



# **Sustainability Report**

## **2017-2018**

**Compiled by:**

**Boshra Salem, Prof.**

**Advisor, Pharos University in Alexandria**



# Pharos University

## Sustainability reporting on SDGs

### 2017

At the 70th Session of the United Nations General Assembly in September 2015, member states adopted a new global development agenda, *Transforming our world: the 2030 Agenda for Sustainable Development*. There are 17 development goals for sustainable development set out by the UN. At its heart are 17 Sustainable Development Goals, is Goal 4 on quality education, which focuses on universal education and commits countries to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. Goal 4, also takes into account a lifelong learning perspective, and continues education . Lifelong learning comprises all learning activities with the aim of improving knowledge, skills and competencies, and employment-related perspectives.

All Sustainable development goals (SDGs) are increasingly being integrated at all levels in universities, including in the overall strategy. Egypt has responded to the 17 SDGs by setting national plan: Egypt 2030 (<http://sdsegypt2030.com/?lang=en>). The third Pillar of this plan is on :Knowledge, Innovation and Scientific Research. This pillar includes the following group of elements and components:

- General environment: Represents the role of the State in the creation of an environment that encourages innovation, including motivators and constraints, the economic system, policies, legislation, and principles of governance.
- Infrastructure: Play a fundamental role in supporting the cognitive and creative production by setting standards and laying regulatory foundations of innovation and scientific research, supporting business and innovation, protecting copyright, ensuring availability of information, financing and encouraging investment.
- Education and scientific research: Includes all research organizations and institutions, technical education and vocational training institutions, higher education and scientific research institutions, and research centers.

- Industry: Represents all industrial sectors including large, medium, and small scale companies' activities relevant to research and development.
- Intermediaries: Includes the institutions that link between industrial innovation, and research and development on the one hand, with academic and research institutions on the other hand.
- Development needs: Represents the required demand for innovation, knowledge, and scientific research to fulfill economic and social needs.

Pharos University has a direct involvement and input into the UN-SDGs and national government SDGs national policy. Development of the strategic goals of Pharos University meet the UN-SDGs , and contribute to identify the national problems and challenges and enable adaptive management through its internal processes (rules and regulations), and external relationships (internationalization and partnerships <http://www.pua.edu.eg/international/international-partners/>).

Table 1 below indicates the compliance of the university with the UN-SDGs

Pharos University goal	Relation to UN-SDG
1. Raising the efficiency of the institutional capacity to improve competitiveness	GOAL 8: Decent Work and Economic Growth
2. Enhancing and supporting the educational system	GOAL 4: Quality Education GOAL 5: Gender Equality
3. Expanding the support to internationalization	Goal 17 Partnership to achieve the goals
4. Developing the scientific research system and post graduate studies to meet the national strategy	GOAL 4: Quality Education GOAL 5: Gender Equality
5. Expanding the activities of community services and environmental development	GOAL 11: Sustainable Cities and Communities
6. Raising the competitive skills of students	GOAL 4: Quality Education GOAL 5: Gender Equality

The strategic goals of Pharos University (<http://www.pua.edu.eg/about-pua/vision-and-mission/>) were reviewed and updated to meet the national strategies of sustainable development - Egypt 2030, Pillar 3: objectives for the knowledge, innovation, and scientific research to 2030 (<http://sdsegypt2030.com/wp-content/uploads/2016/10/4.-Knowledge-Innovation-Scientific-Research-Pillar2.pdf>).

Table 2 below indicate the direct involvement of pharos university in with the Sustainable development Strategy: Egypt 2030 (per objective ) and the corresponding goals of Pharos University .

Objective for Knowledge, Innovation, and Scientific Research to 2030 (National SDG Plan)	Definition as indicated in the Sustainable development Strategy: Egypt 2030	Corresponding Pharos University Goal
--	---	--------------------------------------

Creation of a stimulating environment for the localization and production of knowledge	Maximizing knowledge production by enhancing the legislative, investment, and financing environments and providing the fundamental infrastructure	Goal 2. Enhancing and supporting the educational system Goal 1. Raising the efficiency of the institutional capacity to improve competitiveness
Activation and development of an integrated national innovation system	Enhancing the efficiency of innovation production by encouraging creative production, increasing the links between innovation and developmental needs, the development of basic education and higher education as well as research and development	Goal 4. Developing the scientific research system and post graduate studies to meet the national strategy
		Goal 6. Raising the competitive skills of students.
Linking the knowledge applications and the innovation outputs with priorities	Determining the sectorial priorities and challenges, how to address them by working on increasing the knowledge product for the priority sectors and by raising the local content	Goal 4 Developing the scientific research system and post graduate studies to meet the national strategy. Goal 5. Expanding the activities of community services and environmental development

The Ministry higher education and research has formulated its strategy to cope with EGYPT 2030 Plan. It is available in Arabic in : [http://portal.mohe.gov.eg/ar-eg/Documents/Strategy\\_mohe.pdf](http://portal.mohe.gov.eg/ar-eg/Documents/Strategy_mohe.pdf)

This strategy is basically summarized in improving 5 main aspects A translated summary is provided below.

- Education
- Scientific research and Innovation
- Capacity building
- Community Services
- Health

Under the aspect of Scientific research and Innovation the following items are included:

1. Accessibility: education accessibility for all
2. Quality: Improvement of quality education system to be consistent and coping with international quality systems
3. Competitiveness: Improvement of outcomes of universities in a competitive manner (ranking)
4. Internationalization: Formulation of MOUs with international universities with the purpose of launching branching of these universities in Egypt, And establishment of joint research and educational programs.
5. Community services: Improvement of community services in the field of health (university hospitals), Medical cohorts, cooperation with NGOs, and awareness activities to alleviate illiteracy and combat corruption

The goals of Pharos university are compliant with all the above items as one of the private universities that is recognized and accredited by the Ministry of higher education and research in Egypt. Table 3 shows the alignment of Pharos University Goals with the goals of the Higher ministry of Education .

Table 3 . Alignment of Pharos University Goals with the goals of the Higher ministry of Education

Goals	Pharos University Goals	Goals of the Ministry of Higher Education
Goals 1.	Raising the efficiency of the institutional capacity to improve competitiveness.	Improvement of outcomes of universities in a competitive manner (ranking).
Goals 2.	Enhancing and supporting the educational system	Improvement of quality education system to be consistent and coping with international quality systems
Goal 3.	Expanding the support to internationalization	Internationalization: Formulation of MOUs with international universities with the purpose of launching branching of these universities in Egypt, And establishment of joint research and educational programs.
Goal 4.	Developing the scientific research system and post graduate studies to meet the national strategy	Improvement of outcomes of universities in a competitive manner (ranking)
Goal 5.	Expanding the activities of community services and environmental development	Improvement of community services in the field of health (university hospitals), Medical cohorts, cooperation with NGOs, and awareness activities to alleviate illiteracy and combat corruption
Goal 6.	Raising the competitive skills of students	education accessibility for all

Pharos university as the only private university in Alexandria, and apart from the international research publications, is concerned more with local issues, and collaborate with local NGOs and Schools in this respect. There are already ongoing plans to extend its activities regionally and globally and contribute more to the few SDGs that is either lightly covered or not covered in 2017.

This report summaries the activities carried out by Pharos university in 2017 to achieve the UN- SDGs. The activities take different forms; conferences for discussions, dialogues and exchange experience on SDG topics, community services by staff members form different departments, students community Projects, identification of problems and research, and internal reports from departments. Each SDG is dealt with separately in the following sections.

## SDG 1: No Poverty

Collaboration with NGOs for Convoy of Blankets: **In line with SDG1**, Pharos University participated in poverty alleviation through its community service programs and collaboration with NGOs.

- In November 2017, the Faculty of Financial and Administration Sciences staff and students visited one of the marginalized villages- Halab village to help in their living affairs and distribute blankets for protection from cold winter.
- Faculty of Allied medicine: In November 2017 the staff and students of the faculty of allied medicine organized an event entitle "" convoys for the good" to distribute winter clothes and regalia, food for a marginalized village (Halab) in Amerira district- Alexandria.

<http://www.pua.edu.eg/relief-convoy-of-blankets/>

<http://www.pua.edu.eg/charity-market-for-blankets/>

<http://www.pua.edu.eg/aid-convoy/>

<http://www.pua.edu.eg/tourism-and-hotel-management/tourism activities/page/3/>

<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news>.

<http://demo2.pua.local/newsArchive.aspx?ACT=STD &fid=18>

## SDG2: No Hunger

**In line with SDG2, No hunger** : Pharos University participated in an activity: for Charity Market

- In December 2017, the staff and students of the Faculty of Engineering have organized an open day for Food commodities with discount prices for the benefit of the public community in need.
- The faculty of Tourism and Hotel Management (the artistic committee) organized a pot luck on Tuesday 5/12/2017. Some of faculty students brought ready-made meals; meanwhile others were keen to prepare food by themselves in the faculty's kitchen. Some faculty members and teaching assistants participated in this pot luck which in turn spread an atmosphere of cordiality and merriment. Commemorative photos were taken by the end of the day.

<http://www.pua.edu.eg/the-annual-charity-market-5/>

<http://www.pua.edu.eg/charity-market-11/>

<http://www.pua.edu.eg/charity-market-7/>

<http://www.pua.edu.eg/charity-market-10/>

<http://www.pua.edu.eg/the-annual-charity-market-4/>

<http://www.pua.edu.eg/tourism-and-hotel-management/tourism activities/page/3/>

<http://www.pua.edu.eg/tourism-and-hotel-management/tourism activities/page/3/>

<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news>.

<http://demo2.pua.local/newsArchive.aspx?ACT=STD &fid=18>

## SDG3: Good Health

**In line with SDG3** Pharos university has participated in Blood Donation Campaigns;

- In December 2017, the students and staff several Faculties participated in the national campaign for blood donation.

<http://www.pua.edu.eg/media-gallery/photo-albums/can-blood-donation-save-lives/>

<http://www.pua.edu.eg/blood-donation-campaign-7/>

<http://www.pua.edu.eg/blood-donation-campaign-6/>

<http://www.pua.edu.eg/6493/>

<http://www.pua.edu.eg/tourism-and-hotel-management/tourism activities/page/3/>

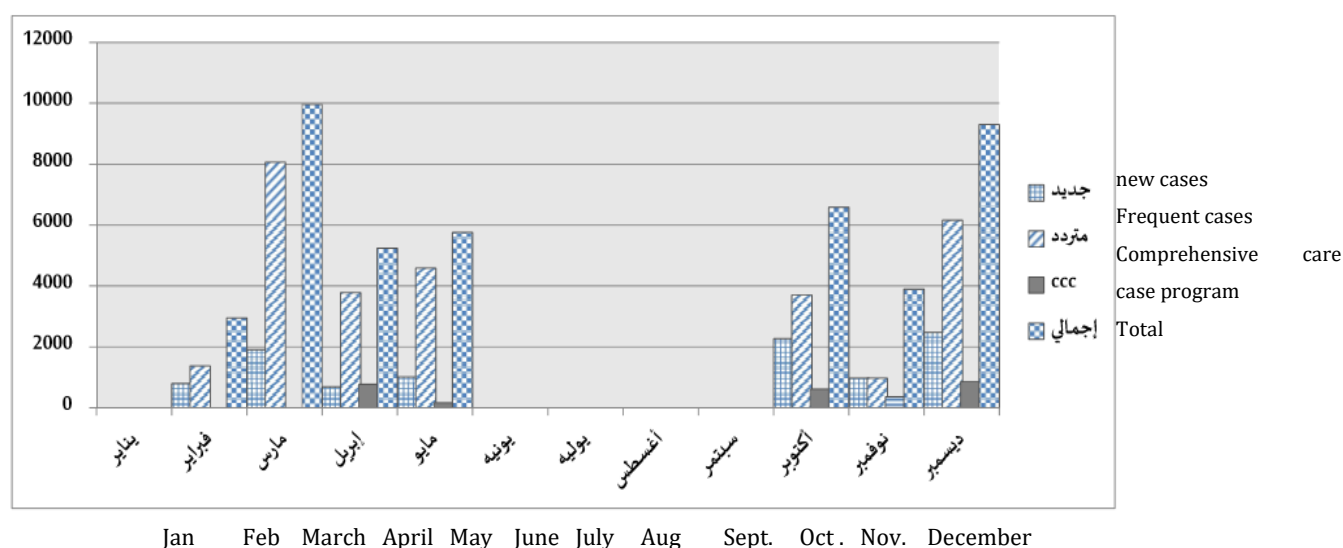
<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news.>

<http://demo2.pua.local/newsArchive.aspx?ACT=STD &fid=18>

- The Faculty of Allied Medical Sciences 2017 represented by the Nutrition Department staff and students have participated in several community services joined by (The Community - Based Rehabilitation Association in Alexandria- an NGO ) to assess the nutritional status of some youth with special needs to evaluate their nutrient intake, deficiencies and excess. Accordingly, a group discussion has been done with their parents / care-givers to give proper nutritional advice, clarification of risks and needs.
- The faculty of Pharmacy and Drug Manufacturing, in collaboration with Bedaya Club, held a seminar on " Drug Addiction" on Tuesday 2/5/2017. Faculty members, teaching assistants and a large number of the faculty students were keen to attend the seminar. that discussed the drug addiction and its reward pathways, stages of addiction and the withdrawal symptom, and finally the seminar attendees concluded by a comparison between the alcohol and drug addiction and their damaging effects on health. <http://www.pua.edu.eg/drug-addiction/>
- The faculty of dentistry carry out a project entitled " Comprehensive **Care Case (CCC)** Program". The **CCC** program **started since 2014** under the supervision of the dean of the Faculty of Dentistry where each 2 students work together on a single patient treating him/her from the beginning till the end under the supervision of the professors of the different faculty departments. This program is **contributing in community service for all the disadvantaged**

**patients mainly those who are unable to pay.** The **actual cost** of treatment of each individual case is ranging from a Minimum of 30,000 L.E to a Maximum of 100,000 L.E. but through this Program; these patients are receiving an excellent treatment totally **Free of charge**. Since the start of this program **nearly 500 cases** were treated with Complete dental care for **Free**.

The Figure below shows the number of patients from the community attended the Dental Clinic of the Faculty of Dentistry and served by senior students and staff



Total number of new Patients under treatment in the Faculty of Dentistry public clinics (2017)= 15284

Total Number of Frequent Patients (2017)= 44972

Total Number of Comprehensive Care Case patients (2017)= 3822

Total Number of Patients (all cases in 2017) = 68788

With this program, Pharos University is able to change the patients' life style, elevate their psychology and improve their overall quality of life.

- Students of Pharos University participated in achieving SD3 by the following research projects in the health sector

<http://www.pua.edu.eg/wp-content/uploads/2019/01/students-volunteering-programs-under-community-projects.pdf>

Project name	Faculty	Term	Relation to SDG
Gastroenteritis and food hygiene Awareness	Pharmacy	Spring 2016-2017	SDG3 good health
Oral health status among group of deaf and mute children	Dentistry	Spring 2016-2017	SDG3 good health



Assessment of community awareness regarding the proper use of corticosteroids using a questionnaire based study	Pharmacy	Fall 2017-2018	SDG3 good health
Assessment of treatment needs regarding children with cleft lip and cleft palate in Alexandria	Dentistry	Fall 2017-2018	SDG3 good health
Evaluation of malnutrition and its associated risk factors among hospitalized patients	Allied medicine	Fall 2017-2018	SDG3 good health

The staff members of Pharos university participated to achieve this SDG by the following research Publications in the health sector: <http://www.pua.edu.eg/wp-content/uploads/2019/01/resreach-list-2017.pdf>

No	Problem identified	SDG concern	of	Author(s)	Year	Publication title	Publisher
	Green cities/ ecocities	SDG3: good health		Salem, M.M. and Moussa, R	2017	Impacts of Nanomaterials in Transforming Towards a Healthy Environment in the Smart Cities.	4th International Conference on Advanced SCIENCES (ICAS4

## SDG4: Quality Education

- In line with the project “ Transformations to Sustainability” <http://www.pua.edu.eg/>, Faculties of Pharos university are assessing their curriculum to mainstream sustainability practices to relevant courses. Examples of such assessment is provided in Appendix A. The assessment made is following the Unit-based Sustainability Assessment Tool ( PART A) Teaching, Research and Community Service, A resource book to complement the UNEP Mainstreaming Environment and Sustainability in African Universities Programme (Reference: Togo, M. & Lotz-Sisitka, H. 2009. Unit Based Sustainability Assessment Tool. A resource book to complement the UNEP Mainstreaming Environment and Sustainability in African Universities Partnership. Howick, Share-Net.)- Appendix A,
- In line with this SDG4, there are many activities implemented by the faculties of Pharos university:
- The faculty of dentistry implement quality education by applying a **Graduation research** program which involves all the departments of the faculty . In this program every 3 students choose a **topic of research** with the help of a team from the department . The team is chosen by the students including, Professors, Assistant professors, Lecturers, and Demonstrators. These researches are presented in front of all the faculty professors, external professors, students, and

parents and are also assessed by a jury consisting of 3 professors either from inside or outside the faculty. The program above has many advantages as improving students' skills and talents such as clinical management, dental photography, and different presentation skills which increase their self-confidence and creativity.

- In line with the curriculum the Faculty of Pharmacy organized in May 2017, a scientific trip for the senior students to a private pharmaceutical company "PHARCO", to see the laboratories of the company and the production lines.
- In line with the curriculum the Faculty of Engineering organize in April 2017 a scientific trip to the mechanical workshops of EgyptAir to see the maintenance and technical repairs procedures.
- In line with the curriculum the faculty of Arts and Design arranged a seminar on the 3rd International Conference on Advances in Education and Social Sciences (ADVED) held in Istanbul – Turkey from 6/10/2017 to 14/10/2017 as well as the subsequent exhibition mounted by the Egyptian Consulate in Turkey. PUA Participated in the International Conference on Advances in Education and Social Sciences (ADVED). <http://www.pua.edu.eg/pua-participated-in-the-third-advded/>
- In line with the curriculum the faculty of Tourism and Hotel Management organized a scientific trip to Siwa Oasis under the supervision of the department of Tourism in the faculty. The trip was of four days' duration; it lasted from Wednesday 22/3/2017 to Saturday 25/3/2017. During the trip, the group visited several tourist attractions such as Salt Lakes, Dakroul Mountain, Fatnas Lake, Cleopatra Spring and the Temple of the Oracle of Amun and submitted a report of their findings.  
<http://www.pua.edu.eg/tourism-and-hotel-management/tourism activities/page/3/>  
<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news.>  
<http://demo2.pua.local/newsArchive.aspx?ACT=STD &fid=18>
- Stemming from the importance of quality management, a Quality Assurance Unit in each faculty reporting to the Quality Assurance Center in the University was established since the first day of operation of PUA. They put together an internal review system for Quality Assurance to strictly evaluate the performance and goals achieved by each faculty structure. At the beginning of each course, the Quality Assurance Unit asks each course coordinator to announce to the students the course aim, the intended learning outcomes, the learning methods, the assessment techniques and the required textbooks. A computer-based student course evaluation is carried out at the

end of each course. It includes questions covering evaluation of the instructors, demonstrators, course content, exams, lecture halls and facilities at the faculty.

An annual self evaluation report is a part of the internal review system that helps monitoring both points of strength and weakness in faculty performance and the action plans to be taken for further enhancement.

- PUA is actively collaborating with the National Authority for Quality Assurance and Accreditation ([NAQAAE](http://www.naqaae.gov.eg/)) through holding a series of training programs and sessions at PUA aiming at deepening the concepts and components of the Quality Assurance and Accreditation System. <http://www.pua.edu.eg/about-pua/quality-assurance-unit/academic-quality-unit/>. The accredited faculties of Pharos University are the Faculty of Pharmacy, Engineering and Tourism. Other faculties are working on receiving their accreditation  
<http://www.pua.edu.eg/pharmacy-and-drug-manufacturing/>  
<http://www.pua.edu.eg/faculty-of-engineering/>  
<http://www.pua.edu.eg/tourism-and-hotel-management/>

## SDG5 Gender equality

Since the foundation of Pharos University, there has been an attention given to the gender equality of students. The Tables below show the ratios of male and female students as well as staff members in pharos university since its start in 20016 till 2018. Original data of such ratios is provided in the gender report. <http://www.pua.edu.eg/about-pua/gender-report>. The ratios shows a fair distribution between make and females in all cases.

### 1. Registered Students per Year

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1 : 0.96	1 : 0.83	1 : 0.95	1 : 0.97	1 : 0.70	1 : 1.20	1 : 1.04	1 : 1.05	1 : 1.20	1 : 1.17	1 : 1.07	1 : 1.03	1 : 1.04

2- Registered Students 2014-2017 (pending students are the students that has not passed in some courses and his transfer from his current level to the next is pending re-examination.

year	2014-2015	2015-2016	2016-2017	2017-2018	Pending
Males to Females	1 : 1.08	1 : 1.24	1 : 1.09	1 : 1.13	1 : 0.53

ratio					
-------	--	--	--	--	--

3- Students of the First Academic Year 2017:

Year	2017
Males to Females ratio	1 : 1.16

4- Total Number of Students of level (1) in Different Subjects 2017:

	Medical Studies	Art and Humanity + Social Studies
Males to Females Ratio	1 : 1.3	1 : 1.4

5- Total Number of graduates in 2017-2018:

Gender (Male : Female)		
Fall 2017-2018	Spring 2017-2018	Summer 2017-2018
1 : 0.83	1 : 1.46	1 : 0.99

5- Graduates 2010-2017:

2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
59.4	57.1	50.3	59.3	49.2	58.85	62.57	53.0

6- Postgraduate Students for the Academic Year 2017/2018:

Ratio Male : Female	1 : 0.8
------------------------	---------

7- Academic Faculty and Assistant Staff - Year 2017/2018 (1st term):

Ratio Male : Female	1 : 2.16
------------------------	----------

#### 8- Adjunct Staff Members and Assistant Staff - Year 2017/2018 (1st term)

Ratio Male : Female	1 : 0.73
------------------------	----------

### SDG6 : Clean water and sanitation

Identifying and contributing to solving problems related to clean water and sanitation is one of the concerns of Pharos University. There are about 8 research publication in 2017 that dealt with this issue, and with their findings contribute to fulfilling the national government SDG. <http://www.pua.edu.eg/wp-content/uploads/2019/01/resreach-list-2017.pdf> . These are:

N o	Problem identified	Author(s)	Year	Publication title	Publisher
1	Water Treatment	Ehssan Nassef, Yehia Eltaweel, Ismail Awwad	2017	ADSORPTION OF NICKEL USING ACTIVATED CARBON FROM SUGARCANE	Engineering Science and Technology: An International Journal (ESTIJ), ISSN: 2250- 3498 ,Vol.7, No.4, 2017.
2	Water Purification	Eiman Helmy,E.Nassef and Mohamed Hussein	2017	International Journal of Chemical and Biochemical Sciences,vol.12,pp1-17,2017.	Study on the Removal of Water Hardness by Electrocoagulation Technique
3	Waste recycling	E. Nassef; A. Mahmoud; H. Salah; Y. El- taweel ,	2017	International Journal of Research in Industrial Engineering,Vol.6,No.3,pp 522-562,2017.	Removal of Copper Ions from Liquid Wastes Using Adsorption Technique
4	Waste water treatment	AlaaElnenay,Ehs san Nassef,GehanMa lash,Mohamed Hussein	2017	Egyptian Journal Of Petroleum,Vol.26,pp203- 208,2017	Treatment of drilling fluids wastewater by electrocoagulation
5	Water treatment	Ehssan Nassef, Mohamed Mousa, Dina Elgayar & Mohamed Hussein	2017	Australian Journal Of Basic And Applied Sciences,Vol13,2018. Accepted for publication.	A Novel Technique for Water Hardness Removal by Using Polystyrene
6	Environmental Management	Masoud, M.S., Farag, H.A., Zaatout, A.A.,	2017	Recovery of some valuable components from industrial waste	Separation Science and Technology (Philadelphia)

		Kamel, H.M., ElGreatly, M.H., Ahmed, H.M.			
7	Green chemistry	Korany, M.A., Mahgoub, H., Haggag, R.S, Ragab, M.A.A, El Mallah, O.A	2017	Green Chemistry : analytical and chromatography	Journal of liquid chromatography and Related Technologies 40 (16), pp 839-852
8	Green chemistry	M.A., Mahgoub, H., Haggag, R.S., Ragab, M.A.A., Elmallah, O.A.	2017	Green chemistry: Analytical and chromatography	Journal of Liquid Chromatography and Related Technologies
	Environmental Management	Masoud, M.S., Farag, H.A., Zaatout, A.A., Kamel, H.M., ElGreatly, M.H., Ahmed, H.M.	2017	Recovery of some valuable components from industrial waste	Separation Science and Technology (Philadelphia)

### **SDG7: Renewable energy**

Renewable Energy is becoming increasingly important for Higher Education Institutions (HEIs) in tackling high carbon footprint. This is demonstrated by the numerous drivers to reduce carbon dioxide and other greenhouse gas emissions. These represent both risks and opportunities, and include the following research publications that were published in 2017. <http://www.pua.edu.eg/wp-content/uploads/2019/01/resreach-list-2017.pdf>

No	Problem identified	Author(s)	Year	Publication title	Publisher
1	Environmental Management	Salem, M. and Zekry, M	2017	.Towards a zero carbon Alexandria. Renewable Energy and Sustainable Development,	, 3(1), pp.150-154.
2	ecocities	Prof Dr/Hisham Elshimy, Arch /Nadia samier	2017	Green Building between Tradition and Modernity Study Comparative Analysis between Conventional Methods and Updated Styles of Design and Architecture Processors	Renewable Energy and Sustainable Development Journal
3	Green energy	Dalia A. Elsorady	2017	Sustainability and Conserved Energy Value of Heritage Buildings	Journal of Renewable Energy and Sustainable Development (RSED) Vol.3 Issue 1, Feb 2017
4	Sustainable energy	Osama, M., Helaly, M	2017	Parallelism in energy production through interior architecture sustainable	International Journal of Parallel, Emergent and Distributed Systems

				development	
5	Sustainable energy	Saleh, M., Abdou, M.A., Aboulhassan, M.	2017	Assessing the use of IP network management protocols in smart grids	Proceedings of IEEE/ACS International Conference on Computer Systems and Applications, AICCS
6	Smart buildings	ElShimy, H.	2017	Methodology for the preparation of the standard model for schools investigator for the sustainability of energy systems and building services	Journal of Smart Innovation, Systems and Technologies

## **SDG8 : Good jobs and economic growth.**

Pharos University participated in achieving this SDG by the following

- In April 2017, the Faculty of Financial and administration sciences and the Faculty of Pharmacy organized two employability fora for the benefit of their students. Several national and private sector companies of concern participated and received CV documents from senior students from that are about to graduate of Pharos University
- In December 2017, the faculty of engineering organized meeting the labour market requirements seminar to prepare the senior students for employability after graduation. <http://www.pua.edu.eg/meeting-the-labour-market-requirements/>
- In April 2017, the Faculty of Financial and administration sciences and the Faculty of Pharmacy organized two employability fora for the benefit of their students. Several national and private sector companies of concern participated and received CV documents from senior students that are about to graduate.
- The center of career development and entrepreneurship center organized a seminar to encourage students to be the entrepreneurs of tomorrow. <http://www.pua.edu.eg/a-seminar-on-the-activities-of-cdec/>
- The faculty of Financial and Administrative Sciences held the faculty's annual job fair on Sunday 23/4/2017 at the Student Theatre. A large number of the faculty students were keen to participate in the event as well. Several local and international corporations were hosted in the job fair to open up opportunities for summer internships for the undergraduates and full-time jobs for the graduates. <http://www.pua.edu.eg/job-fair-2/>.

- Within the framework of the endeavours made by the faculty of Tourism and Hotel Management to open channels of communication between the faculty students and alumni on the one hand and the labour market institutions on the other hand, the faculty held its 3rd Internship and Careers Fair on Thursday 4/5/2017. The aim behind the establishment of this fair is to achieve the faculty's mission to qualify its graduates to meet the requirements of tourism and hospitality industry. This fair was a result of the partnerships and agreements the faculty signed with the tourism and hotel management institutions of both the public and private sectors. The fair included a vast number of tourism and hotel management institutions like the following:  
 ( Egypt Air - the Egyptian Ministry of Tourism- the Egyptian Tourism Promotion Authority- Four Seasons Hotel - Mercure Cairo Le Sphinx Hotel- Sheraton Hotel - Marriott International Hospitality Company- Radisson Blu Hotel- Helnan Palestine Hotel -Savoy Hotel in Sharm El-Shiekh- Majestic Travel Agency - Overseas Tours - Damas Travel Agency - Moon Stone Company For Tourism - Kasha Tours – Ramasside Tours - Alo Travel Agency – Pharos Company for Tourism- Eleman Tours- Agilika Tours- Dreamers Tours - Family Tours - Roaya Travel Agency- Air Arabia- Al-Ezz Company for Travel and Tourism - Cecil Hotel- Hilton Green Plaza - Hilton Alexandria King's Ranch- McDonald's- Star Way Tours& Travels- Khan Abu Elela). Faculty members, teaching assistants also participated in organizing the fair, along with some of the faculty students who received during the fair practical training on their theoretical study. The goals of the 3rd Internship and Careers Fair
  - Maintaining good lines of communication between the employers on the tourism and hotel management sectors on the one hand and the faculty students and alumni on the other hand.
  - Introducing the faculty alumni to the labour market to provide them with good career opportunities in different fields.
  - Providing the faculty students with internships.
  - Meeting the labour market requirements and maintaining contact with the decision makers.
  - Forging partnerships and signing agreements and memoranda of understanding with the institutions in concern.

<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news>.

[http://demo2.pua.local/newsArchive.aspx?ACT=STD\\_&fid=18](http://demo2.pua.local/newsArchive.aspx?ACT=STD_&fid=18)
- The faculty of Tourism and Hotel Management held a seminar on " How to Pass an Interview and Write a CV?" on Tuesday 7/3/2017. The seminar discussed the main set of criteria being used to select the would-be employees in the hospitality field. In addition, it was outlined the questions being frequently put to prospective employees in a job interview. The seminar attracted a lot of interest on the part of the faculty students. Some tokens were distributed among the most outstanding students at the end of the seminar. The seminar was given by Mr. Mohamed Dardeer, the HR Manager at Hilton King's Ranch Hotel. The seminar was attended by Prof. Amany Refaat, the Faculty Dean, a number of staff members, teaching assistants and students from different classes.



<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news.>

<http://demo2.pua.local/newsArchive.aspx?ACT=STD &fid=18>

<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news.>

<http://demo2.pua.local/newsArchive.aspx?ACT=STD &fid=18>

- On the administrative level, Pharos University selects its prospective employees in accordance with the highest professional proficiency standards so as to be able to carry out the required administrative tasks that could enhance the international academic level the university aspires to achieve. The PUA administration works on improving the professional performance of the staff through providing them with training programs in pursuit of applying all the modern administrative systems. The PUA administration is keen to implement the requirements of ISO 9001: 2015 in accordance with the field of each department. -The PUA administration is committed to comply with the University Regulations Law (issued by the Supreme Council of Egyptian Universities) and all bylaws governing its work. -The PUA administration always strives for development and improvement. -The Quality Assurance Unit in Pharos University is going to publish this policy and send it to all departments so as to put it into force.  
<http://www.pua.edu.eg/about-pua/quality-assurance-unit/administration-quality-department/>

## **SDG 11: Sustainable cities and communities**

According to the UN definition, Sustainable cities and communities Making cities safe and sustainable means ensuring access to safe and affordable housing, and upgrading slum settlements. It also involves investment in public transport, creating green public spaces, and improving urban planning and management in a way that is both participatory and inclusive. Several research work in this field was published in 2017 by staff of Pharos University. The following is the list of such research work.  
<http://www.pua.edu.eg/wp-content/uploads/2019/01/resreach-list-2017.pdf>

No	Problem identified	Author(s)	Year	Publication title	publisher
1	ecocities	Prof Dr/Hisham Elshimy, Arch /Nadia samier	2017	Green Building between Tradition and Modernity Study Comparative Analysis between Conventional	Renewable Energy and Sustainable Development Journal

				Methods and Updated Styles of Design and Architecture Processors	
2	ecocities	Nourhane Mohamed Ali Hassan El Haridi-Pakinam Nabil	2017	Sustainable Biomimic Approach in Green architecture (Architectural Applications Inspired By Nature)	First International Conference On New Trends For Sustainable Energy Pharos University In Alexandria 2016 (ICNTSE 2016
3	ecocities	Nourhane Mohamed Ali Hassan El Harid	2017	The Studies Of The Impact of Biomimicry And Sustainability On Urban Design	17th International Conference on Urban Transformations and Sustainability Paris-France
4	Green buildings	Osama, M. Helaly, M	2017	Parallelism in energy production through interior architecture sustainable development	International Journal of Parallel, Emergent and Distributed Systems 32, pp S190-S198
5	Green cities/ ecocities	Salem, M.M. and Moussa, R	2017	Impacts of Nanomaterials in Transforming Towards a Healthy Environment in the Smart Cities.	4th International Conference on Advanced SCIENCES (ICAS4
6	Ecocities and urban development	Dalia A. Elsorady	2017	Community Involvement Framework for Sustainable Urban Conservation: Case of Caliph Street – Historic Cairo	The 1 <sup>st</sup> International Conference : Towards a Better Quality of Life24 - 26 November 2017 – Technische universitat Berlin Campus El Gounak Egypt
7	ecocities	Riham A. Ragheb Amany A. Ragheb Ghada Raghe	2017	Adaptive re-use and sustainable development for existing historic buildings- case study: buildings of racetrack horses in Sporting Club, Alexandria, Egypt	International Journal of Current Engineering and Technology
8	ecocities	Riham A. Ragheb	2017	Sustainable Waterfront Development – A case study of Bahary in Alexandria, Egypt.	Civil Engineering and Architecture Journal
9	Ecocities and urban development	Riham A. Ragheb Hisham El-Shimy	2017	Sustainable Urban Street Design: Evaluation of El-Moaz Street in Cairo, Egypt	Eldevier Procedia Environmental Sciences Journal
10	Green buildings	Osama, M. Helaly, M	2017	Parallelism in energy production through	International Journal of Parallel, Emergent and

				interior architecture sustainable development	Distributed Systems 32, pp S190-S198
--	--	--	--	---	---

- The students volunteering projects contributed to this SDG by the following project:  
<http://www.pua.edu.eg/wp-content/uploads/2019/01/students-volunteering-programs-under-community-projects.pdf>

Project name	Faculty	Term	Relation to SDG
Teach low educated elders ATM Machines	Engineering	Spring 2016-2017	SDG11 sustainable communities

## SDG12: Responsible consumption

According the UN, Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty. Since sustainable consumption and production aims at “doing more and better with less,” net welfare gains from economic activities can increase by reducing resource use, degradation and pollution along the whole life cycle, while increasing quality of life.

Pharos University contributed to this filed with the following research publications.  
<http://www.pua.edu.eg/wp-content/uploads/2019/01/resreach-list-2017.pdf>

No	Problem identified	Author(s)	Year	Publication title	Publisher
1	Waste recycling	E. Nassef; A. Mahmoud; H. Salah; Y. El-taweel ,	2017	International Journal of Research in Industrial Engineering, Vol.6, No.3, pp 522-562, 2017.	Removal of Copper Ions from Liquid Wastes Using Adsorption Technique
2	Waste water treatment	AlaaElnenay, Ehsan Nassef, Gehan Malash, Mohamed Hussein	2017	Egyptian Journal Of Petroleum, Vol.26, pp203-208, 2017	Treatment of drilling fluids wastewater by electrocoagulation
3	Environmental Management	Masoud, M.S., Farag, H.A., Zaatout, A.A., Kamel, H.M., ElGreatly, M.H.,	2017	Recovery of some valuable components from industrial waste	Separation Science and Technology (Philadelphia)

		Ahmed, H.M.			
4	ecocities	Riham A. Ragheb A. Amany A. Ragheb Ghada Raghe	2017	Adaptive re-use and sustainable development for existing historic buildings- case study: buildings of racetrack horses in Sporting Club, Alexandria, Egypt	International Journal of Current Engineering and Technology
5	Environmental Management	Masoud, M.S., Farag, H.A., Zaatout, A.A., Kamel, H.M., ElGreatly, M.H., Ahmed, H.M.	2017	Recovery of some valuable components from industrial waste	Separation Science and Technology (Philadelphia)

### SDG13: Climate action

- In line with SDGs 13 : climate action and life on land, and in March 2017, the Faculty of Languages and Translation has participated in the Environment day with the State Ministry of Environment. The title of the day was "Towards a safe and sustainable environment".
- Pharos university contributed by research in this field by the following publications.  
<http://www.pua.edu.eg/wp-content/uploads/2019/01/resreach-list-2017.pdf>

No	Problem identified	Author(s)	Year	Publication title	Publisher
1	Environmental Management	Salem, M. and Zekry, M	2017	.Towards a zero carbon Alexandria. Renewable Energy and Sustainable Development,	, 3(1), pp.150-154.
2	ecocities	Prof Dr/Hisham Elshimy, Arch /Nadia samier	2017	Green Building between Tradition and Modernity Study Comparative Analysis between Conventional Methods and Updated Styles of Design and Architecture Processors	Renewable Energy and Sustainable Development Journal
3	Green energy	Dalia A. Elsorady	2017	Sustainability and Conserved Energy Value of Heritage Buildings	Journal of Renewable Energy and Sustainable Development (RSED) Vol.3 Issue 1, Feb 2017
4	Green buildings	Arch. Amany Haridy	2017	The Impact of Green Building Envelope on the	The 20 <sup>th</sup> International

				Urban Micro- Climate Case Study: Fawzy Moaaz Streetm Alexandria	Conference on Sustainable Built Environment and Architecture at Tokyo, Japan
5	Green buildings	Osama, M. Helaly, M	2017	Parallelism in energy production through interior architecture sustainable development	International Journal of Parallel, Emergent and Distributed Systems 32, pp S190-S198
6	Green buildings	Arch. Amany Haridy	2017	The Impact of Green Building Envelope on the Urban Micro- Climate Case Study: Fawzy Moaaz Streetm Alexandria	The 20 <sup>th</sup> International Conference on Sustainable Built Environment and Architecture at Tokyo, Japan
7	Green buildings	Osama, M. Helaly, M	2017	Parallelism in energy production through interior architecture sustainable development	International Journal of Parallel, Emergent and Distributed Systems 32, pp S190-S198
8	Sustainable energy	Osama, M., Helaly, M	2017	Parallelism in energy production through interior architecture sustainable development	International Journal of Parallel, Emergent and Distributed Systems
9	Smart buildings	ElShimy, H.	2017	Methodology for the preparation of the standard model for schools investigator for the sustainability of energy systems and building services	Journal of Smart Innovation, Systems and Technologies

## SDG14: Life under water

The students volunteering projects included: (<http://www.pua.edu.eg/wp-content/uploads/2019/01/students-volunteering-programs-under-community-projects.pdf>)

Project name	Faculty	Term	Relation to SDG
Biological Changes in aquatic organisms	Languages and translation	Fall 2017-2018	SDG14 Life below water

## SDG 15 : Life on Land

- In line with SDGs 15 : climate action and life on land, in March 2017, the Faculty of Languages and Translation has participated in the Environment day with the State Ministry of Environment. The title of the day was "Towards a safe and sustainable environment"
- Pharos University contributed to this filed by the following research publication.  
<http://www.pua.edu.eg/wp-content/uploads/2019/01/resreach-list-2017.pdf>

No	Problem identified	Author(s)	Year	Publication title	Publisher
1	Cultural Sustainable Tourism	Nourhane Mohamed Ali El Haridi	2017	Comparative Analysis of the Desert and Green Vernacular Architecture in the Oasis of Egypt	The international Conference of Cultural Sustainable Tourism (CST) in Greece –Faculty of Engineering of Thessaloniki-Mechanical Department.

## SDG16: Peace and Justice:

- In the light of the endeavours made by the faculty of Tourism and Hotel Management to keep up its social role, a faculty delegation paid a visit to Save Children Fund on Tuesday 7/11/2017. Save Children Fund is a children rehabilitation centre in Alexandria that worked in collaboration with the Red Crescent Association and the Social Fund for Development. The delegation involved faculty members, teaching assistants and a large number of students of different academic classes. The main aim of the visit was to provide the orphaned children with the necessary financial and emotional support and to get them integrated into the society.  
<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news>.  
[http://demo2.pua.local/newsArchive.aspx?ACT=STD\\_&fid=18](http://demo2.pua.local/newsArchive.aspx?ACT=STD_&fid=18)
- Within the framework of the endeavours made by the faculty of Tourism and Hotel Management to maintain its social role, the faculty was keen to participate in the orphans' day that was organized by the Student Activities Department on Friday 14/4/2017. Pharos University hosted more than 250 orphans on that day. The day was held in the presence of Prof. Amany Refaat, the faculty Dean, faculty members, teaching assistants and some of the faculty students.  
<http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news>.

[http://demo2.pua.local/newsArchive.aspx?ACT=STD\\_&fid=18](http://demo2.pua.local/newsArchive.aspx?ACT=STD_&fid=18)

- The students volunteering projects included: (<http://www.pua.edu.eg/wp-content/uploads/2019/01/students-volunteering-programs-under-community-projects.pdf>)

Project name	Faculty	Term	Relation to SDG
Homeless children	Mass communication	Fall 2017-2018	SDG16 Peace and Justice

## SDG 17: Partnership for the goals

Pharos University has participated in achieving SDG17 on partnerships through holding international conferences, and having partnerships with universities for discussions, and exchanging experiences about SDGs.

### 1. Conference:

Pharos University has been involved in dialogues and discussions about SDGs in meetings and conferences that was attended by partners and guests from local NGOs and government representatives. Examples of such dialogues and discussion in 2017 are listed below

Event	summary	URL
Pharos University Faculty of Tourism and Hotel Management Organizing The 1st International Conference Entrepreneurship of Tourism, Hospitality and Heritage in Egypt "A Vision for Sustainable Development" 24 – 27 October 2017 – Alexandria – Egypt	The conference was organized under the auspices of the Minister of Higher Education and Scientific Research, the Minister of Tourism, the Minister of Civil Aviation, the Minister of Antiquities and the Conference Chairman was the Governor of Alexandria city. Internationally, there was representative from University of Missouri Kansas City – USA, Jamk University, Faculty of Tourism and Hotel Management – Finland, Lincoln Uni. college (IUC) Faculty of Hospitality and Tourism – Malaysia and senghor University (International University of French language at the service of African development). International authorities concerned were: World tourism organization, Arab tourism organization Arab center for tourist media, UNESCO, and Egyptian - Japanese Friendship association. Conference goals: 1) Shed the light on the potential development and investment opportunities in tourism and hospitality in Alexandria 2) Promote the cooperation and integration initiatives between decision makers and entrepreneurs. 3) Discuss global best practices and successful case studies of sustainable development. 4) Offer opportunities for concerned	<a href="http://www.pua.edu.eg/tourism-and-hotel-management/sustainability-concept-applications/international-conferences-and-researches/">http://www.pua.edu.eg/tourism-and-hotel-management/sustainability-concept-applications/international-conferences-and-researches/</a>

	authorities to develop plans to achieve sustainable development for tourist and archaeological sites in Alexandria. 5) Support and encourage youth entrepreneurs in tourism and hospitality industry 6) Study tourism sector challenges which impede achieving sustainable development goals. 7) Activate the role of sustainable development in preserving cultural and urban heritage in Egypt and 8) Study policies and strategies of sustainable aviation	
<b>Seminar on <u>Population Dynamics and Sustainable Development</u></b>	On Tuesday 21/11/2017 The faculty of Engineering held a seminar on "Population Dynamics and Sustainable Development" on Tuesday 21/11/2017. At the beginning of the seminar, two documentary films were shown; the first was on the history of world population dynamics and the second was on Africa Continent.	<a href="http://www.pua.edu.eg/?s=sustainable+development">http://www.pua.edu.eg/?s=sustainable+development</a>
<b>Tourism day</b>	The faculty of Tourism and Hotel Management hosted a celebration of the Tourism International Day on Tuesday 10/10/2017. The event was held under the supervision of Prof. Amany Refaat, the Dean of the faculty of Tourism and Hotel Management. A considerable number of faculty members, teaching assistance staff and faculty students of different academic classes. The celebration was also attended by a number of key decision-makers and experts in the field; e.g. the Director-General of Tourism Projects at the Tourism Development Authority; the Deputy Minister of Tourism in Alexandria; the former Deputy Minister of Tourism and a tourist expert and, a tourist expert. A seminar was held on the sidelines of the celebration of the Tourism International Day to discuss the theme chosen for this year: <b>Sustainable Tourism- a Tool for Development</b> . The seminar also discussed the opportunities and challenges of sustainable development of tourism in Egypt. At the end of the seminar, the experts answered the students' enquiries and received their comments in an open discussion.	<a href="http://www.pua.edu.eg/tourism-international-day/">http://www.pua.edu.eg/tourism-international-day/</a> and <a href="http://www.pua.edu.eg/tourism-and-hotel-management/tourism-activities/page/3/">http://www.pua.edu.eg/tourism-and-hotel-management/tourism-activities/page/3/</a>
The first international conference on New Trends for Sustainable Energy Faculty of Engineering, Pharos University	In Collaboration with KTH Institute of Technology (Sweden), the faculty of Engineering held this first conference in the academic term Fall 2016-2017. Sponsors of the conference included the Swedish institute, ABB company, and other national companies. The conference included presentation on solar energy, sustainable development, green housing,	<a href="http://www.pua.edu.eg/faculty-of-engineering/conferences/">http://www.pua.edu.eg/faculty-of-engineering/conferences/</a>

## 2. International Cooperation: Participation in International collaboration on gathering data for SDGs

Egyptian cities – Urban	In the coming years new cities will be <a href="http://www.pua.edu.eg/international">http://www.pua.edu.eg/international</a>
-------------------------	--



Design, an architectural task- A Pharos University, -KTH Royal Institute of Technology (Sweden) collaboration	built in Egypt, urban design will become an important subject for the development of the country as a whole. There is no profession more suitable to address the urban form of cities than the architect. The potential of developing sustainable urban form can have a massive impact on living qualities and the reduction of energy needs, if professionally designed. In this concern Pharos University and KTH who organized a four day workshop, which guided students and young teachers to relevant procedures that will give insights in these complex questions of urban sustainable cities.	<a href="#">/announcements/</a>
The faculty of Tourism has signed several MOU for collaboration in sustainable tourism	Collaboration with: Middle east university ( <a href="http://meu.edu.jo/">http://meu.edu.jo/</a> ) Lincoln University college – Malaysia ( <a href="http://www.lincoln.edu.my/">http://www.lincoln.edu.my/</a> ) Missouri University- Kansas ( <a href="https://www.mst.edu/">https://www.mst.edu/</a> ) Ajmer University ( <a href="https://www.mdsuajmer.ac.in/">https://www.mdsuajmer.ac.in/</a> )	<a href="http://www.pua.edu.eg/tourism-and-hotel-management/cooperation-protocols-mou/">http://www.pua.edu.eg/tourism-and-hotel-management/cooperation-protocols-mou/</a>

Other international Cooperation are available at <http://www.pua.edu.eg/international/>

#### Research:

No	Problem identified	SDG of concern	Author(s)	Year	Publication title	Publisher
	Sustainable cities	SDG17 : Partnership for the goals	Salem, M	2017	Participated in "Sustainable Smart Cities International Workshop" hosted by The University of Alabama at Birmingham (UAB) Sustainable Smart Cities Research Center in partnership with Alexandria University	Proceeding
6	Environmental	SDG17 Partnership for the goals	Masoud, M.S., Farag, H.A.,	2017	Recovery of some valuable components	Separation Science and Technology

	Managem nt		Zaatout, A.A., Kamel, H.M., ElGreatly, M.H., Ahmed, H.M.		from industrial waste	(Philadelphia)
	Ecocities and urban developme nt	SDG17 : Partnership for the goals	Dalia A. Elsorady	2017	Community Involvement Framework for Sustainable Urban Conservation: Case of Caliph Street – Historic Cairo	The 1 <sup>st</sup> International Conference : Towards a Better Quality of Life24 -26 November 2017 – Technische universitat Berlin Campus El Gounak Egypt
	Green buildings	DG17: partnership for the goals	Arch. Amany Haridy	2017	The Impact of Green Building Envelope on the Urban Micro- Climate Case Study: Fawzy Moaaz Streetm Alexandria	The 20 <sup>th</sup> International Conference on Sustainable Built Environment and Architecture at Tokyo, Japan
	Green buildings	SD13: climate action DG17: partnership for the goals	Arch. Amany Haridy	2017	The Impact of Green Building Envelope on the Urban Micro- Climate Case Study: Fawzy Moaaz Streetm Alexandria	The 20 <sup>th</sup> International Conference on Sustainable Built Environment and Architecture at Tokyo, Japan
	Environme ntal Managem nt	SDG6: clean water and sanitation SDG12 responsible consumption SDG17 Partnership for the goals	Masoud, M.S., Farag, H.A., Zaatout, A.A., Kamel, H.M., ElGreatly, M.H., Ahmed, H.M.	2017	Recovery of some valuable components from industrial waste	Separation Science and Technology (Philadelphia)

# Appendix A curriculum Evaluation

## Unit-based Sustainability Assessment Tool PART A Teaching, Research and Community Service

A resource book to complement the UNEP  
Mainstreaming Environment and Sustainability in  
African Universities Programme

**Reference:** Togo, M. & Lotz-Sisitka, H. 2009. *Unit Based Sustainability Assessment Tool. A resource book to complement the UNEP Mainstreaming Environment and Sustainability in African Universities Partnership.* Howick, Share-Net.

### Assessment Criteria

#### Rating

<b>X</b>	=	<b>Don't know</b>	no information concerning the practice
<b>0</b>	=	<b>None</b>	there is total lack of evidence on the indicator
<b>1</b>	=	<b>A little</b>	evidence show poor performance
<b>2</b>	=	<b>Adequate</b>	evidence show regular performance
<b>3</b>	=	<b>Substantial</b>	evidence show good performance
<b>4</b>	=	<b>A great deal</b>	excellent performance

		Score					
Code	Indicator	x Don't know	0 None	1 A little	2 Adequate	3 Substantial	4 A great deal
	<b>Curriculum</b>						
<b>C1</b>	The extent to which the department offer courses that engage						

	sustainability concerns						
<b>C2</b>	The level of integration of sustainability topics in courses referred to above						
<b>C3</b>	The degree to which local sustainability issues and challenges form part of the department's teaching programme						
<b>C4</b>	The degree to which global sustainability issues and challenges form part of the department's teaching programme						
<b>C5</b>	The extent to which the department enrol students in courses that engage sustainability concerns						
<b>C6</b>	The level of cross faculty collaboration in teaching sustainability programmes						
	<b>Teaching approach</b>  <b>How far the teaching approach contributes to development of the following characteristics among students:</b>						
<b>T7</b>	The capacity to make informed decisions						
<b>T8</b>	Critical thinking skills						
<b>T9</b>	A sense of responsibility						
<b>T10</b>	Respect for the opinions of others						
<b>T11</b>	Integrated problem solving skills						
	<b>Research and scholarship activities</b>						
<b>R12</b>	The extent to which the department (staff and students) is involved in research and scholarship in the area of sustainability						
<b>R13</b>	The degree to which global sustainability issues and challenges form part of the department's research						
<b>R14</b>	The degree to which local sustainability issues and challenges form part of the department's research						
<b>R15</b>	The extent to which the department is collaborating with other faculties, institutions and stakeholders in pursuit of solutions to sustainability problems						

<b>R16</b>	The extent to which aspects of sustainable development are used in selection/execution of research						
<b>R17</b>	The level to which aspects of sustainable development are reflected in the department's research outputs						
	<b>Community Engagement</b>						
<b>E18</b>	The extent to which the department (staff and students) is involved in community engagement in the area of sustainability						
<b>E19</b>	The level of commitment of the department's resources in sustainability projects in the community						
<b>E20</b>	The degree to which local sustainability issues and challenges form part of the department's community engagement						
<b>E21</b>	The extent to which the department collaborates with other stakeholders in addressing community sustainability challenges						
<b>E22</b>	The extent to which aspects of sustainable development are used in selection/execution of community engagement projects						
	<b>Examination (assessment) of sustainability topics</b>						
<b>X23</b>	The extent to which sustainability aspects are assessed/examined during course						
<b>X24</b>	The extent to which sustainability aspects are considered in evaluating/assessing projects						
<b>X25</b>	The degree to which sustainability aspects are assessed in evaluating service learning programmes						
	<b>Staff expertise and willingness to participate</b>						
<b>S26</b>	The level of expertise of staff members in the area of sustainability						
<b>S27</b>	The extent to which staff members are willing to carry out research and service activities on sustainability aspects/topics						
<b>S28</b>	The extent to which staff members are willing to teach sustainability topics						

Examples form faculties are included below

**Faculty of dentistry : Sustainability performance of the Faculty of Dentistry, Pharos University (Part A, Teaching, Research and Community Service).**

Indicator code	Score	Evidence
C1	3	Infection control-Community dentistry-CCC-Graduation researches-Computer skills
C2	2	Topics to be added include: climate change-pollution-footprint-limitation of resources and poverty-globalisation-gender equity-culture equity-democracy for a better society
C3	4	Courses cover nature, economy, society and well being
C4	1	Computer skills
C5	4	Student's feedback and course evaluation
C6	1	Sustainable transformation project
T7	4	Based on the student evaluation of the course
T8	4	Interactive learning and self learning
T9	4	Attendance, Warning and Denial
T10	4	Suggestions for improvement
T11	0	
R12	3	Graduation researches
R13	0	
R14	2	
R15	1	Sustainable transformation project
R16	3	
R17	2	Patient satisfaction research
E18	4	CCC-Graduation researches-Medical convoys
E19	4	CCC-Medical convoys
E20	4	CCC-Medical convoys
E21	1	Sustainable transformation project
E22	4	CCC-Medical convoys
X23	2	Topics to be added include: climate change-pollution-footprint-limitation of resources and poverty-globalisation-gender equity-culture equity-democracy for a better society
X24	2	Assignments
X25	4	CCC
S26	2	Sustainable transformation change agents
S27	4	
S28	4	
Average	2.75	
Total	77	

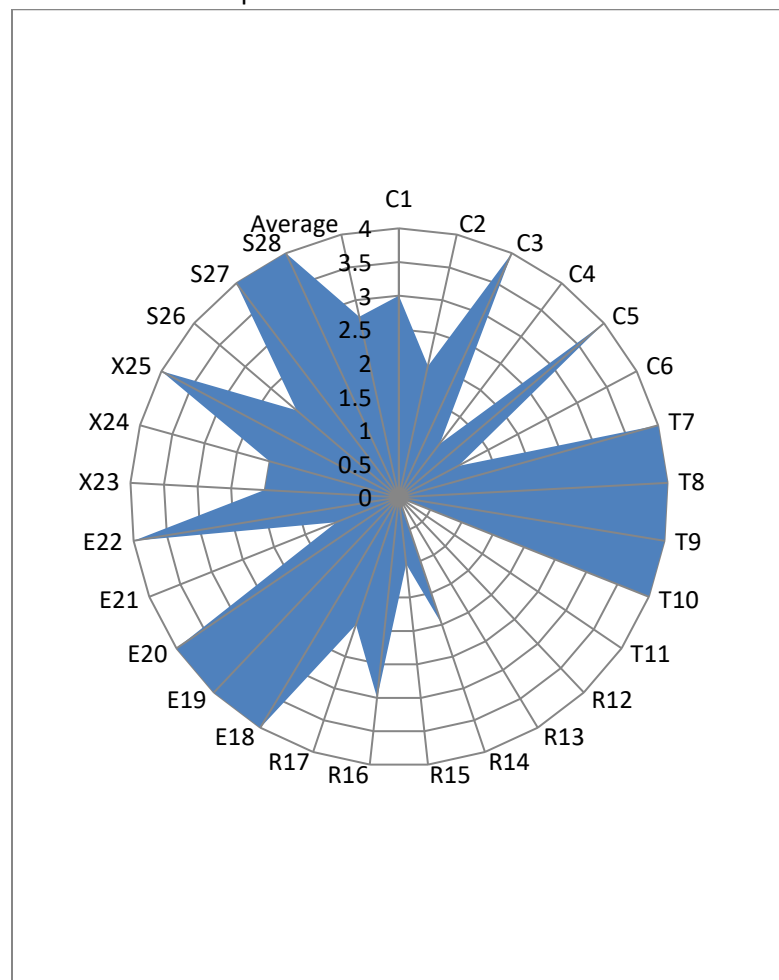
(112)		
% rating	68.75	

Total number of courses = 85

Total number of CCC (2018) = 178

Total number of graduation researches (2018) = 127

Total number of departments = 10

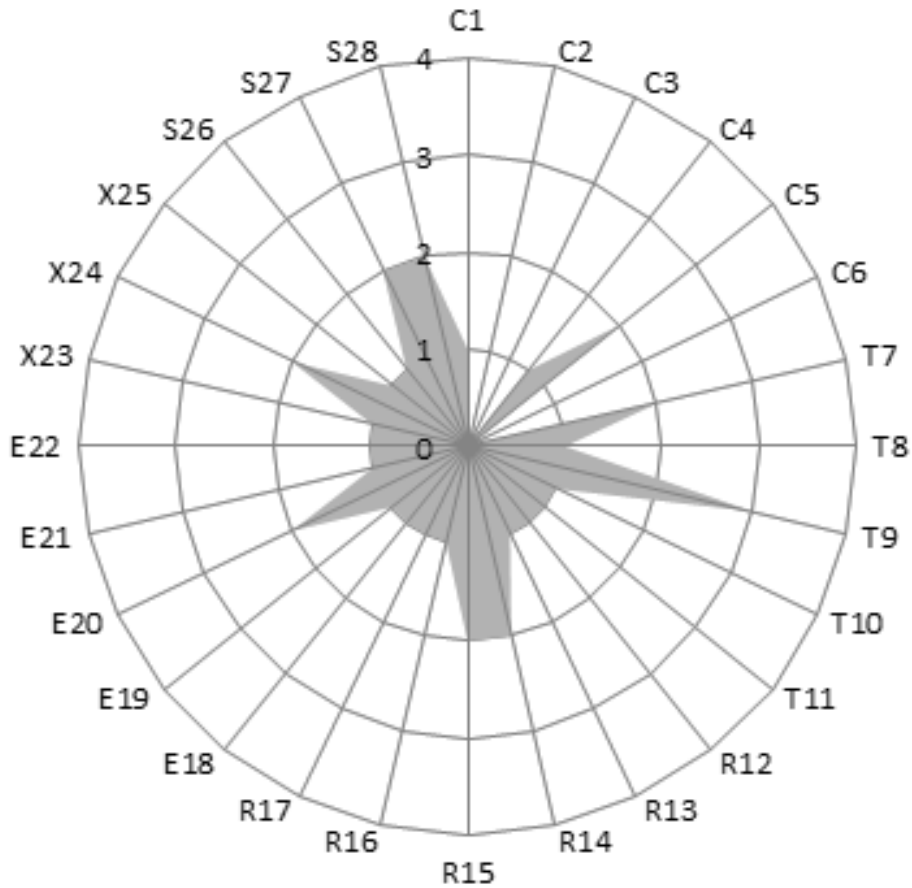


### Faculty of Engineering assessment proposal (department of basic sciences):

The committee has selected the department of basic sciences as a pilot study. The reason of such choice stems from the fact that the courses offered under the department contribute significantly to all programs at the faculty of Engineering. The courses considered are as follows:

- 1- Physics.
- 2- Chemistry.
- 3- Mathematics.
- 4- Drawing.
- 5- Mechanics.
- 6- Manufacturing.
- 7- Perspective.

### **Department of Basic Sciences**





INDICATOR CODE	Department of Basic Sciences
C1	1
C2	0
C3	0
C4	1
C5	2
C6	0
T7	2
T8	1
T9	3
T10	1
T11	1
R12	1
R13	1
R14	2
R15	2
R16	1
R17	1
E18	1
E19	1
E20	2
E21	1
E22	1
X23	1
X24	2
X25	1
S26	1
S27	2
S28	2
AVERAGE	1.25
TOTAL 112	35
% rating	31.25

It is worthy to mention here that, this proposal made according to the bylaw 2014 and we used only the basic courses offered in the department. The former data illuminated the need for new modifications in the content of the courses to be directed into more sustainability. Moreover, we concluded that the perspective course could be our leverage point to be started with.

Score			
Indicator code	Total	Graphic	Décor
C1	3	1	4
C2	2	1	2
C3	2	0	3
C4	0	0	0
C5	2	1	2
C6	0	0	0
T7	2	3	1
T8	3	2	3
T9	1	2	0
T10	2	2	2
T11	3	2	3
R12	0	0	0
R13	1	0	1
R14	0	0	0
R15	0	0	0
R16	1	0	2
R17	0	0	0
E18	1	0	1
E19	0	0	0
E20	0	0	0
E21	1	2	0
E22	2	2	2
X23	1	0	1
X24	1	0	1
X25	0	0	0
S26	2	1	3
S27	0	0	0
S28	2	2	2
Average	0.9643	0.75	1.178571
Total (112)	27	21	33
% rating	24%	19%	29%

