



Climate Action

CLIMATE ACTION

Sustainable Development Goal 13 (SDG 13) highlights the urgent need to combat climate change and its consequences. Educational institutions, as a critical component of this global movement, play a critical role in increasing awareness, establishing climate-resilient communities, and encouraging collaboration at the local and regional levels. PSU is dedicated to achieving SDG 13 via a number of environmental education programs and collaborative activities.

Local Education Programs on Climate Change

The creation and execution of regional climate change education programs is one of PSU's main priorities. These initiatives seek to increase knowledge of the risks, consequences, adaptation tactics, impact reduction techniques, and early warning systems associated with climate change among students, professors, and the general public. PSU holds lectures, seminars, and workshops to promote creative solutions to climate-related problems and to give a thorough understanding of them. Through these programs, PSU aims to equip people with the information and abilities they need to make wise decisions and take preventative action to lessen the consequences of climate change. This strategy supports SDG 13's overarching objective of promoting local climate knowledge and awareness. The following events were held in 2022 to inform the local populace about climate change.

International Conference on Sustainability: Developments and Innovations

The conference in 2022 put a heavy emphasis on the state of the art and current practices in various sustainable development goals. From all across the world, the researchers, practitioners, students, and contractors came together. The ICSDI 2022 included a variety of presentations on difficult projects and research, as well as various guest speakers on chosen subjects. The conference featured a wide range of technical and panel discussions, short courses, and workshops that advanced expertise.



A field trip to EV Expo 2022 for students of Electrical Engineering

In accordance with Saudi Vision 2030 and the Sustainable Development Goals (SDGs) of the United Nations, Dr. Umashankar Subramanian, Electrical Engineering, College of Engineering, organized a field trip for electrical engineering students to the largest electric vehicle event in Saudi Arabia, hosted by EV Auto Show, on November 2, 2022. The EV Auto Show is an international display of the most recent advancements in electric automobiles sector. Its main goal is to build and advance a zero-emission environment on a worldwide scope.



A field trip to LEAP 2022 for students of electrical engineering, communications, and networks engineering

The field trip to LEAP, an international level technical exhibition held in Riyadh on February 1, 2022, was organized by their course instructor, Dr. Umashankar Subramaniam, for the Electrical and Communications and Networks Engineering students. LEAP is a unique event that serves as a worldwide platform for the most innovative technology experts from across the world. Modern technology are embraced there earliest, and progress is advancing there the greatest.

Solar PV-based speed control of DC motor using arduino for fan and pump applications

Abdul Rahman Al-Zeer, Talal Al-Sharif, and Abdulelah Al-Yemeni, students in the Electrical Machines course in the Department of Electrical Engineering, completed a project relating to the operation and speed control of a DC motor powered by solar energy in accordance with the Saudi Vision 2030 under the guidance of Dr. Uma Shankar and Eng. Sivakumar. This work aims to develop students' skills in sustainability technology and techniques required to achieve future goals for the country and the world. The project serves the United Nations Sustainable Development 17 Goals 2030, which are:

- 1 - Affordable and Clean energy (SDG#7)
- 2 - Industry, innovation and infrastructure (SDG#9)
- 3 - Climate Action (SDG#13)
- 4 - Partnerships for the goals (SDG#17)



PSU SDG Club

In order to support the UN Sustainable Development Goals 2030 (SDG) agenda towards sustainability and climate justice, the Prince Sultan University SDG Club, which is a part of the Centre for Sustainability and Climate (CSC), engages students in higher education. It also equips them with the knowledge, skills, and pathways to action they need to be effective change agents in the present. To update students on environmental and climatic issues, organize events where students may discuss important Sustainable Development Goals (SDG) topics, volunteer for SDG projects, and establish connections with the local and international communities is the mission of this club.

Net Zero Emission and Transition towards Climate-Neutral Economies: The Role of Higher Education and Saudi Vision 2030

On March 23, 2022, speakers from several universities participated in this Zoom session. Higher education, sustainability, and the Sustainable Development Goals: A Call to Action was the topic of Professor Wendy M. Purcell's talk at Harvard University in the United States. Ms Fiona Goodwin, Deputy CEO of the EAUC and Secretariat for the Race to Zero for Universities and Colleges, provided an introduction to the event. Panel discussions on net zero emissions and transition to climate-neutral economies: the role of higher education and Saudi Vision 2030 were also held.



SPRINGER LINK

Find a Journal | Publish with us | Search

Home > Environmental Science and Pollution Research > Article

Research Article | Published: 01 October 2022

Integration of renewable energy and technological innovation in realizing environmental sustainability: the role of human capital in EKC framework

Najia Saqib, Arshian Sharif, Asif Razaq & Muhammad Usman

Environmental Science and Pollution Research 30, 16372–16385 (2023) | Cite this article

752 Accesses | 20 Citations | Metrics



Sustainable Development



RESEARCH ARTICLE

Nexus between green technology innovation, green financing, and CO₂ emissions in the G7 countries: The moderating role of social globalisation

Arshian Sharif, Najia Saqib, Kangyin Dong, Syed Abdul Rehman Khan

First published: 23 June 2022 | <https://doi.org/10.1002/sd.2360> | Citations: 57

[Correction added on 28 June 2022, after first online publication: The ORCID of Najia Saqib has been added in this version.]

Funding information: National Social Science Foundation of China, Grant/Award Number: 20VGQ003



ORIGINAL RESEARCH article

Front. Environ. Sci., 16 December 2022
Sec. Environmental Economics and Management
Volume 10 - 2022 |
<https://doi.org/10.3389/fenvs.2022.1077658>

This article is part of the Research Topic
Clean Energy Transition and Load Capacity Factors:
Environmental Sustainability Assessment through Advanced
Statistical Methods

[View all 18 Articles >](#)

Revisiting EKC hypothesis in context of renewable energy, human development and moderating role of technological innovations in E-7 countries?

Najia Saqib¹, Muhammad Usman^{2*}, Magdalena Radulescu^{3,4}, Crenguta Ileana Sinisi⁵,
Carmen Gabriela Secara⁵, Claudia Tolea⁵

¹ Department of Finance, College of Business Administration, Prince Sultan University, Riyadh, Saudi Arabia

² China Institute of Development Strategy and Planning, and Center for Industrial Economics, Wuhan University, W

³ Department of Finance, Accounting and Economics, University of Pitesti, Pitesti, Romania

⁴ Institute for Doctoral and Post-Doctoral Studies, University "Lucian Blaga" Sibiu, Sibiu, Romania

⁵ Department of Management and Business Administration, University of Pitesti, Pitesti, Romania



Climate Action Plan

In support of climate action, PSU has developed a comprehensive policies that outlines the university's commitment to reducing its carbon footprint and increasing sustainability.

Sustainable Waste Management, Prevention and Disposal Policy



The PSU Management Department produced the Sustainable Waste Management, Prevention, and Disposal Policy on July 15, 2020. Prince Sultan University is a sustainable, green institution that promotes and implements methods and strategies for sustainable development at all levels. PSU promotes sustainable waste management and disposal practices that are put into place in conjunction with municipal and governmental organizations as part of its efforts to create a secure, environmentally friendly campus. One of the aims of this policy is to avoid carbon-intensive industries and similar chemical processes that cause the emission of unhealthy gases.

Institutional Risk Management Policy

The Prince Sultan University's ("PSU") approach to risk management and the methods it uses to categorize, evaluate, and manage risk are outlined in this policy.



Risk management is something that all unit managers must be accountable for. The risk management committee's duties include deciding how PSU will approach risk management with the help of unit managers, discussing and approving matters that have a significant impact on PSU's risk profile or exposure, continuously monitoring risks and ensuring that appropriate actions are being taken, and reviewing risks every two years.



Co-operative Planning for Climate Change Disasters

In light of a changing climate that is becoming more unpredictable, collaborative preparation for climate change catastrophes is essential. PSU actively engages in cooperative planning initiatives, which may include relocating individuals both domestically and internationally. PSU helps to the creation of preparations for evacuation and relief operations as well as strategies for managing climate change disasters by collaborating closely with regional partners and governmental organizations. Participation of the university in cooperative planning provides a coordinated response to problems brought on by climate change and promotes community resilience. This is in line with SDG 13's objectives to strengthen climate resilience and lessen the effects of natural catastrophes caused by climate change.

Prince Sultan University forms a partnership with Higher Education Sustainability Initiative (HESI), United Nations

HESI serve as centers for creativity and critical thinking, fostering future leaders, legislators, business owners, scientists, researchers, and teachers. In order to advance in the implementation of the 2030 Agenda for Sustainable Development, HEIs are also essential in promoting a deeper knowledge of the SDGs and how they are interrelated. The HESI Partner Program, the most recent addition to the HESI action groups, aims to link higher education institutions, networks, and student organizations to foster a community of shared learning in support of SDG integration into curricula, research, programs, and campus practices and to facilitate knowledge transfer.



Local and Regional Impact

PSU's commitment to environmental education and collaborative efforts in climate action impacts not only the local community but also the broader region. By providing the tools and knowledge necessary to address climate change at the local level, PSU is indirectly contributing to regional sustainability and resilience. This regional impact is crucial in addressing the trans-boundary nature of climate change challenges and ensures that the community remains proactive in mitigating its effects.

Research

Predicting Efficiency of Innovative Disaster Response Practices: Case Study of China's Corporate Philanthropy

by [Ateeq ur Rehman Irshad](#)^{1*}, [Nabeel Safdar](#)^{2*} and [Wajiha Manzoor](#)³

- ¹ Department of Mathematics and Sciences, College of Humanities and Social Science, Prince Sultan University, Rafah Street, Riyadh 11586, Saudi Arabia
 - ² Department of Finance and Investment, NUST Business School, National University of Sciences and Technology (NUST), Islamabad 44000, Pakistan
 - ³ Department of Economics, COMSATS University Islamabad (CUI), Islamabad 45550, Pakistan
- * Authors to whom correspondence should be addressed.

Sustainability **2023**, *15*(3), 2031; <https://doi.org/10.3390/su15032031>

Received: 8 October 2022 / Revised: 13 December 2022 / Accepted: 28 December 2022 /

Published: 20 January 2023

(This article belongs to the Special Issue Economic and Financial Consequences of Climate Change: Emerging Economy Perspectives)



IOP Conference Series: Earth and Environmental Science

PAPER • OPEN ACCESS

The Green Areas in the city and sustainable Approach: Analytical Study of Saudi Crown Prince Mohammed bin Salman's tree-planting Program

Walaa Metwally¹ and Vitta Ibrahim²

Published under licence by IOP Publishing Ltd

[IOP Conference Series: Earth and Environmental Science: Volume 1026, International Conference on Sustainability,](#)

[Developments and Innovations \(ICSDI-2022\) 19/02/2022 - 22/02/2022, Riyadh, Saudi Arabia](#)

Citation Walaa Metwally and Vitta Ibrahim 2022 *IOP Conf. Ser.: Earth Environ. Sci.* **1026** 012045

DOI 10.1088/1755-1315/1026/1/012045



Professor Mohammad Nurunnabi participated as a speaker in Saudi Youth for Sustainability Conference 2022

Professor Mohammad Nurunnabi discussed “Re-imagining the Role of Education on Sustainability” and highlighted that collective efforts from all Saudi Universities will accomplish Vision 2030 and Saudi Green Initiative towards a sustainable future of Saudi Arabia.

Professor Mohammad Nurunnabi PhD (Edinburgh), FAIA(Acad), SFHEA, FRSA, CMBE, CMA, FFA, FIPA, CPA from Prince Sultan University was a distinguished speaker in the session titled - “Continue the conversation with critical questions and ambition for Race to Zero Universities and Colleges”.



Prince Sultan University is the first Carbon Neutral Certified Company in the MENA Region

Prince Sultan University is partnering with Climate Impact Partners, an expert in carbon market solutions for climate action, to earn CarbonNeutral® certification. The university had an independent evaluation of the greenhouse gas emissions created by the 5000 tonnes of CO₂e covered by certification. The first Saudi university to pledge net zero carbon university by 2060 will be at Prince Sultan University. The race to zero for universities and colleges campaign is jointly managed by EAUC, Second Nature, and UN environment. The University also has CSC (Prince Sultan University Center for Sustainability and Climate), which is the first student SDG Club in Saudi Arabia with University Prince Sultan.



Collaboration for SDG best practice

PSU has international collaboration and research. In research, we focus on review comparative approaches and develop international best practice on tackling the SDGs



We're now Carbon Neutral!

Prince Sultan University is now CarbonNeutral® Company Certified!

Prince Sultan University, the 1st CarbonNeutral certified university in the MENA region

CarbonNeutral® Company

Prince Sultan University

5000 tonnes CO2e



This certificate verifies that:
The stated subject is carbon neutral through the use of high quality environmental instruments in accordance with The CarbonNeutral Protocol. All credits adhere to standards approved by the International Carbon Reduction and Offset Alliance (ICROA).

Vaughan Lindsay
CEO - CLIMATE IMPACT PARTNERS

Certificate:	Expires:
CarbonNeutral Company	30 Jan 2023 - 31 Jan 2023
Name of organisation:	Quantity of certified instruments:
Prince Sultan University	5000
Subject:	Certificate number:
Prince Sultan University	PNUS0011310
Project title:	
Renewable Energy Institute (REI) CO2e	



PSU x Jahez Initiative

Together with Prince Sultan University, Jahez plants 500 trees in an effort to cut carbon emissions and meet sustainability goals.



جاهز تزرع 500 شجرة بالتعاون مع جامعة الأمير سلطان لخفض الكربون و تحقيق مستهدفات الاستدامة

JAHEZ PLANTS 500 TREES IN COOPERATION WITH PRINCE SULTAN UNIVERSITY TO REDUCE CARBON EMISSIONS AND ACHIEVE SUSTAINABILITY GOALS

Tuesday - الثلاثاء (28th February - فبراير)
12:00-15:00



Open Access Review

Assessment of Physical Vulnerability and Uncertainties for Debris Flow Hazard: A Review concerning Climate Change

by [Mudassir Ali Khan](#) ^{1,*}, [Zaharaniza Mustafa](#) ¹, [Indra Sati Hamonangan Harahap](#) ²,
[Muhammad Bello Ibrahim](#) ¹ and [Mohamed Ezzat Al-Atroush](#) ^{3,*}

¹ Department of Civil and Environmental Engineering, Universiti Teknologi PETRONAS, Perak 32610, Malaysia

² Department of Civil Engineering, Universitas Islam Indonesia, Yogyakarta 55584, Indonesia

³ Department of Engineering Management, Prince Sultan University, Riyadh P.O. Box 66833, Saudi Arabia

* Authors to whom correspondence should be addressed.

Land 2022, 11(12), 2240; <https://doi.org/10.3390/land11122240>

Received: 16 October 2022 / Revised: 15 November 2022 / Accepted: 16 November 2022 /

Published: 8 December 2022



Environmental education collaborate with NGO & Collaborate with NGOs on climate adaptation

Understanding Sustainable Development Goals: ACT NOW!

On Wednesday, December 7, 2022, the Centre for Sustainability and Climate (CSC) organized a session for PSU students called "Understanding Sustainable Development Goals and its Relation to Saudi Vision 2030" in collaboration with their strategic partner United Nations Global Compact (UNGC) Saudi Network. This session's goal is to examine how students may participate in SDG efforts to support Saudi Vision 2030 and have a better grasp of all 17 SDGs. An international roadmap for peace and prosperity for people and the earth, both now and in the future, is provided by the United Nations 2030 Agenda for Sustainable Development, which was accepted by all UN Member States in 2015. The 17 Sustainable Development Goals (SDGs), which are an urgent call to action for all nations—developed and developing—in a global partnership, are at the center of it.



United Nations Global Compact Network Saudi Arabia forms a strategic partnership with Prince Sultan University to advance the UN's 2030 Agenda

Through higher education institutions, the collaboration hopes to advance UN's 2030 Agenda more effectively. The UNGC aims to facilitate sustainability in the business sector through a number of initiatives. Additionally, UNGC strives to close the knowledge gap among Saudi youth as well as educate them on responsible business behavior and promote a practical understanding of diligent corporate management by partnering and collaborating with academic institutions like PSU, which is also in line with Vision 2030.

Commitment to carbon neutral university

Prince Sultan University is partnering with Climate Impact Partners, an expert in carbon market solutions for climate action, to earn CarbonNeutral® certification. The university had an independent evaluation of the greenhouse gas emissions created by the 5000 tonnes of CO2e covered by certification. The first Saudi university to pledge net zero carbon university by 2060 will be at Prince Sultan University. The race to zero for universities and colleges campaign is jointly managed by EAUC, Second Nature, and UN environment. The University also has CSC (Prince Sultan University Center for Sustainability and Climate), which is the first student SDG Club in Saudi Arabia with University Prince Sultan. Together with Prince Sultan University, Jahez plants 500 trees in an effort to cut carbon emissions and meet sustainability goals.

jahez



جاهز تزرع 500 شجرة بالتعاون مع جامعة الأمير سلطان
لخفض الكربون و تحقيق مستهدفات الاستدامة

JAHEZ PLANTS 500 TREES IN COOPERATION WITH PRINCE SULTAN UNIVERSITY
TO REDUCE CARBON EMISSIONS AND ACHIEVE SUSTAINABILITY GOALS

Tuesday - الثلاثاء (28th February - فبراير)

12:00-15:00



PSU's commitment to SDG 2030

Mission

PSU is committed to United Nations Sustainable Development Goals (SDGs) through effective institutional resource management, innovative teaching and learning, research, national and international partnerships, continuous studies, and outreach. PSU shall undertake the following activities: form higher and steering committees, evaluate each SDG, formulate and develop related SDG policies, conduct awareness campaigns to the PSU community, establish a sustainability office, identify the SDGs related to each college, program, and course, and lab centers at PSU, and implement sustainability-related initiatives.

Vision

Prince Sultan University strives to support Saudi Arabia's Vision 2030 and the United Nations Sustainable Development Goals (SDGs) by paving the way for higher education in KSA and Middle East.

Mission

Supporting the Saudi Arabia's Vision 2030 and the PSU's strategic directions, PSU aligns its mission with SDGs by providing quality education, sustainability initiatives, lifelong learning, scientific research, and community service



P.O. Box No. 66833, Rafha Street, Riyadh 11586,
Saudi Arabia.

©2023 All copyrights reserved

