

Al-Turath University's Contribution to Affordable and Clean Energy

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Committee: Al-Turath University Sustainability Committee

Introduction

Al-Turath University (TU) is dedicated to advancing Sustainable Development Goal 7 (SDG 7): Affordable and Clean Energy. This goal emphasizes the importance of ensuring access to affordable, reliable, and sustainable energy. TU has taken concrete steps in enhancing energy efficiency, reducing carbon emissions, and exploring renewable energy solutions across campus facilities. This report provides an overview of TU's current policies, initiatives, partnerships, and ongoing improvements aimed at supporting SDG 7.

Current Initiatives and Policies Supporting SDG 7

1. Energy-Efficient Renovation and Building Standards

- TU has established a policy ensuring that all new buildings and renovations adhere to energy efficiency standards. Buildings are designed to maximize the use of natural sunlight to reduce electricity consumption. A recently renovated main building, designed with energy-efficient standards, has successfully reduced its electricity usage by 30% compared to the old structure.



2. Upgrading Buildings for Higher Energy Efficiency

- TU has systematically upgraded its campus buildings to enhance energy efficiency. Our plan by 2027, all the building will be energy efficient building. This includes:

- **Solar Energy Integration:** Solar systems have been installed to partially power campus facilities.



- **Energy-Saving Architectural Design:** New buildings are constructed with glass facades to utilize natural daylight, minimizing the need for artificial lighting during the day.



3. Use of Renewable Energy and Electric Vehicles

- TU is actively incorporating renewable energy sources, including solar power, to reduce its reliance on conventional energy. Additionally, the university has introduced electric vehicles on campus to cut down on greenhouse gas emissions, supporting a cleaner campus environment, including cleaning, visitors and students' transportations cars.



Research and Collaboration in Sustainable Energy

















1. Green Energy Research Program

- TU has partnered with the West Asian Mathematical School to create a research group focused on green and sustainable energy. This program encourages collaborative research among staff and students, aiming to develop innovative solutions for sustainable energy.

2. International Partnerships

- TU collaborates with international institutions such as the International Union of Universities and Jehan University in Turkey. These partnerships aim to foster research and educational programs that promote sustainable practices, including remote learning initiatives that indirectly support energy conservation by reducing the need for physical infrastructure.

SDG contributions

 Goal 1: No poverty	1 document	 Goal 10: Reduced inequalities	4 documents
 Goal 2: Zero hunger	7 documents	 Goal 11: Sustainable cities and communities	43 documents
 Goal 3: Good health and well-being	117 documents	 Goal 12: Responsible consumption and production	21 documents
 Goal 4: Quality education	11 documents	 Goal 13: Climate action	39 documents
 Goal 6: Clean water and sanitation	33 documents	 Goal 14: Life below water	2 documents
 Goal 7: Affordable and clean energy	120 documents	 Goal 15: Life on land	4 documents
 Goal 8: Decent work and economic growth	20 documents	 Goal 16: Peace, justice and strong institutions	4 documents
 Goal 9: Industry, innovation and infrastructure	72 documents	 Goal 17: Partnership for the goals	76 documents

Community Engagement and Awareness Programs

1. Public Awareness Campaigns

- TU, in collaboration with institutions like the University of Iowa Hospital, has organized programs to promote environmental protection and sustainable habits among students and the wider community. These campaigns focus on educating the public about energy conservation and sustainability practices.

2. Educational Programs on Clean Energy

- TU regularly conducts workshops, seminars, and public lectures to educate students, staff, and community members on the benefits of clean energy, energy-saving practices, and the importance of reducing carbon footprints. These activities are part of TU's broader commitment to fostering a culture of sustainability on campus and beyond.

Impact Measurement and Evaluation

1. Energy Savings and Emissions Reduction

- The energy-efficient renovations and solar installations have led to measurable reductions in electricity usage on campus, as demonstrated by the 30% decrease in power consumption in renovated buildings. The use of electric vehicles further contributes to emissions reduction, supporting TU's climate goals.

2. Tracking Progress Towards Sustainability Goals

- TU has established monitoring systems to assess the effectiveness of its energy-saving measures and renewable energy installations. These metrics help the university evaluate its progress toward SDG 7 and identify areas for improvement in its sustainability practices.
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Recommendations

To further strengthen TU's commitment to SDG 7, the following recommendations are proposed:

1. Expand Solar Panel Installations

- Increase the number of buildings equipped with solar panels to further reduce the campus's reliance on non-renewable energy sources and lower overall energy costs.

2. Introduce a Campus-Wide Energy Conservation Program

- Launch an energy-saving awareness campaign targeting students and staff to promote responsible energy use. This could include tips on reducing energy consumption, rewards for departments achieving the greatest savings, and regular workshops on sustainability.

3. Invest in Research on Renewable Energy Technologies

- Establish a dedicated research fund to support projects on renewable energy and sustainable practices, encouraging students and faculty to innovate in the field of clean energy.

4. Expand Partnerships with Energy Organizations

- Strengthen partnerships with local and international organizations specializing in renewable energy. This could open up opportunities for joint projects, internships, and funding support to enhance TU's energy initiatives.
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Conclusion

Al-Turath University's commitment to SDG 7 is demonstrated through its energy-efficient infrastructure, renewable energy initiatives, and active promotion of sustainable practices. By reducing energy consumption, utilizing renewable resources, and engaging in collaborative research, TU is making meaningful progress toward affordable and clean energy goals. The university will continue to explore innovative solutions and partnerships to reinforce its position as a leader in sustainability within the academic sector.