



SUSTAINABILITY TEAM



Introduction

The University of Tabuk is committed to promoting sustainable development across all aspects of its operations, academic programs, and campus life. Sustainability is embedded as a key strategic priority in the University's Third Strategic Plan (2023-2027), reflecting its dedication to environmental stewardship, social responsibility, and energy efficiency.

Dedicated staff members and project teams work to advance these objectives by implementing targeted initiatives that integrate sustainability into governance, administration, teaching, research, and the campus environment. These efforts are aligned with national frameworks and the Ministry of Education's Community Responsibility Plan, ensuring that the university contributes actively to both local and national sustainable development goals.

Key Sustainability Projects

1. Implementation of the Global University Sustainability Framework

- Applied across governance, administration, teaching, research, and environmental protection.
- Ensures compliance with environmental and energy sustainability standards.
- Includes developing future plans aligned with the Ministry's Community Responsibility Plan.

2. Campus Greening and Tree Planting Initiatives

- Conducted across the main campus and affiliated colleges in the governorates.
- Aims to enhance the campus environment, promote biodiversity, and contribute to environmental sustainability.

For more information: University of Tabuk Third Strategic Plan (Second Edition), Pages 34-35.

<https://www.ut.edu.sa/office-strategy-and-institutional-excellence/about-institute/resources>

Implementation of the Global University Sustainability Framework

The University of Tabuk has established a dedicated committee for the Implementation of the Global University Sustainability Framework, formed by an official decision of the University President. The committee is responsible for advancing sustainable development practices across the institution and ensuring that sustainability principles are integrated into university governance, operations, teaching, research, and campus management.

The committee undertakes several key responsibilities, including:

- Developing a comprehensive timeline and action plan to ensure that all university entities meet the requirements of the Sustainable University Framework.
- Assessing the current sustainability status of the university, identifying strengths, weaknesses, opportunities, and challenges.
- Proposing policies, governance mechanisms, and key performance indicators (KPIs) to monitor the implementation of sustainability initiatives.
- Promoting the integration of sustainability practices across all university sectors and monitoring progress toward sustainability objectives.
- Periodically reviewing and updating the university's sustainability priorities and goals to support continuous improvement.

- Enhancing sustainability awareness and culture within the campus and encouraging participation from university units and individuals.
- Highlighting the university's environmental initiatives and sustainability achievements through available communication channels.
- Conducting periodic evaluations to measure progress toward sustainability targets and baseline indicators.
- Supporting local and international partnerships that strengthen sustainability practices.
- Identifying relevant sustainability certifications, particularly related to infrastructure, and studying their requirements and application processes.
- Establishing a database of environmental regulations, policies, and infrastructure-related standards and ensuring their continuous update.
- Submitting periodic reports to the University President on the committee's activities and achievements.

This committee functions as a central coordinating body for sustainability initiatives at the University of Tabuk, ensuring the effective implementation of sustainability strategies and alignment with national and international sustainability standards.

For details:

- [Implementation Plan for the Sustainable University Framework Project](#)
- [University of Tabuk Sustainability Committee](#)

Campus Greening and Tree Planting Initiatives

The University of Tabuk has established a specialized committee to develop and implement the Strategic Plan for Campus Greening and Landscaping, aiming to plant 500,000 trees across the university campus, affiliated colleges, and governorates. The committee is responsible for planning, supervising, and evaluating tree-planting and landscaping initiatives to enhance environmental sustainability and improve the university's green infrastructure.

The committee undertakes several key responsibilities, including:

- Developing a phased implementation plan for tree planting across the university campus and affiliated colleges.
- Assessing and monitoring the sites designated for landscaping and tree-planting activities.
- Evaluating the progress and outcomes of the strategic planting initiative.
- Supervising planting activities and coordinating landscaping work across the main campus and university branches in the governorates.
- Overseeing contracts related to the design, construction, and maintenance of green spaces within the university campus.
- Participating in the planning and development of new landscaped areas and approving proposed designs submitted by consultants or contractors.
- Identifying environmentally suitable plant and tree species for cultivation within the campus and its affiliated colleges.
- Establishing policies and procedures for plant protection and pest management.
- Monitoring implementation and ensuring continuous improvement by reinforcing strengths and addressing challenges.

This initiative contributes to enhancing biodiversity, improving the campus environment, and supporting the university's broader sustainability objectives.

For details:

- [University decision establishing the Tree Planting Strategic Plan Committee](#)

Landscaping and Green Spaces Management

The General Administration of Engineering Affairs at the University of Tabuk includes a dedicated Landscaping and Green Spaces Section within its organizational structure. This section is responsible for managing and maintaining the university's green infrastructure and supporting environmental sustainability across the campus.

The section oversees several operational units, including Irrigation Management and Plant Maintenance, and undertakes key responsibilities such as:

- Supervising the maintenance and operation of irrigation systems, including sprinklers, pipelines, valves, and control panels.
- Monitoring irrigation schedules and regulating water consumption in coordination with contractors to ensure efficient resource use.
- Ensuring the proper functioning and maintenance of irrigation networks.
- Supervising contractors responsible for tree and plant maintenance and landscaping activities.
- Participating in the selection of environmentally suitable plant and tree species for the campus environment.
- Monitoring the implementation of pest control measures to protect plants and green areas.
- Reviewing contractor performance reports and ensuring compliance with contractual obligations.
- Overseeing landscaping maintenance operations and ensuring the sustainability of green areas across the campus.

Through these responsibilities, the Landscaping and Green Spaces Section contributes significantly to improving the campus environment, supporting biodiversity, and advancing the university's environmental sustainability initiatives.

For details:

- [Organizational Structure of the General Administration for Engineering Affairs p.19-20](#)

Net Zero Innovation Center Initiative

During the EDGEX International Education Exhibition, the University of Tabuk launched a national alliance project titled "Net Zero Innovation Center" in partnership with NEOM, Red Sea Global, and Teesside University (UK).

This initiative aims to develop sustainable environmental solutions by adopting advanced technologies and supporting the transition of industries toward achieving net-zero carbon emissions by 2060, in alignment with national sustainability goals.

The project focuses on fostering research collaboration, innovation, and knowledge exchange to accelerate the development of technologies that reduce carbon emissions and support sustainable industrial transformation.

For details:

- https://x.com/u_tabuk/status/1912222065647812613?s=48

Renewable Energy and Environmental Technology Center

The Renewable Energy and Environmental Technology Center at the University of Tabuk plays a key role in advancing sustainable development through research, innovation, training, and community engagement in the fields of renewable energy and environmental technologies.

Mission

To develop and deliver specialized research projects, training programs, and consulting services in renewable energy systems and energy efficiency for the government sector, private sector, and local community.

Vision

To become a globally recognized leader in research and development in renewable energy systems and energy efficiency, aligned with Saudi Vision 2030.

Key Activities and Contributions

- Conducting advanced research in renewable energy and environmental technologies.
- Providing training programs and technical consultations in renewable energy systems and energy efficiency.
- Developing innovative technological solutions such as:
 - ✓ Monitoring solar panel performance and automated cleaning systems.
 - ✓ Cleaning solar panels installed on lighting poles using Bluetooth technology.
 - ✓ Cooling solar panels using phase-change nanomaterials based on camel grease to improve efficiency.
- Supporting research collaboration and partnerships with industrial, tourism, academic, and research sectors locally and internationally.
- Promoting public awareness and education on clean and sustainable energy practices.
- Contributing to innovative solutions addressing energy, water, and environmental challenges through applied research.

Accreditation

The center is accredited by King Abdullah City for Atomic and Renewable Energy (KACARE) as a training center for solar photovoltaic system design.

Through these activities, the center contributes to strengthening the university's role in promoting clean energy technologies, environmental sustainability, and knowledge transfer to society.

For details:

- <https://www.ut.edu.sa/renewable-energy-environmental-technology-center>

Artificial Intelligence and Sensing Research Center

The Artificial Intelligence and Sensing Research Center at the University of Tabuk is a multidisciplinary research unit dedicated to advancing knowledge and innovation in the fields of artificial intelligence (AI), sensing technologies, and their applications across sectors such as environmental monitoring, smart systems, and data analytics. The center brings together specialized faculty members and researchers who collaborate to develop cutting-edge solutions that address societal, industrial, and environmental challenges.

Key Focus Areas and Contributions:

- Conducting high-impact research in artificial intelligence, machine learning, robotics, and sensing technologies.
- Developing innovative AI-driven systems for applications in environmental monitoring, sustainability, and smart infrastructure.
- Enhancing the university's research capacity and supporting collaborations with national and international partners.

- Providing platforms for training, workshops, and academic engagement in AI and sensing technologies.
- Contributing to applied research that can positively impact regional development and support data-driven decision-making.

The center's activities contribute to the university's broader commitment to sustainable development by supporting technological innovation, building research excellence, and fostering partnerships that bring scientific solutions to local and global challenges.

Staff Composition:

The center is staffed by a team of specialized researchers and faculty members with expertise in artificial intelligence and sensing technologies, dedicated to advancing the center's research mission and collaborative initiatives.

For details:

- <https://www.ut.edu.sa/artificial-intelligence-sensing-research-center/about-center/aist-staff>
- <https://www.ut.edu.sa/artificial-intelligence-sensing-research-center>

Supporting Policies

In addition to dedicated committees, research centers, and administrative units, the University of Tabuk has implemented a comprehensive set of policies that reinforce sustainable development and ensure consistent application across all university activities.

For details:

- [University of Tabuk Sustainability Policies](#)

Conclusion

The University of Tabuk demonstrates a strong and systematic commitment to advancing sustainable development across all its operations. Through dedicated committees, specialized research centers, strategic initiatives, and comprehensive institutional policies, the university ensures that sustainability is embedded in governance, teaching, research, environmental management, and community engagement. These coordinated efforts not only strengthen the university's environmental and social responsibility but also foster a culture of innovation, accountability, and long-term impact, positioning the University of Tabuk as a leading institution in sustainability at both national and regional levels.