

## Sustainability Report 2017-2018

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# 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 (<a href="http://sdsegypt2030.com/?lang=en">http://sdsegypt2030.com/?lang=en</a>). 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 <a href="http://www.pua.edu.eg/international/international-partners/">http://www.pua.edu.eg/international/international-partners/</a>).

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	GOAL 8: Decent Work and Economic Growth			
to improve competitiveness				
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	GOAL 4: Quality Education			
post graduate studies to meet the national strategy	GOAL 5: Gender Equality			
5. Expanding the activities of community services	GOAL 11: Sustainable Cities and			
and environmental development	Communities			
6. Raising the competitive skills of students	GOAL 4: Quality Education			
	GOAL 5: Gender Equality			

The strategic goals of Pharos University (<a href="http://www.pua.edu.eg/about-pua/vision-and-mission/">http://www.pua.edu.eg/about-pua/vision-and-mission/</a>) 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 (<a href="http://sdsegypt2030.com/wp-content/uploads/2016/10/4.-Knowledge-Innovation-Scientific-Pillar2.pdf">http://sdsegypt2030.com/wp-content/uploads/2016/10/4.-Knowledge-Innovation-Scientific-Pillar2.pdf</a>.

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,	Definition	as	indicated	in	the	Corresponding	Pharos	University
Innovation,	and	Scientific	Sustainable	de	velopment	Stra	tegy:	Goal		
Research t	o 203	0 (National	Egypt 2030							
SDG Plan)										

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 : <a href="http://portal.mohesr.gov.eg/ar-eg/Documents/Strategy mohesr.pdf">http://portal.mohesr.gov.eg/ar-eg/Documents/Strategy mohesr.pdf</a>)

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 repect. 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**

<u>Collaboration with NGOs</u> 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 America 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.

#### 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/

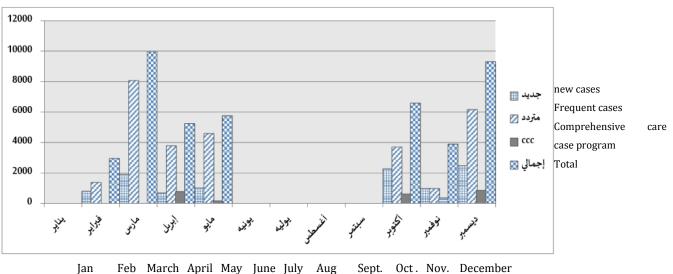
http://demo2.pua.local/newsArchive.aspx?FID=18&NewsTag=news.

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. <a href="http://www.pua.edu.eg/drug-addiction/">http://www.pua.edu.eg/drug-addiction/</a>
- The faculty of density 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 of the Faculty of Density and served by senior students and staff



Jan Feb March April May June July Aug Sept. Oct. Nov. December

Total number of <u>new Patients under treatment in the Faculty of Dentistry public clinics (2017) = 15284</u>
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		Spring	SDG3 good health
	Pharmacy	2016-2017	
Oral health status among group of deaf and mute	Dentistry	Spring	SDG3 good health
children		2016-2017	

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

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

N	lo	Problem	SDG	of	Author(s)	Year	Publication title	Publisher
		identified	concern					
		Green	SDG3:	good	Salem, M.M. and	2017	Impacts of Nanomaterials	4th International
		cities/	health		Moussa, R		in Transforming Towards a	Conference on
		ecocities					Healthy Environment in	Advanced SCIENCES
							the Smart Cities.	(ICAS4

#### **SDG4: Quality Education**

- In line with the project "Transformations to Sustinability" <a href="http://www.pua.edu.eg/">http://www.pua.edu.eg/</a>, 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-adved/
- 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, Dakrour 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) 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. <a href="http://www.pua.edu.eg/about-pua/quality-assurance-unit/academic-quality-unit/">http://www.pua.edu.eg/about-pua/quality-assurance-unit/academic-quality-unit/</a>. 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. <a href="http://www.pua.edu.eg/about-pua/gender-report">http://www.pua.edu.eg/about-pua/gender-report</a>. 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-examiniation.

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
		10.00

#### 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-	2011-	2012-	2013-	2014-	2015-	2016-
2010	2011	2012	2013	2014	1015	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	1.00
Male : Female	1:0.8

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

Ratio	1:2.16
Male : Female	1.2.10

Ratio	1:0.73
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. Eltaweel,	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	Environmenta l 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	Saleh, M., Abdou,	2017	Assessing the use of IP	Proceedings of
	energy	M.A.,		network management	IEEE/ACS International
		Aboulhassan, M.		protocols in smart grids	Conference on Computer
					Systems and
					Applications, AICCS
6	Smart	ElShimy, H.	2017	Methodology for the	Journal of Smart
	buildings			preparation of the standard	Innovation, Systems and
				model for schools	Technologies
				investigator for the	
				sustainability of energy	
				systems and building	
				services	

#### 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 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. <a href="http://www.pua.edu.eg/job-fair-2/">http://www.pua.edu.eg/job-fair-2/</a>.

- 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.
  - o 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

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

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 all it to departments SO to as put it 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		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 developme nt	Dalia A. Elsorady	2017	Community Involvement Framework for Sustainable Urban Conservation: Case of Caliph Street – Historic Cairo	The 1st 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
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 developme nt	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

	inte	erior	architecture	Distributed Systems 32,
	sus	sustainable		pp S190-S198
	dev	development		

- 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	Engineering	Spring 2016-2017	SDG11 sustainable
Machines					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. Eltaweel,	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,Eh ssan Nassef,GehanM alash,Mohamed Hussein	2017	Egyptian Journal Of Petroleum,Vol.26,pp20 3-208,2017	Treatment of drilling fluids wastewater by electrocoagulation
3	Environme ntal Manageme nt	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.	2017	Adaptive re-use and	International Journal of
		Ragheb		sustainable	Current Engineering and
		Amany A.		development for	Technology
		Ragheb		existing historic	
		Ghada Raghe		buildings- case study:	
				buildings of racetrack	
				horses in Sporting	
				Club, Alexandria, Egypt	
5	Environme	Masoud, M.S.,	2017	Recovery of some	Separation Science and
	ntal	Farag, H.A.,		valuable components	Technology
	Manageme	Zaatout, A.A.,		from industrial waste	(Philadelphia)
	nt	Kamel, H.M.,			
		ElGreatly, M.H.,			
		Ahmed, H.M.			

#### **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 20th 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		Fall 2017-2018	SDG14 Life below
	translation			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

- 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

- 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	Fall 2017-2018	SDG16 Pease and
	communication		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 form local NGOs and government representatives. Examples of such dialogues and discussion in 2017 are listed below

Event	summary	URL
Pharos University	The conference was organized under the auspices of the	http://www.pua.edu.e
Faculty of Tourism	Minster of Higher Education and Scientific Research, the	g/tourism-and-hotel-
and Hotel	Minister of Tourism , the Minster of Civil Aviation, the	management/sustaina
Management	Minister of Antiquities and the Conference Chairman	bility-concept-
Organizing	was the Governor of Alexandria city. Internationally,	applications/internati
The 1st International	there was representative from University of Missouri	onal-conferences-and-
Conference	Kansas City – USA, Jamk University, Faculty of Tourism	<u>researches/</u>
Entrepreneurship of	and Hotel Management – Finland, Lincoln Uni. college	
Tourism, Hospitality	(lUc) Faculty of Hospitality and Tourism – Malaysia and	
and Heritage in Egypt	senghor University (International University of French	
"A Vision for	language at the service of African development).	
Sustainable	International authorities concerned were: World	
Development"	tourism organization,	
24 – 27 October 2017	Arab tourism organization	
– Alexandria – Egypt	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) Discus global best	
	practices and successful case studies of sustainable	
	development. 4) Offer opportunities for concerned	

	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	
Seminar on	On Tuesday 21/11/2017 The faculty of Engineering held	http://www.pua.edu.e
Population on	a seminar on "Population Dynamics and Sustainable	g/?s=sustainable+dev
<b>Dynamics</b> and	Development" on Tuesday 21/11/2017. At the beginning	elopment
<u>Sustainable</u>	of the seminar, two documentary films were shown; the	
<u>Development</u>	first was on the history of world population dynamics	
	and the second was on Africa Continent.	
Tourism day	The faculty of Tourism and Hotel Management hosted a	http://www.pua.edu.e
	celebration of the Tourism International Day on Tuesday	g/tourism-
	10/10/2017. The event was held under the supervision of Prof. Amany Refaat, the Dean of the faculty of Tourism	international-day/ and
	and Hotel Management. A considerable number of	http://www.pua.edu.e
	faculty members, teaching assistance staff and faculty	g/tourism-and-hotel-
	students of different academic classes. The celebration	management/tourism
	was also attended by a number of key decision- makers	-activities/page/3/
	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</b>	
	<b>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.	
The first international	In Collaboration with KTH Institute of Technology	http://www.pua.edu.e
conference on New	(Sweden), the faculty of Engineering held this first conference in the academic term Fall 2016-2017.	<u>q/faculty-of-</u> engineering/conferen
Trends for Sustiainable Energy	Sponors of the conference included the Swedish	ces/
Faculty of	institute, ABB company, and other national companies.	<u> </u>
Engineering, Pharos	The conference included presentation on solar energy,	
University	sustainable development, green housing,	

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

Design, an architectural task- A Pharos University, -KTH Royal Institute of	built in Egypt, urban design will become an important subject for the development of the country as a whole. There is no	/announcements/
Technology (Sweden) collaboration	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.	
The faculty of Tourism		http://www.pua.edu.eg/tourism-and-
has signed several MOU	(http://meu.edu.jo/)	hotel-management/cooperation-
for collaboration in	Lincoln University college – Malaysia	protocols-mou/
sustainable tourism	(http://www.lincoln.edu.my/)	
	Missouri University- Kansas	
	(https://www.mst.edu/)	
	Ajmer University (https://www.mdsuajmer.ac.in/)	
	[ [iittps.//www.iiiusuajiiiei.at.iii/]	

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

#### Research:

N	Problem	SDG of concern	Author(s)	Year	Publication title	Publisher
0	identified					
	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	Environme	SDG17 Partnership	Masoud, M.S.,		Recovery of some	Separation Science and Technology
	ntal	for the goals	Farag, H.A.,		valuable components	and

Manageme nt		Zaatout, A.A., Kamel, H.M.,		from industrial waste	(Philadelphia)
		ElGreatly, M.H.,			
		Ahmed, H.M.			
		Dalia A.	2017	Community	The 1st International
	SDG17 : Partnership	Elsorady		Involvement	Conference :
	for the goals			Framework for	Towards a Better
Ecocities				Sustainable Urban	Quality of Life24 -26
and urban				Conservation: Case of	November 2017 -
developme				Caliph Street – Historic	Technische
nt				Cairo	universitat Berlin
					Campus El Gounak
	D 0.1 5		0045	m	Egypt
Green	DG17: partnership	Arch. Amany	2017	The Impact of Green	The 20 <sup>th</sup>
buildings	for the goals	Haridy		Building Envelope on	International
				the Urban Micro-	Conference on
				Climate Case Study: Fawzy	Sustainable Built Environment and
				Case Study: Fawzy Moaaz Streetm	
				Alexandria	Architecture at Tokyo, Japan
Green	SD13: climate action	Arch. Amany	2017	The Impact of Green	The 20 <sup>th</sup>
buildings	DG17: partnership	Haridy	2017	Building Envelope on	International
bunuings	for the goals	Harray		the Urban Micro-	Conference on
	Tor the gould			Climate	Sustainable Built
				Case Study: Fawzy	Environment and
				Moaaz Streetm	Architecture at
				Alexandria	Tokyo, Japan
Environme	SDG6: clean water	Masoud, M.S.,	2017	Recovery of some	Separation Science
ntal	and sanitation	Farag, H.A.,		valuable components	and Technology
Manageme	SDG12 responsible	Zaatout, A.A.,		from industrial waste	(Philadelphia)
nt	consumption	Kamel, H.M.,			
	SDG17 Partnership	ElGreatly, M.H.,			
	for the goals	Ahmed, H.M.			

#### 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**

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

4 = A great deal excellent performance

		Sco	ore				
Code	Indicator	x Don't know	) None	1 A little	2 Adequate	3 Substantial	4 A great deal
	Curriculum	1 2	<u> </u>	, 1	. 1	_ • •	7
C1	The extent to which the department offer courses that engage						

	sustainability concerns			
	Submitted Concerns			
<b>C2</b>	The level of integration of sustainability topics in courses referred to			
	above			
С3	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			
С6	The level of cross faculty collaboration in teaching sustainability			
	programmes			
	Teaching approach	I	 I.	
	How far the teaching approach contributes to development of the			
	following characteristics among students:			
T7	The capacity to make informed decisions			
Т8	Critical thinking skills			
Т9	A sense of responsibility			
T10	Respect for the opinions of others			
T11	Integrated problem solving skills			
	Research and scholarship activities			
R12	The extent to which the department (staff and students) is involved in			
	research and scholarship in the area of sustainability			
R13	The degree to which global sustainability issues and challenges form			
	part of the department's research			
R14	The degree to which local sustainability issues and challenges form part		+	
	of the department's research			
R15	The extent to which the department is collaborating with other faculties,		+	
	institutions and stakeholders in pursuit of solutions to sustainability			
	problems			

R16	The extent to which aspects of sustainable development are used in selection/execution of research				
R17	The level to which aspects of sustainable development are reflected in the department's research outputs				
	Community Engagement	•	•	•	
E18	The extent to which the department (staff and students) is involved in community engagement in the area of sustainability				
E19	The level of commitment of the department's resources in sustainability projects in the community				
E20	The degree to which local sustainability issues and challenges form part of the department's community engagement				
E21	The extent to which the department collaborates with other stakeholders in addressing community sustainability challenges				
E22	The extent to which aspects of sustainable development are used in selection/execution of community engagement projects				
	Examination (assessment) of sustainability	1	l l	L	
	topics				
X23	The extent to which sustainability aspects are assessed/examined during course				
X24	The extent to which sustainability aspects are considered in evaluating/assessing projects				
X25	The degree to which sustainability aspects are assessed in evaluating service learning programmes				
	Staff expertise and willingness to participate			<u> </u>	
S26	The level of expertise of staff members in the area of sustainability				
S27	The extent to which staff members are willing to carry out research and service activities on sustainability aspects/topics				
S28	The extent to which staff members are willing to teach sustainability topics				

#### Examples form faculties are included below

### <u>Faculty of dentistry</u>: 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	

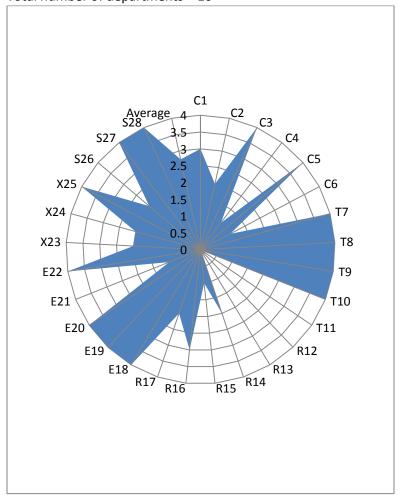
(112)		
% rating	68.75	

Total number of courses = 85

Total number of CCC (2018) = 178

Total number of graduation researches (2018) = 127

Total number of departments = 10

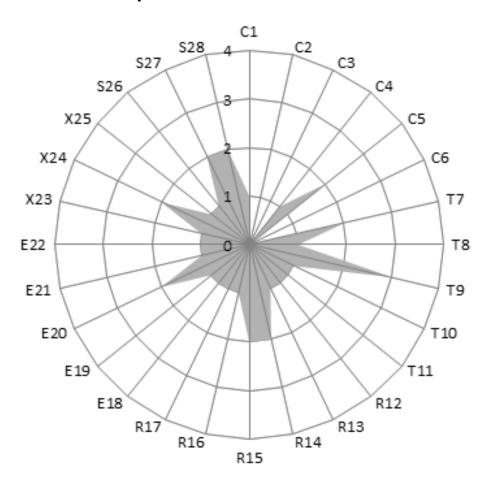


#### Faculty of Engineering assessment proposal (department of basic sciences):

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
Т8	1
Т9	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	35
112	
% 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					
Т8	3	2	3					
Т9	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%					

