

# SIDI KERIR PETROCHEMICALS CO. (SIDPEC)

2015

# SUSTAINABILITY REPORT



#### **About this report:**

This report includes Sidpec's sustainability activities during 2015 and published on UN Global Compact web site in June 2016.

Further information shall be available on sidpec web site: www.sidpec.com



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### Sidpec Sid Kerir Petrochemicals co

#### **Foreword**



I warm-heartedly want to welcome you to Sidpecs' second installment of our annual sustainability report. Being one of Egypt's leading petrochemical companies and producers we are committed to creating economic, environmental as well as social values throughout our entire production process. As in previous years, the insights of our business practices and the progress made to achieving the highest levels of sustainability is shared with our companies' stakeholders both, inside and outside.

This report reflects our sustainability strategy, commitment, practices, performance during 2015 and our reconfirmation of our continual support to UN GLOBAL COMPACT ten principles on human rights, labors, environment and anti-corruption.

The abidance and upholding of the rules and standards we have set for ourselves, which is necessary in a hazardous and health-risk related business such as ours. We are furthermore committed to excellence through the systematic and disciplined management of our operations and a great part of that is the continuity to learn and improve and not to shy away from correcting our shortcomings in that area.

We are aware of the consequences of our decisions, no matter how big or small they may be. Therefore, we hold ourselves to the highest ethical and behavioral standards and respect the environment in which we operate. This begins with the strict compliance of laws and regulations, which are an important building block in order to earn the trust of internal and external relationships on which we so strongly depend.

I want to seize the opportunity to extend my thanks and gratitude towards our employees, customers, suppliers as well as our stakeholders, who so bravely faced the challenges we encountered and helped in making the previous year a success.

Last, but not least, since we are in constant pursuit of improving of our society and environment on the long-term, I would like to emphasize that sustainability starts from the within. Be it the maintenance of our production process at the highest quality standards, supporting our surrounding community by exercising our corporate social responsibility as well as facing and managing the impacts of our environment in order to increase financial returns.

Chairman & CEO Eng. Osama Mahdy

and and

Vision

 Sustain SIDPEC's leadership in providing value added and highest quality petrochemical products worldwide while creating a superior shareholders value.

 To produce and market high quality petrochemical products

and



Mission

through the integration of most efficient staff, best updated technologies and business systems within the highest standards of ethics and integrity for the purpose of achieving

sustainable

growth.



profitable



# 1-ABOUT SIDPEC







#### **Overview**



Export Polyethylene to

53 Countries



No. of Employee is

1028

Labors



EGYPTENE®:

225

KTY



1 st

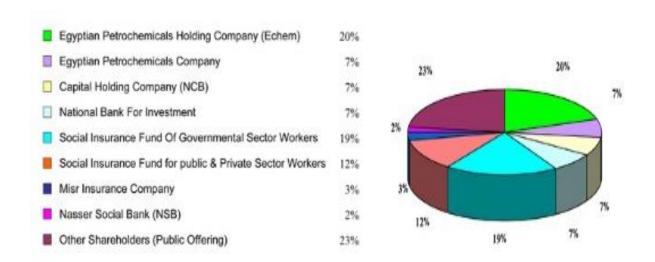
Petrochemicals Co. in Egypt

to be certified with ISO-50001



1 St integral step towards the petrochemicals future in Egypt

#### **Shareholders Structure**







#### **Our Business Units**

SIDPEC is an Egyptian joint stock company established on 16 November 1997 Under Egyptian investment law.

SIDPEC is considered the first integral step towards the petrochemicals future in Egypt.

We utilize the latest available technology and design in order to satisfy the Egyptian environmental regulation and requirements.

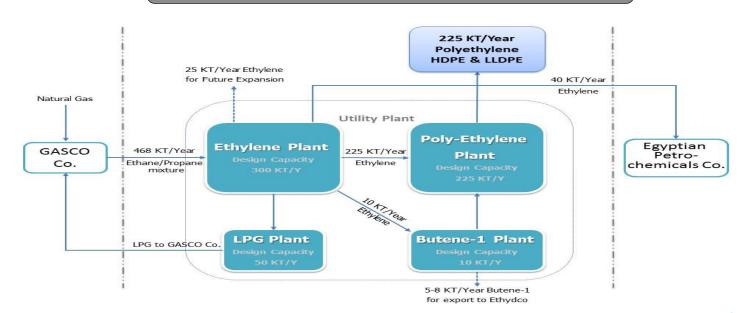
The trade name of SIDPEC polymers is named "EGYPTENE®" polymer portfolio includes linear low density polyethylene (LLDPE) and high density polyethylene (HDPE).

Our objectives are:

 Maintain Polyethylene local market leadership through strict compliance with product quality and marketing services to attain Customer's satisfaction.

- Maintain and develop our global market share thanks to our technology edge in the field of polyethylene production.
- Fulfill the requirements of Egyptian Petrochemical Co. of Ethylene instead of importing it to produce PVC.
- Maximize value of Natural gas resources in Egypt.
- Maximize profit through production and marketing of intermediate products as LPG, Butene-1.
- Comply with Egyptian Environmental Regulations through adopting a state of the art technology that consumes less energy and has the least impact on the environment.

#### **SIDPEC** Production Process





#### **Ethylene Plant**

Plant Capacity is 300 KT/ year based on the Feed Ethane / propane mixture Stock. The used know how is ABB Lummus (USA), and the general Contractor was Toyo – Japan. Start-up date was August 2000.



#### **Polyethylene Plant**

Plant Capacity is 225 KT/ year based on the Ethylene and hydrogen Feed Stock. The used license is bp Chemicals (Ineos), and the general Contractor was Samsung – Korea. Start-up date was October 2000.

Polyethylene plant is designed to produce HDPE, and LLDPE.



#### **Utilities & Facilities Complex**

Utilities complex is designed to secure the following:

Filtered water: 2,000 m³/hr. Demineralized water: 150 m³/hr. Cooling water: 23,000 m³/hr. Firefighting water: 2,250 m³/hr. Instrument air: 4,000 Nm³/hr.

Plant air: 3,000 Nm<sup>3</sup>/hr. HP steam: 92 ton/hr.

Start-up date: January 2000 General Contractor: ENPPI.



#### **LPG Plant**

Plant Capacity is 50 KT/ year based on the C3 and heavier Feed Stock. The used know how is ABB Lummus (USA), and the main Contractor was Toyo – Japan. Start-up date was May 2002.



**Butene-1 Plant** 

Plant Capacity is 10 KT/ year based on the Ethylene Feed Stock. The used know how is IFP. Start-up date was September 2000.



**Effluent Water** 

Designed to collect all treated waste water from all plants and disposed these effluents to external drainage system.



#### **Addition of Business Value**

#### **NEW AMINE UNIT**

The feed treatment system of the Ethylene Plant designed to remove CO<sub>2</sub> and mercury from ethane / propane feedstock through Feed Pre-treatment System (Acid Gas Absorber, Amine Stripper and Mercury Removal Bed).

Sidpec has decided to ADD NEW Amine Unit in Ethylene Plant, to overcome the changes in feedstock specifications (C2/C3 ratio and increase of CO<sub>2</sub> content).

In 2015, Sidpec and Thyssen Krupp Industrial Solutions Egypt (TKIS) signed a contract regarding the establishment of new amine unit designed to remove CO<sub>2</sub> up to 17 % in feed stock with a capacity of 300,000 T/Y expandable to 460,000 T/Y.



During signing a contract of Amine Unit in October 2015



#### Our Strategic Plan towards Sustainability

The principal goal of our Strategic Plan for substantiality as shown below is to improve our performance to ensure healthy ecosystems, social equity and good organizational governance.

Our strategy is to reveal our aspirations efforts to continue the pursuit of a world-class financial performance. Our goal is to strengthen our leadership position in providing highest quality petrochemical products worldwide.

Sidpec's 2020 strategy as announced in 2014 focusses on the following objectives to be achieved:

- 1. EnMS: Reduce energy consumption by 10% within 5 years.
- 2. Environment: Initiate project for zero discharge of treated industrial water from production
- 3. Environment: Reduce CO<sub>2</sub> emission from ethylene plant by 20% within 3 years.
- 4. HSE: Reduce near misses by 80% within 4 years.
- 5. Stakeholders: Encourage and systematize communication with our stakeholders.
- 6. Labors: Ensure employment of disabled personnel to reach 5% by 2020.

Our sustainability strategy is considered as a part of the company. It includes identification and analysis of global trends, predict the risks and adapt to them, and seize opportunities, enhance business agility; all of that in order to achieve the interests of all stakeholders.

Our first approach is to determine where we are for an accurate picture of where our business is, to get a clear understanding of the marketplace, the competitive environment, and organization's competencies. Secondly. we identify materiality (priorities) according to our vision and mission. Third approach is to **define what we must** achieve by define the expected objectives what we must achieve to address the materiality issues. The forth approach is to **determine who is accountable** to implement the action plan and final approach is to regularly review in order to ensure that the action plan performed as designed.





#### **Strategic Plan**



#### Accountability for our sustainability goals

As mentioned above, there are many sustainability strategic goals over the long term. Below is an account of our actions in 2015 and our looking forward towards them in 2016:

Long-term target	<b>Target Achieved in 2015</b>	Target in 2016	
Reduce electrical energy consumption and fuel gas consumption 10% for each by the end of 2018	Reduce about 2.7 % of electrical Consumption compared to baseline through no cost projects	Focus on medium cost projects	
Reach zero discharge of treated industrial water from all plant- ZLD Project (400 m³/hour)	Prepare the technical specifications of the project	Studying offers regarding BOOT system	
Reduction of CO <sub>2</sub> emission by 20% within 3 years.  Transfer the CO <sub>2</sub> reduced for usage by Air Liquide company for compressed gases	Reduce GHG > 10,000 tCO <sub>2</sub> eq	Continuous reduction depending on achieved energy savings	
Reduce near misses by 80% within 4 years	Arrange 4 training sessions for 100 employees about near misses & Publish 6 messages about near misses on sidper intranet		
Encourage and systematize communication channels (stakeholders have been informed and trained in our sustainability approach and code of conduct).  100% of high priority stakeholders 50% of med. Priority and 30% of low priority (2014:2018)	Train 60 Persons	Arrange 4 sessions to train about 80 Persons	
Achieve 5% disabled workers within 7 years (2014:2020) to comply with the law total number of worker in 2014 ( 1028 )	Continual support to people have of 290,000 EGP in 2015	ving special needs with about	



#### **Performance Summary**

				_
Item	Performance Indicator	Measuring Unit	Measured P 2014	erformance 2015
Labors	Skilled Work force	Employee	1032	1028
Labors	Internal Mobility	%	8.4	12.4
Labors	Training Evaluation Surveys	%	86.75	87.99
Labors	Training related to Sustainability	Courses	-	18
Labors	Training related to Sustainability	Employee	-	321
Labors	Training (Sharing Knowledge)	Courses	14	18
Labors	Training (Sharing Knowledge)	Employee	401	661
Safety	No incident since 2007	Total Hours	13,702,590	15,744,125
Environment	Energy Improvement*	%	-	2.99
Environment	Energy Savings*	EGP	-	2,401,590
Environment	Energy Savings*	MWh	-	4,819
Environment	GHGs emissions Reduction*	tCO <sub>2</sub> eq	-	10,000
Community	Summer training	Students	294	446
Community	EnMS Certified National Expert	Experts	-	22
Community	Energy Savings**	EGP	-	41,846,455
Community	Electricity Savings**	MWh	-	61,951
Community	Firing Fuel Savings**	MMBTU	-	224,369
Community	Social Contributions	EGP	3,979,500	6,608,000

<sup>\*</sup> Achieved by SIDPEC

<sup>\*\*</sup>Achieved by six Petrochemicals companies participated in IEE Project



# 2-GOVERNANCE & ETHICS

# Governance & Ethics Ethics



#### Governance

Sidpec believes that governance strategy sustainability will lead to quality and excellence in performance through the selection of appropriate and effective methods to achieve the plans and objectives of corporate and the existence of systems of relations between the interested parties that affect the performance, It also includes elements of the strengthening the organization in the long term and determine the charge and responsibility include, based characteristics several such as discipline, transparency; independence; accountability; responsibility; justice; social responsibility.

So SIDPEC has established a system of governance for the implementation of its sustainability strategy and appoint the general management of HSE and Quality to be responsible for developing the sidpec's vision towards sustainability, priorities, and objectives, as well as to be responsible for the corporate's performance on sustainability. Sidpec rely to manage its sustainable development on the following processes:

- Effectiveness in planning: and that their consequent of accuracy in determining the goals and objectives, and in order to be an effective and flexible it is necessary to provide comprehensive, modern, documented, and renewable data base for resources.
- Effectiveness in implementation: the ability to convert strategic objectives into reality, here are highlights how important the human element and efficiency in achieving the goals of sustainable development and to provide the suitable base of education, culture, good preparation and training.
- *Teamwork:* working in an integrated multidisciplinary team unity the purpose and performance levels and therefore easily overcome regulatory barriers and most of the problems in order to achieve sustainable development goals.





#### **Ethics**

#### Anticorruption

Sidpec Identified the Risks of Corruption, Implement and Maintain Many Policies and Practices to Counter Corruption, Sidpec Rules such as HR, Purchasing, Marketing and all of its Rules Counter Corruption.

Sidpec's Leadership is a Clear and Perfect Pattern for Anticorruption, provide Commitment, encouragement Implementation Of anticorruption Polices.

Sidpec Code Of Conduct Emphasizes The Rules Of Anticorruption.

Sidpec Always Work to raise the Awareness Of its People and All Stake Holders about Corruption.



#### **Human rights**

Sidpec avoids getting involved in any business is not consistent with Human rights.

Sidpec do not enter into partnership or relationship with any partner that commits human rights abuses.

Sidpec avoids any relationship with entities which engaged in antisocial activities.

Sidpec has effective grievance mechanisms that protect human rights

Sidpec eliminates all forms of forced or compulsory labor.

Sidpec do not use child labor internally or among its suppliers or customers.

Sidpec respects the right of own property.

Sidpec respects access to due process and right to a fair hearing before any internal disciplinary measure had taken.



# Sidpec Sidpec Sidi Kerir Petrochemicals co.

#### **Sidpec Code of Conduct**

#### **SIDPEC Code of Conduct**

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.

"It is easy to say what we must do, but the proof is in our actions".

#### 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.

"Refer to our vision &mission".

#### 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.

#### 3- Labor Practices:

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'

## Sidpec Sidi Kerir Petrochemicals co.

#### **Sidpec Code of Conduct**

representation to participate in a transparent social dialogue.

#### 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 zero liquid discharge, zero pollutants emission and zero wasted energy company. "Refer to our HSE policy".

#### 5- Fair Operating Practices:

We prohibit corrupt or non-ethical 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. "Refer to our quality policy".

#### 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.



# 3-HUMAN RESOURCES DEVELOPMENT





#### **Sustainability driven concept**

HR function play a pivot role in achieving success in a sustainability driven concept in SIDPEC through two prime major missions:

- Develop managers & key users who can deal with both present & future sustainability challenges facing the company.
- Adopt a holistic & integrated view of people management by using our skills & knowledge as sources of competitive advantage that contributes in developing & implementing SIDPEC sustainable strategy. Ex. Compensation & benefits, training & development, performance target & value-based recruitment.

HR Dept. provide an annual training plan based on an actual training needs assessment , further more contributes in designing organizational chart related to business necessity.

**SIDPEC** HR team excels to handle employee benefits needs, providing significant support for employees and their families through a rich portfolio of high quality healthcare providers (Hospital, Clinics, Pharmacies & laboratories).

#### **Measurable contribution**

**HR** performance include not only support for the achievement of broad sustainability business objectives, but also measurable contributions to HR performance, including:

- Lower employee turnover
- Lower absenteeism
- Improved employee well-being
- Increase employee engagement

**SIDPEC** adopts a career development policy consists of two processes:

- Career planning: assisting employees to focus on their skills & abilities in order to establish a career plan through:
  - o Identify personal abilities and interest.
  - Encouraging & embracing employees in obtaining professional diplomas and academic degrees
- Career Management:
  - Identifying future staffing Needs.
  - Assess training program
  - Develop Career developing Programs (career path)
  - o Provide career training.

#### **Performing HRM Sustainably**

We focus on the professional HRM tools & processes that form the core of the HRM contribution & on executing processes in accordance with sustainability principals for example:

- Linking remuneration to performance & seniority & a degree of equitable distribution of variable pay tied to our business annual results.
- HR policy acts towards how remuneration is applied addressing balance between male-female pay ratios.

#### **Our Values in Action**

Our values & leadership principals shape our culture as a dynamic workplace where employees are encouraged to think big, act boldly & work collaboratively across boundaries. We hold one another accountable to act with integrity.

Our employees are encouraged to report any issues of potential misconduct they may contact leadership or HR rep. Reports are investigated & any substantiated incidences of misconduct result in disciplinary action.

#### **Providing Opportunities**

**SIDPEC** offers employees opportunities to experience different aspects of our business through:

- Short term assignments
- Internal transfers
- International roles

These opportunities provide employees with necessary hands-on training to be successful in their careers while creating a more skilled workforce to help the company achieve its mission.

In 2015 we filled almost 90% of position at the manager level.

#### SIDPEC Workforce Total Employees

2013 10142014 1032

o **2015 1028** 

#### **Internal Mobility**

Percent of positions filled with internal candidates for manager level and above

20138.7 %20148.41 %

o 2015 12.4 %

#### **Engaging Employees**

SIDPEC seeks employees, who are enthusiastic about their work and eager to make positive contributions that propel product innovation and improve business operation. We encourage employees to contribute their ideas through many avenues including engagement survey and employee communities:

#### Ideas Bank

The idea was built where every employee introduces his idea, which contributes in improving the working process aiming better culture and results. These ideas are published to all other colleagues. We almost reached about 241 Ideas in the bank.

#### • Training Surveys

Training department regular surveys employees to understand how their training needs and evaluation can be better addressed.

The result showed how is the evaluation of our trainees toward the training program as mentioned below:

o **2013 85.74** %

o 2014 86.75 %

o 2015 87.99 %

#### Skill building & Leadership development

We understand the value each employee brings to our company & work to match them with the resources & opportunities needed to grow their careers & meet their professional goals.

 Our commitment begins with competitive compensation & reward packages & extends to formal coaching & professional development programs tailored to individual needs.

#### **Rewarding employees**

Our compensation packages are designed to reward & support the needs of employees & their families.to verify that; package are fair & equitable we conduct annual compensation assessment to ensure our practices are in line with selling and production plan.

#### **Supportive Job description**

SIDPEC job description are an integral part of quality environment management. They reference iob for a determining employee's role toward saving energy, environment protection continuous improvement in the working place.



#### **Talent Development**

Over the last five years we have invested heavily in training courses which promote understanding of how efforts made at the local level can improve environment & quality of life.

Our range of training & short courses provide opportunities for promoting sustainable development and social responsibility aspect as mentioned below:

- **CSR.** Courses: 101 trainee attend 5 course in 2015
- Energy courses: 185 trainee attend 9 course in 2015
- **Environmental courses**: 35 trainee attend 4 course in 2015

#### Partnership with faculties

**SIDPEC** support & encourage the sharing of knowledge across the academic community aiming to be a company with an up-todate profile in environmental & scientific issues, thus contributes in relating conferences organized or held by the faculties of science engineering whether by monetary funds or papers and presentations prepared by volunteering employees.

**SIDPEC** support meeting, workshops in the field of polymer technology and students site visits.

#### Leadership development

We have also launched several leadership development programs including advanced training for seasoned leaders & intensive rational programs for those early in their careers.

In 2014 approximately 34 employees attended courses in leadership in 2015 the number rose to approximately 46 employees.

**SIDPEC** offers training courses covering the areas of finance, operations, safety & marketing. The programs enable recent graduates & young leaders to accelerate their careers by gaining hands-on experience in multiple role.

#### **Sharing Knowledge**

Employee's knowledge is our largest asset; HR plays a pivot role in managing knowledge, we believe that knowledge in action gets results accelerating the rate of learning, cutting down the risks of not knowing and repeating mistakes and retaining knowledge assets when people move, leave or retire.

We transfer valuable knowledge from the most experienced, high performing employees to others through internal training courses. When essential knowledge is captured & shared we touch an improved result across the range of cost saving, time on task, error rates and innovative solutions.

#### **Student Opportunity**

- **SIDPEC** offer a wide range of internship opportunities across job categories.
- Our internships provide students with the opportunity to do "real work" alongside our talented full-time employees and to gain first-hand experience with a leading petrochemical company.
- Many of our internships also provide broad exposure to the company through formal orientation meetings and session with senior leaders as well as a variety of development opportunities through training.
- In 2014 approximately 294 students attended summer training course in 2015 the number rose to 446 student

#### **Training Courses by SIDPEC**

		<b>Trainees</b>	Courses
0	2013:	356	11
0	2014:	401	14
0	2015:	661	18

#### **Retirement benefits**

SIDPEC-sponsored retirement savings plans, which are useful for both employees and employer, as they present benefits like savings directly, deducted from employees paycheck and in some cases.

Employees are automatically enrolled in different retirement benefits systems and get their first contribution with their paycheck, these competitive retirement plans enhance involvement employees belonging also increases retention and longer stays within the company, as mentioned below:

- Offering social insurance contribution that obtains the employee the highest pension grade when reaching retirement age.
- Providing an additional pension benefit (supplementary pension)
- Offering a life insurance policy subsidized by SIDPEC.
- Qualified deferred compensation retirement plan offered to all employees, this plan provides a retirement reward at the age sixty.

#### **Employee Involvement**

**SIDPEC** involves its employees in setting its goals and achieving them. Performance improvement is accomplished through the delegation of authorities and teamwork through

#### Committees

- o Formation of workers' committee of representatives from various departments of the company. Its main role is the direct communication with employees of different levels to share ideas, collect their suggestions and their views, and submit a feedback to superior management allowing employees to take the initiative to improve and continuously develop systems inside
- o Employees are trained one year in the new position before accession of the middle and top management level so that they can exercise responsibilities before promotion and ensure their ability to carry out their duties.
- o Formation of committees, task
- o Forces for new projects and technical, feasibility studies, tenders, auctions, Practices and any other mandates. Recommendations of these committees and task follows are implemented as initiative for the employees to work and innovate.

#### **Health Insurance Program**

SIDPEC provides a Health Insurance Program for employees and their families through direct contracting with medical specialties (physicians, hospitals, laboratories, prosthetic devices, etc.)

Employees enroll in and get their medical benefits from a Medical managed care plan, employees can only go to doctors, specialists, or hospitals that are part of the plan.

**SIDPEC** health plan brochure explain how they coordinate benefits with Medicare, where are lists of all physicians, hospitals & laboratories which an employee and their family can choose.

**SIDPEC** raised its contribution in the medical provision plus a new advantage point has been added allowing employee's parent to use the medical care employees program.

#### Periodical medical check

- Periodical medical check for all employees
- Annual medical check for employees above 50 years old.
- First Aid training course is implemented for our employees every year as awareness.



#### **SIDPEC HSE**

"SIDPEC is considering health and safety issues and environmental protection as well as the assurance of product quality, to be fundamental elements in its policy.

It is most important that we all be committed to prevent incident, safeguarding the environment and protecting its employees and others from harm, thereby fulfilling our social responsibility as an industrial firm and earning the confidence of society".

#### Safety

SIDPEC is committed to providing safe and healthful working conditions for all persons working at Jobsite. The responsibility for safety also extends to all our employees and contractors, who are required to ensure that all governing safety rules and operating procedures are followed.

SIDPEC states that safety is the most important Concern at work and safety is everybody Duty and responsibility to strictly follow all of time. SIDPEC provide a good working environment to workers to keep their safety.

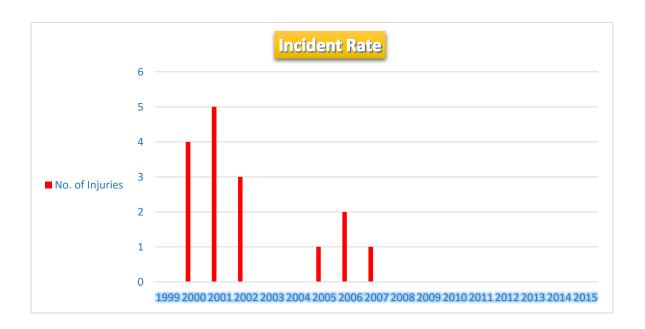
Accidental loss can be decreased through good management, which has standard measurement, and comply with the international safety rating system.

SIDPEC provide its employees, contractors training and Budgets for safety activities property.



#### **Performance**

Goal (2015)	2,041536 Hr. Without incidents or time losses
What we do	2,041,536 Hr.
Employees	1028
Total hours without incidents since 22/7/2007	15,744,125





#### This has been achieved through the application of the following elements: -

- Periodical inspection of the production units and through which to check the status for technical methods of engineering applied to reduce business risk.
- Controlling the work permits system and careful follow-up of the permits issued to make sure that workers commitment to implementing the safety instructions.
- 3. Training and awareness for SIDPEC employees and contractors through planned programs, HSE induction and Tool Box Talk (TBT).
- 4. Completion of a major site activities successfully without any major incidents
- 5. Reducing unsafe behavior.
- 6. Responses to employees' opinion survey on HSE.
- 7. Applying process safety management systems
- 8. Applying the health and safety management systems to comply with OHSAS-18001 regulations, (The Company certified from 2003).



#### SIDPEC HSE Management System includes:

- 1. Identification of hazards.
- 2. Assessing and ranking the risks associated with our operations and activities.
- 3. Selection, implementation and maintenance of a structured system of controls.
- 4. Monitoring the effectiveness of the process and identifying areas for improvement.



# 4-ENVIRONMENTAL PROTECTION





#### **Sidpec Environmental Policy:**

SIDPEC control the operation of production complying with the standards of environment allowance so as not make negative impact on the natural resources.

The company is obliged to minimize wastes and emissions so that local environment can be preserved and also to save energy, natural resources so that global environment can be protected.

Sidpec seek to comply with all applicable legal and other relevant requirements that relate to our environmental aspects, official codes of practice and, as far as practicable, accepted best practice in environmental management, endorsed at senior management level. HSE's long-term aim is to continually reduce its environmental impact.

HSE is committed to the continuous improvement of environmental performance and management and the prevention of pollution from the activities we undertake by;

- Implementing energy saving technologies and initiatives.
- Adopting strategies to minimize the environmental impacts of business travel.
- Using utilities in a responsible and economic way to minimize negative impacts on the environment.
- Managing waste according to our duty of care, minimizing volumes going to landfill, by re-use and recycling wherever possible.
- Purchasing supplies wherever possible which are recycled and recyclable, and whose production and use minimizes the consumption of natural resources.
- Communicating our environmental policy and performance to appropriate people working for or on behalf of the organization.
- Using contractors / suppliers who perform the services in accordance with the government's environmental policy, demonstrating commitment to the continual improvement of environmental performance and the management and prevention of pollution from the activities they undertake.
- Objectives and targets are set and reviewed each year according to our policy and environment needs
- Environmental management systems (ISO-14001).





#### Sidpec objectives regarding air emissions include:

• Eliminating of hydrocarbon flaring, reducing emissions, improving energy efficiency, promoting renewable energy and eliminating continuous venting of hydrocarbons. In line with SIDPEC's HSE policy and objectives, SIDPEC established an continuous emission Monitoring System (CEMS), the system is for monitoring the ambient air quality in the (Utility – Boiler stack), as well as continuous stack monitoring of major sources.

#### As a result of the CEMS, SIDPEC is now able to:

- Transfer Utility Boiler stack ambient air quality and meteorological data online (10 sec. delay) to EEAA (Egyptian Environmental Affairs Agency) through a central server.
- Prepare and submit an ambient air quality monitoring report to EEAA.
- Compare actual ambient air quality with air quality objectives.
- Provide an information and simulation tool to develop and implement an air quality management program.

"SIDPEC Next objective is that all site stacks to be monitored by CEMS (continuous emission monitoring system".

#### **Climate change**

SIDPEC accept the international trends on Climate Change assessment of climate change science, which has found that the warming of the climate is unequivocal, the human influence is clear and physical impacts are unavoidable. As a producer of Ethylene, we recognize our responsibility to take action by focusing on reducing our emissions, increasing our preparedness for physical climate impacts and working with others, including industry and governments, to enhance the global response to climate change.

Our strategic approach to climate change is engaged with our environmental policy. We believe industry has a key role to play in climate change policy development by working with governments and other stakeholders to inform the development of an effective, long-term policy framework that delivers a measured transition to a lower emissions economy. SIDPEC believes an effective policy framework should include a complementary set of measures, support for low-emissions technologies and measures to build resilience

As a result, SIDPEC signed a contract with Air liquid to build up a new unit for recovery of CO2, and at the second quarter of 2017 Air liquid will start the first industrial production.



#### **Environmental lab**

The company has its own environmental lab to conduct the appropriate environmental measurements for all emissions (water and flue gases).

Each plant (ethylene, polyethylene, utility) has its own lab to continuously follow the emissions. Periodical sampling from the waste water and flue gases from the incinerators, boilers, cracking heaters conducted to detect any deviation from the assigned limits at the environmental laws.

#### Sanitary water treatment unit instead of water trenches

The company take a lead role in establishing a sanitary waste water treatment unit (50 m³/day) to treat the sanitary water from the administrative buildings all over the company instead of using water trenches that may cause ground water pollution.

The next step to use the treated water used in irrigation of green areas all over the company.

#### Paper and wood pallets recycling

One of the leading projects that the company tried to do is the recycling of papers and the wooden pallets

Where the company collect the waste paper from all over the company to recycle them by selling them to a specified company in paper recycling

In addition, the company established a small workshop to repair the wooden pallets that are used in packaging the polyethylene product and encourage the customers to revert the used pallets to be reused in packaging the products.

#### Green areas all around the plant

Sidpec pays more attention to increasing the green areas inside the company. The green areas all over the company equals  $(49,650 \text{ m}^2)$  that helps in reducing the air pollution and eliminates the visual pollution.

These green areas irrigated by treated water instead of using potable water. The may contribute to decreasing the use of potable water and decreasing the use of chemicals used in purifying the potable water.



#### **New Environmental Project**

#### **CO<sub>2</sub> PROJECT (70,000 T/Y)**

Amine Unit function is removing acid gases (carbon dioxide & hydrogen sulfide) from feed gas. Acid gases go through thermal Oxidizer (Incinerator) which converts it to a safe form to atmosphere.

We will establish a new plant to recover CO<sub>2</sub>



# CORRUGATED PLATE INTERCEPTOR PROJECT (CPI)

Installation of a new CPI unit to improve oil and grease removal (Until 50 ppm) in WWT unit inlet feed which lead to improvement for all the unit



#### PRESSURE SWING ABSORPTION PROJECT (PSA)

New additional Fifth Drum will be installed in the PSA unit to avoid the stopping of this unit. This will lead to a decrease emissions of burned hydrocarbon gases to atmosphere.





#### **Our vision towards Energy and GHGS**

Sidpec believes that sustainable energy is prerequisite for development, economic growth and prosperity creation and therefore there is a need to establish a new model for dealing with energy contributes to reconcile the need to achieve economic growth and prosperity on the one hand, and ensure sustainability for the benefit of future generations on the other hand.

In order to achieve sustainable development and meet the climate change mitigation goals (GHG emissions), Sidpec focus its efforts significantly on improve its energy efficiency which considered one of most cost effective ways to expand energy supply and reduce environmental impact.

Sidpec determined procedures in order to increase the efficiency of the existing energy systems through rehabilitation, moderating demand for energy, and adopting more efficient technologies.

Sidpec choose to apply one of the best practice methodology to ensure sustainable energy efficiency and continually improving performance which is the Energy management systems (EnMS).

Sidpec keen to align with Energy management systems as a systematic approach (ISO 50001:2011) effecting organizational, technical and behavioral actions in an economically-sound manner with the objective to improve the energy performance and cost optimization.

When the UNIDO established industrial energy efficiency project (IEE) in Egypt, Sidpec saw that this is an opportunity to get the necessary technical support during preparation and implementation of EnMS till being ISO 50001 certified. This achievement is attained through strong partnership

with IEE project in Egypt, implemented by the UNIDO and financed by the GEF in cooperation with ministry of Environment, the Ministry of Industry, Trade Small and Medium Enterprises and the Federation of Egyptian Industries.



UNIDO International Energy Expert with some of SIDPEC Energy team members

Sidpec ensures that the organization continually passes through the cycle of making policy, evaluation the objectives, planning actions, implementing actions and checking results, reviewing progress and updating policy and objectives.

Top Management is committed to the EnMS system and allocate resources for implementation of system in terms of manpower, purchase of energy meters, awareness and training etc.

Sidpec is focusing on no cost/low cost opportunities that can reduce energy rather than having only medium to high cost investments.

"Our success story started by leveraging organization culture towards Lean Six Sigma that made us ready to implement an effective EnMS in compliance to ISO 50001"



#### Our Objective in 2015

Energy Projects in 2015			
SER.	Objective	Status	
1	Use of excess plant air produced from utilities air compressors unit in performing decoking for cracking heater instead of decoking compressor	Achieved	
2	Stop the recycling of LPG pumps on storage tank	Achieved	
3	Reduce power consumption of polyethylene plant extruders	Achieved	
4	Stop $N_2$ compressor of ethylene plant and use the excess $N_2$ produced from $N_2$ unit of polyethylene plant instead	Partially Achieved	
5	Connect OPC Cooling Water pumps in cooling towers to cooling water network	ON HOLD	
6	Reduce imported fuel gas consumption in ethylene plant by HS vents waste optimization	Partially Achieved	
7	Install two units of solar cells on administration buildings	Achieved	

"Applying Gemba within SIDPEC is a key to get more and more energy efficiency improvement opportunities"

#### **Solar power station**

For the purpose of focusing on the use of renewable energy source, 60 KW solar station was installed.



During the installation of SIDPEC solar station on the admin. Building in March 2015



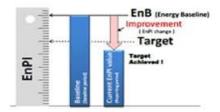
#### **Energy & GHGs**

#### **Our Key Performance in 2015**

Energy Project	Savings MWh	Savings * EGP	Investment Cost *EGP	Payback Year
Excessive air utilization	1,312	710,000	0	immediate
LPG Pumps	650	350,000	0	immediate
Optimization of Nitrogen Unit	297	160,000	0	immediate
Rationalization of Extruder energy consumption	2,132	1,150,000	0	immediate
Install two units of solar cells	128	69,000	898,000	13

<sup>\*</sup> EGP: Egyptian Pound (base 1 US\$ = 8 EGP)

#### **Highlights Performance against base line:**



Energy Performance Improvement (%)

2.99 %



Cost savings

2.4 Million EGP



**Energy savings** 

4.8 GWh



Cost to implement

898,000 EGP



**GHG** Reduction

>10,000 tCO2eq



Payback period

**0** Year for most projects



#### **EnMS in SIDPEC**

SIDPEC staff members were motivated to implement an EnMS at their facility by the clear benefits realized from previous management systems (e.g. ISO 14001 and ISO 9001) and other techniques and tools for process improvement (e.g. Lean Six Sigma). Under a pressuring energy situation in Egypt with rising energy costs and insecurity in supply, it was clear to the company's top management that a serious commitment to improving their energy performance to reduce its overall costs is the way forward. The company was assured that the economic and technically sound approach is to tackle the issue through energy efficiency improvement following a systemized approach. Thus, concrete steps have been taken to adopt an EnMS that is compliant with ISO 50001.

Our keys to success are:

- Strong Top management begins with buy-in to the business value of a systematic approach to EnMS.
- Reporting is a key element in maintaining management commitment.
- Develop a dynamic cross functional energy team: provide training, and delegate activities.
- Perform complete energy review.
- Strong internal communication: Establish SIDPEC Ideas Bank by which any person can suggest opportunities for improvements to the EnMS.
- Providing recognition for EnMS achievements to motivates staff and employees and brings positive exposure to the energy management program.
- SIDPEC applies Statistical Process Control (SPC) for operational control purpose which is the critical element of the EnMS for energy savings.

• Ensure that the key characteristics of operations that determine energy performance are monitored, measured and analyzed at planned intervals using state-of-the-art control system and historian.

Although the implementation of EnMS at SIDPEC was, smooth due to the strong management commitment. The company's energy team has faced some challenges and barriers along the way. Barriers faced during implementation of the EnMS were mainly related to resistance to change and motivation as it was believed that there are low monetary benefits from EnMS when compared to company annual profit.

These barriers were overcome through conducting awareness sessions, linking the EnMS with the environmental performance and sustainability requirements, and linking the EnMS with the continuous improvement activities already achieved by Lean Six Sigma methodology.

"We believe that it's not difficult to save more than 10% of energy consumption using no cost and low cost opportunities"



SIDPEC 50001:2011 Certificate

#### **CASE STUDY**

#### **IMPLEMENTATION OF EnMS IN SIDPEC**

Sidpec EnMS is based on the assigned energy policy and careful attention to the core elements including energy planning phase, implementation phase and checking phase necessary to improve energy performance and achieve the required effectiveness.

#### **Organizational**

- Top management established and implemented energy policy integrated with quality policy highlighting the concern of sustainability and business excellence.
- Top management appointed management representative and approved energy team formation. Sidpec decided to establish Energy Team at two-levels; Top Management Committee and Implementation Committee.

#### **Energy Review and Planning:**

• Sidpec developed a document titled "SIDPEC EnMS description" that assures the compliance with energy management system (EnMS) requirements of ISO 50001 such as an energy policy, responsibilities, scope and boundaries, objectives, targets, and action plans needed to improve energy performance according to legal requirements and information related to significant energy use.

#### Training, and communications

- Sidpec ensure EnMS awareness of all employees by conducted 13 awareness training sessions in 2014 and 2015 for 241 employees.
- Sidpec establish Ideas Bank (SIB) for effective internal communication in order to have a recognized channel for ideas from all employees.

#### **Tools & resources**

Sidpec use automated control system and monitoring, CMMS Program, Sidpec information system (SIS), ISO 9001 and ISO 14001 management system, lean six sigma methodology supported the successful implementation of Sidpec EnMS.

#### **Operational control**

Sidpec ensures that operational and maintenance controls should bring the significant energy uses and the energy uses related to the energy objectives, targets and action plans into efficient and sustainable operation through certain procedures.

#### **Energy performance indicators**

Sidpec depended on several ways in order to analyze the measured data by transforming it into useful information upon which action can be taken. There is a regular comparison of actual monthly energy starting from September 2014 versus average baseline (2011-2013) energy to ensure the energy performance measurement.

#### **International Recognition**

Sidpec was honored by UNIDO at the Vienna Energy Forum 2015 that took place in Austria as one of the best practitioners of EnMS that significantly saved energy.



SIDPEC Energy Management Representative receiving the award of Industrial Leaders of Energy Management System from UNIDO during Vienna Energy forum 2015



#### **Effect of EnMS on our Supply Chain**

As concerns mount about fuel prices, long-term energy availability, and climate change, sidpec attention is finally turning toward one of the most pervasive places where energy can be conserved: the industrial supply chain. Simply put, the supply chain is the production and distribution network that encompasses the sourcing, manufacturing, distribution, consumption, and disposal of goods.

Some primary factors drive sidpec to be interested in the energy-efficient supply chain. One of these factors is the desire to cut energy costs. Other one is concern about regulation which will increasingly pressure to limit the amount of GHG we release. Third one, is a growing segment of customers favor companies that credibly demonstrate reduction of GHG impact. The fourth driver is productivity: The economies put in place to reduce emissions, reduce other costs and improve operations as well.

ISO 50001 requires that sidpec take into account energy impacts when conducting procurement and selecting suppliers. Sidpec proceed to develop purchasing specifications for services, products, and equipment that can have significant impacts on energy use and shall inform their suppliers that procurement of such services and equipment will be partly evaluated based on energy performance. This might be an effective way to affect the supply chain later by encouraging the suppliers themselves to adopt ISO 50001.

Development and implementation of energyefficient system saves consumers and businesses money, drives innovation and productivity, supports a cleaner environment, and reduces dependence on imported energy.

#### Our Plan in 2016

Sidpec assigned its EnMS objectives based on the approach of big hairy audacious goal (BHAG). BHAGs are described on a corporate level as nearly impossible to achieve without consistently working outside of a comfort zone and displaying corporate commitment, confidence and even a bit of arrogance. In this context, Sidpec assigned the following long term objectives to be achieved by the end of 2018:

- Reduce Electrical Consumption by 10 %
- Reduce Fuel Gas Consumption by 10 %
- Energy Awareness Training of 80 % of personnel

In 2015 MRM, a decision for starting the implementation of some medium cost projects was taken and supported by the company's chairman & CEO.

In order to achieve this decision in 2016, sidpec shall identify the appropriate medium cost opportunities that improve the energy performance and according to rating and ranking of the opportunities with respect to the prioritization criteria, the most appropriate opportunities shall be selected to be implemented firstly to proceed the fulfillment of main objective achieved by the end of 2018.

Sidpec shall continue to ensure that all employees who may have an impact on energy performance within the scope and boundaries of the EnMS and can affect the performance of SEUs are appropriately aware of their roles, daily activities and job functions and how they relate to energy use and consumption and understand the negative impacts when their activities deviate from defined procedures, objectives and targets.

In order to achieve this target, SIDPEC shall organize 20 awareness training sessions in 2016.



# 5-SOCIAL RELATIONS



#### **Our vision towards Peer-to-Peer Network**

After the participation of staff of sidpec in the UNIDO EnMS training program delivered within the IEE project and the success demonstrated by the company in implementing Energy Management System (EnMS) and obtaining ISO 50001, sidpec wished to share their knowledge and experience and expand its role in industrial energy efficiency to the national level. When UNIDO IEE project in Egypt took the initiative of establishing the Peer-to-Peer network, sidpec saw that this is a great opportunity to perform its vision.

UNIDO and Egyptian Petrochemicals Holding Company (ECHEM) agreed to cooperate on starting the first Peer-to-Peer network within the petrochemicals sector by supporting experts trained at sidpec to transfer their knowledge and expertise to staff of all companies in the petrochemicals sector.

During Peer-to Peer project, Sidpec proved that the highest level of success is achieved by replicating the success to other companies. EnMS consultation and technical assistance is more effective when it comes from companies who work in the same industrial sector speaking the same technical language; that is what Sidpec provided to other Egyptian petrochemical companies.

Sidpec succeeded through Peer-to Peer project in not only making the trainees aware of the significance of energy efficiency in their plants but also in personal lives. They now understand that achieving energy savings reduces cost, improves production and it is a social responsibility.

Sidpec made an effort to describe the effect of one of main barrier faced when implementing EnMS which is the mentality, as everyone thinks about the productivity and not care about energy consumption. It is time to transfer this message to the employees.

Because energy was subsidized by the government, energy consumption was the last thing that petrochemicals industries though about. From another hand policies are now changing and subsidies are getting removed, and so there is a great need to be more energy efficient. That is what the Peer-to-Peer network is training the staff on by sidpec.



SIDPEC Experts conduct 2-Day User training as a part of the peer-to-peer project in March 2015



Participants in third module training as a part of the peer-to-peer project in Dec 2015

"We work in the same industry, and we speak the same language, therefore participants can witness the implemented EnMS in a plant similar to theirs"



#### Our Objective in 2015

	Peer-to-Peer Network Services Provision in 2015			
SER.	Objective	Status		
1	Training Provision	Achieved		
2	Operationalization of a peer to peer network to share EnMS Implementation expertise within the petrochemicals sector	Achieved		
3	Provision of Technical Expertise and Assistance for EnMS Implementation	Achieved		

#### **Highlights on Performance of Peer-to-Peer Network Project in 2015**

Savings below achieved by actual energy projects in 2015 regarding to five petrochemicals companies.



Cost savings

**41.2 Million EGP** 



Electricity savings

**62 GWh** 



Firing Fuel Gas Savings

**224,369 MMBTU** 



Certified UNIDO EnMS National Experts

**22 National Experts** 



#### **CASE STUDY**

#### SIDPEC PEER-TO-PEER NETWORK

The Peer-to-Peer network owes its success to the collaboration of the three organizations:

#### • ECHEM:

The network activities are sponsored by the Egyptian Petrochemicals Holding Company (ECHEM) who is responsible for ensuring participating companies management commitment and monitoring the efficiency of the network.

#### SIDPEC:

Provides all the technical support to participating companies including training and on-site technical support for the implementation of EnMS.

#### UNIDO IEE:

Provides financial sponsorship as well as technical support through the provision of international expertise and technical training material.

The participating companies fall under the UNIDO IEE project scope, and hope to achieve the ISO 50001 certification upon completing the project. The Peerto-Peer network supports a total of 30 participants, with representatives from the following companies: E-Styrenics, ELAB, EPPC, MOPCO, ECHEM, and SIDPEC, all from the petrochemicals sector.

#### **Peer-to-Peer Network Structure**

The project methodology determined by UNIDO experts and the action plan developed by sidpec experts in close collaboration with UNIDO IEE following the PDCA cycle. Scheduled over the project of one Year (2015), the Peer-to-Peer network services provision is divided into closely monitored phases that ensure both that the participants are technically qualified, and that the EnMS implementation in their companies is on the track to be ISO 50001 compliant. Following an introductory 2-Day User Training on EnMS, three modules are carried out covering EnMS planning, implementation and operation, and checking. From their experience, sidpec experts added two additional sector-specific topics covering "Yellow Belt 6 Sigma" and "Statistical Process control" for process quality and monitoring improvement.

The Peer-to-Peer network utilizes various tools for effective communication. These include the "Basecamp", an interactive online platform developed by UNIDO IEE that allows the participants, sidpec experts and international experts to share queries, knowledge, experiences and files to one another. Webinars between the companies and the international experts are also carried out periodically. For follow-up, consultation and support, sidpec experts make regular field visits to the participants' plants.



Participants during internal Audit on-site training in ECHEM as a part of the peer-to-peer project in Dec 2015

#### **UNIDO EnMS National Expert Certification**

Following the completion of the modules, an examination is carried out to evaluate the participants. *Twenty two participants* passed this examination and get certified as a "UNIDO EnMS national experts".



#### **Effect of EnMS Peer-to-Peer Network on our Supply Chain**

Sidpec relies on running their plants on the import of electricity from the Egyptian petrochemical company which is considered one of the participating companies in the Peer-to-Peer network project.

This project helped the Egyptian petrochemical company, as a service supplier to Sidpec, to improve the efficiency of operation regarding to their own electrical power station through developed opportunities for improvement of the efficiency of the power plant performance and attention to perform preventive maintenance, monitoring systems and periodic examination programs put.

This shall lead to the stability of the operating units and integrity of the continuity regarding the existence of the power plant in service without interruptions and reduced emergency operational problems and shutdown, which will inevitably affect the stability of operation in Sidpec's plants and thus adversely affect the smooth supply chain within the company.

The interest in the improvement of the efficient operation of the Egyptian petrochemical's power plant started with the improvement of fuel fire gas efficiency used in boilers inside the plant to secure the fuel gas needed to run the power plant.



#### Our Plan in 2016

Although it is assumed that Peer-to-Peer network project will end at the beginning of 2016, however, sidpec looks forward to continue the communication with the companies participating in the project in order to complete the exchange of experiences and knowledge, and benefit from the successful implementation of improvement projects of similar units in each company to be applied to the rest of other companies.

Sidpec has taken several steps to ensure the continuation of cooperation between these companies through creation of group on the linked-in website in order to exchange views, ideas and to put forward topics for discussion.

Sidpec has also assigned the participating companies to fill a template regarding their utilities units' design figures and actual operating conditions over the past years in order to compare these data between all companies as a bench mark.



#### CASE STUDY

#### **MOTOR SYSTEM OPTIMIZATION (MSO) TRAINING**

More than 300 million motors are used in industry, large buildings and infrastructure globally, and 30 million new electric motors are sold each year for industrial purposes alone.

Electric motor driven systems in industry are estimated to be responsible for about 29 % of overall global, and 69 % of industrial electricity consumption.

Their energy costs are estimated to be 362 million USD per year, and by using existing technologies and practices, the efficiency of industrial electric motor driven systems can be cost-effectively improved on average between 20 and 30 %.

Such improvement holds the potential to reduce global electricity consumption by 3.2-4.8 EJ, cut the CO2 emissions by 770-1100 Mt, and save the industry between 72-108 Billion USD annually.

It is obvious that motor system optimization (MSO) is of vital importance to the industrial sector in EGYPT and can save enterprises a huge amount of energy.

Thus the industrial energy efficiency project in EGYPT organized MSO training during the period of 7-12 November 2015 at SIDPEC Company in Alexandria, and attended by 40 engineers representing 16 organizations.

The training was carried out by UNIDO's international MSO experts. Topics covered during the training included proven approaches aimed at optimizing motor system performance and energy efficiency such as having motor systems management plan, motor sizing and high efficiency motors technologies, applications of adjustable speed drives, and preventive maintenance schemes.





Source: IEE Newsletter Issue 09 Oct.-Dec. 2015



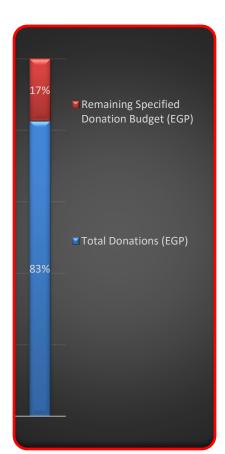


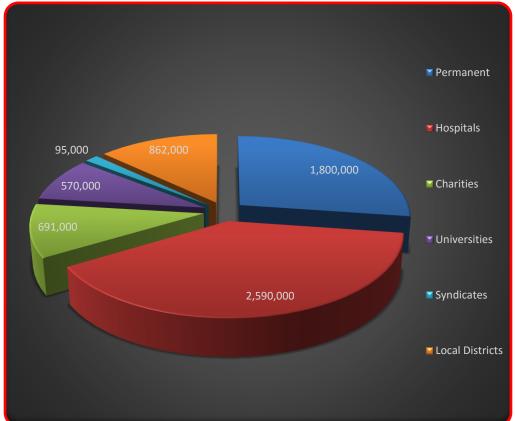
SIDPEC realizes that its activity affecting on a better life provision. The completion of any progress at this level requires the company to invest in areas and locations in which they operate, and to contribute to building a flexible and healthy communities.

In this context, SIDPEC provides its support to the local communities through the participation of its employees and through its donations and charitable contributions.



#### SIDPEC's Donations (EGP) to the community in 2015





Kerir Petrochemicals co.

#### **Social Contributions**

#### Examples of SIDPEC's Donations to the community



Distribution of Ramadan food packages and Meat Amount 1,000,000 EGP



Subsidies for schools, universities and scientific research
Amount 1,070,000 EGP



Subsidies of public and private hospitals
Amount 2,440,000 EGP



Free treatment fund for patients from the surrounding areas

Amount 100,000 EGP



Support for orphans and the disabled Amount 290,000 EGP



Projects through charities in surround area
Amount 141,000 EGP



Subsidies for syndicates and associations

Amount 305,000 EGP



Restoration/Improvement of the company mosque and annual an Quran (Reading) Competition

Amount 300,000 EGP



The establishment of a national project of the surround community

Amount 912,000 EGP



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