Azerbaijan
TECHNICAL
University

Report on Sustainable Development

Goal 17

PARTNERSHIPS FOR THE GOALS

2024

17 PARTNERSHIPS FOR THE GOALS

Foreword

Developing global partnerships is vitally important to deliver the SDGs. Azerbaijan Technical University (AzTU) believes that Sustainable development is a global challenge that demands the involvement of governments, universities, organizations, the private sector, and NGOs worldwide. Developing global partnerships is important in terms of enhancing knowledge and skills, as well as, exchanging expertise to tackle global challenges. AzTU supports developing a partnership with global and local governments, organizations, and universities to fight against global challenges affecting sustainability.

Introduction

SDG 17, focuses on global partnership for sustainable development, which is crucial to the successful realization of the 2030 agenda for Sustainable development—developing cooperation among government, universities, private sector, and civil society essential to support the SDG17 goals. This report highlights how the AzTU contributes to this goal through international partnerships. The University focuses on cultivating partnerships with a broad spectrum of stakeholders. By working alongside government agencies, industry experts, NGOs, and global institutions, the university taps into shared expertise, resources, and knowledge. These collaborations enable a holistic approach to tackling societal issues and advancing sustainable development objectives.

References

National Information Portal on Sustainable Development Goals of the Republic of Azerbaijan

AzTU Sustainability

AzTU SDG 17 Report / November 2023

SDG 17 keywords - Partnerships for the goals

Capacity building	Foreign direct investments	International aid	Technology cooperation agreements
Civil society partnerships	Fostering innovation	International population	Technology transfer
Communication technologies	Free trade	International support	Weighted tariff average
Debt sustainability	Fundamental principles of official statistics	International support for developing countries	Women entrepreneurs
Development assistance	Global partnership	Knowledge sharing	World Trade Organization
Disaggregated data	Global partnership for sustainable development	Multi - stakeholder partnerships	
Doha Development Agenda	Global stability	Poverty eradication	
Entrepreneurship	Housing census International aid	Public - private partnerships	
Environmentally sound technologies	International cooperation	Science cooperation agreements	

SDG 17 Targets

- **Build and expand partnerships:** AzTU developing cooperation with over 130 universities from 40 different countries to develop joint projects, and programs. Azerbaijan Technical University is deeply engaged in international collaborations and partnerships that extend beyond borders. Developing partnerships with global HEIs and companies fosters knowledge exchange, promotes cross-cultural understanding, and facilitates the sharing of best practices. These partnerships allow the university to gain insights from diverse perspectives and implement global solutions to address local challenges.

- **Research collaboration:** AzTU supports this target through its research partnership with local and global partners. Through collaboration with HEIs and industry partners, AzTU helps generate knowledge, foster innovative solutions, and provide recommendations that shape policy decisions and promote sustainable development. AzTU and Bahchashehir University of Turkiye held an International Summit on Climate change. The main purpose of the summit is to bring scientists together to work on global issues. As well as inform the young generation and community regarding climate change.

- **Industry partnership:** Azerbaijan Technical University develops partnerships with industry and carries out numerous projects and educational programs across various sectors through university-industry collaboration. The main goal is to design a curriculum and research that aligns with the industry needs in Azerbaijan. This initiative ensures that students gain knowledge and skills that are directly applicable to real-world processes in the industrial sector.

- **Community engagement:** In Azerbaijan, work is being done on the nationalization and concrete implementation of the UN Sustainable Development Goals until 2030 with special attention. The university always engages the local community in its sustainable development activities through various outreach initiatives, projects, workshops, and events. The university involves local government offices, NGOs, and the community in the project implemented by Azerbaijan Technical University regarding transportation infrastructure in 42 cities of Azerbaijan. The project was implemented in the frame of "2019-2023 State Program on Road Traffic Safety in the Republic of Azerbaijan" dated Decree No. 852 27.12.2018 of the President of the Republic of Azerbaijan. AzTU is the key actor in implementing the project in cooperation with other government offices, local governments, NGO's, and the community.

- **Academic activities on SDGs:** Adherent to sustainable development priorities in both national and international contexts, Azerbaijan Technical University fosters the SDGs

through teaching and research. To provide hands-on knowledge on SDGs, the relevant subjects on SDGs have been included in the curriculum. AzTU's educational programs integrate sustainability and STEM education, fostering skills in innovation, critical thinking, and responsible decision-making.

Today`s environmental situation is one of the most global problems in the world, and environmental problems continue to increase day by day. To solve the growing problems, specialists with relevant knowledge and skills are required. Ecologists and Ecological Engineers are such specialists. There is a great demand for people studying and improving their qualifications in the field of ecology in Azerbaijan, and the prospects of the field in our country are very great.

SDG 17's Positive Impact on Other SDGs

SDG 9 (Industry, Innovation, and Infrastructure): By partnering with international universities, research centers, and the private sector, AzTU's focus on areas like Data Science, AI, and Cybersecurity accelerates innovations that are crucial for both SDG 9 (building resilient infrastructure, promoting inclusive industrialization, and fostering innovation) and SDG 7 (Affordable and Clean Energy). These partnerships, which include collaborations with the Black Sea Universities Network (BSUN) and participation in the Erasmus+ program, are critical for generating new solutions and sharing best practices that can be applied globally.

SDG 13 (Climate Action): AzTU's focus on Sustainable Energy and Environmental Technologies provides an example of how SDG 17 can create synergies across countries and sectors to address the climate crisis. By hosting events like the "Water and Energy Security" workshop in 2022, AzTU fosters collaborative discussions that generate innovative solutions for mitigating climate change impacts. These partnerships not only advance SDG 13 but also enable AzTU's faculty and students to engage in climate solutions that have regional and global relevance.

SDG 4 (Quality Education): The Social Development Center, established in 2022, exemplifies AzTU's commitment to SDG 4 by engaging students in volunteering activities where they mentor and inspire secondary school students. These outreach initiatives, which include seminars on STEM careers and sustainable engineering, help develop a future generation that is knowledgeable about the SDGs and capable of driving positive change. By collaborating with local schools and NGOs, AzTU enhances education both at the university level and in the wider community, creating a culture of lifelong learning and promoting the values of sustainability across all levels of society.

SDG 6 (Clean Water and Sanitation): AzTU's involvement in the BSUN workshop on Water and Energy Security in 2022 demonstrated how academic partnerships can address water-related challenges. By bringing together researchers, policymakers, and experts from different sectors, AzTU

contributes to research and discussions that influence water management strategies, conservation practices, and technologies for ensuring access to safe and clean water. This helps advance SDG 6 by improving water governance and enhancing local and regional capacity to manage water resources sustainably.

SDG 8 (Decent Work and Economic Growth): AzTU's research on Robotics, Automation, and the Industrial Internet of Things (IIoT) helps foster innovation in manufacturing, transportation, and industry. These innovations have the potential to create new industries and economic opportunities, particularly in areas related to sustainability and green technologies. By participating in projects like UniClaD, which aims to enhance the capacity of universities to foster innovation clusters, AzTU contributes to the development of a sustainable and inclusive economy. These partnerships help universities, businesses, and governments to jointly create an environment that supports decent work and fosters economic growth through sustainable practices.

SDG 12 (Responsible Consumption and Production): AzTU's focus on Sustainable Manufacturing and Advanced Material Science contributes to reducing waste, optimizing resource use, and creating more sustainable production systems. Through research collaborations, AzTU works with international partners to explore ways to make production processes more resource-efficient and environmentally friendly. AzTU's commitment to eco-friendly technologies and its active participation in conferences focused on Energy Efficiency are examples of how global partnerships in academia and industry contribute to the realization of SDG 12 by promoting responsible consumption patterns and sustainable production methods.

Current situation

As a higher education institution, Azerbaijan Technical University (AzTU) is playing an active role in promoting partnerships and contributing to SDG 17, particularly through its research, academic programs, and collaborations with various stakeholders.

AzTU's Strategic Approach to SDGs and Partnerships

AzTU has integrated the SDGs into its Development Strategy for 2021-2030. One of the central themes of this strategy is the creation of a "Sustainable and Inclusive University" that aligns with the requirements of the 21st century. This includes fostering partnerships for the implementation of SDG 17 by leveraging the university's capabilities in research, education, and community engagement.

AzTU emphasizes knowledge sharing, research collaboration, and capacity building in its strategy, aligning these elements with global sustainable development goals. In this framework, AzTU has set specific research priorities that align with key aspects of sustainable development, particularly those related to technology, energy, and environmental sustainability.

https://www.aztu.edu.az/web_admin/upload/files/aztu.edu.az/menus/9-2022/Strategiya.pdf

AzTU's Research Areas and Focus on SDGs

AzTU has redefined its research priorities for the 2022-2026 period to better integrate the SDGs into its academic activities. These focus areas include:

- Data Science, Artificial Intelligence, and Machine Learning

- Information Technologies, Software Development, and Cybersecurity

- Sustainable Energy, Mobility, and Environmental Technologies

- Advanced Manufacturing, Material Science, and Nanotechnologies

- Robotics, Automation, and the Industrial Internet of Things

These research areas directly contribute to achieving multiple SDGs, particularly those related to technology (SDG 9: Industry, Innovation, and Infrastructure), sustainable energy (SDG 7: Affordable and Clean Energy), and environmental sustainability (SDG 13: Climate Action).

In 2022, AzTU established the Social Development Center, which focuses on social engagement activities and volunteer programs that directly support SDG 17. This initiative coordinates efforts to enhance collaboration with schools, local communities, and various social organizations, helping to improve awareness and participation in sustainability efforts.

https://www.aztu.edu.az/web_admin/upload/files/aztu.edu.az/menus/9-2022/Strategiya.pdf

Global Partnerships and International Collaboration

AzTU has maintained strong international ties, particularly within networks like the Black Sea Universities Network (BSUN). As an active member, AzTU contributes to the BSUN's research on sustainable development, including organizing workshops such as the one held in 2022 on "Water and Energy Security and the UN 2030 Agenda for Sustainable Development." This event, along with many others, underscores AzTU's commitment to fostering global partnerships for achieving SDG 17.

https://www.aztu.edu.az/az/news/aztu-da-qara-deniz-universitetler-sebekesinin-numayendelerinin-istiraki-ile-beynelxalq-seminar-kecirilib-7748

Additionally, AzTU has contributed to the Erasmus+ project** on enhancing university capacities to promote innovation and sustainability, underscoring its commitment to building international partnerships focused on SDG 17.

https://www.aztu.edu.az/az/project/innovasiya-ve-dayaniqliliq-prinsipleri-ile-klasterlerin-islenmesine-baslamaqda-ve-istirakda-universitetlerin-potensialinin-artirilmasi-layihesi-uniclad-2

Academic and Educational Contributions to SDGs

AzTU has developed specialized educational programs that address SDG-related issues. For example, two new master's programs developed under the EU-funded Erasmus+ initiative focus on SDG 11 (Sustainable Cities and Communities) and SDG 3 (Good Health and Well-Being):

- Master's in Crisis and Risk Management for Transport Services (SDG 11)

- Master's in Quality and Risk Management in Healthcare (SDG 3)

Additionally, the university's engineering programs include courses that cover a wide range of SDG topics, including environmental management, waste recycling, green economy, and energy conservation. Courses such as "General Ecology", "Urban Ecology", and "Energy and Environment" reflect AzTU's commitment to equipping students with the knowledge and skills needed to address the world's pressing sustainability challenges.

https://aztuconference.aztu.edu.az/conference_detail/20

https://aztuconference.aztu.edu.az/conference_detail/22

https://aztuconference.aztu.edu.az/conference_detail/21

Engagement with NGOs and Civil Society

AzTU actively collaborates with a wide range of NGOs and civil society organizations, further supporting SDG 17 by promoting education and public awareness on critical issues. In 2022, AzTU organized and co-hosted several international conferences focused on sustainable development, including:

- The 3rd Eurasian Energy and Sustainability Conference

- Energy Efficiency and Green Energy Technologies Conference

- International Conference on Engineering Sciences

These conferences, which included participation from global experts and stakeholders, serve as platforms for discussing sustainable energy, green technologies, and other SDG-related issues.

AzTU also partners with NGOs such as the Development of the Field of Migration Public Union and the Support for Youth Enlightenment Public Union, organizing educational and training events on topics like drug addiction prevention, psychology, and youth empowerment.

https://www.aztu.edu.az/sub_site/az/creng-88/page/study-materials-646

 https://www.aztu.edu.az/az/news/aztu-da-lmqs-layihesi-cercivesinde-yeni-ixtisas-uzre-telebe-qebuluaparilib-7959

Student Engagement and Community Impact

AzTU's students are deeply involved in initiatives related to SDG 17 through volunteer programs and social engagement activities. The AzTU Student Youth Organization and Student Trade Union play active roles in organizing events and participating in sustainability efforts, both within the university and the broader community. For example, student-led initiatives include seminars on gender equality, domestic violence, and youth empowerment, all of which contribute to building a more sustainable and inclusive society.

https://www.aztu.edu.az/sub_site/az/telebe-gencler-teskilati-71/news/tgt-nin-teskilatciligi-ile-fakultelerarasi-futbol-cempionati-kecirilib-187

https://www.baymedia.az/news/qht_news/80755.html

Future Goals

- **Strengthening Global Partnerships.** AzTU will further deepen its partnerships with international academic institutions, governmental bodies, NGOs, and the private sector. The university plans to enhance its involvement in global research initiatives and sustainability projects, particularly in the areas of climate change, energy security, and digital transformation. These partnerships will be integral in advancing cross-border collaborations that tackle the world's most pressing challenges.

- **Fostering Interdisciplinary Research.** Building on the identified research areas (such as sustainable energy, artificial intelligence, and robotics), AzTU will continue to promote interdisciplinary research that integrates SDGs into technological and scientific innovations. By fostering collaboration across faculties and research centers, AzTU aims to produce cutting-edge research that contributes directly to sustainable development and aligns with the global SDG agenda.

- **Expanding Educational Programs on SDGs.** AzTU will enhance its curriculum by introducing more specialized programs and courses focused on the SDGs. This includes expanding the number of master's and bachelor's programs that address specific goals such as sustainable urban development (SDG 11), clean energy (SDG 7), and public health (SDG 3). Additionally, AzTU plans to offer more professional development and training programs for industry professionals, further aligning education with the evolving demands of a sustainable global economy.

- **Increasing Student and Community Engagement.** The university will continue to prioritize student involvement in sustainability initiatives. AzTU aims to expand its volunteering programs and community outreach efforts, enabling students to directly contribute to local and global development projects. This will include more initiatives related to environmental conservation, social justice, and public health, empowering students to become proactive agents of change in their communities.

- **Sustainable Campus Development.** AzTU will take concrete steps to make its own campus a model of sustainability. This includes implementing green technologies, reducing the university's carbon footprint, and promoting sustainable practices within campus operations.

The goal is to transform AzTU into a fully sustainable and environmentally responsible institution, which serves as an example for other universities and organizations to follow.

- **Enhancing Regional Cooperation on SDGs.** As part of its active membership in regional networks like the Black Sea Universities Network (BSUN), AzTU will continue to build stronger regional alliances focused on achieving SDGs. The university plans to take a leadership role in regional discussions and initiatives aimed at improving energy security, environmental sustainability, and social development within the Black Sea region.

- **Promoting Innovation and Entrepreneurship for Sustainability.** AzTU will support and incubate innovative start-ups and entrepreneurial initiatives focused on sustainable solutions. By creating a dedicated platform for students, faculty, and local entrepreneurs to develop and scale green technologies, sustainable businesses, and social enterprises, AzTU aims to contribute to the broader innovation ecosystem that drives sustainable economic growth.

Conclusion

AzTU's research areas, including data science, sustainable energy, and robotics, are intricately linked to SDGs, focusing on innovative solutions to global challenges. The establishment of the Social Development Center and AzTU's active participation in international collaborations, such as the Black Sea Universities Network (BSUN) and Erasmus+ projects, further underline its dedication to advancing sustainable development. The university's role as an organizer of international conferences and the integration of SDGs into academic curricula highlight its commitment to education for sustainability.

Furthermore, AzTU's extensive partnerships with NGOs, student organizations, and the broader community ensure a collaborative approach to social development, fostering a culture of civic engagement among students and faculty alike. By emphasizing the importance of partnerships, both within and beyond academia, AzTU sets a strong example of how universities can drive positive change and contribute meaningfully to the global sustainable development agenda.