Sidi Kerir Petrochemicals Co.

www.sidpec.com

2020 Sustainability Report







INSIDE THIS REPORT

CEO foreword Sidpec Profile

Part ONE

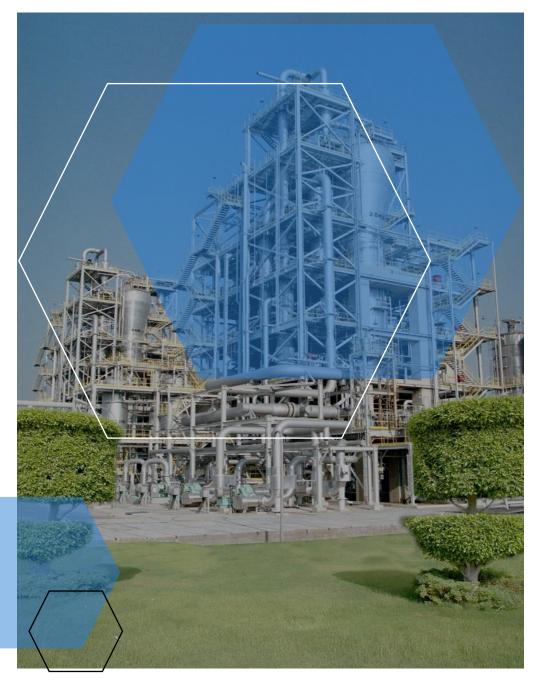
People

Part TWO

Environment

Part THREE

Community



ABOUT THIS REPORT

WE BUILD OUR FUTURE

This report includes SIDPEC sustainability activities starting from July 2019 to October 2020. This report is published on the UN Global Compact web site in November 2020.

The preparation of this report depends on our level of commitment to the ten principles through four pillars of UN Global compact. All disclosures mentioned in this report illustrate the alignment with Sustainable Development Goals (SDGs).

Last report mentioned activities during 2018 and first half of 2019 was published in 6th August 2019 (see archived reports). We appreciate your comments ,if any, and please email us at info@sidpec.com.

CEO Foreword

Dear Valued Stakeholders,

On behalf of Sidpec, it's my pleasure to introduce our annual sustainability report where your comments to our progress and efforts exerted for the purpose of sustainability are more than welcome.

SIDPEC has a global reach so that we are committed to the "Ten principles of UNGC" as a demonstration for our intent to act responsibly toward the community.

We believe in having all our business activities aligned with the global efforts to achieve the Sustainable Development Goals (SDGs).

In the last two years, **SIDPEC** faced many unprecedented challenges regarding financial issues while the effective engagement with the stakeholders had great impact on the successful business continuity.

During the second half of 2019, **SIDPEC** has faced some circumstances regarding the decrease in the prices of polymers that causes a severe interruption in the global market; in addition to the increase in energy prices and feed stock gases, and the fluctuation of the supply quantities and specifications of the feed gases. However, **SIDPEC** is still performing based on its robust strategy to overcome such tough circumstances. In 2020, while the pandemic hit the world with huge impact on the economy worldwide, **SIDPEC** continued working successfully where many measures were taken to confront the *COVID-19 pandemic*.

On the economic level, **SIDPEC** was able to achieve its production plan by 97% and marketing plan by 98% during the year 2019. Also, a wood technology company (WOTECH) was established in which **SIDPEC** shares about 28% of its capital cost, as it is considered one of the most important national projects with economic and environmental returns required to produce adhesives and wood panels from rice straw. Studies are also being prepared for the construction of facilities necessary to import the propane needed for the new projects and the ethane needed for the current production units.

Our focus was not only on the economic impact, as energy efficiency aligns with our commitment towards sustainability and reducing the environmental impact of GHGs, therefore, **SIDPEC** is proceeding to partner with KBC company to conduct a *Strategic Energy Review (SER)* program for the purpose of energy efficiency improvement and economic production.

SIDPEC has continued to show its responsibility towards society in various aspects. To mention some, providing consultation and technical support to a sister company, AMOC, till being ISO 50001:2018 Certified; supporting the link between academia and industry by providing a technical software license to help students and researcher in Faculty of Engineering, Zagazig University; participating in the initiative "with you, Egypt is more beautiful" to support people with disabilities.

Finally, I would like to thank our stakeholders for their support in expanding our business. And special thanks for dear **SIDPEC** staff with my appreciation for spirit of cooperation, unification of efforts, pursuit of more success, and overcoming obstacles to keep **SIDPEC** at its usual reputable position.



Eng. Mohamed Ibrahim Chairman & CEO

Strategy

Our commitment to business Excellence

Since 2001, **SIDPEC** has achieved the production and marketing plans during its years of business. The company sells part of its products in the local market and exports the rest to several countries.

Since the start of production, the company has achieved sustainable high percentage of profits according to the annual financial statements.

Although achieving high profits is essential to survival and growth, it is not the only parameter that reflects our commitment. Our success over a long period of time, requires taking care of all economic, legal, ethical, and discretionary responsibilities.

Consequently, sustainability involves many issues, concerns, and trade-offs, which leads us to study the different needs of interested parties and societal responsibility. **SIDPEC** generally follows the guidelines for the Standard 26000 in this regard. It also follows the directions of several standard of management systems.

Our core values are:

Excellence, Staff development, Justice and Integrity, Team spirit, Sustainability, and safety.

Our strategic Objectives are:

Maximize value added by increasing production capacity and adding new products.

Achieve Asset Integrity and focus on Interested Parties.

Our Mission:

To produce and market high quality petrochemical products within an integrated business system established on the highest standards of ethics & integrity, an efficient staff, and best updated technologies to achieve sustainable and profitable growth.

Our Vision:

Sustain leadership in the Petrochemicals' Industry in both the international and local markets.

Strategy

Achieve our strategic objectives

SIDPEC establishes annual targets, and their corresponding action plans to achieve the strategic objectives, a timeline for starting and ending the action, and how the outcome will be measured and evaluated.

The most important programs that implemented during last periods are stated below:

- 1. Preliminary works for the establishment of the PDH and PP plants.
- 2. Upgrade of control systems and other equipment.
- 3. Implementation of energy and environmental projects.
- 4. Provide awareness and training sessions regarding management systems.
- 5. Prepare to implement a process safety management.
- 6. Prepare leadership cadres in coordination with ECHEM.
- 7. Prepare for implementing an ERP system based on Oracle.
- 8. Use of the expertise of International Consultancy service providers in evaluating energy performance and developing opportunities for improvement.
- 9. Qualifying AMOC Company to comply with the ISO 50001:2018.

In the light of SIDPEC strategy, it:

Commits to apply the process safety and OH&S highest standards.

Focuses on customers' satisfaction by providing high quality product.

Integrates environment management into its day-to-day business operations.

Commits to be a good corporate citizen maintaining high ethical standards.

Considers the key success factors of the strategic goals as a framework for setting and reviewing its management systems objectives to achieve competitive edge through effective risk-based thinking.

Improves efficiency and productivity through implementing best practices.

Strives to cultivate a culture that values knowledge learning and sharing while managing the balance between shared and protective knowledge within the expectations set for the entire workforce.

Core Market

Support Petrochemicals Plan

SIDPEC is the first step towards integration in petrochemicals' industry in Egypt, and fulfilling a national objective, which is production of value-added products by using the available raw materials as well as developing related local industries.

SIDPEC produces Polyethylene (HDPE & LLDPE grades) using Ethylene which is produced by the processing of Ethane/Propane feed gas.

SIDPEC polymers trade name is Egyptene®, and it is one of the best well-known products in polyethylene industry worldwide as well as the local market.





Corporate Governance

Transparency & Accountability

SIDPEC through its corporate governance, keens to achieve transparency and justice, grants the right of accountability to the management of the company, considering the interests of labor and workers, developing investment, maximize profits, create new jobs, maintaining minority rights and small investors.

SIDPEC accounting control adopted by corporate governance by different committees like Marketing, EnMS, customer complain, safety committees.... etc., audit committees which evaluate the levels of governance applied in our business organization. Reporting of External auditors on their impartial technical opinion on the veracity and fairness of the prepared financial statements, general Assembly held annually and our existence in stock market.



During General Assembly discussing the results of the fiscal year ending 2019 took place at ECHEM Headquarters, on April 21st, 2020. The assembly was headed by ECHEM Chairman and CEO Chem. Saad Helal, Eng. Abed Ezz-Alregal representing EGPC and SIDPEC's Chairman and CEO Eng. Mohamed Ibrahim; and SIDPEC's staff was well-prepared to held strict hygiene and safety measures in order to assure the attendees' safe participation amid COVID-19 pandemic.



Principle 10

 Businesses should work against corruption in all its forms, including extortion and bribery

Stakeholders Engagement

Influence and dependability

SIDPEC identifies and selects stakeholders based on their influence and dependability and who can affect or can be affected by the **SIDPEC's** activities and services.

SIDPEC regularly engages in dialogue with stakeholders to keep up to date with stakeholders' expectations and report the key topics and concerns that have been raised to its stakeholders.

Internal Stakeholders

Board of Directors Managers Workers

External Stakeholders



Sources of external Engagement:

Financial statements, web site, customer feedback, sustainability report and SIDPEC policy.

Sources of internal Engagement:

Ideas bank, services survey, sustainability awareness & messages, code of conduct, HSE competitions and HSE committees.

Ethics and Integrity

Code of Conduct (COC)

SIDPEC commits to encouraging a safe, supportive, and reproductive work environment through cooperative and sustainable principles of conduct and ethical behavior. We envision added human rights and social value by incorporating Social Responsibility into our activities. Our approach is built upon a holistic view, transparency, and an open dialogue with consideration to our stakeholders' interests. We are accountable for our impact on society, the economy, and the environment with respect to the rules of law and international norms of behavior.

1- Governance:

Our decisions are taken in pursuit of our objectives and are built upon factual Data.

We gain credibility by adhering to our commitments, displaying honesty and integrity, and reaching company goals solely through honorable conduct.

Management is responsible for demonstrating through their actions, the importance of this code.







2- Human Rights:

We believe that all employees deserve to work in an environment where they are treated with dignity and respect. We are committed to creating such an environment because it brings out the full potential in each one, which in turn, contributes directly to our business success.

We are an equal employment entity and are committed to providing a workplace that is free of discrimination of all types of abusiveness, offensiveness, or harassing behavior. Any employee who feels harassed or discriminated against should report the incident to his or her supervisor or department manager. If the employee is not satisfied that the matter has been appropriately addressed, the employee should feel free to address this issue to the company's Chairman.

We oppose child labor in our premises and among our stakeholders.

Ethics and Integrity

Code of Conduct (COC)

3- Labor Practice:

We endeavor to invest in our employees by providing them with the best possible skills and abilities in order to develop their individual potential to the maximum, and thereby contribute to a sustainable success and competitiveness of our enterprise. We provide specific training to the employees as regards to technical aspects connected with our processes and the field of health & safety at the workplace as well as other relevant aspects connected with the enterprise activities.

We strive to create working conditions that give our employees the convenient environment to work considering the human aspects and particularly without any risk for their health and industrial hygiene.

We have clear recruitment and promotion criteria for all employees. Our grievance procedures are identified, and we recognize the right for employees' representation to participate in a transparent social dialogue.

8 DECENT WORK AND ECONOMIC GROWTH

4- The Environment:

We are committed to conserve the natural environment, endorsing the principles of sustainable use and minimum impact on the environment in full compliance with the applicable laws and regulation.

Our stakeholders should be sensitive to the impact of their operation on the local community and cultural setting within which they work and minimize any adverse effects.

We encourage our stakeholders to develop their own, and others' understanding of the environment protection and the behaviors that can adversely affect it.

Within our decisions and activities, we adopt special practices that take into consideration the direct and indirect economic, social, health and environmental implications.

We envision ourselves in future as a zeroliquid discharge, zero pollutants emission and zero wasted energy company.









Ethics and Integrity

Code of Conduct (COC)

5- Fair Operating Practices:

We investigate all reported instances of questionable or unethical behavior and take appropriate actions that prevent such unethical behavior in the future. Our commitment to integrity begins with complying with laws, rules, and regulations.

We are dedicated to ethical, fair, and vigorous competition. We sell our products based on their superior quality, functionality, and competitive pricing.

We respect the property right of others. We do not acquire or seek to acquire improper means of a competitor's proprietary or confidential information.

6- Consumer Issues:

We are keen to provide products, which achieve our customers' satisfaction.

We provide our customers with fair and transparent information of our products.

We review our customers' complaints and improve practices in response to them.

We offer adequate and efficient support and advice system for our customers.

We always take adequate measures to protect our customer health, safety, and business.

7-Community Involvement and development:

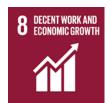
We consider ourselves as an integral partner of the community in approaching educational development projects.

We provide continuous contributions to the surrounding communities to promote higher levels of well-being in these communities.

We provide employment opportunities for our surrounding community either directly through us or indirectly through our subcontractors.

We never cease to invest tremendously on our community health care projects.

We support research and development projects in cooperation with governmental institutions and universities.



Economic Performance

Process Efficiency linkage

New investments

During the year 2019, a wood technology company was established (WOTECH), in which **SIDPEC** contributes 28% of its capital cost, amounting 65 million euros, and has paid 10% of the capital cost. This project is considered one of the most important projects adopted by the MOP and ECHEM during the current stage to achieve its desired returns at the economic and national level to produce adhesives and medium and high-density wooden plates produced from rice straw.

SIDPEC has previously participated in the acquisition of the Petrochemical Logistics Services (PLS) Company to complete its needs of imported gases and export some of its production abroad, and it is currently preparing the necessary studies to determine the investment cost for the construction of the pier and spheres to import propane gas for the polypropylene project and to provide ethane gas to fill the deficit in the quantities supplied from GASCO. This ensures that the **SIDPEC** can operate at the maximum design capacity and reaches the optimal ratio of financial leverage.

Future Extension

SIDPEC has previously purchased licenses for a propylene (PDH) and polypropylene (PP) projects. In this context, **SIDPEC** proceeds with the necessary procedures for the purpose of selecting general contractors for these projects and their necessary utilities by offering tenders and providing the necessary financing.

Value Added

SIDPEC has succeeded in changing the bagging lines for the polyethylene product without affecting the production and marketing processes.

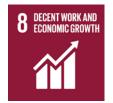
SIDPEC continued to provide the needs of CO₂ Air Liquide recovery and liquefaction unit with a BOO system without incurring any costs, which has a great impact on reducing carbon emissions, improve the economies and increase revenues.

SIDPEC continued to integrate its side products with ETHYDCO, which had a great effect of increasing the production of the LPG unit, operating it at full capacity, and increasing revenues.

Financial Performance

SIDPEC was able to provide the needs of the local market for ethylene and polyethylene products and export the surplus abroad to provide foreign currencies to meet the its needs and support the national economy despite the collapse of the global selling prices of final products and the increase in supply.













Spending Rationalization

Confronting COVID-19 Pandemic

In light of the keenness of **SIDPEC** to face challenges and overcome obstacles to maintain its leadership and achieve its goals in accordance with a clear direction and aligned with the strategies and directives of the MOP, and ECHEM and Egypt's Vision 2030, **SIDPEC** has since its inception placed the on its list of priorities to rationalize consumption and expenditures without prejudice to the governorate on assets and achieving marketing and production plans through adopting systems, mechanisms and programs concerned with sustainability, raising efficiency and good resource management.

The importance of rationalizing expenses has increased in recent times as **SIDPEC** faced some obstacles and difficulties, such as:

- COVID-19 pandemic and its impact on labor, and sales market.
- Decrease in the global product price, increase in supply, and the effect on new investment provisions.
- High prices of feed gas, additives, and supplies.
- Quantity reduction of feed gases and fluctuation of specifications.
- High transportation and freight costs.
- Existence of new competitors in the global and local markets.
- New laws and legislations, especially in environmental protection.

In its endeavor to rationalize expenses, the company has worked in three directions:

- Initiatives and improvements that have extended and continuous financial impacts: It targets the periodic operations and daily activities within the company.
- *Previous initiatives and improvements*: Targeting previous projects that have resulted in lower costs.
- Measures that have been planned or started to be implemented according to the new implications: It targets future projects, purchases and all initiatives that have been developed to meet new challenges in 2020.

PEOPLE PART ONE

INSIDE THIS PART



Section 1

Health and safety



Section 2

Workforces



"We constantly
assess the
effectiveness of HR
services and build
employee loyalty."

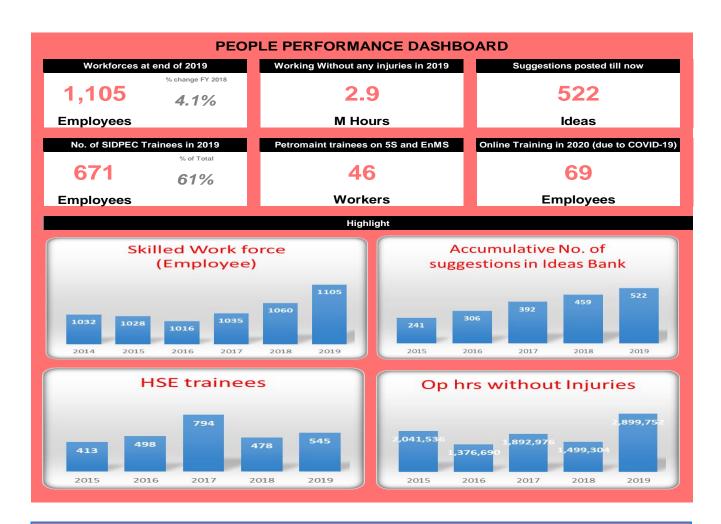


OUR APPROACH

SIDPEC human resources are the driving force for its success. SIDPEC foremost responsibility is to provide its staff with all the tools and skills to accomplish its business plan and objectives.

SIDPEC Strives to cultivate a culture that values knowledge learning and sharing while managing the balance between shared and protected knowledge within the expectations set for the entire workforce.

Part One People



What we did?

Issue "life-saving rules" for employees.
Organize "Safety week".
Get new edition of ISO 45001 standard.
Execute hiring and training plans.
Enhance annual Evaluation criteria of labors.
Launched several leadership development programs.

What we are doing?

Unifying all HR data into ERP database.
Improve Process Safety Management (PSM).
Raise awareness on QEHSE systems remotely.
Maintaining blood sugar level for labors.
Upgrade the necessary equipment and systems
Take precautionary measures to confront COVID-19.

Health and Safety

Health and Safety Systems

Safety Precautions

SIDPEC develops effective health and safety measures at the focus of its interests so that it complies with all required standards, defines safety responsibilities for all individuals, and periodically monitors all activities carried out on operations to ensure a safe work.

SIDPEC is working on the periodic update of our emergency plan, training personnel, assessing the response time to emergencies at work and their knowledge of assembly points at evacuations.

All workplaces are periodically inspected to ensure that there is a suitable and comfortable work environment for individuals.

In line with the *COVID-19 pandemic*, **SIDPEC** has developed several special precautions for workers, especially those with chronic diseases.







Principle 1

Health and Safety

Protective Equipment and Training

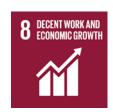
Effective Training

SIDPEC periodically updates the "Personal Protective Equipment (PPE)" procedures, which ensures that all workers are supplied with the necessary protective equipment and even implement training processes on it and the importance of using it to ensure that they perform their work safely.

SIDPEC keens to provide classroom and practical training and/or awareness programs on safety procedures and fire fighting for all labors, including general contractors like Petromaint and other executive contractors, the necessary training to ensure that the work is performed safely. Online training is provided due to *COVID-19 pandemic*.

About 30 workers from Petromaint have been trained on fire fighting and 12 drivers trained on safe driving.







Principle 1

Health and Safety

Employee Involvement

Accident/Incident investigation

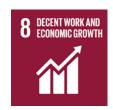
SIDPEC established a Safety Committee and Subcommittees in which workers' representatives can attend and give advice on issues related to health and safety.

Health and/or safety accidents (if any) and the results of the investigation are discussed, the root causes are identified, the measures taken to prevent their recurrence, in addition to the procedures regarding the "Accident Investigation Report", the hours lost as a result of injury or illness compared to the total working hours.

All workers can issue "Near miss report" regarding all potential risk that can affect the safety conditions in which these risks are investigated and the suitable actions to be considered to eliminate the risk.

SIDPEC' CEO heads all managers and labors to take regular walk throughs through the sites to follow up the safety procedures and highlights the need to continue to adhere to safety regulations and provide a safe work environment.







Principle 1

Hours, Wages and Leave

Obey laws and standards

SIDPEC complies with local laws and standards regarding the rights of labors regarding working hours, wages, and leave.

Required working hours is in accordance with the law depending on either daily or shift basis (40-48 per week) considering overtime when needed. Suitable wages for normal living are provided and paid regularly.

Each labor is provided with paid vacation, sick leave, and maternity leave per child for female employees.

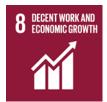
In line with the precautionary measures taken by the Ministry of Petroleum to confront the novel COVID-19 pandemic, SIDPEC has committed itself to reduce the work capacity to about 50% day time workforce, while granting the rest exceptional leave, by reciprocity, workers with chronic diseases and female workers with children under 12 years of age have been granted exceptional paid leave.

2019 Highlight

1,105 Employees

Workforces at end of 2019









Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights

Principle 2: make sure that they are not complicit in human rights abuses

Medical Care

Confronting COVID-19





SIDPEC formed a "Crisis Committee" from all departments to take the necessary measures towards confronting the repercussions of the Corona virus, and the following decisions have been taken:

- Organize an intensive campaign to sterilize and disinfect all administrative buildings, trasportation means, and production sites.
- Conduct awareness sessions among all workers to prevent the speed of corona virus in the work place.
- Develop the instructions of wearing a mask to preserve public health and be available to all workers periodically, in addition to all disinfectants.
- Measure the temperature of all workers and visitors upon entering the company.
- Carry out the procedures followed in case of suspicion or confirmation of an employee being infected with the disease.
- Establish instructions for holding meetings, monitor the preparation of workers' meals during ramadan.











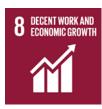


Principle 1

Employment Status

Enhance labor practices







SIDPEC keens to deal with all employees through a contract before starting their work based on the competent, and qualification suitable to the assigned as described in job description with a definite responsibility towards assigned tasks, HSE, and quality systems and it is not allowed to use child labor among its employees or its contractor.

SIDPEC develops the procedures regarding employment, promotion, and training based on unbiased criteria and are not related to any of the discriminatory characteristics and disabled persons can obtain employment opportunities in SIDPEC.

SIDPEC's policy focuses on increasing employees' skills and abilities and how to buy-in to obtain their positive contributions to improve business operation through their ideas, surveys, and suggestions through "SIDPEC Ideas Bank (SIB)".

SIDPEC developed retirement plans including social insurance, additional pension, and retirement reward to increase the involvement and loyality of the employees.

SIDPEC avoids all forms of forced or compulsory labor as all wages, bonuses, and overtime hours are paid on a regular basis. All employees can leave once they have finished their working time and they have access to leave during working time with a suitable permission.

SIDPEC's workplace is free of all types of discrimination and any employee who feels discriminated against should report the incident.



2019-2020 Highlight

522 Ideas

posted till October 2020



Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

Principle 4: The elimination of all forms of forced and compulsory labour

Principle 5: The effective abolition of child labour

Principle 6: The elimination of discrimination in respect of employment and occupation

Honoring Workers

Celebration for the promoted employees

Under the patronage of **SIDPEC'** Chairman, a celebration for the promoted employees was held to highlight the SIDPEC's role in honoring employees for their efforts and achievements to enhance the production processes.



Celebration for children with an academic and sports excellence

Under the patronage of **SIDPEC**' Chairman, a ceremony was held to honor employees' children with an academic and sports excellence for the year. This celebration is to encourage young people to move forward for the better in their scientific career, which will serve our beloved country Egypt because the strong state is the one that has a strong and educated human resources.



Ceremony for Retired workers

SIDPEC' Chairman honored the employees that retired during the year.









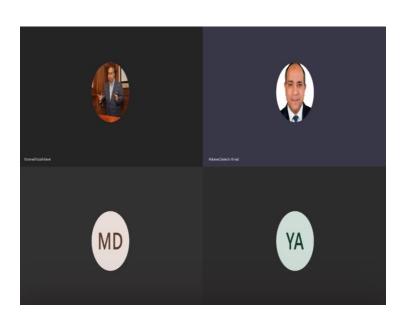
Principle 1

Training and Education

Provide online training services

Remote learning has become a new method for seeking knowledge that the whole world uses to resume studying at different levels in light of the continuing pandemic of the new Corona virus, "COVID-19", and this method that relies on technology and the Internet aims to provide knowledge to learners while preserving them from the risk of infection with the Corona virus or infecting others.

SIDPEC conduced (4) awareness sessions in 2020 by (remote training) on quality and energy management systems for (69) employees through the use of an online program that contributes to increasing communication between the trainees and the lecturer, either by writing comments or organizing a live meeting while providing the necessary scientific material and videos.









Principle 1

Training and Education

Training of Maintenance General Contractor





SIDPEC keens to share knowledge, spreads the idea of continuous improvement and develops the culture of workers who are working on behalf of SIDPEC in maintenance processes.

In this context, **SIDPEC** provided (5) lectures on the 5S methodology and principles of energy management system to (46) of PETROMAINT workers and provide a practical demonstration through the site visit to the Ethylene electrical workshop to actually notice the 5S implementation.







2019 Highlight

46 Workers

Trained on 5S and EnMS



Principle 1

ENVIRONMENTPART TWO

INSIDE THIS PART



Section 1

Precautions



Section 2

Responsibility and Performance



Section 3

Technology



"We don't take any steps that would have any negative impact on the environment."

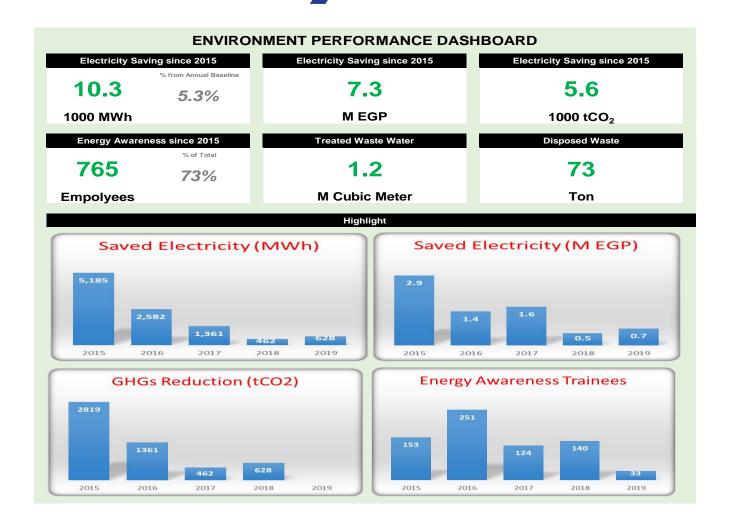


OUR APPROACH

SIDPEC Integrates environment management into its day-to-day business operations through minimizing GHGs emissions, water effluences and solid wastes, achieving the responsible use of natural resources, purchasing, and using high energy efficiency products and services and supporting design for energy performance improvement.

SIDPEC ensures compliance with the local laws, regulations and standards related to environmental protection.

Part Two: Environment



What we did?

Conduct Environmental issues review.

Issue EIA for new PDH and PP projects.
Connect crackers stacks on the National Monitor emissions by installing the Continuous Emission Measurement System (CEMS).
Acquire the certificate of new edition of ISO 50001 standard.

What we are doing?

Perform energy efficiency projects.

Start to conduct strategic energy review with KBC.

Continuous monitor of emissions and wastewater specifications.

Reduce emissions from the polyethylene incinerator (reduce run time to 400 hrs. p.a).

Precautions

Precautionary approach

Scientific Research Support

SIDPEC participated in "EGYPS 2020" which is the largest oil & gas conference and exhibition across Egypt, North Africa and the Mediterranean which was held in Egypt International Exhibition Centre during 11-13 February 2020.

SIDPEC submitted TWO papers during the Technical Conference and cemented its presence with a stand in the exhibition.

First submitted paper was "Solar Heat Integration in Industrial Processes (SHIP)". The objective of that paper is to outline renewable technologies to encourage the significant energy uses companies to use it instead of conventional energy use. Also, it demonstrates the research carried out in this field in Egyptian companies and the economic returns of that application. Our paper focused on the previous application of SHIP technology in Egypt and its economic studies, and the importance of MOP to support further research works in this area financially for the processes heating applications.

The most important initiatives for submitting this paper during EGYPS 2020 is that SHIP process provides up to 50% saving of energy cost used in industrial heating processes, reducing the dramatic impact of the rising energy prices, reducing production costs, increasing the competitiveness in different markets, securing a sustainable source of energy, minimizing the impact on climate change and reducing carbon emissions.

"In Egyptian Petroleum Sector, total energy consumption estimated with about 5.23 MM TOE in which 81 % of this consumption is regarding to Natural gas. About 25 companies consumes about 92 % of total energy petroleum sector"











Principle 7

 Businesses should support a precautionary approach to environmental challenges

Precautions

Precautionary approach

Scientific Research Support





Second submitted paper was "Influence of Poly (butylene succinate) and Calcium Carbonate Nano-particles on the Biodegradability of Eco-friendly High Density-Polyethylene Nanocomposites". The aim of this research is to highlight the creation of innovative types of the green petrochemical products using the natural biobased-biodegradable materials and Nanotechnology to promote the sustainable development in our companies and the preservation of the environment.

The main problem is the accumulation of plastics, in other word the plastic pollution (silent killer).

SIDPEC lab staff prepared the Nanocomposites on lab-scale at the Polyethylene Research Laboratories.

The biodegradation property of the products was proved statistically around 55 years for 100% product degradation instead of more than 600 years that make it a partially biodegradable product.

The mechanical, thermal, and physical properties improved compared to the neat HDPE which would represent a satisfaction to both customers and producers.

All these results based on lab-scale are considered a beginning of the industrial research that can develop bio-based/biodegradable polymer grades out of the traditional non-biodegradable HDPE.

"Solving the plastic pollution problem lies in reshaping the traditional non-biodegradable plastics with partially and completely biodegradable and bio-based polymer products"



Speaker: Ch. Kareem Mahmoud-SIDPEC

During the session

This research has been published recently in the Journal of Polymer Research, Springer Nature



Principle 7

 Businesses should support a precautionary approach to environmental challenges

Energy Performance and Climate Change

Energy Efficiency

SIDPEC believes that Sustainable energy is required for social development and economic growth and therefore, its efforts focus on how energy contributes to achieve economic growth and ensure sustainability for future generations.

Therefore, **SIDPEC** achieves annual energy objective to improve its energy efficiency and performance using EnMS as a systematic approach to achieve sustainable development goals regarding the climate change to reduce environmental impact.

Since 2015 till 2020, **SIDPEC** achieved about 5.3 % cumulative savings in energy consumption; this is equivalent to about 7.3 M EGP and reduction in GHGs emissions of about 5,622 tCO₂.













Principle 8

Energy Performance and Climate Change

KBC - SIDPEC SER Project







Since **SIDPEC** has obtained the ISO 50001 certification in 2014, some technical obstacles have emerged that prevent the achievement of the desired objectives of improving energy efficiency in various production units.

As a result of the recent changes in profits, and considering that energy expenditures constitute a great value that is characterized by the possibility of controlling it by taking some technical measures necessary to save energy consumption, and since the usual means have been exhausted, it is necessary to use modern scientific tools and software to simulate operational processes.

SIDPEC has confirmed that KBC (Yokogawa Company) has the specialized experience and is distinguished by providing the necessary software as well as the required technical expertise, and this makes it the ideal choice for carrying out technical studies in order to achieve the targeted savings in the fastest time.

On 18th October 2020, KOM with KBC was conducted to execute "SIDPEC strategic Energy Review – SER Project" to perform required benchmark, identify the gaps, and develop the opportunities for improvement. **SIDPEC** engaged the employees to participate in this project by organizing a workshop describing the project benefits and objectives.



Eng. Mohamed Ibrahim, Chairman and CEO
During the KOM



Project Manager: Dr. Mohamed Salaheldin and project team during KOM



Principle 8

Energy Performance and Climate Change

Spirax Sarco – Steam Systems Services







SIDPEC has the long-term objective "Steam System Management Program" in place, but the first step and short-term objective is "Steam System Optimization" at the Ethylene plant, by performing Steam Trap survey to generate the necessary data and recommendations to discuss the next steps to implement.

Spirax Sarco, one of the companies working in the field of steam systems demonstrated its technical support to **SIDPEC** and it was able to address the issues regarding steam network optimization. This encouraged SIDPEC to sign a service agreement with Spirax Sarco started in March 2020 to perform "Steam and Condensate Network Audit".

The scope of work focuses on the following:

- Comprehensive audit of entire steam network and facility processes"
- Compare the installations of steam and condensate network with best practice quidelines.
- Study the improvement of the steam distribution and condensate returns piping condition and design.
- Identify and eliminate sources of vibration, water hammering and associated problems for steam and condensate network.
- Engineering Review on condensate recovery, and areas of improvements.
- Inspecting insulation installations throughout the steam system network.
- Steam traps survey.

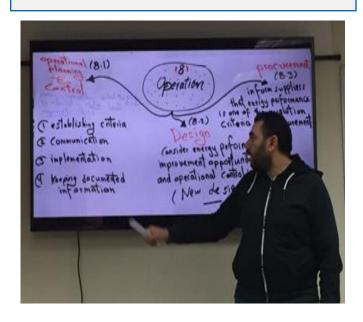


Principle 8

Energy Performance and Climate Change

Case Study: ISO 50001:2018 Transition

When the new edition of the standard (ISO 50001:2018) was issued on 21thAugust 2018, **SIDPEC** took a decision at the end of 2018 to perform the transition process and to update the certificate during 2019 considering an earlier renewal of the certificate to keep its pioneering position in EnMS.



Conduction of internal Audit training as a part of transition plan

"The driver for the transition to ISO 50001:2018 depends on its requirements which provide systemic process focusing on the continual improvement in the energy performance"

Road Map

Transition Journey

Establish energy objective (Transition plan).

Create innovative design of gap analysis template.

Actions taken to close any identified gaps and the associated amendment of documented information when required.

Conduct internal audit based on ISO 50001:2018.

Provide ISO 50001:2018 internal audit training (two runs) by two national experts in EnMS from SIDPEC.

Communicate the new requirements within the organization.

Acquisition of ISO 50001:2018 certificate in December 2019.



Principle 8

"Our successful transition achieved by commitment from all levels in SIDPEC and by the integration of EnMS into business practices"



Receiving the Award of Merit from External Auditor in Oct. 2019

Keys to success

Tips for successful transition

Commitment – Top management is convinced with the EnMS.

Integration of EnMS into our business processes.

Reference implementation – Perform two previous transitions; ISO 9001:2015 and ISO 14001:2015.

Energy Team – High qualified and great experience of EIGHT National Experts in EnMS from SIDPEC.

Review – Systems, policies, procedures, and business processes are in place.

Staff – Engage our staff begins with buyin, prepare them as internal auditors.

A marathon not a sprint – It is not a project, but it can be considered as a process management approach not only to continually improve energy performance but also to establish business excellence.



Principle 8

Water and Wastewater

Water Treatment

SIDPEC is provided with raw water from the Nubaria Canal, and annual quantities of water are obtained with permission from the Drinking Water Authority.

The effluent industrial water is treated, the specifications and quantities of water are monitored and adjusted before being discharged to the external drains.

The production units and water treatment units are also designed to reuse and recycle water in various processes to reduce water consumption.

The best and recent chemical technologies are used to treat raw water, boiler water and desalination water focusing on reducing the rates of waste and drainage on water bodies. Among the initiatives undertaken by **SIDPEC** during this year, is to replace the osmotic membranes to reduce the salt passage percentage in the water effluent from RO unit.

SIDPEC proceeds in installing continuous monitoring sensors on the final treated drainage to be linked to the national network for wastewater monitoring.









Principle 8

Responsibility and Performance

Waste Management

Waste Disposal

SIDPEC manages waste through a "waste management procedure" whereby it has the necessary permits to handle and dispose the waste to licensed contractors to transport, recycle, treat, and dispose of hazardous waste.

SIDPEC monitors the types and quantities of waste produced, including where and how waste is recycled, treated, or disposed of.

The company provides training to workers on safe handling, storage, transportation, and disposal of all types of waste.

SIDPEC defines areas where waste is stored, and labels the containers, including the related sign for hazardous waste hazard.

During 2019, **SIDPEC** signed a contract with an approved entity to receive spent caustic from ethylene plant instead of disposing it to industrial wastewater ponds, which led to an improvement in the analysis of industrial wastewater samples.

2019 Highlight
73 Ton
Of disposed waste





Principle 8

• Undertake initiatives to promote greater environmental responsibility

Responsibility and Performance

Air Pollution

Control and monitor the Emissions

SIDPEC monitors all types and quantities of emissions from thermal crackers and boilers and ensures that limits comply with environmental laws.

SIDPEC controls the flue gases getting from the stacks by ensuring the specs of fuel used, complete the burning process.

Preparation for activities regarding connection of the boilers and cracker heaters' stacks to the national network for monitoring industrial emissions of flue gases.





Principle 8

• Undertake initiatives to promote greater environmental responsibility

Responsibility and Performance

Noise Control

Noise Measurement

According to several laws, **SIDPEC** Noise measurement is performed in all sites once every 3 months.

During the year 2019, the average exposure to noise in different factories was calculated in each unit separately.

In the case of areas with higher limits, workers are required to wear protective equipment and adhere to the allowed time according to the law.

There are warning signs in the various places where there is a loud noise to wear the protective ear plug.

Coordination takes place between all departments to control and monitor the sources that cause noise increase.







Principle 8

• Undertake initiatives to promote greater environmental responsibility

Technology

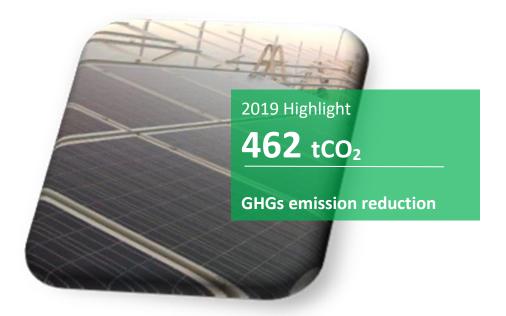
Environmentally friendly technologies

Best Available Technologies

SIDPEC keens to use environmentally friendly technologies when procuring any motors or lighting fixtures, like IE3 motor types and LED fixtures.

From another perspective, **SIDPEC**' processes are designed depending on thermal energy recovery, and recycling of water.

SIDPEC gets the environmental approval from the Environmental Affairs Agency on the type (C) Environmental Impact Assessment study for an NEW project to establish propylene and polypropylene plants.









Principle 9

• Encourage the development and diffusion of environmentally friendly technologies

COMMUNITYPART THREE

INSIDE THIS PART



Section 1

Knowledge Sharing



Section 2

Community Engagement



Section 3

Training and Education



Section 4

Social Partnership



Section 5

Social Contribution

"We prioritize our programs in line with the strategic objectives of social responsibility."

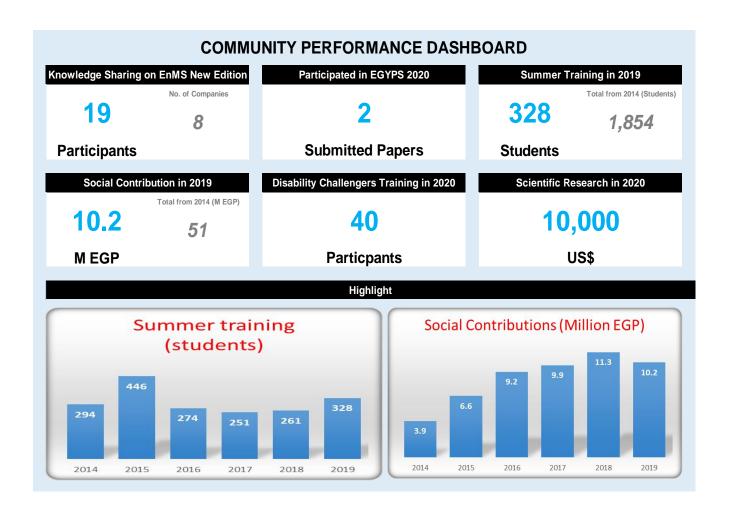




OUR APPROACH

Our annual agenda includes a series of campaigns, activities, programs, and awareness-raising, humanitarian and volunteer initiatives that benefit the local community or contribute to improving people's lives in one way or another. We are dedicated to perpetuate the principle of continuity and sustainable impact by establishing a consistent program of community, charities, volunteer, and humanitarian activities, and periodically evaluate, develop, and expand their impacts.

Part Three Community



What we did?

Participate in "Blood Donation" initiative.

organize "Community Consultation Session" for new PDH and PP projects.

organize the "Orphan Day" attended by 1200 children.

Permanent donations and charities for our community.

Start cooperation with AMOC to get on EnMS. Sharing our EnMS knowledge with our partners.

What we are doing?

AMOC get ISO 50001:2018 Certificate.

Participate in Initiative "with you, Egypt is more beautiful".

Encourage under/Post Graduate Students by donate a software license.

Participate in "Pro Girls 2020" program to develop the skills of students from 16 to 18 years.

Host a meeting with ECHEM and other companies to discuss "COVID -19" precautionary measures.

EnMS Implementation Knowledge

Case Study: Technical Support and Training Provision to AMOC to get ISO 50001:2018

Certificate

As a continuity of **SIDPEC's** success demonstrated and its vision that achieved during peer to peer network within the petrochemicals sector supported by UNIDO IEE project, and as its reputation in its experience in the implementation of EnMS, **SIDPEC** keened to exploit the highest level of success to replicate it to other national companies.

In support of the principles of sustainable development that include access to clean energy and partnership in combating climate change, as well as the principles of quality that emphasize the strengthening of relations with interested parties, **SIDPEC** took an opportunity to transfer their knowledge and expertise in the implementation of EnMS to the staff of "Alexandria Mineral Oils Company – AMOC".

As usual, the services provision of this rehabilitation considered closely monitored phases that ensure that the staff are technically qualified, and the EnMS implementation is on the track to be complied with ISO 50001:2018.



Kick off Meeting held in AMOC



EnMS Implementation Knowledge

Case Study: Technical Support and training Provision to AMOC to get ISO 50001:2018

Certificate

During the Kick-off meeting, SIDPEC described the road to implement EnMS starting from the formation of our EnMS team, established policy and implementation phases.

The rehabilitation process consisted of training provision and technical support during all EnMS implementation phases.



Sidpec Team during site tour in AMOC



Training session held in SIDPEC- Planning Phase

Implementation Process

Consultancy Approach by Sidpec

Form EnMS cross-functional team.

Establish energy policy incorporated into AMOC policy.

Provide *half-day training session* to top management staff held in AMOC.

Provide 2 days user training session to EnMS team held in AMOC.

Conduct TWO site tours to determine the opportunities for improvement.

Provide *planning and implementation phases* training session (3 days) to EnMS team held in SIDPEC.

Provide SIX *awareness* sessions for the rest of the staff held in AMOC.

Provide *checking phase* online training session to EnMS team.

Conduct internal audit based on ISO 50001:2018 for (15) sites.

In addition to NINE site visits and remote work focused on the establishment of the system.



Principle 1

EnMS Implementation Knowledge

Case Study: Technical Support and training Provision to AMOC to get ISO 50001:2018

Certificate

Business Benefits

The acquisition of ISO 50001:2018 certificate represents a proactive look at what the European Union standards may require in the future regarding dealing with entities that have a distinguished activity in energy efficiency.

Elimination of the barriers between the production plants staff as a result of the cross-functional team building.

This appeared in an energy project suggested by EnMS team, which suggests the stopping of diesel oil circuit and restarting it again when needed. This circuit has been operated for more than 20 years, but as the culture of staff has changed with high level of commitment and communication, they succeeded to execute that opportunity.

"We believe that the potential benefits could be achieved if a commitment to continuous improvement becomes an integrated part of the company's culture and day-to-day behavior"

Keys to success

Strong commitment from CEO.

Strong internal communication between EnMS team.

Provide training sessions to the EnMS team in the different stages of EnMS implementation and awareness sessions to the rest of the staff.

Implementation of other management systems like ISO 9001,14001 and 18001.



During honoring the SIDPEC TEAM

By AMOC CEO



Principle 1

EnMS Transition Knowledge

Transfer our experience in EnMS

In January 2020, **SIDPEC** hosted the quarterly meeting for the energy efficiency departments of ECHEM and its affiliated companies, with the aim of periodically following up on future energy activities, plans and projects, and discussing ways of cooperation and integration in the fields of energy efficiency improvement.

During the meeting, **SIDPEC** submitted a presentation that included its experience about the transition of EnMS ISO 50001 from 2011 to 2018 new edition. We demonstrated the key changes of 2018 edition compared with 2011 one, our transition journey, tips for successful transition, Challenges, and lessons learnt.

SIDPEC, as one of the leading companies in the field of EnMS implementation, it believes that its societal responsibility necessitates it to transfer the knowledge and experience that it has gained in this field to the peer companies.





Principle 1

Community **Engagement**

Rehabilitation of the disability challengers

Initiative "with you, Egypt is more beautiful"



Within the framework of launching 2019 to be a year for people with special needs through **President Abdel Fattah El-Sisi**, which placed responsibility on all parties to provide all attention to this group.

In November 2019, **SIDPEC** participated in the last program regarding the prelaunch initiative "with you, Egypt is more beautiful", which aims to create the appropriate atmosphere to achieve maximum benefit for trainees with special needs, and provide them with job opportunities in the private sector to provide a decent life, in addition to finding small projects for them.

SIDPEC welcomed a group of trainees from the third program of the initiative for the training and rehabilitation of the disability challengers where a simplified explanation of the production process and an awareness lecture in the field of occupational safety and occupational health.





Principle 1

Training and Education

Scientific Research

Encourage under/Post Graduate Students

In the field of community service and environmental development, and within the framework of cooperation between **SIDPEC** and the Faculty of Engineering, Zagazig University, **SIDPEC** has succeeded in providing a *software license* for one of the most important programs in the various fields of engineering, especially in the field of fluid dynamics named "CFD Ansys – Computerized Fluid Dynamics software program solutions". It is worth noting that the cost of this license is approximately *10,000 US\$*. This program will serve the college's students in the bachelor's and postgraduate levels in the fields of fluid mechanics and network design.



Every year, **SIDPEC** keens to train undergraduate students on the nature of business in the petrochemical industry to qualify them for the job market.



2019 Highlight

328 Students

Summer training in 2019



Principle 1

Social Partnership

COVID-19 Pandemic

Develop the Precautionary Measures

Minister of Petroleum and Mineral Resources, **Eng. Tarek El Molla**, always direct to share experiences, cooperation, and coordination among the leaders of the petroleum sector, From this perspective, **SIDPEC** hosted in October 2020 an expanded meeting between the leaders of the ECHEM and other companies to *discuss insurance plans, how to deal with reports in emergency cases, and precautionary measures to confront the "COVID-19"* under the patronage of **Eng. Mohamed Ibrahim**, Chairman and CEO.





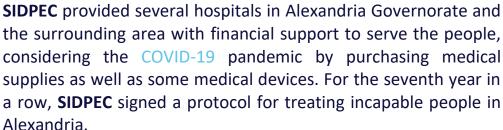


Principle 1

Social Contribution

Sustainable Communities

Support our local neighbor's communities



SIDPEC rehabilitates and equips 20 houses for the residents of the surrounding villages in cooperation with the Orman association. **SIDPEC** donated several blind associations in Alexandria. It also supports about (81) associations in Alexandria in various religious events. For the first time, **SIDPEC** participates in "Pro Girls 2020" program under the auspices of the German organization "GIZ" to develop the skills of students from 16 to 18 years old in the fields of science, engineering and business administration.















2019 Highlight

10.2 M EGP

Social Contribution in 2019





Principle 1

INDEX A

UN Global Compact Principle Alignment

UN Global Compact Principles	Section Alignment
Principle 1 (Human Rights):	Health and safety
Businesses should support and respect the protection of internationally proclaimed human	Employment
rights	Local community
Principle 2 (Human Rights):	Local community
Make sure that they are not complicit in human rights abuses	Local community
Principle 3 (Labor):	Freedom of
Businesses should uphold the freedom of association and the effective recognition of the right	Association
to collective bargaining.	, 100001411011
Principle 4 (Labor):	Forced Labor
The elimination of all forms of forced and compulsory labor.	i ologa Easol
Principle 5 (Labor):	Child Labor
The effective abolition of child labor.	Offind Eddor
Principle 6 (Labor):	Discrimination
The elimination of discrimination in respect of employment and occupation.	Dicommitation
Principle 7 (Environment):	Precaution
Businesses should support a precautionary approach to environmental challenges.	riccadion
Principle 8 (Environment):	Responsibility &
Undertake initiatives to promote greater environmental responsibility.	Performance
Principle 9 (Environment):	Technology
Encourage the development and diffusion of environmentally friendly technologies.	recimology
Principle 10 (Anti-corruption):	Corporate
Businesses should work against corruption in all its forms, including extortion and bribery.	Governance



We are committed to 10 principles of UN global compact

INDEX B

Sustainable Development Goals (SDGs) Alignment

SGD	Disclosure of Alignment
1 NO POVERTY 小本本本市	Social Contribution
2 ZERO HUNGER	Social Contribution
3 GOOD HEALTH AND WELL-BEING	Social Contribution
- ₩•	Workforce: Medical Care Noise Control
4 QUALITY EDUCATION	Local Community: Training and Education
	Workforces: Training and Education
5 GENDER EQUALITY	Ethics and Integrity
	Discrimination



We are aligned with the SDGs.

INDEX B

SGD	Disclosur	e of Alignment
6 CLEAN WATER AND SANITATION	Water and Wastewater	
7 AFFORDABLE AND CLEAN ENERGY	Precautionary approach	
-0-	Energy Performance and climate change	
715	Environmentally friendly technologies	
8 DECENT WORK AND ECONOMIC GROWTH	Core Markets Transparency and Accountability Health and safety Systems Employees involvement Employment Status	Ethics and Integrity Protective Equipment and Training Hours, Wages and leave Medical Care Training and Education
10 REDUCED INEQUALITIES	Hours, Wages and leave Ethics and Integrity Child labor	forced labor Discrimination Community Engagement
11 SUSTAINABLE CITIES AND COMMUNITIES	Precautionary approach	
Social Conti		Contribution
AHH⊞	Energy Performar	nce and climate change

INDEX B

SGD	Disclosure of Alignment
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Energy Performance and climate change Precautionary approach
13 CLIMATE ACTION	Ethics and Integrity Precautionary approach Energy Performance and climate change Air Pollution Environmentally friendly technologies
14 LIFE BELOW WATER	Ethics and Integrity Precautionary approach Emergency Response Water and Wastewater
15 LIFE ON LAND	Ethics and Integrity Precautionary approach Emergency Response Waste Management
PEACE, JUSTICE AND STRONG INSTITUTIONS	Justice, Transparency, Accountability
17 PARTINERSHIPS FOR THE GOALS	Knowledge Sharing Precautionary approach



KM 36 Alexandria/Cairo Desert Road El-Amerya - El-Nahda Territory - Alexandria - Egypt



info@sidpec.com



(+203) 4770131

Further information shall be available on the web site





ANNUAL SUSTAINABILITY REPORT 2020



This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.