



SUSTAINABLE DEVELOPMENT REPORT 2019

Climate Action



Climate Action ■

Prince Sultan University is attentive on bringing down the environment pollution and contribute in the fight towards climate change. As an important stakeholder, PSU contributes towards the achievement of sustainable environment and campus through various events, practices, and research. It regularly organizes events and exhibitions for students and employees to promote the awareness on climate change.

The strong commitment can be witnessed from the type of support provided in events related to clean energy, EV and the sustainable practices followed for sustainable PSU campus to promote measures for climate change and research contribution etc. Moreover, the solutions and impacts of climate change is an important topic is endorsed in our curriculum and outreach.

Impact example – Low carbon energy use

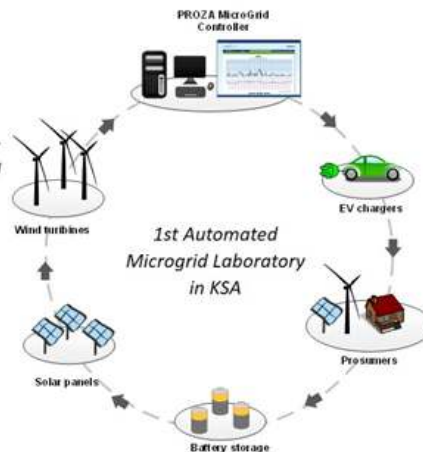
The Prince Sultan University is involved in several industrial collaborations that are leading the way in the search for alternative energy sources. One such example comes from our Renewable Energy Lab, who are in cooperation with Koncar Power Plant Electric Traction, Croatia for a collaborative project on microgrids' test bench for EV charging and renewable energy to combat climate change.



PROZA MicroGrid Controller



- *Highly-scalable, flexible and extensible — can be adapted as your microgrid configuration changes and supports up to 100% renewable energy systems*
- *Cybersecure — it supports multi-layer password protection, encrypted data, VLANs for traffic segregation, firewalls and smart switches according to the IEC 62443 standard*



- *"Self-healing" microgrid — maintains system integrity, reliability and stability should a power generation source go off-line*
- *Applying experience from successful H2020 research projects dealing with flexibility and active demand response*

The Prince Sultan University is involved in several industrial collaborations that are leading the way in the search for alternative energy sources. One such example comes from our Renewable Energy Lab, who are in cooperation with Power and Telecom Technologies Co., KFB Holding Group, Riyadh for a collaborative consultancy project on investigations on minimizing electricity cost and feasibility study of self-sustainable campus towards climate change mitigation.

1 Introducing custom-made techniques for local environment conditions like robotic panel cleaning etc. as per the SDGs 9 and 13

2 Setting up a remote monitoring and control station at Renewable Energy Lab for the performance analysis of installed lights



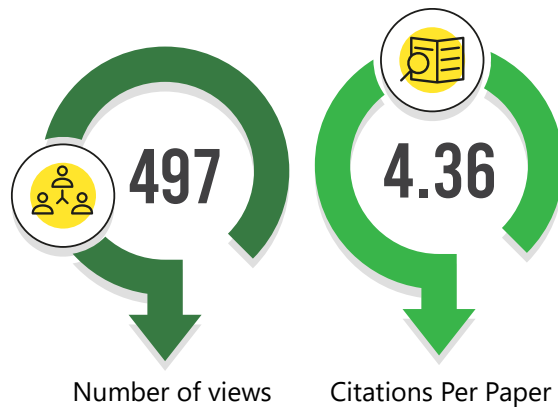


Metrics ■

Research on Climate Action

PSU's scholarly output researches related to Climate Action in the past academic year has 497 views and 4.36 citations per paper.

Renewable Energy lab at PSU is showing serious commitment to encourage its researchers for increasing their productivity in this field.

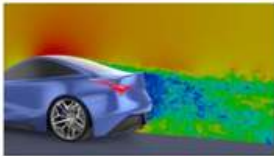


Environmental education measures

Renewable Energy Lab (REL), College of Engineering, Prince Sultan University has organized several events and conferences in association with Top ranking universities in the world in the 'climate change' theme.

e-Mobility

June 23, 2020 | 11:30 am



Delivering e-Mobility to the masses is not only a huge investment, but a significant operational undertaking. As OEMs, suppliers and emerging vehicle manufacturers invest billions to develop innovative electric vehicles, and optimize development and production processes, they are looking for a strategic partner to help realize their vision. Altair technologies are changing the way electric passenger, off-highway and autonomous vehicles are designed, enabling them to accelerate product development, enhance the energy efficiency, and optimize integrated system performance.

Agenda: 23 June

- e-Mobility research and development trends
- Leveraging virtual engineering platform for faster product development
- e-Mobility components - Light weighting, Advanced Material, Safety and Comfort, Electronics and Battery, Connected systems
- e-Mobility infrastructure design
- Advance Driver assistance system

Register here
(<https://attendee.gotowebinar.com/r>)



Umashankar Subramaniam

- Associate Professor,
Renewable energy Lab, College
of Engineering,
Prince Sultan University,
Saudi Arabia,

Speakers:

Mr. Prashanth Kulkarni
Industry Applications - Altair

Mr. Kamleshwar
Industry Applications - Altair

Mr. Manoj M
Industry Applications - Altair

Mr. Sandeep Ramagiri
Industry Applications - Altair

Mr. Sudhir Padaki
Industry Applications - Altair







الهيئة الملكية للجبيل وينبع
Royal Commission for Jubail & Yanbu

قطاع التعليم بالجبيل - العلاقات الصناعية
Education Sector in Jubail - Industrial Relations



The Department of Electrical and Electronics Engineering Technology and the IEEE Students Chapter of Jubail Industrial College cordially invites you for a free webinar on:

WIND ENERGY TECHNOLOGY

and its Research Challenges - A Global and Saudi Arabia Perspective



 Dr. Umashankar Subramaniam
Renewable Energy Lab, College of Engineering, Prince Sultan University

 15 July 2020

 12.30 - 2.00 P.M

 <http://app.jic.edu.sa/jic.sp/CourseDetail.aspx?id=4572>

 No registration charges and active participants will receive certificates

 Further Information Contact: Training@jic.edu.sa



WWW.RCJY.GOV.SA

Virtual Conference on Energy, Smart Grid and EV:

9th July, 2020

Virtual Conference on
Recent Trends on
Renewable Energy, Smart Grid and
Electric Vehicle Technologies

Organized by: School of Electrical Engineering
In Association with





Renewable Energy Lab (REL), College of Engineering, Prince Sultan University is organized International Virtual Conference on Recent trends on Renewable Energy, Smart Grid, and Electric Vehicle Charging (RESGEVT-20) on 9th July 2020 as a partner Institution in association with Top ranking universities in the world . VIT University Vellore India is hosting this conference. The Virtual Conference is a platform for researchers, academicians as well as professionals from all over the world to present, discuss and promote the knowledge, research and practice in the field of Smart Grid Control, Renewable Energy Sources, Energy Efficiency, Power Quality and Electric Vehicle Charging to combat climate change. RESGEVT-20 is offering a fantastic opportunity to attend a global scientific forum from the convenience of your desktop. The conference is online, from paper submission, including reviewing, conference discussion, and post-conference processing. All papers referred to the double tier approval process, single-blind peer-review and regular check. The online conference is a smart and affordable manner of presenting research results. Selected papers based on the domain and quality published in **Scopus Indexed conference proceedings (IOP Conference Series)**.



SUSTAINABLE DEVELOPMENT GOALS

PSU's commitment to SDG 2030

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.

جامعة الأمير سلطان
PRINCE SULTAN
UNIVERSITY



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