaa Holdings became a signatory to the Women Empowerment Principles (WEPs) among an international network of high-performing companies that are advancing diversity and inclusion in the private sector. The initiative is composed of a set of seven principles established by UN Women and the UN Global Compact (UNGC) to improve gender equality at the company, marketplace, and community levels.

Qalaa Holdings and its subsidiary, ERC, have launched diverse community development programs that target training and empowering women to fill the gender gap. Currently, c. 50% of our direct and indirect beneficiaries from our community development programs are women, reaching c. 170,000 beneficiaries.

SDG #10 (Reduced Inequality):

The ultimate goal of all our initiatives and projects is to help reduce economic and social inequalities by building capacities through education and human capital development. Qalaa Holdings and its subsidiaries empower women, youth, and individuals with disabilities through its different community development initiatives:

Tamkeen and Mashrouy: for income raising and the empowerment of youth and women.

Reyada: for youth volunteering and capacity building

Takaful: for people with disabilities.

Oil & Gas:

Qalaa Holdings provides green solutions in the field of decarbonization through its energy subsidiaries: TAQA Arabia, a “one-stop-shop” fully-fledged energy distribution and utilities leader in the private-sector in Egypt and a pioneer in energy distribution in several countries in the Middle East and Africa, and the Egyptian Refining company (ERC), the USD 4.3 billion greenfield petroleum refinery and Egypt’s largest state-of-art PPP infrastructure megaproject.

QH supports the government’s goal of maximizing energy production from local resources, diversifying supply, reducing the intensity of energy consumption, and transitioning to low carbon pathway in the electricity sector, primarily through:

- Installing additional renewable energy (RE) capacities
- Accelerating the scale-up of on-grid renewable energy
- Improving energy efficiency across the company’s operations and portfolio, substituting diesel fuel power plants with solar plants

Qalaa Holdings and its subsidiaries support Egypt’s NDC to reduce GHG emissions by 65% through benchmarking and setting a decarbonization plan for ERC to implement low carbon technologies in all upstream and downstream activities, primarily through our subsidiary TAQA Arabia.

Sustainable Transport:

Qalaa Holdings is actively working on converting its buses, cars, and trucks to ensure they operate on fuels with lower carbon intensity (i.e. natural gas) through its subsidiary TAQA Arabia.

Sustainable Industry:

Qalaa is mobilizing and facilitating compressed natural gas (CNG) and mini solar PV solutions to accelerate the transition to greener economy through TAQA Arabia, which distributes natural gas for vehicles through CNG stations, branded as Master Gas and located in several cities across the country. Master Gas owns 47 CNG stations and 13 conversion centers established in major locations. Master Gas converts around 23,500 vehicles per year and has an ambitious plan to increase the rate of car conversions to more than 8,000 vehicles per year and increase the number of filling stations to 108 stations by 2023. Master Gas’s CNG stations have contributed to preserving the environment by reducing CO2 emissions comparing to gasoline 70,896 tons and comparing to diesel 82,172 tons.

Sustainable Building and Urban Cities:

Qalaa promotes sustainable practices across its urban development operations and its new buildings through implementing standards and practices that ensure low carbon emissions. This is mainly achieved through GlassRock, which is considered the biggest manufacturer of rock wool and the sole manufacturer of glass wool in Egypt, offering high performance, efficient, and sustainable insulation solutions for thermal, acoustic, and fire applications engineered

by expert local teams, providing rock wool and glass wool for construction, industrial, agricultural, transportation, and other OEM sectors. GlassRock also exports its products to key markets in North Africa, the GCC, Southern Europe, and Turkey.

Sustainable Waste Management:

In line with the governments' vision to increase waste-to-energy contributions and create a safe, efficient, and effective waste management, disposal, and recycling system that protects the natural environment, Qalaa's solid waste management subsidiary Tawazon has maintained strong efforts to provide cleaner and alternative fuels recycled from waste --such as biomass-derived fuel (BDF), solid recovery fuel (SRF), and refuse-derived fuel (RDF) --to heavy energy consumers as a source of thermal energy throughout 2021.

Tawazon, a full-service solid waste management company, is pioneering in circular waste-to-energy solutions by recycling waste into environmentally friendly biofuels. Tawazon holds two companies: the Egyptian Company for Solid Waste Recycling (ECARU), a solid waste management service operator, and the Engineering tasks Group (ENTAG), a solid waste management engineering and contracting company that has consulted on more than 85 projects in Egypt and in several Arab countries and maintained an international presence with projects in Saudi Arabia, Malaysia, Libya, Sudan, Oman, and Syria.

The company's short- to medium-term focus is on providing biomass and RDF as an alternative fuel to heavy energy consumers, such as cement factories, and feedstock to medium-density fibreboard (MDF) factories and pulp plants. As of the end of July 2022, the company produced and distributed 561,834 tons of RDF, 1,420,048 tons of organic compost, and 1,563,682 tons of biomass.



SDGs Milestones

We build sustainable businesses that are fully aligned with, and enable the transition to, a green economy. Through our energy subsidiaries, ERC, TAQA Arabia, and Tawazon, we aim to provide clean energy solutions at affordable prices and substitute imported materials with local alternatives. We also seek to further our commitment and expand our alternative energy mix to help achieve the Egyptian government's strategy to generate 20% of its total energy from renewables by 2022.

In line with this, we remain dedicated to investing in renewable energy activities, reducing our carbon footprint, and lowering our harmful emissions. We are steadily achieving this through the deployment of multiple projects across our footprint, including the ERC and TAQA Arabia's solar power plant in Benban Solar Park. We have also introduced state-of-the-art technologies at TAQA Arabia in support of the government's plan to expand the use of natural gas by converting vehicle engines to run on dual fuel and use both natural gas and diesel.

Other subsidiaries that have impacted energy management include Tawazon, ECARU, GlassRock, Uniboard, and Nile Logistics. Our solid waste management subsidiary, Tawazon, has offered waste-to-energy solutions by providing alternative fuels to heavy energy consumers. Since 2015, Tawazon has supplied companies in heavy industries with nearly 1,485,122 tons of sustainable biomass. The company also recycles municipal and agricultural waste into useful products, such as compost and animal fodder. Moreover, ECARU produces biomass from agricultural waste, and Nile Logistics uses the Nile River, a more environment-friendly mode of transportation, to link producers, exporters, and importers to local and global markets. GlassRock also produces energy-efficient insulation materials, such as glass wool and rock wool, while Uniboard uses recycled wastepaper as one of the main raw materials in the production of duplex boards.



Qalaa Holdings is committed to contributing to fostering and nurturing sustainable cities and communities in which it and its subsidiaries operate. Qalaa's subsidiaries support various aspects of sustainable transportation, reducing emissions through TAQA Arabia's Dual-Fuel technology, which allows fuel vehicles to run on a Dual-Fuel system mixing both diesel and natural gas simultaneously during the engine's compression process, thus delivering much better power and efficiency while reducing the truck's diesel consumption by 30%.

We also remain committed to ensuring adequate recycled solid waste and promoting the utilization of waste management to preserve and add value to natural resources. Qalaa's subsidiaries are involved in these efforts, such as Tawazon, which recycles waste into environmentally friendly alternatives to coal and natural gas, such as biomass-derived fuel (BDF), solid recovery fuel (SRF), and refuse-derived fuel (RDF) to heavy consumers as a source of thermal energy.

Tawazon/ECARU at Dina Farms makes 100% organic compost from feedstocks manure (average 100k tons annually), which serves as good input in organic farming, decreases reliance on chemical fertilizers, and reduces the water consumption rate by three times compared to other fertilizers.



Alongside complying with environmental laws across our footprint, we have developed a comprehensive, progressive, and proactive environmental policy to guide our investment decisions and govern our subsidiaries. Our policy incorporates several goals and practices, including conducting a thorough environmental impact study before making any investments; prioritizing efficient use

of resources to minimize waste and depletion of natural resources; actively pushing industries and communities toward the use of cleaner energy; investing in the latest technologies for waste management; and investing in the research and development of new technologies to reduce emissions and minimize waste. Our framework also encompasses producing annual reports on our performance to celebrate our strengths and identify and address weaknesses.

Qalaa Holdings incorporates these practices across all its subsidiaries. We employ strict waste management policies, with some subsidiaries using waste as input to produce a variety of materials that range from clean alternative energy (Tawazon) to duplex boards (Shorouk, a subsidiary of National Printing Company). At ERC, we operate an environmentally friendly closed-circuit cooling system that efficiently utilizes a limited water supply and reuses it in the cooling process with the aid of cooling towers. ERC also performs regular upgrades, including the installation of environmental monitoring equipment at Cairo Oil Refining Company (CORC), our neighboring refinery. At Dina Farms, we use the world's most technologically efficient irrigation system to reduce water consumption, while El Baddar recycles paper and other materials in the production of packaging and printing products.

Our portfolio also boasts the efforts of TAQA Oil Marketing, which complies with Egyptian environmental law No.4 issued in 1994 in disposing of all forms of waste resulting from operations. This includes the disposal of solid contaminated waste through governmental approved contractors, while contaminated wastewater is pumped back into the refinery to be treated accordingly. TAQA Power has also efficiently optimized paper consumption through the implementation of a document retention policy (DRP).



Investing in Sustainable Buildings

- USD 70 million investment in sustainable insulation materials companies by GlassRock
- 40% reduction in CO₂ emissions in buildings that use GlassRock insulation materials

Mobilizing Capital to Invest in Cleaner Energy

- Providing energy to more than 1.5 million customers
- Master gas owns 47 CNG stations and 13 conversion centers scattered in major locations
- Introduction of the Dual-Fuel technology in Egypt for the first time in 2020 by TAQA Arabia
- Inauguration of TAQA Volt by TAQA Arabia, which focuses on developing and managing vehicle charging stations (13 charging units are already operational)

Prioritizing Decarbonization

- ERC is the first company in the Egyptian Oil and Gas Sector to publish its GHG Inventory Report
- At ERC, all refinery heaters are equipped with a low NO_x burner, which maintains the concentration of NO_x at low levels, in addition to using natural gas as a clean fuel
- Installing double sealing systems at ERC for floating surface tanks at CORC to reduce greenhouse gas emissions
- ERC has an environmental monitoring program in place for ambient air in the surrounding area of the refinery and stacks emissions to keep track of the air quality in surrounding communities

Pioneering The Commitment to the Net-Zero Challenge (SDG 13):

Qalaa Holdings is the first Egyptian company to sign an international pledge that aims to curb the effects of global warming and build a net-zero carbon economy

for the future. As signatories of the Business Ambition 1.5°C, we will measure, quantify, and accordingly reduce our greenhouse gas emissions at a pace and scale that is necessary to limit global warming. By signing the pledge, we are further underscoring our accountability, responsibility, and leadership toward carbon neutrality and achieving a more sustainable future for coming generations.

Prosperity

Qalaa Holdings invests in various businesses across a wide range of sectors, ranging from industry to infrastructure. We aim to provide innovative solutions and facilitate knowledge transfer, introduce international best practices, and empower employees to spur innovation in all sectors in which we invest.



SDGs Milestones

We build sustainable businesses that are fully aligned with and enable the transition to a green economy. Through our energy subsidiaries ERC, TAQA Arabia, and Tawazon, we aim to provide clean energy solutions at affordable prices and substitute imported materials with local alternatives. We also seek to further our commitment and expand our alternative energy mix to help achieve the Egyptian government's strategy to generate 20% of its total energy from renewables by 2022.

In line with this, we remain dedicated to investing in renewable energy activities, reducing our carbon footprint, and lowering our harmful emissions. We are steadily achieving this through the deployment of multiple projects across our footprint, including the ERC and TAQA Arabia's solar power plant in Benban Solar Park. We have also introduced state-of-the-art technologies at TAQA Arabia in support of the government's plan to expand the use of natural gas by converting vehicle engines to run on dual fuel and use both natural gas and diesel.

Other subsidiaries that have impacted energy management include Tawazon, ECARU, GlassRock, Uniboard, and Nile Logistics. Our solid waste management subsidiary, Tawazon, has offered waste-to-energy solutions by providing alternative fuels to heavy energy consumers. The company also recycles municipal and agricultural waste into useful products such as compost and animal fodder. Moreover, ECARU produces biomass from agricultural waste and Nile Logistics uses the Nile River, a more environment-friendly mode of transportation, to link producers, exporters, and importers to local and global markets. GlassRock also produces energy-efficient insulation materials such as glass wool and rock wool, while Uniboard uses recycled wastepaper as one of the main raw materials in the production of duplex boards.

Egypt’s Vision 2030, coupled with the tremendous efforts exerted in localizing industries and SDGs, while efficiently using local resources, thus positioning Qalaa as a trend-setter in the market. We believe that empowering local skilled labor is a sustainable business practice that will positively impact Egypt and the region. Our regular incremental increase in existing investments drives job creation and improves economic prospects, which we fuel at every possible opportunity, while contributing to closing the market gap. To further stimulate our economic growth, we also provide our employees with vocational training and other educational opportunities to reduce skill gaps and bolster capabilities. At our subsidiaries, employees also get to interact with, and learn from, onsite specialists and engineers.



- 80+ businesses founded and developed
- 40,000 jobs created
- 17,000 employees currently employed by Qalaa and its subsidiaries
- c. 2,600 people trained in job market skills by ERC
- More than 10,767 workers trained at ASEC Engineering Academy’s training program

Part and parcel of Qalaa Holdings’ mission is the goal to invest in a diverse array of businesses that contribute to sustainable economic growth and job creation in Egypt and across Africa. Thanks to Qalaa’s appeal as an investor, we have built and acquired more than 80 businesses throughout the years and created over 40,000 jobs across our footprint. Qalaa’s attractiveness stems from our positive contributions to the Egyptian and African economies and our commitment to



Investing in Energy Infrastructure Solutions

- Master Gas has been innovating its technology “CNG” by bringing the “Virtual Pipeline” technology to Egypt for the first time
- TAQA Arabia led the only 100% fully Egyptian consortium among the 32 developers and launched its 65 MW solar power plant in Benban Solar Park
- USD 4.3 billion refinery to provide environmentally friendly Euro V diesel and refined products for the local market

Sustainable Transport Solutions:

- 50 river barges, serving as a one-stop-shop for transporting goods efficiently and economically

Waste Management Infrastructure:

- 531,228 tons of RDF, 1,327,934 tons of organic compost and 1,485,122 tons of biomass

Among Qalaa's investments is TAQA Arabia, our "one-stop-shop" fully-fledged energy distribution and utilities subsidiary, which led the only 100% fully Egyptian consortium among the 32 developers and launched its 65 MW solar power plant in Benban Solar Park in Aswan, and our flagship energy project, ERC, which was constructed under the supervision of leading international experts from GS Engineering & Construction Corp. and Mitsui & Co. Ltd. They provided essential transfer of knowledge and innovation to local workers throughout the project's lifecycle. It utilizes advanced technology to convert the lowest value fuel oil into middle and light distillates and supports transportation and infrastructure by investing in water and rail transport to reduce pressure on congested highways in Egypt and other regional countries.

As for Qalaa's investments in sustainable transport solutions, we have Nile Logistics, a transportation, port management, and logistics platform that utilizes environmentally friendly river barges as an alternative to trucking. Furthermore, through TAQA Arabia, the company introduced Dual-Fuel technology for the first time in Egypt (adding a small component to a diesel engine), enabling diesel fuel trucks to run on a Dual-Fuel system mixing both diesel and natural gas simultaneously during the engine's compression process, thus delivering much better power and efficiency while reducing the truck's diesel consumption by 30%.

In the area of waste management, Qalaa's solid waste management subsidiary Tawazon (parent company of ECARU and ENTAG), a pioneer in circular waste-to-energy solution, has maintained strong efforts in providing cleaner and recycled alternative fuels from waste, such as biomass-derived fuel (BDF), solid recovery fuel (SRF), and refuse-derived fuel (RDF) to heavy consumers as a source of thermal energy throughout 2021.

Leveraging Partnerships to Unlock Sustainable Economic Growth (SDG 17)



Partnerships for the Goals

- Partnership for financing: partner of choice for c.6 DFI's
- 5+ governmental organizations in Egypt
- 44 civil society organizations as partners
- 13+ academic and international organizations

Qalaa Holdings strongly believes in the power of partnering with like-minded local and international organizations, such as the UNGC and WEF, which work toward common goals. Our partnerships enable us to further our reach and add more value to our communities, which is why we partner with governments, civil societies, international organizations, and thinktanks in every country we work in to increase the size and scope of our impact. Additionally, we actively encourage other companies to adopt and work toward the SDGs. We are also members of the Integrity Network Initiative, which seeks to bring the Egyptian business community together to fight corruption and create an efficient and enabling business environment. Furthermore, ERC presents a crucial import substitution project that will save Egypt around USD 600 million to USD 1 billion annually, significantly supporting the Egyptian economy.

Qalaa Holdings continues to be the partner of choice for Developmental Finance Institution (DFI) partners due to its compliance with rigorous environmental and social development standards, as well as robust reporting mechanisms and continuous improvements. This was amplified in the ERC project, the company's landmark investment, which attracted the support of top Egyptian, Gulf and international investors, global export credit agencies, and DFIs.

Qalaa Holdings and its subsidiaries work closely with our DFI partners to enhance the company's compliance and reporting frameworks. This includes the adherence to IFC's performance standards on environmental and social performance, among others. A significant number of our subsidiaries report quarterly on their environmental performance to our DFI partners to ensure transparency and ongoing dialogue. Moreover, Qalaa Holdings has entered a number of public-private partnerships (PPPs) in order to implement its large-scale projects, such as Benban, as well as several gas projects, with Qalaa leading these partnerships. Additionally, Qalaa has partnered with the Egyptian government in several social development programs alongside ministries, such as the Ministry of Education and the Ministry of Planning.

ERC Community Development Initiatives

ERC has been focused on four main areas that have been identified by an Environmental and Social Impact Assessment (ESIA) conducted earlier by its team. The assessment was the most comprehensive ESIA ever commissioned in Egypt for an industrial project based on international IFC standards to minimize negative project impacts.

Despite the difficulties posed by COVID-19, ERC continued to carry on its community development programs. Its respective teams remain engaged and ready to support beneficiaries whether online or in person.

Supporting Education

In cooperation with the Ministry of Education and educational directorates in the Cairo and Qalyubia governorates, ERC launched Mostakbaly initiative to improve teaching and learning capacities within Egypt's

public education system. The initiative is part of ERC's sustainable development strategy and its ongoing efforts to advance public education in Egypt and achieve quality education for all in line with SDG 4.

Stemming from a firm belief that early years are the pillars on which future education is built, Mostakbaly focuses on kindergarten and primary school teachers. Teachers nominated for scholarships are selected based on their track record in community service activities and ability to transfer their acquired experiences and knowledge to colleagues in their schools and districts.

Moreover, teachers who receive the Mostakbaly scholarship are given trainings at AUC where they are provided with e-learning skills to conduct online education. The program allows participants to play a pivotal role in successfully ensuring educational continuity, as schools were forced to shift to distance learning during the pandemic. In total, Mostakbaly has benefited 130 teachers since 2017.

Similarly, Mostakbaly continues to provide members of ERC's local community with access to better education opportunities. It provides students with opportunities to pursue undergraduate degrees in various disciplines at some of Egypt's most prestigious public and private universities. To date, the program has provided 115 undergraduate and three graduate student scholarships abroad in partnership with five universities, as well as 52 scholarships to Don Bosco. As of 2021, we provided a total of 300 scholarships.

In 2021, Qalaa Holdings celebrated five years of the Mostakbaly program, including announcing the names of 78 new beneficiaries and its efforts in impacting over 180,000 students, offering 300 scholarships in total, and developing 45 schools.

Women and Youth Economic Empowerment

ERC has continued to promote the economic empowerment of women and youth through its Tamkeen and Mashrouy initiatives. Tamkeen provides training in economic empowerment projects and aims to support female entrepreneurs in developing their living conditions, while Mashrouy specializes in youth economic empowerment. In 2021, Tamkeen and Mashrouy had a total of c. 8,900 and c. 113,000 direct and indirect beneficiaries, respectively.

Youth Volunteering and Capacity Building

Driven by its firm belief that youth are the best intermediaries for maintaining sustainable efforts and passing them to future generations, ERC prioritizes

encouraging them to volunteer and participate in community initiatives. As such, the company launched its Reyada program to train volunteers on managing social initiatives. In 2021, Reyada had 100 volunteers direct and c. 1,400 direct and indirect beneficiaries.

Supporting Individuals with Special Needs

ERC launched Takaful to provide community members with special needs with the opportunity to integrate within, and contribute to, their communities, in partnership with governmental institutions and local development associations. As of 2021, the total number of direct Takaful beneficiaries reached 1,500, while its indirect beneficiaries reached 9,500.



WE INVEST IN THE DEVELOPMENT OF EGYPTIAN YOUTH WHO WILL SHAPE A BETTER AND MORE PROSPEROUS FUTURE FOR OUR COUNTRY

Decarbonization Plans and Target Setting

Decarbonization Plans – Carbon Inventory Benchmarking and Mitigation Plans

Qalaa Holdings is accelerating the climate transition through capital mobilization, committing to the net-zero challenge and decarbonization plans, with efforts to control and monitor emissions showing excellent results. There is a 30% reduction in greenhouse gas emissions, achieved by transforming 4 million tons per year of heavy residuals to light petroleum products. We have enhanced the quality of ambient air through 99.9% sulphur recovery technology and removing 96,000 tons of sulphur per year. We are also supplied with advanced technology, such as the ERC Refinery stacks that are directly connected to the Egyptian Environmental Affairs Agency (EEAA) with an online real time emission monitoring system. ERC has also been producing low sulphur content diesel (Euro 5), providing new conventional burners to the Cairo Oil Refinery Company and providing double seal floating roofs for tanks in Pipeline company, all effectively reducing emissions and improving ambient air quality.

ERC also adheres to the IFC Performance Standards and Equator Principals, and it has started issuing a GHG inventory report on direct emissions and electricity consumption as a base-year report. The report follows the standards and guidance of the GHG Protocol, Corporate Accounting and Reporting Standard, the Intergovernmental Panel on Climate Change (IPCC), and the American Petroleum Institute (API) Compendium, and it complies with ISO 16064 requirements. The GHG report's data quality, uncertainty, and QA/QC are verified by a third-party consultant to ensure data reliability.

Key Metrics and Indicators for Measuring Our Progress Egyptian Refining Company (ERC)

ERC, Qalaa Holdings' flagship USD 4.3 billion refinery, was inaugurated in 2020 by H.E. President Abdel Fattah El Sisi. Endorsed by the Egyptian

government, the project is a solid example of a public-private partnership (PPP). It integrates economic, social, and environmental returns that are in line with Egypt's Vision 2030 and President El Sisi's mandate to attract private investors to invest in the localization of industries and value-added national projects.

ERC is expected to have resounding, multifaceted effects on Egypt, economically, environmentally, and socially. It is a crucial import substitution project that will save Egypt around USD 600 million to USD 1 billion annually. It also conducts several community development programs to improve the lives of people in the Mostorod area where the refinery operates.

To achieve energy efficiency, ERC takes atmospheric fuel oil from the adjacent government-owned refinery, CORC, and transforms it into Euro V diesel, considered to be the cleanest fuel of its type in the world. It prevents 186,000 tons of SO₂ and 96,000 tons of sulfur from being emitted into Cairo's air annually. Moreover, ERC established a three-stage industrial wastewater treatment plant, in accordance with the highest local and international standards. The plant reduces water consumption and water pollution as it is not diverted to the Ismailia Canal.

ERC is the first Egyptian oil and gas company to publish a GHG Inventory Report. ERC has developed a robust and reliable integrated GHG system, including a GHG Monitoring and Reporting Plan (MRP) on the corporate level, based on international best practices and calculation methodologies. The system enables the identification and quantification of GHGs emissions from all emission sources, managing GHG risks and identifying reduction opportunities, public reporting and participation in voluntary GHG programs, participating in mandatory reporting programs, participating in GHG markets, and recognition for early voluntary action. ERC's GHG Inventory is calculated using the standards and guidance of GHG protocol, corporate accounting, and reporting standards, IPCC, API, for

the Natural Gas and Oil Industry 2021 standards, in addition to complying with IFC Performance standard and consistent with ISO 14064-1:2018 requirements.

ERC also leads the way in regards to decarbonization. At ERC, all refinery heaters are equipped with a low NOx burner, which maintains the concentration of NOx at low levels, and natural gas is used as a clean fuel at. The subsidiary is also installing double sealing systems for floating surface tanks at CORC to reduce GHG emissions. Moreover, ERC has an environmental monitoring program in place for ambient air in the surrounding area of the refinery and stacks emissions to keep track of the air quality in surrounding communities.

ERC Environmental Indicators

Waste Disposal (tons/year)

	2021
Hazardous Waste	20
Empty Chemical Containers	36
Bulbs and Transformers	0.2
Sludge	1,620
Non-Hazardous Waste	334
Caustic Soda	0.3

Wastewater Treated/Reused (m³)

	2021
ERC Refinery	3,992,985

City Water Use (m³)

	2021
ERC Refinery	7,074,024

TAQA Arabia

Driven by its goal to expand in renewable energy, TAQA Arabia led the only 100% fully Egyptian consortium among 32 other developers and launched its 65 MW solar power plant in Benban Solar Park in Aswan, Egypt, the largest solar park in the world. This EGP 1.35 billion investment plays a crucial role in Egypt's 2022 plan of producing 20% of its electricity needs through renewable resources. TAQA transmits and distributes natural gas connections to more than 1.5 million customers across 18 governorates (48 cities) throughout Egypt and is expected to reduce emissions by c. 78,000 tons annually, as well as prevent 2 million GHG tons per annum from its solar plant. It also continues to examine opportunities for expansion into alternative energy and wind power.

TAQA Arabia introduced Dual-Fuel technology for the first time in Egypt (adding a small component to a diesel engine), allowing the diesel fuel truck to run on a Dual-Fuel system mixing both diesel and natural gas simultaneously during the engine's compression process, thus delivering greater power and efficiency while reducing the truck's diesel consumption by 30%. In 2021, TAQA Arabia signed with Ostool, operator of the largest land trucking fleet in Egypt, and has been



transitioning its truck fleet to dual fuel. TAQA Arabia has also been one of the first companies to acquire a regulatory license for building and developing EV charging stations; this comes alongside the company's plan to shift its power services to renewable energies and cater to a wide range of clients in need of sustainable, environmentally friendly solutions. To that end, TAQA inaugurated TAQA Volt, a subsidiary focused on developing and managing vehicle charging stations, which already has 13 charging units and is targeting to add over 50 new charging units yearly. As for cars, TAQA has been expanding the use of natural gas, reaching around 28,000 cars in Egypt. Within the framework of collaboration between the Ministry of Mines and Hydrocarbons in Equatorial Guinea, TAQA Arabia has successfully transferred its knowledge and know-how to introduce the CNG/GNV technology, enabling cars to run on natural gas for the first time in Equatorial Guinea. The collaboration between MMH's operations team and TAQA's technical experts has seen the successful conversion of the first five cars to run on CNG. Kits were safely installed, training for drivers and technicians was conducted on site, and cars were calibrated to international standards. The goal of this successful cooperation is to convert 50% of cars in Equatorial Guinea to run on CNG. In cooperation with the Ministry of Mines and Hydrocarbons in Equatorial Guinea, TAQA Arabia intends to deploy all its efforts, experience, and know-how regarding the development of gas infrastructure projects through several phases with the aim of achieving and supporting Equatorial Guinea's commitments toward net-zero CO₂ emissions by 2050.

In 2021, TAQA PV received the first tranche of a USD 10 million loan from the European Bank of Reconstruction and Development (EBRD), under the Southern and Eastern Mediterranean Private Renewable Energy Framework (SPREF). TAQA PV is Egypt's first recipient of this financing package, which was approved in 2020 and will be used to mobilize private finance for

renewable energy projects in the SEMED region. The tranche, amounting to USD 4.2 million, will finance the construction of a 6 MW solar photovoltaic power plant that will supply energy to Dina Farms, Qalaa Holdings' agrifoods subsidiary. The project is in line with both Egypt's energy sector transition and target to achieve 42% generation from renewable sources by 2035, as well as Qalaa Holdings' overall environment sustainability strategy to enable and drive growth in Egypt's green economy. Furthermore, TAQA Arabia is currently developing another solar PV plant in ASCOM company for mining and geology, one of Qalaa Holdings' mining companies, in addition to the newly established 5 MW Solar PV power plant dedicated for the Red Sea touristic destination "Soma Bay".

TAQA Gas is expanding its operations and growing its market share in CNG. It presents CNG as a more cost-effective alternative to gasoline to capitalize on the recent cuts to energy subsidies. The company actively works toward expanding the use of natural gas by introducing the latest available technologies, in line with Egypt's national strategy to foster the use of natural gas as an economically and environmentally viable source of fuel for vehicles. It has successfully increased the number of CNG filling stations to 50 in 2021, up from 16 stations in 2020. TAQA Gas has also received several certifications, including ISO 14001: 2015, EGAS License of Hazardous Waste Handling, and EGAS Environmental Audit Reports. The company regularly conducts environmental impact assessments (EISs) and contracts professional third parties to conduct environmental measurements.

Moreover, and in line with the government's natural gas transition plan, TAQA Arabia seeks to expand Egypt's network of natural gas stations along with two other publicly owned stations, targeting the construction of 200 stations around the country by 2023. In 2021, it participated in the Go Green exhibition, during which the Central Bank of Egypt launched a multi-billion

EGP program to encourage car owners to outfit their vehicles with dual-fuel engines, as part of the transition plan. During the exhibition, H.E. President Abdel Fattah El-Sisi visited TAQA Arabia's booth, where it showcased its latest technologies to support the state's plan to expand the usage of natural gas by converting vehicle engines to run on dual fuel, using both natural gas and diesel.

In line with the holding company's strategies, TAQA Oil Marketing employs a strict safety, health, and environment (SHE) system and has risk assessment tools in place to assess, monitor, and mitigate environmental risks. Accordingly, it uses high quality materials and equipment throughout its supply chain. Workers are regularly trained on how to respond to various risk scenarios to ensure their capability to handle petroleum products without posing environmental risks.

Going forward, TAQA aims to expand its footprint in Egypt's renewables sector in parallel with the government's strong energy transition movement. As such, TAQA is currently exploring several small-to-medium scale industrial power generation projects, ranging from 40 MW to 150 MW.

TAQA Gas Environmental Indicators

Emissions

	2019	2020	2021
Scope 1	1,021.3	1,046.3	1,213.8
Scope 2	1,085.7	1,183.8	1,343.6

Overall Annual Consumption

Utility	2019	2020	2021
Electricity (KW/yr)	2,171,318	2,367,507	2,687,120
Diesel (liters)	381,082	390,415	452,881
Maintenance (EGP)	1,507,000	1,773,112	2,145,465

Waste Disposal (tonne/yr)

	2019	2020	2021
Hazardous Waste	1.57	2.1	2.2
Empty Chemical Containers	0.33	1.3	1.3
Batteries	0.69	0.95	0.95
Plastic	14.75	36.38	38
Wood	0	2.25	2.5
Steel	162.96	77.61	78

TAQA Oil and Marketing Environmental Indicators

Overall annual consumption

Utility	2019	2020	2021
Electricity (KWH/year)	210,045	203,625	364,012
Diesel (liters)	2,400	3,100	3,100
Maintenance (EGP)	746,179	1,281,951	1,195,944



Emissions (part per million)

	2020						2021					
	CO ₂	CH ₄	NO ₂	HFCs	PFCs	SF ₆	CO ₂	CH ₄	NO ₂	HFCs	PFCs	SF ₆
Suez Terminal	415 ppm	0	0.1 ppm	0	0	0	437 ppm	0	0.62 ppm	0	0	0

Energy Intensity in Manufacturing/Ton of production

	Electricity (KWH)/ton		
	2019	2020	2021
Suez Terminal	0.29	0.26	0.42

City water use (m³)

	2019	2020	2021
Suez Terminal	3,200	3,200	3,200

Waste disposal by item (kilogram/year)

	2019	2020	2021
Hazardous Waste	160	40	0.270
Empty Chemical Containers	20	60	0.590
Bulbs and transformers	20	0	0
Batteries	30	0	0.5
Sludge	3,700	1,670	3,280
Scraped products	0	0	0
Carton and Paper	0	0	0
Plastic	0.66	0.855	0
Paper	0.66	0.855	1.760

Nile Logistics

The river transportation subsidiary remains one of the most fuel-efficient and environmentally friendly methods of transportation available in Egypt, Sudan, and South Sudan. Nile Logistics has a large fleet of fuel-efficient, environmentally friendly river barges that transport cargo along the Nile. The company continues to transport the equivalent of 20–40 truckloads on each barge using a fraction of the fuel and money usually invested in other modes of transport.

GlassRock

GlassRock's thermal insulation solutions can save up to 40% of the cooling and heating load and minimize the global CO₂ footprint from heating and cooling while using a calculated percentage of recycled materials. Building insulation can save 80% of the energy needed for heating or cooling, thus expanding the asset's life span. The USD 70 million sustainable insulation materials company maintains a total annual production capacity of 30,000 metric tons of rock wool and 20,000 metric tons of glass wool. Both materials are considered key in environmentally friendly construction as they are used to reduce CO₂ emitted by buildings. GlassRock adopts the most efficient techniques and integrates natural resources in an effort to reduce CO₂ emissions and preserve energy during the production process to deliver environmentally friendly products. During the production process, GlassRock's main objective is reducing carbon emissions, where 70–80% of rock wool residue is recycled, thus tremendously reducing waste.

El Baddar

The National Printing Company's printing and packaging subsidiary, El Baddar, develops corrugated sheets and boxes that are widely used for shipping, particularly in the food industry. Its products are renowned in the market for their strength, durability, lightness, recyclability, and cost-efficiency. The company uses recycled papers and material in the production of packaging and printing products. El Baddar's new state-of-the-art facility is expected to expand El Baddar's product range and enable the company to penetrate new markets.

Dina Farms

With an agricultural footprint spanning over c. 10,000 acres, Dina Farms is the leading private sector dairy farm in Africa. Throughout its operations, Dina Farms applies an efficient and advanced irrigation systems technology (drip and pivot irrigation) and practices sustainable and responsible farming.

A 6 MW solar photovoltaic power plant is currently under construction at Dina Farms to cover 23% of its total energy consumption with clean energy. The plant is constructed in collaboration with the EBRD and TAQA PV for Solar Energy. It will be one of the first green private-to-private projects in Egypt. TAQA PV will sell all its generated energy to Dina Farms under a 25-year power purchase agreement (PPA).

Tawazon

Qalaa's solid waste management subsidiary Tawazon (parent company of ECARU and ENTAG), a pioneer in circular waste-to-energy solution, has maintained strong efforts in providing cleaner and recycled alternative fuels from waste, such as biomass-derived fuel (BDF), solid recovery fuel (SRF), and refuse-derived fuel (RDF) to heavy consumers as a source of thermal energy throughout 2021. As of the end of July 2022, the company produced and distributed 531,228 tons of RDF, 1,327,934 tons of organic compost, and 1,485,122 tons of biomass. In line with the government's strategy to create new, decentralized approaches for agricultural waste collection and recycling to create "green jobs"

and promote the efficient use of resources, Tawazon/ECARU has been operating in Dina Farms since 2016 in circular waste management, making 100% organic compost from feedstocks manure (average 100k ton annually), which serves as good input in organic farming, decreases reliance on chemical fertilizers, and reduces the water consumption rate by three times compared to other fertilizers. Moreover, applying biological treatment technology to feedstock manure helps eliminate diseases and nematodes.

ECARU

ECARU is responsible for collecting, transporting, and processing agricultural waste. For the past six years, the company has been a regional leader in biomass production, a process that recycles agricultural residues that would otherwise be openly burned into fuel for heavy industries, such as cement manufacturing. The processing capacity of the six MRF's operated by ECARU in Dakahlia Governorate is c. 1,580 tons per day.

ENTAG

ENTAG is a solid waste management, engineering, and contracting company with multiple sorting and composting facilities in Egypt. The company has consulted on more than 85 projects in Egypt and in several Arab countries, while maintaining an international presence with projects in Saudi Arabia, Malaysia, Libya, Sudan, Oman, and Syria. In 2017, ENTAG established an Omani subsidiary that is 60% owned by ENTAG Egypt and 10% owned by ECARU.



Managing Lives and Livelihoods in Light of COVID-19

Managing lives and livelihoods in light of COVID-19

We deeply value our people and believe they are the backbone of the company, and so, we invest greatly in ensuring that they are well cared for. Qalaa Holdings prioritized the safety of its 17,000+ employees during the onset of COVID-19 and its variants. The company put strict protocols in place to ensure the health and safety of all stakeholders for the duration of the crisis, with a focus on the following:

Business Agility

To ensure business continuity and agility across its subsidiaries, Qalaa Holdings:

- Established a specialized committee to monitor, manage, and oversee response strategies across its footprint
- Developed contingency plans and business continuity protocols, including supply chain and inventory management
- Reviewed liquidity positions and short-term financial obligations to ensure efficient cash management and reduce costs
- Invested in strengthening IT infrastructure to support remote work

Balancing Lives and Livelihoods

Qalaa Holdings maintained its full workforce without layoffs since the spread of COVID-19. A portion of the salaries of top management was temporarily deferred to ensure that the company could meet its financial obligations. Throughout this challenging period, the company and its subsidiaries remained fully functional and open for business. All subsidiaries continued to cater for the needs of their various stakeholders safely and efficiently, monitoring the evolving situation in a manner that allowed companies to make informed and rational decisions that ensured health and safety and maintained business continuity.

Supporting the Fight to Preserve Jobs

Qalaa Holdings joined the Ministry of Planning and Economic Development's "Egypt Will Pass" initiative,

a campaign that aims to fight the COVID-19-induced employment crisis and encourage the business community to maintain workforces and provide new job opportunities. The campaign included announcing plans for four new projects that could potentially provide an additional 2,000 jobs. Qalaa Holdings and its subsidiaries have donated EGP 30 million to the Tahya Masr Fund to support its COVID-19 vaccination efforts.

Supporting Front Liners

Through our energy subsidiary TAQA Arabia, Egypt's largest private sector energy distribution company, we supported hospitals and medical teams by:

- Partnering with the American Chamber of Commerce (AmCham) through the "AmCham Private Sector Alliance Against COVID-19", which gathered donations to purchase critical medical supplies and personal protective equipment (PPE) through UNICEF's Global Supply Division
- Contributing to the Ahl Masr Foundation to support COVID-19 patients and medical staff
- Participating in the Tahya Masr Fund initiative "Partners in Prosperity"
- Assisting the Matareya Nephrology Institute through ERC in offering mobile healthcare services to limit the volume of patients visiting the institute
- Providing support in the form of medical supplies through ERC to Al Khosous Specialized Hospital to enhance the quality of healthcare provided to the city's locals
- Providing financial support through ERC to the People's Hospital in Qalyubia to renovate the hospital's receptions, emergency department, and operating rooms in an effort to improve the healthcare status of children across Egypt's governorates
- It is worth highlighting that ERC's efforts directly and indirectly benefitted over c. 8,000 patients.

Our Way Forward

As Qalaa Holdings continues to fuel sustainable development in Egypt and the region, we will continue to invest in diversified initiatives that assist us in realizing this goal. As such, we intend to:

- Take account of existing policies and practices and work with subsidiaries to set and maintain group-wide HSE standards
- Continue to refine our ESG monitoring and reporting structure to collect measurable data and, accordingly, set indicators/KPIs at the holding, subsidiary and platform levels for responsible resource consumption, production, and waste management
- Ensure continued awareness of all sorts of risks across all subsidiaries and leverage opportunities to achieve shared value and develop best practices
- Continue adopting sound, sustainable, efficient, and inclusive practices across all stakeholders in current and potential investments
- Examine internal policies to ensure the adoption of international best practices in health, safety, governance, labor, and the environment
- Conduct industry-specific training, as needed, for senior managers in sustainability and SDG awareness at the holding and subsidiary levels
- Assist individual managers in setting goals to gradually integrate sustainability into all business operations and performance assessments
- Prioritize benchmarking carbon footprint comprehensively and continue voluntary sustainability reporting on progress
- Continue to explore and identify ways to reduce carbon footprint across our investment portfolio to reach neutrality by 2030
- Develop a plan for climate change benchmarking and set group-wide, science-based targets in line with Science-Based Targets Initiatives (SBTI)
- Seek international certifications, affiliations, and reporting agencies to ensure compliance with international best practices in all sectors

