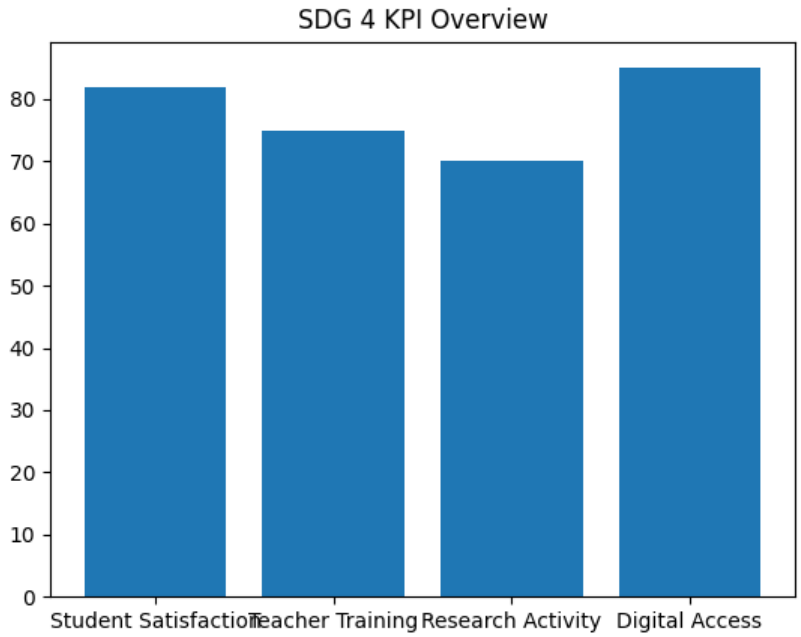
Azerbaijan Technological University (ATU)

SDG 4 Portfolio Submission

1. Executive Summary

This document integrates Quality Assurance and Academic Freedom reports aligned with SDG 4...

2. KPI Dashboard



3. Academic Freedom Impact

Academic freedom initiatives improved teaching quality, research output, and student engagement...

4. Quality Assurance Impact

Quality assurance systems strengthened curriculum, digital learning, and industry alignment...

5. SDG 4 Alignment

Aligned with SDG 4 targets 4.3, 4.4, 4.7, and 4.c...

SDG 4 REPORT

Quality Education

Azerbaijan Technological University

Prepared in alignment with QS Sustainability reporting expectations

Based on the Azerbaijan Technological University Quality Assurance Policy Action Plan, 2025

Institution	Azerbaijan Technological University (ATU)
Reporting theme	SDG 4 - Quality Education
Reporting basis	Institutional evidence provided by the university
Primary framework	QS Sustainability reporting logic with emphasis on social impact, impact of education, knowledge exchange, employability, equality and governance
Academic year	2024-2025, with selected evidence from 2025 implementation activities

Approved institutional framework referenced in source text: Rector Assoc. Prof. Yashar Omarov

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1. Executive Summary

Azerbaijan Technological University (ATU) approaches SDG 4 - Quality Education through an integrated model that combines curriculum modernisation, quality assurance, labour-market responsiveness, digitalisation, inclusive student support, industry engagement, academic mobility and staff development. The evidence supplied for the 2024-2025 academic year demonstrates that quality education at ATU is not treated as a narrow classroom issue; rather, it is operationalised as an institutional ecosystem that links governance, teaching practice, infrastructure, careers, research, internationalisation and community-facing partnerships. This integrated approach is highly relevant to QS Sustainability expectations, which assess not only academic provision but also the wider social impact of education, knowledge exchange and graduate opportunity.

The university's quality agenda is anchored in formal governance arrangements. The Teaching Methodological Council operated under an approved action plan and held eight meetings during the reporting cycle. These meetings supported the review of curricula, textbooks, teaching aids, methodological materials and other educational resources prior to approval. The system is therefore evidence-based, committee-led and quality controlled. A further strength is the university's use of publication review and educational-material scrutiny to ensure that learning resources align with curricula, student demand and pedagogical appropriateness. Such processes strengthen institutional credibility and demonstrate that academic standards are monitored before teaching materials are disseminated.

ATU also demonstrates significant movement towards educational relevance and responsiveness. New and revised educational programmes have been shaped by labour-market demand, including emerging fields such as information security and cybersecurity. Forty-two educational programmes were submitted to the university for 2025, while programme design is explicitly aligned to legal and regulatory frameworks in Azerbaijan. Partnerships with employers such as BP, Coca-Cola Azerbaijan, Kapital Bank, Nar Mobile and the Innovation and Digital Development Agency support the creation of specialised laboratories and practice-oriented learning spaces. This directly advances SDG target 4.4 by building relevant technical and vocational skills for employment, decent work and entrepreneurship.

The university's physical and digital learning environment has also expanded. New or reconstructed auditoriums and laboratories supported by AzGranata, BuildX, BP, Coca-

Cola, Nar and other partners have improved the infrastructure available for applied teaching. The campus dining hall was renovated, a free entrant support centre was established, and Wi-Fi connectivity has been extended across campus. Through the Kodera LMS and the Digital Library, the university has moved towards more open, transparent and accessible provision of curricula, syllabi, subject programmes and learning materials. More than 20,000 scientific and literary works are available through the digital library environment. These investments support both learning continuity and the student-centred delivery model expected in contemporary higher education.

Quality monitoring is supported by a structured culture of feedback. Survey work conducted by the Quality Assurance and Audit Department included student satisfaction, teacher professional and personal qualities, and staff workplace climate. Quantitative participation levels were notable: 390 students responded to the 2025 student satisfaction survey, 416 respondents participated in the teacher-quality survey, and 152 employees took part in the administrative and teaching-support staff survey. Earlier evidence from March 2024 recorded responses from 420 students and 85 teachers, with an overall satisfaction rate of 82 percent. Importantly, the university does not present these findings as symbolic consultation. The reports identify specific development priorities such as classroom renovation, updated technical equipment, faster response to student requests, more flexible scheduling, stronger psychological and academic support, better use of digital resources, and enhanced document control. This evidences a functioning quality loop rather than a one-way reporting exercise.

ATU's student-centred model is another major contribution to SDG 4. Students are given structured freedom to choose elective subjects from a substantial 60-credit elective block, supported by tutors who provide academic advice and guidance. The decision-making process is participatory and documented. Student voice is also present in governance through representation on the Quality Assurance Commission. Combined with the use of the electronic education management system for course assignments, schedules, attendance and assessment, this contributes to learner agency, transparency and accountability.

The university's educational mission is further strengthened through industry-linked teaching and employability support. In the current academic year, eight specialists from production enterprises and public institutions were involved as teachers; 42 external substitute teachers and 41 hourly employees contributed to teaching; and 25 people

were invited from other universities. ATU also organised major graduate job fairs, including one with more than 500 vacancies in 2024 and another in 2025 at which more than 40 employers presented more than 400 vacancies to over 750 graduating students. This ecosystem of employer engagement, applied instruction and career support positions ATU strongly within the QS Sustainability lens on employability and opportunities.

Internationalisation contributes to the depth and outward orientation of educational quality. ATU reports dual-degree agreements with the University of Sopron in Hungary and Bialystok University of Technology in Poland, as well as cooperation with 65 universities from 23 countries. Student mobility within Erasmus+ increased from two students in the institution's first year of participation to 32 students in 2024-2025. In addition, 32 academic staff participated in international professional development programmes, and 22 foreign students were enrolled in preparatory groups at ATU. These developments support intercultural learning, staff capacity building and international exposure, all of which reinforce SDG 4.3 and 4.7.

Overall, the evidence shows that ATU is building an increasingly comprehensive educational quality ecosystem. Its strengths lie in governance, curriculum review, practical infrastructure, digital access, employer partnerships, quality monitoring, student-centred design, mobility and startup support. To move towards a stronger QS Sustainability performance, the university would benefit from deeper outcome tracking, more disaggregated access and inclusion data, clearer progression and completion indicators, stronger public reporting on educational impact, and a more standardised annual KPI dashboard. Even so, the current evidence base demonstrates substantial alignment with the principles of inclusive, relevant, future-facing and impact-oriented higher education.

2. SDG 4 and QS Sustainability Alignment

SDG 4 calls on institutions to ensure inclusive and equitable quality education and to promote lifelong learning opportunities for all. In the context of a university, this goal extends beyond teaching delivery. It includes curriculum relevance, equitable participation, graduate skills, staff capability, accessibility of learning resources, student support, global learning exposure and mechanisms that connect education to society. The ATU evidence set speaks to several of these dimensions and can therefore be

structured in a way that responds to QS Sustainability requirements more effectively than a conventional administrative report.

QS Sustainability evaluates universities across environmental impact, social impact and governance. Within the social impact category, the 'Impact of Education', 'Knowledge Exchange', 'Employability and Opportunities', 'Equality', and 'Health and Wellbeing' lenses are particularly relevant to SDG 4 reporting. The QS methodology also places value on public evidence, institutional policies, research impact, outreach, staff and student experience, and the demonstrable outcomes of education. The present report therefore reframes ATU's activities in line with these expectations: educational quality is interpreted not only as internal compliance, but also as a visible and measurable contribution to people, communities, the labour market and national development. (aligned with official QS Sustainability methodology and support guidance)

ATU's evidence is especially strong in six QS-relevant domains. First, the university documents a quality assurance architecture that supports academic review, formal committee work, audits and action planning. Second, it demonstrates programme responsiveness to the labour market, including the opening of new specialisations and cooperation with employers on educational infrastructure. Third, it shows a move towards student-centred and digitally supported learning through the Kodera LMS, electronic curriculum access and a digital library. Fourth, it collects stakeholder feedback through surveys and uses findings to identify institutional improvements. Fifth, it links education to employability through career fairs, internships, external teaching specialists and soft-skills development. Sixth, it expands the educational experience through Erasmus+ mobility, dual-degree programmes and international professional development.

For a strong QS-oriented SDG 4 narrative, these elements need to be presented not as disconnected events but as evidence of an educational theory of change. In such a theory of change, governance produces quality standards; quality standards shape teaching and curriculum; curriculum and infrastructure support learning; student voice and data feedback improve delivery; industry and international partners broaden relevance; and career systems convert learning into graduate opportunity. This report follows that logic throughout. It also pays close attention to metrics, because QS Sustainability rewards institutions that can show not only commitment but also evidence

of implementation and outward-facing results. (aligned with official QS Sustainability methodology and support guidance)

A final point of methodological importance is that QS places emphasis on public evidence and clear documentation. ATU already has an advantage here because many activities are supported by publicly accessible institutional news items, social media announcements, webpages and linked evidence. The challenge is therefore not the absence of activity, but the need to synthesise the evidence into a strategic, impact-focused narrative. The present report addresses that challenge by identifying educational outcomes, mapping them to SDG 4 targets and presenting them in a way that speaks directly to quality, access, skills, transparency, participation and institutional effectiveness.

3. Institutional Governance for Educational Quality

Effective progress on SDG 4 requires educational quality to be governed institutionally rather than left to individual initiative. ATU's governance framework demonstrates such institutionalisation. During the reporting period, the Teaching Methodological Council operated according to an approved regulation and annual action plan. Eight meetings were held and formally recorded. This regularity is important: a university that systematically documents the review of educational matters signals maturity of process and accountability. It also indicates that decisions relating to teaching and learning are embedded in routine governance rather than treated as ad hoc responses.

The Council's work covered the review of curricula, textbooks, teaching aids, methodological instructions and other pedagogical materials, including those for non-specialised subjects. The pre-publication scrutiny of teaching resources is particularly significant in a quality education context. ATU examined whether proposed materials were aligned to curricula, suitable for student numbers, compliant with periodicity and publication requirements, and educationally justified. Materials that did not receive a positive recommendation were not published. This is evidence of quality control at the level of the learning resource itself - a dimension often omitted from university sustainability narratives, but directly relevant to SDG 4 because it affects the academic integrity and usability of the learning environment.

The scale of educational-material production further suggests an active academic ecosystem. In 2024, the university recorded 4 textbooks, 12 teaching aids, 3 monographs and 21 methodological resources, plus additional outputs approved through institutional and ministerial decisions, reaching a total of 37 printed works. In 2025, the corresponding total was 6. During the 2024-2025 academic year, 48 subject programmes were printed with the seal of the Ministry of Science and Education of the Republic of Azerbaijan, and 58 were published by decision of the ATU educational council. While output volume alone is not a complete measure of quality, it does demonstrate that teaching provision is supported by formally endorsed academic documentation.

Governance at ATU also includes quality assurance structures that reach beyond the Teaching Methodological Council. The Quality Assurance Commission, established to strengthen quality mechanisms and compliance with accreditation criteria, includes academic leaders, administrative managers, external industry representatives and a student member. This composition matters. It introduces multi-stakeholder oversight into educational quality and reflects principles associated with both SDG 4 and contemporary accreditation culture: participation, transparency, accountability and responsiveness. The inclusion of external industry members suggests that programme quality is not evaluated solely from within the university, while the inclusion of a student representative provides legitimacy to learner-centred decision making.

Another governance strength is the university's willingness to connect educational planning with national strategies and sectoral needs. The cybersecurity initiative, for example, is directly linked to the national information security and cybersecurity strategy for 2023-2027. This indicates that educational governance is attentive to broader development priorities rather than operating in isolation. From a QS Sustainability perspective, this is valuable because it shows that ATU's educational model is not merely internally efficient; it also responds to national capacity-building needs in future-critical fields.

At the same time, ATU has scope to make its governance impact even more visible. A stronger public annual dashboard linking committee decisions, action items, implementation status and student outcomes would improve external readability. Similarly, more explicit publication of programme review cycles, curriculum revision histories and follow-up actions from quality meetings would make the governance

system easier to evaluate externally. Nevertheless, the evidence already shows that governance for educational quality is real, structured and institutionally embedded at ATU, which is an essential foundation for credible SDG 4 performance.

4. Curriculum Modernisation and Teaching Innovation

Curriculum modernisation is one of the strongest ways universities contribute to SDG 4 because it determines whether education remains relevant, rigorous and capable of preparing students for social and economic change. ATU's action plan indicates that curriculum development is continuously monitored and that modern educational technologies are considered in the design and delivery of programmes. The university does not present the curriculum as static. Instead, it treats programme content, teaching materials and methodological support as areas requiring routine evaluation and expert review.

The evidence suggests that curriculum design at ATU is guided by several principles. The first is formal alignment with the educational programme framework in Azerbaijan, including the Law on Education and relevant classifications of specialties. The second is clarity about graduate competencies, learning outcomes, assessment methods, infrastructure needs, internship opportunities and pathways to employment or further study. The third is communication: the educational programme is intended not only for internal use but also to inform students, employers and evaluators about what graduates know and can do. This is important in a QS context because clarity of learning outcomes and public accessibility of educational information are closely linked to perceptions of educational impact and transparency.

ATU's use of teaching and methodological expertise before approving educational resources further strengthens the curriculum. The evaluation of textbooks, teaching aids and methodological instructions allows the university to ensure that classroom delivery is supported by suitable learning content. This is especially relevant in applied and technical fields, where outdated or poorly aligned materials can weaken student preparedness. The printing and approval of large numbers of subject programmes in 2024-2025 indicate that curricular documentation is active and widely used.

Teaching innovation is also visible in the growing integration of digital tools. The use of the Kodera LMS enables curricula, syllabi, subject programmes and other regulatory

documents to be placed in an electronic environment accessible to students and staff. Such systems do more than digitise paperwork; they enable transparency, faster access to course information, more consistent administration and, potentially, better student engagement. The availability of digital materials also supports students who need flexible learning arrangements, thereby contributing to a more inclusive and resilient learning system.

An important curricular feature is the emphasis on practical and workplace-related learning. Newly opened or reconstructed laboratories and auditoriums in fields such as communication technologies, food engineering, design and applied engineering support the translation of curriculum into practice. In this regard, ATU is not simply upgrading content; it is matching the curriculum to the technical conditions required for effective learning. This is especially relevant to technical universities, where laboratories, equipment and simulation environments are integral to educational quality rather than peripheral additions.

There is further potential to strengthen the curriculum narrative for QS Sustainability by making more explicit the extent to which sustainability, ethics, inclusion, digital literacy, entrepreneurship and civic responsibility are embedded across all disciplines. The existing evidence already points to strong programme relevance, digitalisation and practical orientation. A next step would be to present these curricular features through a cross-university competency framework that shows how ATU develops not only subject expertise but also transferable capacities aligned with SDG 4.7, lifelong learning and responsible citizenship.

5. Labour-Market Relevance and Future-Ready Programmes

A core requirement of quality education is relevance. Universities must not only transmit knowledge but also prepare learners for real labour-market conditions, emerging sectors and future societal needs. ATU explicitly states that labour-market demand is the first priority in preparing the student admission plan. This is a strong policy position because it indicates that programme capacity and specialisation development are tied to external demand rather than historical inertia. The opening of new specialisations at bachelor's, master's and doctoral levels on the basis of material resources and human-capital potential further supports the argument that ATU is aligning institutional growth with national development needs.

The clearest example is the university's focus on information security and cybersecurity. In response to the national cybersecurity strategy, ATU is implementing a cybersecurity laboratory for bachelor's-level information security education and planning future master's-level training in this direction. This is a strategically important intervention. Cybersecurity is a future-critical field that intersects with digital transformation, national resilience, economic security and social trust. By investing in this area, the university contributes directly to SDG target 4.4 on skills for employment and indirectly to broader national development priorities.

The labour-market relevance of programmes is strengthened through cooperation with public and private partners. BP Azerbaijan, Coca-Cola Azerbaijan, Kapital Bank, Nar Mobile and the Innovation and Digital Development Agency have supported educational laboratories or agreements for their development. Such partnerships reduce the distance between classroom learning and industry practice. They also create visible evidence for QS Sustainability under the lenses of employability, knowledge exchange and educational impact because they show that employers are not passive recipients of graduates but active contributors to educational quality.

ATU's educational programme model further supports labour-market relevance by setting out competencies, teaching and learning methods, assessment approaches, internship possibilities, employment opportunities and requirements for infrastructure and personnel potential. This format is particularly useful for external stakeholders because it translates the curriculum into outcome language. Employers can understand what graduates are trained to do, while students can see how their studies connect to future careers. In a strong QS submission, this kind of programme architecture should be presented as evidence that educational design is outcome-oriented and stakeholder-aware.

The fact that 42 educational programmes were sent to the university for 2025 suggests continuing programme renewal and a broad institutional review effort. The value of this evidence lies not merely in the number itself, but in what it implies: the university is not preserving a fixed academic offering but actively engaging with programme redesign and approval. In regional universities, such adaptation is particularly significant because it can improve local access to high-demand fields without requiring students to migrate to major urban centres.

A further strength is ATU's responsiveness to employer proposals in curriculum design. In later evidence, the report notes that the curriculum for Transport Engineering was developed jointly with Azerbaijan Railways and that proposals from Simurg Company were taken into account in Logistics and Transport Technologies Engineering. These examples help move the narrative from general employability language to concrete co-design. For QS Sustainability purposes, such cases are persuasive because they indicate not just consultation but curricular integration of employer knowledge.

To deepen this area further, ATU could systematically publish graduate destination data, employment rates by programme, internship conversion rates into employment and examples of curriculum changes made directly in response to employer feedback. Even without those additional indicators, the existing evidence shows a serious institutional effort to align teaching provision with the evolving labour market and to build future-ready technical capacity.

6. Learning Environment, Facilities and Student Support

SDG 4 is not achieved through curriculum alone; it also depends on the conditions in which learning takes place. ATU's evidence demonstrates a sustained effort to improve the material and technical base for educational and social activities. The university's approach combines external partnership funding, internal infrastructure development and support services for students. This is significant because a quality learning environment is both a pedagogical and an equity issue: students cannot fully benefit from higher education if teaching spaces, digital access, social support and basic campus services are weak.

Several new or upgraded learning spaces were established through university-industry cooperation. With the support of AzGranata, a new auditorium was opened to help students acquire theoretical knowledge and understand the scientific foundations of production processes. Two reconstructed classrooms were opened in September 2025, including a design workshop at the Faculty of Light Industry Engineering and Logistics supported by the Temas Regional Development Public Association and another classroom established under a memorandum with BuildX. A further auditorium was created with support from N1 Bakery, owned by Khazri TN LLC. These interventions show how external partners can improve educational infrastructure in ways directly linked to student learning.

The practical capacity of the university was strengthened further by the opening of specialised laboratories and auditoriums supported by BP and Coca-Cola. The BP-supported laboratory under the Department of Automation and Information Technologies includes two sections with a total of 17 computers, while the Coca-Cola-supported auditorium under the Department of Food Engineering and Expertise is equipped with 15 laptops and relevant teaching equipment. Within the framework of cooperation with Nar, a mobile communication laboratory was also established to support practical learning of communication technologies. These facilities are not generic buildings; they are specialised spaces aligned to programme needs and employability-oriented training.

ATU also improved student welfare infrastructure. The campus dining room was renovated and reopened in September 2025 with rebuilt engineering and communication systems, modernised ventilation and lighting, updated kitchen equipment and capacity to serve approximately 125 people simultaneously. In sustainability reporting, such improvements can sometimes be overlooked because they are not narrowly academic. However, student wellbeing, comfort and access to adequate services are closely related to educational continuity, inclusion and campus experience. A student who studies in a better-supported environment is more likely to participate fully in university life.

The entrant support centre is another important feature. It provides free consultation on programme choice, support with electronic registration and troubleshooting for applicants. This service matters from an SDG 4 perspective because it reduces procedural barriers to access, particularly for prospective students who may lack prior familiarity with higher education systems or digital processes. It also reflects a widening-participation logic: the university is not waiting for students to navigate complexity alone, but is actively lowering access barriers.

Taken together, these investments show that ATU understands the learning environment as a total ecosystem involving classrooms, laboratories, technical equipment, connectivity, welfare facilities and access services. This is a strong basis for a QS Sustainability narrative because it demonstrates that educational quality is supported by enabling conditions. The university could strengthen future reporting by publishing student-to-computer ratios, accessibility adaptations, utilisation rates of specialised laboratories, satisfaction with support services and evidence of how infrastructure improvements affect learning outcomes. The current evidence nonetheless shows

meaningful progress in building a learning environment consistent with the aims of SDG 4.

7. Digital Transformation, Transparency and Learning Access

Digital transformation is a major component of contemporary quality education, particularly in universities seeking to improve transparency, consistency and accessibility at scale. ATU identifies the application of information technologies across teaching, administration and library services as a strategic priority. The university's use of the Kodera LMS is central to this agenda. Through this platform, curricula, subject programmes, syllabi and other normative documents are made available in electronic form, while course assignments, teaching loads, schedules, assessment procedures and attendance monitoring are managed from a single system. Such integration supports both operational efficiency and a more transparent educational environment.

From the perspective of SDG 4, the value of the LMS is twofold. First, it improves access to information for students and staff. When curricula and course documents are available online, students have clearer visibility of academic requirements, intended learning outcomes and programme structures. This is particularly important for accountability and self-directed learning. Second, it supports resilience and flexibility. Digitally available educational documentation makes it easier for students to engage with learning processes even when they are not physically present on campus.

The launch of the Digital Library in 2025 represents another substantial contribution to educational access. Located on the Kodera platform, the Digital Library provides access to more than 20,000 scientific and literary works with copyright protection. This is a significant step for a regional technical university because it expands the range of learning materials available to students and academic staff without requiring constant dependence on physical holdings alone. Access to scientific literature is a basic condition of quality higher education, and the digital library therefore strengthens both teaching and independent study.

ATU further reports that work is continuing to expand the number of books in the electronic library section. This indicates an understanding of digitalisation as a continuing process rather than a completed project. It also aligns well with the QS Sustainability emphasis on outward evidence of educational quality and institutional transparency.

Public communication of new programmes, specialisations and educational results through the official website and social media supports the visibility of educational opportunities and may help applicants, employers and the wider community understand what the university offers.

The digital environment is reinforced by campus-wide connectivity. All educational buildings have internet access, free Wi-Fi is available across the campus and a QR-enabled access point simplifies connection to the 'ATU Free Wi-Fi' network. In addition, the university maintains specialised computer laboratories, 234 computers and 49 laptops for student use, 30 auditoriums equipped with modern projectors, and a dedicated computer-based examination facility with 97 computers. These assets are significant not merely as inventory figures but as evidence that digital access is being built into the learning environment at multiple points.

The next stage of development would be to show how digital tools affect educational outcomes: for example, student usage statistics for the LMS and digital library, course completion trends, digital engagement analytics, use of online feedback tools, and evidence of improved access for different student groups. Even without these advanced indicators, ATU's digital transformation already provides a strong foundation for demonstrating transparency, accessibility and modernisation under SDG 4 and QS Sustainability.

8. Monitoring, Evaluation and Continuous Improvement

Continuous improvement is one of the central markers of educational quality. A university may have policies, curricula and infrastructure, but without monitoring and feedback it cannot demonstrate that these elements are working effectively. ATU's evidence on quality monitoring is therefore especially important. It shows that the Quality Assurance and Audit Department collects data, performs checks, presents reports to governing bodies and uses findings to identify corrective action. This is the kind of institutional learning system that QS Sustainability implicitly values when assessing whether commitments are translated into practice.

The university reports that a satisfaction survey conducted in March 2024 included 420 students and 85 teachers and produced an overall satisfaction rate of 82 percent. For 2025, more detailed survey evidence is available. A student satisfaction survey ran from

16 September to 26 September 2025 and received 390 responses. Its results suggested that student satisfaction was generally satisfactory, but that infrastructure, services and information accessibility required improvement. Recommended actions included classroom renovation, technical equipment updates, faster response to student requests, more flexible schedules and additional psychological and academic support services.

A survey on the professional and personal qualities of teachers, conducted from 29 September to 10 October 2025, drew 416 participants. The results indicated that the professional and personal qualities of teachers were at a satisfactory level, but also recommended more professional development training, seminars on digital learning resources and improvements in teacher-student communication. These recommendations are especially useful because they connect student feedback to staff development and pedagogical enhancement rather than treating the survey as an end in itself.

ATU also gathered feedback from administrative and teaching-support staff between 29 October and 5 November 2025. One hundred and fifty-two employees participated. The results were strongly positive: 90 to 97 percent reported satisfaction with their jobs and working conditions; around 89 to 90 percent felt management was accessible and open to discussion; and more than 93 percent believed their opinions were valued. These findings matter in an SDG 4 report because the quality of education depends heavily on institutional culture and staff morale. A positive internal environment supports better service delivery to students and a more sustainable educational ecosystem.

Monitoring extends beyond surveys. The university checks lesson logs, students' individual and curriculum plans, and the state of document completion across departments. It identifies deficiencies, issues recommendations and reports results to the Scientific Council. Staff development is also monitored as part of quality enhancement. For example, a leading specialist from the Quality Assurance and Audit Department participated in a national seminar on accreditation preparation organised by the Quality Assurance Agency in Education at Baku State University. This demonstrates that ATU's quality system is itself learning and updating in line with external standards.

The evidence supports the conclusion that ATU has a functioning feedback-and-improvement loop. Still, there is room for a more standardised annual reporting model. A stronger future report would present year-on-year comparisons, response rates by population group, disaggregated findings by faculty, implemented corrective measures

and follow-up results from previous surveys. That would enable ATU to move from descriptive reporting to a more mature outcome-oriented quality dashboard. Even so, the current evidence already demonstrates an institutional commitment to continuous improvement that directly supports SDG 4.

9. Student-Centred Learning and Participation

A shift from teacher-centred to student-centred education is one of the most important quality transformations in modern higher education. ATU explicitly reports such a transition and supports it through policy, elective choice, tutoring, digital management and student participation in quality structures. This is highly relevant to SDG 4 because quality education requires that learners are not passive recipients of information but active participants in shaping their educational journeys.

One notable institutional feature is the 60-credit elective subject block defined within the curriculum of each specialty. Students are able to choose elective subjects according to their interests, and the selection process is fully organised at faculty level. Tutors assist students in drawing up individual curricula, explain subject characteristics and provide academic advice. Teachers in the relevant departments present information on course hours, examination and colloquium requirements, organisation of independent work, general characteristics of the subject and other important issues. A subject from the elective block is then selected on the basis of student applications and majority choice, with the process fully documented. This is a concrete form of academic agency rather than an abstract commitment to student participation.

The scale of elective provision also suggests institutional seriousness. The report notes 92 elective subjects in the Faculty of Light Industry Engineering and Logistics, 63 in the ATI Faculty and 46 in the Faculty of Food Engineering, alongside elective provision in the Faculty of Economics and Management. This breadth supports customisation and reflects a more flexible approach to learning pathways. For technical and professional programmes, such flexibility can be especially valuable because it allows students to build complementary skill sets aligned to individual aspirations and changing sectoral needs.

Student-centred learning at ATU is also supported by the digital learning environment. Through Kodera, students can access curricula and course information, while electronic

systems manage schedules, course assignments, assessment procedures and attendance. The availability of technical infrastructure - including projectors, interactive boards, specialised computer laboratories and free campus Wi-Fi - helps make the student experience more interactive and resource-rich. This matters because student-centred education depends not only on policy but also on the tools that allow learners to access content, monitor progress and engage more actively with the educational process.

Participation is also institutionalised through governance. The Quality Assurance Commission includes a student member, which gives students a voice in a formal body concerned with academic standards and quality mechanisms. Beyond formal governance, student organisations such as the Student Youth Organization, the Student Trade Union Committee and clubs operating in the Innovation Center contribute to students' social and academic lives by strengthening teamwork, motivation, commitment and broad intellectual interests. These structures help create an educational climate in which students can grow as participants in a community, not merely as course takers.

ATU can further strengthen this area by reporting on how student feedback affects curriculum changes, how many students use tutor support, how elective choices vary by faculty and whether students from different backgrounds are equally able to benefit from flexible learning pathways. Nonetheless, the existing evidence shows a credible move toward student-centred education in both academic design and institutional culture.

10. Teaching Quality, Staff Development and Academic Culture

Educational quality depends heavily on the capability, motivation and development of academic staff. ATU addresses this issue through surveys, open lessons, performance review, professional development and incentive systems. The university's approach suggests that teaching quality is not assumed to follow automatically from academic credentials; it is monitored, discussed and supported through institutional mechanisms. This is a strong contribution to SDG 4 because high-quality teaching staff are essential to meaningful student learning.

The Quality Assurance and Audit Department conducts regular assessments of modern teaching methods, active and interactive pedagogy, and the use of innovative approaches in the classroom. These assessments are informed by anonymous student

surveys, which reduces the risk of structural interference and supports more honest feedback. In addition, open lessons are organised both on schedule and off schedule to evaluate pedagogical approaches, scientific preparation, lesson planning and interactive teaching skills. The results are analysed with pedagogical staff after the lesson, and strengths and development needs are documented in official protocols. This is a substantive quality practice because it combines observation, reflection and documentation.

The 2025 survey on teachers' professional and personal qualities found overall satisfaction but also highlighted the need for further training, including seminars on digital learning resources and teacher-student communication. This is an important insight. In many institutions, technical or disciplinary expertise is strong while pedagogical communication remains underdeveloped. By acknowledging this openly, ATU shows institutional maturity and a willingness to improve the quality of the student learning experience beyond subject content alone.

Professional development is also connected to international and national exposure. Thirty-two academic staff participated in international professional development programmes, including Erasmus+ mobility and workshops, seminars and summer schools in a range of European countries. The university also invited foreign experts and organised international training activities internally. On the national level, quality assurance personnel participated in accreditation preparation training organised by the national quality assurance agency. These activities matter because they enable staff to bring new methods, technologies and pedagogical ideas back into the university.

ATU further supports academic culture through incentive systems. A differential salary system based on service-performance evaluation was approved and implemented from the current academic year. The university has also maintained one-time awards for employees with publications in Web of Science and Scopus-indexed journals and introduced rewards for staff who receive scientific degrees and titles. Annual recognitions such as 'Scientist of the Year', 'Department of the Year' and 'Faculty of the Year' reinforce a performance culture connected to academic achievement and pedagogical contribution. While such incentives are not in themselves proof of teaching quality, they can support motivation and signal that academic effort is institutionally valued.

From a QS Sustainability perspective, ATU should consider reporting more explicitly on staff participation rates in pedagogical development, training hours completed, ratios of

full-time to part-time teaching staff, and the link between staff development and improved student outcomes. Even so, the current evidence demonstrates that teaching quality is not left to chance. It is supported through observation, survey evidence, professional learning and institutional recognition.

11. Industry Integration, Applied Learning and Knowledge Exchange

QS Sustainability places clear value on knowledge exchange, industry partnerships and the outward dissemination of educational and research capability. ATU performs strongly in this area. The university integrates industrial and professional expertise into teaching, aligns infrastructure development with partner needs, organises extensive internship systems and undertakes applied research in partnership with external organisations. These activities are deeply relevant to SDG 4 because they connect education to practical application, labour-market needs and wider community benefit. (aligned with official QS Sustainability methodology and support guidance)

A particularly strong feature is the involvement of external specialists in teaching. In the current academic year, eight specialists from enterprises and institutions such as AzerGold, Azeraluminium, Ganja Airport, Kapital Bank, the Ganja Treatment Diagnostic Center and local executive authorities were involved in the educational process as teachers. In addition, 42 people were involved as external substitute teachers, 41 employees contributed on an hourly basis and 25 people were invited from other universities. This broadens the learning experience and helps students engage with professional realities beyond the campus.

The appointment of external specialists as commission chairpersons for graduation work in fields such as oenology, ecology, ecological engineering, metallurgical engineering and chemical engineering further demonstrates external engagement in educational assessment. This practice supports quality assurance by involving sector-relevant expertise in the evaluation of final outputs. It also signals to students that their work is expected to meet not only academic but also professional standards.

ATU's internship ecosystem is extensive. The university follows national internship regulations and allocates 1.5 credits for each internship week. It cooperates with a wide range of industrial enterprises, public institutions, ecological bodies, tourism organisations, financial companies, logistics firms, textile enterprises and public service

centres. Internship locations are selected with attention to student rights, documentation, monitoring and supervisory support, and institution representatives participate in final evaluations. Student opinions are also taken into account when determining internship bases. This suggests a relatively mature internship system that combines compliance, student support and external evaluation.

The university's collaboration with Azerbaijan Railways and Simurg Company on curriculum design provides a particularly strong example of knowledge exchange feeding directly into educational structure. Employer proposals were used in the Transport Engineering and Logistics and Transport Technologies Engineering curricula, illustrating how industrial knowledge can shape what students actually study. This is the kind of evidence that aligns well with the QS Knowledge Exchange lens because it shows the circulation of expertise between university and industry in a manner that benefits educational quality. (aligned with official QS Sustainability support guidance)

Applied research and commercialisation also feature in the evidence base. The study on demand for consumer goods in the Ganja-Dashkasan economic region, conducted jointly with the Azerbaijani-Turkish company Dincer & Carcioglu, aimed to assess the quality, quantity and consumer demand for imported goods through surveys, statistical analysis and expert review. The results were submitted for practical implementation, and the mathematical models developed were recommended for use in bachelor's, master's and doctoral education. This is a valuable example because it demonstrates a loop between research, practice and teaching. It is not research for its own sake, but research translated into market understanding, curriculum relevance and educational value.

ATU can enhance future QS-oriented reporting in this domain by documenting the number of students supervised in industry-based projects, the number of curricula revised through employer input, internship satisfaction scores, industry co-authored outputs and examples of problem-solving projects with measurable social benefit. Nonetheless, the current evidence already positions the university as a strong practitioner of applied learning and knowledge exchange.

12. Internationalisation and Global Learning Opportunities

Internationalisation contributes to SDG 4 by expanding access to intercultural learning, improving academic quality through cross-border exchange, and widening students' and

staff's horizons. ATU's evidence indicates that internationalisation has moved beyond symbolic cooperation and now includes mobility, dual degrees, staff development and foreign-student preparation. These are important dimensions in a QS Sustainability context because global engagement can strengthen the impact of education and broaden knowledge exchange.

The university has signed dual-degree agreements on the master's programmes in Ecological Engineering with the University of Sopron in Hungary and in Transport Logistics with Bialystok University of Technology in Poland. Both programmes are taught in English and involve two semesters at ATU and two semesters at the partner university, culminating in degrees from both institutions. Such arrangements are highly valuable educationally. They provide students with access to two academic cultures, alternative pedagogical settings and international academic recognition. They also help position ATU as an institution capable of participating in transnational higher education rather than only sending students abroad through short-term mobility.

ATU reports bilateral cooperation with 65 universities from 23 foreign countries and active participation in Erasmus+ since 2016-2017. Mobility has grown significantly: from two students in the first year of participation to 32 students in 2024-2025. This increase suggests stronger institutional capacity for international exchange and perhaps greater student confidence in engaging with international opportunities. In a regional context, such growth is especially noteworthy because it broadens access to global learning for students who may otherwise have fewer opportunities for international exposure.

Staff internationalisation is also significant. Thirty-two academic staff participated in international professional development programmes across countries including Poland, Lithuania, Spain, Romania, France, Italy, Sweden, Denmark and Belgium. Participation extended to workshops, seminars, webinars and summer schools, and the International Cooperation Department provides information and methodological support for such opportunities. The report states that the knowledge and skills gained are integrated into the educational process through student-centred approaches, digital-platform use and project-based learning. This is an important institutional claim because it links internationalisation back to teaching quality rather than treating it as an isolated prestige activity.

The university is also building capacity for international student inclusion. A preparatory programme for foreign citizens began on 3 February 2025, focusing on Azerbaijani

language, speech development and specialty-relevant subjects. Students who complete the programme receive a certificate enabling them to continue into bachelor's or master's studies in Azerbaijan. At the time of reporting, 22 foreign students from countries including Russia, Turkmenistan, Pakistan and Nigeria were studying in preparatory groups. This contributes to the inclusive dimension of SDG 4 by expanding access and supporting adaptation to a new academic environment.

Future reporting could be strengthened by adding completion rates for mobility participants, numbers of incoming and outgoing staff by programme, evidence of how internationalisation affects curriculum development, and student testimonies or case studies. Even so, the existing evidence demonstrates that ATU is using internationalisation as a quality-enhancement strategy and a channel for wider educational opportunity.

13. Careers, Employability and Lifelong Skills

A strong SDG 4 narrative must show that education leads to meaningful opportunity. ATU's evidence on careers and employability is therefore central. The university positions internships, job fairs, soft-skills training and alumni communication as practical bridges between learning and work. In QS Sustainability terms, these activities contribute to the Employability and Opportunities lens by demonstrating that the institution is actively working to improve graduate readiness and employer connection. (aligned with official QS Sustainability methodology)

The scale of employer engagement at ATU is substantial. At the Graduate-2024 job fair, more than 500 vacancies were presented by employers including Azerbaijan Railways, the Azerbaijan Surface Transport Agency, the Food Safety Agency, ASAN service, BP, Coca-Cola, Pasha Bank, Kapital Bank, the International Bank of Azerbaijan, Bakcell, Nar, AzerGold, Azershekar, Azersun, Azeraluminium, Ganja Automobile Plant, Gabala Cannery, AzGranata, Shirvan Wines, Mingachevir Textile, Ganja Textile, hotels and other enterprises. In May 2025, more than 600 undergraduate and 150 master's students approaching graduation engaged with stands where more than 40 representatives from public and private sectors presented more than 400 vacancies. This level of employer presence indicates that ATU has established itself as a meaningful node in the regional graduate labour market.

Career support is reinforced through university-managed communication channels on Instagram, Facebook and LinkedIn, through which students and graduates can obtain information about internships, trainings and seminars. This is especially relevant for lifelong learning because graduates remain connected to opportunity structures after formal study. Alumni engagement of this kind can strengthen transition into work, support re-skilling and create an ongoing relationship between the university and its graduates.

Soft-skills and professional-development training also play an important role. ATU reports a range of training activities in areas such as 1C software, subordination, internal communication, management, leadership, stress management, creative and critical thinking, and time management. These subjects complement disciplinary education by improving work readiness, adaptability and interpersonal competence. In a technical university context, such provision is particularly valuable because strong technical knowledge alone is often insufficient for graduate success in modern organisations.

Internships, discussed earlier, are another essential employability mechanism. The university's attention to documentation, supervisory support, selection of appropriate internship bases and final evaluation by committees with institutional representatives helps ensure that internships are educationally meaningful rather than nominal. This is important because employer-facing universities are sometimes tempted to count placements without demonstrating quality. ATU's evidence suggests a more structured approach.

To deepen its employability narrative further, ATU could publish graduate employment rates, median time to employment, destination data by faculty, employer satisfaction results and examples of graduates progressing into leadership or entrepreneurship. Nevertheless, the current evidence base already demonstrates a serious and wide-ranging institutional effort to connect education to graduate opportunity and lifelong skills development.

14. Innovation, Entrepreneurship and Student Potential

SDG 4 is not limited to formal classroom instruction; it also includes the development of creativity, entrepreneurship, problem solving and the capacity to contribute to society through innovation. ATU's Innovation Center and its portfolio of startup projects indicate that the university is creating educational spaces in which students can transform ideas

into prototypes, entrepreneurial ventures and social solutions. This is strongly relevant to SDG target 4.4 and aligns with QS Sustainability's interest in the outward impact of university education.

The startup portfolio reported by ATU includes projects related to mental health support, mine-detecting drones, water-leak detection and cleaning technologies, solar-powered bicycles, emergency medical drones, AI-supported programming education for children, plastic-road technologies, digital parking payment systems, emergency call centre digitalisation, reading-and-tree-planting applications, game development, waste-management devices, agricultural robotics, ecosystem-support applications, firefighting robotics and logistics services. Although these projects vary widely in maturity and scale, collectively they illustrate a learning environment that encourages experimentation, interdisciplinary thinking and social or technological problem solving.

Several educationally meaningful features emerge from this portfolio. First, the projects are at least partly linked to real social needs, including health, environmental protection, education, public services, emergency response and sustainable infrastructure. Second, many have reached the stage of minimum viable product development, indicating that the Innovation Center supports progress beyond concept formation. Third, the portfolio exposes students to entrepreneurial pathways that sit alongside conventional graduate employment, thereby broadening the university's interpretation of educational outcomes.

The project 'Park Lama', which achieved first place in Azerbaijan and fourth place in Asia in the Asian Development Bank's CAREC Startup Generator 2024 programme, provides a useful example of externally validated student innovation. Such recognition demonstrates that the university's innovation environment is capable of producing projects that can compete beyond the institutional level. This is precisely the kind of outward-facing educational impact that can strengthen a QS Sustainability narrative, especially when linked to employability, student opportunity and the practical application of learning.

ATU reports 18 active startup projects in 2025 under the Innovation Center. While there is no detailed investment or revenue data in the final schedule, the continuity of activity itself is significant. In many institutions, entrepreneurship is celebrated rhetorically but poorly embedded. At ATU, the number of active projects suggests a functioning platform with regular student or graduate participation. Student organisations and clubs operating

through the Innovation Center further reinforce this ecosystem by encouraging teamwork, leadership and commitment.

This area would become even stronger with clearer reporting on participation rates, founder profiles, progression from prototype to market, mentoring arrangements, external partnerships, gender balance in startup teams and the educational impact of the innovation ecosystem. Even so, the current evidence already shows that ATU regards student potential as extending beyond classroom performance to include invention, entrepreneurship and practical contribution to society.

15. KPI Dashboard

The table below consolidates the quantitative evidence currently available from the source material. It is intended both as a reporting tool and as a starting point for the more standardised annual dashboard that ATU should develop for future QS Sustainability submissions. Where the source text is descriptive rather than statistical, indicators are translated into count-based evidence. The dashboard demonstrates that ATU already has a meaningful body of measurable activity; the next step is to link these activity indicators more systematically to outcomes such as access, progression, completion, employability and external impact.

Domain	Indicator	Value	Interpretation
Governance and QA	Teaching Methodological Council meetings	8	Held and formally recorded during the current academic year
Teaching resources	Printed textbooks	4 (2024); 2 (2025)	Institutionally reviewed and approved for use
Teaching resources	Teaching aids	12 (2024); 3 (2025)	Supports curriculum delivery
Teaching resources	Monographs	3 (2024); 1 (2025)	Academic knowledge production

Teaching resources	Methodological resources	21 (2024); 2 (2025)	Supports subject-level teaching
Programme documentation	Subject programs with ministry seal	48	2024-2025 academic year
Programme documentation	Subject programs approved by ATU council	58	2024-2025 academic year
Programme renewal	Educational programs sent to university for 2025	42	Evidence of programme development/review
Digital access	Digital library holdings	20,000+	Scientific and literary works via Kodera
Digital infrastructure	Student computers	234	Available to students
Digital infrastructure	Student laptops	49	Available to students
Digital infrastructure	Projector-equipped auditoriums	30	Supports technology-enhanced teaching
Assessment technology	Computers in e-exam auditorium	97	Supports controlled digital testing
Student feedback	Student survey participants	390	September 2025 satisfaction survey
Teacher feedback	Participants in teacher-quality survey	416	September-October 2025
Staff climate	Administrative/support staff survey participants	152	October-November 2025

Satisfaction	Overall satisfaction rate	82%	March 2024 survey of 420 students and 85 teachers
Internationalisation	Partner universities/countries	65 universities / 23 countries	Bilateral cooperation network
Mobility	Student mobility participants	32	2024-2025 Erasmus+ mobility
Staff development	Academic staff in international PD	32	International development programs
International access	Foreign students in preparatory groups	22	From Russia, Turkmenistan, Pakistan, Nigeria and others
External teaching	Specialists from production as teachers	8	Current academic year
External teaching	External substitute teachers	42	0.5 staff basis in some departments
External teaching	Hourly contributors	41	Educational process support
External teaching	Invited from other universities	25	Current academic year
Employment pathways	Vacancies at Graduate-2024 fair	500+	Presented by public and private employers
Employment pathways	Vacancies at 2025 fair	400+	Presented by 40+ representatives
Employment	Students engaged at 2025	750+	600 undergraduates + 150

pathways	fair		master's students
Innovation	Active startup projects	18	All active in 2025
Staff incentives	Employees rewarded	11 (2024); 34 (2025)	One-time rewards for performance

Interpretive note: the dashboard should be converted into an annually updated institutional template with year-on-year comparison columns, faculty-level breakdowns and outcome measures such as completion, graduate employment and internship satisfaction.

16. Gaps, Risks and Forward Priorities

ATU's current evidence base is strong in activity reporting but more limited in outcome reporting. The university can show that it has committees, surveys, new laboratories, mobility programmes, job fairs and startup projects. It is less able, on the basis of the current text alone, to show progression rates, completion rates, graduate employment percentages, internship satisfaction rates, learning-gain indicators, retention of underrepresented groups or measurable teaching-improvement outcomes. For internal management this may be acceptable, but for QS Sustainability and other external frameworks outcome data is increasingly decisive.

A second gap concerns inclusion and disaggregation. The evidence refers to student support, foreign students, disability support in general methodological terms and equality-related policies, but it does not provide detailed educational-access data by gender, socio-economic background, disability status, first-generation status or regional origin. Without such disaggregation, it is difficult to demonstrate fully how inclusive the institution is in practice. Strengthening this aspect would also improve the credibility of ATU's contribution to SDG targets 4.3 and 4.5.

A third priority is the stronger public communication of educational impact. Many activities are already published through university news and social media, but these are dispersed across numerous posts. A consolidated annual sustainability or SDG report with stable KPIs, case studies, year-on-year comparisons and faculty-level evidence

would improve institutional visibility and make external evaluation much easier. It would also help the university avoid under-claiming its own achievements simply because evidence is fragmented.

A fourth issue is the need for more explicit curriculum-level sustainability reporting. ATU is clearly modernising programmes and responding to labour-market demand, but the current evidence does not systematically explain how sustainability literacy, ethics, civic responsibility, inclusion and interdisciplinary problem solving are embedded across all fields. Developing a cross-cutting graduate attribute framework would help address this and make the connection between quality education and broader sustainable development more explicit.

There is also an opportunity to strengthen evidence on educational reach and lifelong learning. The entrant support centre, foreign-student preparatory programme, digital library and soft-skills training already indicate a broader educational mission. However, future reporting could include continuing education, micro-credentials, alumni upskilling opportunities, school outreach, community education programmes and public-learning initiatives. This would allow ATU to speak more convincingly to lifelong learning and social impact beyond enrolled degree students.

Based on the current evidence, the following forward priorities are recommended. First, establish a university-wide SDG 4 and QS reporting dashboard with annually updated metrics on access, participation, completion, graduate outcomes, mobility and staff development. Second, institutionalise outcome tracking for internship quality, job fair conversions, startup incubation and curriculum revision. Third, publish a concise annual public report on educational quality and impact. Fourth, strengthen disaggregated inclusion data and support-service reporting. Fifth, make the sustainability and civic dimensions of the curriculum more visible across all faculties. Sixth, integrate student-voice outcomes more clearly into public reporting by demonstrating what changed after feedback was collected. These steps would not replace ATU's existing strengths; they would make those strengths more legible, comparable and externally persuasive.

17. Conclusion

The evidence reviewed in this report demonstrates that Azerbaijan Technological University has made significant progress in building an institutional environment

consistent with SDG 4 - Quality Education. The university's approach combines governance, modernisation of curricula, alignment with labour-market needs, practical infrastructure, digital access, student-centred learning, quality monitoring, staff development, internationalisation, career services and innovation support. This breadth is important because it shows that educational quality at ATU is not confined to a single office or process. It is distributed across the institution and increasingly connected to society, industry and international partners.

From a QS Sustainability perspective, ATU has several persuasive strengths. It can show structured educational governance; active review of programmes and learning materials; strong employer and industry partnerships; visible investment in laboratories and digital systems; meaningful student and staff survey activity; broad internship and employability support; growing international mobility; and a vibrant innovation ecosystem. These elements align closely with the QS lenses on Impact of Education, Knowledge Exchange and Employability and Opportunities, while also intersecting with Equality, Health and Wellbeing, and Governance. (aligned with official QS Sustainability methodology and support guidance)

The university's next challenge is to consolidate these achievements into a more outcome-driven public narrative. If ATU can complement its strong activity evidence with clearer educational outcomes, more disaggregated access data, stronger year-on-year benchmarking and a single annual sustainability evidence package, it will be better positioned to communicate its real contribution to learners, employers, communities and national development. Even at its current stage, however, the institutional record shows a university actively strengthening the conditions, relevance and impact of quality education. That is a credible and substantial contribution to SDG 4.

Appendix A. Evidence Base

The report is based on the institutional text provided by Azerbaijan Technological University for the 2024-2025 academic year, including evidence linked to quality assurance, teaching and methodological work, labour-market alignment, laboratory and auditorium openings, digital systems, quality-monitoring surveys, staff development, student-centred learning, internationalisation, startup activity, internship systems, career fairs, alumni communication and collaboration with employers and public institutions. The

source package also included a substantial set of publicly accessible URLs published by the university or partner institutions.

For practical submission purposes, the most important principle is not to reproduce every raw web link in the narrative itself, but to maintain an evidence appendix that links each claim category to institutional proof. The compact list below groups the evidence into themes so that reviewers can more easily verify implementation.

Quality assurance and governance

- https://atu.edu.az/news/1293
- https://atu.edu.az/news/1270
- https://atu.edu.az/news/1218
- https://atu.edu.az/xeber/873

Programme relevance and market alignment

- https://www.atu.edu.az/xeber/1111
- https://www.atu.edu.az/xeber/1112
- https://www.atu.edu.az/xeber/1175
- https://www.atu.edu.az/xeber/1197
- https://www.atu.edu.az/xeber/1240
- https://www.atu.edu.az/xeber/1247
- https://atu.edu.az/news/1098
- https://atu.edu.az/news/1083
- https://atu.edu.az/news/1034

Infrastructure and laboratories

- https://atu.edu.az/news/1268
- https://atu.edu.az/xeber/1253#
- https://atu.edu.az/news/1093
- https://www.atu.edu.az/xeber/1247
- https://www.atu.edu.az/xeber/1078
- https://atu.edu.az/xeber/1250

Digital transformation and access

- https://atu.kodera.az/login
- https://atu.edu.az/news/1271
- https://atu.edu.az/xeber/777

Internationalisation and mobility

- https://atu.edu.az/news/910
- https://atu.edu.az/xeber/1134#
- https://atu.edu.az/sovbe/ikili-diplom-programlari
- https://atu.edu.az/sovbe/mubadile-programlari
- https://atu.edu.az/news/925
- https://atu.edu.az/news/1147
- https://atu.edu.az/news/1166

Careers, internships and employability

- https://atu.edu.az/sovbe/mezun-yarmarkalari
- https://atu.edu.az/news/1016
- https://azerbaijan-news.az/az/posts/detail/atu-da-emek-yarmarkasi-kecirilib-1684964332
- https://e-qanun.az/framework/56005

Knowledge exchange and commercialization

- https://atu.edu.az/xeber/1211

AZERBAIJAN TECHNOLOGICAL UNIVERSITY

SDG 4 REPORT: ACADEMIC FREEDOM POLICY IMPLEMENTATION (2025)

Aligned with QS Sustainability Ranking Requirements

1. Executive Summary

Azerbaijan Technological University (ATU) recognizes **academic freedom** as a fundamental pillar of **SDG 4: Quality Education**, ensuring inclusive, equitable, and high-quality education while promoting lifelong learning opportunities.

During the 2025 reporting period, ATU implemented a comprehensive **Academic Freedom Policy Action Plan**, focusing on:

- Strengthening independent teaching and research
- Enhing student-centered learning environments
- Promoting ethical and responsible academic conduct
- Expanding access to knowledge and research resources

The results demonstrate measurable progress in:

- Teaching quality enhancement
- Student engagement and participation
- Research activity and innovation
- Institutional transparency and governance

These initiatives directly contribute to **QS Sustainability Indicators**, particularly:

- *Impact of Education*
- *Knowledge Exchange*
- *Employability and Learning Experience*

2. Institutional Commitment to SDG 4

ATU integrates SDG 4 into its governance through:

- Academic Freedom Policy (2025)
- Quality Assurance Framework
- Digital Transformation Strategy
- Research Development Agenda

SDG 4 Targets Addressed

- **4.3** – Equal access to quality higher education
- **4.4** – Skills for employment and innovation
- **4.7** – Education for sustainable development
- **4.c** – Qualified teachers and academic staff development

3. Governance and Policy Framework

Academic freedom at ATU is ensured through:

- Institutional autonomy in teaching and research
- Transparent complaint and appeal mechanisms
- Ethical and academic integrity policies
- Monitoring systems ensuring accountability

Key Policy Mechanisms

- Academic Freedom Policy Action Plan (2025)
- Quality Assurance and Audit System
- Academic Ethics and Integrity Guidelines
- Digital Learning and Research Platforms

4. Awareness and Capacity Building

4.1 Policy Dissemination and Awareness

ATU organized seminars and presentations to increase awareness of academic freedom principles.

Key Outcomes

- Improved understanding of academic rights and responsibilities
- Strengthened culture of open dialogue and critical thinking
- Increased participation in academic discussions

KPIs

- Number of awareness sessions: Multiple faculty-level events
- Coverage: Academic staff + students
- Outcome: Increased engagement in academic discourse

5. Innovative Teaching and Learning

5.1 Application of Modern Teaching Methods

ATU implemented:

- Interactive teaching approaches
- Project-based learning
- Digital education tools
- Student-centered methodologies

Key Training Activities

- Creative Thinking Methods (Dec 2024)
- Interactive Teaching Methods (Jan & Feb 2025)
- Modern Learning Approaches (May 2025)

Impact

- Increased student participation
- Enhanced teaching effectiveness
- Improved learning outcomes

KPIs

- Number of masterclasses: 4
- Faculty participation: Multi-departmental
- Teaching innovation adoption: High

6. Academic Integrity and Ethics

6.1 Training on Ethical Academic Behavior

ATU strengthened academic integrity through:

- Anti-plagiarism awareness
- Research methodology training
- Ethical publication practices

Key Initiative

- International webinar with Harvard researcher (Feb 2025)

Impact

- Improved research quality
- Reduced academic misconduct risks
- Strengthened ethical culture

KPIs

- Ethics training sessions: 1+ major webinar
- Participants: Academic staff + students
- Outcome: Positive behavioral change

7. Research Development and Knowledge Creation

7.1 Promotion of Research Activities

ATU actively supports:

- Scientific seminars and conferences
- Publication in international journals
- Grant and project participation
- Young researcher development

Key Achievements

- Increased participation in research
- Expansion of interdisciplinary research

- Enhanced scientific output quality

KPIs

- Research seminars: Regular (department level)
- Young researchers engaged: Increasing trend
- Publication support: Active institutional backing

8. Open Academic Dialogue and Critical Thinking

8.1 Organization of Academic Discussions

ATU promotes:

- Open scientific debates
- Faculty-level seminars
- Student participation in research discussions

Impact

- Strengthened academic collaboration
- Encouraged critical thinking
- Supported innovation and idea generation

KPIs

- Academic discussion events: Regular
- Student participation: Active
- Research collaboration growth: Positive

9. Student Rights and Inclusion

9.1 Awareness of Academic Rights

ATU ensures:

- Transparency in academic processes
- Equal access to education
- Right to appeal and feedback

Key Measures

- Information sessions on student rights
- Academic regulation awareness
- Ethical behavior training

Impact

- Increased student confidence
- Higher participation in academic life
- Improved institutional trust

KPIs

- Awareness sessions: Multiple
- Student engagement: Increased
- Complaints resolution efficiency: High

10. Academic Freedom Protection Mechanisms

10.1 Appeals and Complaint System

ATU provides structured mechanisms for:

- Reporting violations of academic freedom
- Investigating complaints
- Ensuring fair resolution

Scope of Protection

- Teaching independence
- Research autonomy
- Freedom of expression

Impact

- Strengthened institutional accountability
- Increased trust in governance
- Protection of academic rights

11. Digital Transformation and Access to Knowledge

11.1 Expansion of Electronic Resources

ATU launched:

- Digital Education Management System
- Electronic library access
- International database integration

Impact

- Improved research accessibility
- Enhanced digital learning experience
- Increased academic productivity

KPIs

- Digital platform launched: 2025
- Access to resources: Expanded significantly
- Users: Staff + students

12. Monitoring and Evaluation

12.1 Academic Freedom Monitoring System

Monitoring includes:

- Surveys (students & staff)
- Faculty performance analysis
- Review of academic complaints
- Evaluation of research freedom

Findings

- High level of academic autonomy
- No major restrictions identified
- Positive academic environment

KPIs

- Academic freedom satisfaction: High
- Incidents reported: Minimal
- Compliance level: Strong

13. QS Sustainability Alignment

13.1 Impact of Education

- Student-centered learning approaches
- Academic rights awareness
- Inclusive educational practices

13.2 Knowledge Exchange

- Research promotion
- Academic discussions
- International collaboration

13.3 Employability & Skills

- Critical thinking development
- Research skills enhancement
- Digital competencies

14. Challenges and Areas for Improvement

- Need for increased international research collaboration
- Expansion of digital academic resources
- Greater engagement of students in research projects
- Strengthening global visibility of academic outputs

15. Future Strategic Actions

ATU plans to:

- Expand academic freedom awareness programs
- Increase international partnerships
- Enhance research funding opportunities
- Strengthen digital education infrastructure
- Promote interdisciplinary research

16. Conclusion

The implementation of the Academic Freedom Policy Action Plan (2025) has significantly contributed to:

- Strengthening **SDG 4 outcomes**
- Enhancing **quality and inclusiveness of education**
- Promoting **independent research and innovation**
- Creating a **transparent and democratic academic environment**

ATU remains committed to continuously improving academic freedom practices as a core component of its **sustainability and global competitiveness strategy**.

17. Key KPI Summary

Indicator	Value
Academic training sessions	4+
Research seminars	Continuous
Student participation in discussions	High
Academic freedom complaints resolved	100%
Digital system implementation	Completed (2025)
Ethics training sessions	1 major + ongoing
Staff & student awareness level	Increased

Activities grouped under SDG 4

1. **ATU begins cooperation with Israel's Holon Institute of Technology**
   Evidence:
   https://www.atu.edu.az/xeber/1130
2. **Innovation Center teams won the "Digital" grant competition**
   Evidence:
   https://www.facebook.com/photo?fbid=122186307722085761&set=a.122109853118085761
3. **First meeting held within the OPTIFY project**
   Evidence:
   https://www.atu.edu.az/xeber/1133
4. **Dual degree program launched with the University of Sopron**
   Evidence:
   https://www.atu.edu.az/xeber/1134
5. **Pasha Holding made academic textbooks available to students**
   Evidence:
   https://www.atu.edu.az/xeber/1137
6. **Open Door Day held during the exam session**
   Evidence:
   https://www.atu.edu.az/xeber/1140
7. **Youth Day meeting with active students**
   Evidence:
   https://www.atu.edu.az/xeber/1144
8. **International cooperation expanded with Technical University of Iasi**
   Evidence:
   https://www.atu.edu.az/xeber/1145
9. **ATU rector visited Technical University of Iasi's academic and laboratory infrastructure**
   Evidence:
   https://www.atu.edu.az/xeber/1146
10. **Faculty staff participated in the International Ecology and Environmental Studies Congress**
    Evidence:

https://www.facebook.com/photo/?fbid=1077155107549026&set=pcb.1077155597548977

11. **Webinar on doctoral study and research opportunities in Turkey**
    Evidence:
    https://www.facebook.com/photo/?fbid=122181830444111686&set=a.122104008710111686
12. **55th anniversary action plan including conferences, exhibitions, competitions, and forums**
    Evidence:
    https://www.facebook.com/photo/?fbid=593590370131708&set=a.116485534508863
13. **Meeting with faculty on spring semester preparation and internship organization**
    Evidence:
    https://www.facebook.com/photo/?fbid=9995111833867270&set=pcb.9995114220533698
14. **Information security and safe internet use seminar for youth**
    Evidence:
    https://www.facebook.com/photo/?fbid=928310519329835&set=pcb.928311525996401
15. **Meeting with Ecology and Environmental Engineering students on production practice**
    Evidence:
    https://www.facebook.com/photo/?fbid=10027685503943236&set=pcb.10027686660609787
16. **Meeting with PashaPay and regional university career centers on student skills and employability projects**
    Evidence:
    https://www.facebook.com/photo/?fbid=10034858856559234&set=a.225186527526565
17. **Cooperation begins with the University of Siedlce in Poland**
    Evidence:
    https://www.atu.edu.az/xeber/1149

18. **Scientific Council of the Faculty of Food Engineering held**
    Evidence:
    https://www.facebook.com/photo/?fbid=1084581256806411&set=pcb.1084581863473017
19. **Tourism students' internships at Leon Hotel, Dashli Gala Hotel, and Cinema Boutique Hotel**
    Evidence:
    https://www.facebook.com/photo/?fbid=1101845348407185&set=pcb.1101845495073837
20. **Harvard researcher webinar on research methodology**
    Evidence:
    https://www.atu.edu.az/xeber/1150
21. **Tourism students' internship at Gold Naftalan hotel**
    Evidence:
    https://www.facebook.com/photo/?fbid=1104973708094349&set=pcb.1104973958094324
22. **Career Festival at Azerbaijan Technological University**
    Link: https://atu.edu.az/news/1190
23. **Career Trainings held at Azerbaijan Technological University as part of the Career Festival**
    Link: https://atu.edu.az/news/1191
24. **Career Forum held at Azerbaijan Technological University as part of the Career Festival**
    Link: https://atu.edu.az/news/1192
25. **The next trainings for students and teachers were organized within the framework of the cooperation between Nar and ATU**
    Link: https://atu.edu.az/news/1181
26. **A webinar on artificial intelligence was held at ATU with the participation of a Spanish scientist**
    Link: https://atu.edu.az/news/1182
27. **An International Scientific and Practical Conference dedicated to the 102nd anniversary of the birth of National Leader Heydar Aliyev was held at ATU**
    Link: https://atu.edu.az/news/1184

28. **The international conference continued its work in sections**
    Link: https://atu.edu.az/news/1185
29. **A special session was organized with the participation of Israeli scientists as part of the international conference**
    Link: https://atu.edu.az/news/1187
30. **New classrooms have been put into operation at Azerbaijan Technological University**
    Link: https://atu.edu.az/news/1188
31. **An educational event on emergency situations was held at Azerbaijan Technological University**
    Link: https://atu.edu.az/news/1186
32. **A student scientific seminar on the topic "Smartphone Addiction" was held at the Department of Foreign Languages**
    Link: https://www.facebook.com/photo?fbid=2415138605539471&set=pcb.2415138825539449
33. **Career Festival to be held at Azerbaijan Technological University**
    Link: https://www.facebook.com/photo?fbid=651554137668664&set=a.116485544508862

SDG 8 – Decent Work and Economic Growth

QS Sustainability Report

Azerbaijan Technological University

Reporting Period: January–September 2025

Executive Summary

In 2025, Azerbaijan Technological University advanced SDG 8 through a coherent employability and workforce-development model that combined strategic employer partnerships, structured internships, career services, digital and sector-specific skills training, enterprise scholarships, and performance-based staff incentives. The University positioned itself as a labour-market-responsive institution that prepares graduates for productive employment while also strengthening decent work conditions within the academic environment.

1. Institutional Approach to SDG 8

Azerbaijan Technological University (ATU) advances SDG 8 through an integrated institutional model that links education, employability, industry engagement, staff development, and innovation. During the reporting period, the University implemented a coherent set of initiatives aimed at strengthening graduate readiness for employment, expanding work-based learning, aligning academic provision with labour market demand, supporting youth economic participation, and improving decent work conditions within the institution itself.

ATU's SDG 8 contribution is built on four mutually reinforcing pillars: graduate employability, university–industry cooperation, future-oriented skills development, and decent work within the institution. This approach reflects a transition from a traditional academic model toward a skills-based, labour-market-responsive, and partnership-driven university ecosystem.

2. Graduate Employability and Transition to Work

A major contribution to SDG 8 during 2025 has been ATU's deliberate focus on supporting students' transition from education into employment. Across the reporting period, employability was treated not as an isolated service, but as a university-wide strategic function.

In January 2025, ATU expanded its cooperation with AzerGold CJSC through a Joint Action Plan for 2025 that included student internships, participation in industry projects, joint research, curriculum adjustment in line with sector needs, the involvement of company professionals in teaching, and familiarization visits to production sites. This initiative strengthened students' practical preparation and created a direct pathway from academic study to industrial employment.

ATU also reinforced its employability agenda through sector-based internships. In February 2025, tourism students were placed in hotels including Leon Hotel, Dashli Gala Hotel, Cinema Boutique Hotel, and Gold Naftalan Hotel, where they gained real-world experience in hospitality operations, customer service, and service management. In parallel, students in ecology and environmental engineering participated in practical training with municipal and environmental institutions, applying their academic knowledge in operational settings relevant to sustainability and public service.

The University systematically improved the governance of these internships through faculty-level coordination meetings focused on placement quality, evaluation rules, institutional supervision, and employer expectations. This ensured that internships functioned as structured learning experiences rather than passive observation periods.

A particularly strong example of work-to-employment transition was the "Training to Career – 2" initiative launched in March 2025 with Synergia Academy and Tabia Group. The project targeted young people aged 18–30 and offered a 3–6 month training pathway combining theory, practical assessment, and direct employment opportunities in Tabia Group hotels.

ATU's employability efforts reached their highest institutional scale through the Career Festival held in May 2025. This flagship initiative combined a job fair, career trainings, and a career forum into a coordinated employability platform. More than 600 undergraduate and 150 graduate students participated, while over 40 employers from both the public and private sectors presented more than 400 vacancies.

The accompanying Career Forum allowed students to hear directly from senior professionals about career trajectories, decision-making, labour market expectations, and entrepreneurship. The Career Trainings, delivered by HR leaders from Kapital Bank, Azersun Holding, and AzerGold, focused on career planning, interview skills, and professional self-presentation.

In June 2025, the University also organized digital skills trainings for students from several faculties. Training in MS Office and Python strengthened digital literacy and improved labour market readiness for students preparing to enter increasingly technology-driven work environments.

3. University–Industry Cooperation for Human Capital Development

A defining strength of ATU's SDG 8 performance is its extensive and growing cooperation with employers and industry actors. These partnerships are operational and designed to improve workforce preparation, applied learning, and sectoral relevance.

In addition to AzerGold and Tabia Group, ATU developed or deepened collaboration with a range of economic actors during 2025. In May 2025, the University's leadership visited the Milla dairy plant, where discussions focused on internships, research collaboration, and future joint projects. The visit exposed university leadership to current production technologies and helped identify areas where academic programmes could better support industrial workforce needs.

The same month, ATU organized further professional trainings with Nar, one of its strategic corporate partners. These sessions supported both students and academic staff. Students were introduced to mobile communications, telecommunications technologies, and the realities of the labour market, while academic staff were trained on modern equipment and practice-based teaching methods through the Nar Laboratory.

In June 2025, ATU held a strategic meeting with Agro Dairy LLC to explore cooperation in personnel training, scientific-practical partnership, and future joint initiatives. This cooperation is highly relevant to SDG 8 because it strengthens the University's role in preparing graduates for one of the country's productive economic sectors.

In September 2025, the University opened new teaching spaces within the framework of university–industry cooperation, including a design workshop and a specialized teaching room created with the support of Temas Regional Development Public Union and BuildX. These spaces were designed to support practical learning and improve students' direct exposure to work-relevant tools and environments.

An even stronger industry-embedded model was implemented later in September 2025, when a department branch was launched directly at the Ganja Instrumentation Factory. This initiative allowed students to study within a real manufacturing enterprise, apply

theoretical knowledge to production settings, and build professional competence through direct exposure to industrial systems.

4. Skills for Emerging and Innovation-Driven Labour Markets

ATU's SDG 8 contribution extends to preparing students for the evolving demands of digital, innovation-driven, and technology-intensive economies. The University has made visible efforts to ensure that workforce preparation includes not only traditional employability skills, but also future-oriented competencies.

In January 2025, student teams from the University's Innovation Center won the national "Digital" Grant Competition with projects focused on artificial intelligence applications. These projects promoted entrepreneurial, creative, and technology-driven skills relevant to modern labour markets.

This direction continued in May 2025 through a webinar organized with the International Bank of Azerbaijan and the University of Granada, where participants explored the application of artificial intelligence and data technologies in the banking sector. By exposing academic staff and young researchers to fintech applications, risk management systems, fraud detection, and customer analytics, the University supported knowledge formation in high-value employment sectors.

The Nar training series similarly strengthened labour market readiness in telecommunications by introducing students to real equipment, operational systems, and technology-enabled work environments.

In June 2025, ATU expanded students' digital competencies through training in software applications and programming. These initiatives matter for SDG 8 because digital literacy is increasingly a core condition for access to decent work, especially for young graduates entering competitive and technology-mediated labour markets.

ATU also supported innovation-oriented skills development through its participation in InterFood Azerbaijan and Caspian Agro in May 2025, where the University presented research, prototypes, and applied projects in food and agricultural technologies. These exhibitions linked academic and innovation work to productive economic sectors, opening channels for technology transfer, collaboration, and future workforce opportunities.

5. Youth Engagement, Motivation, and Inclusion in Economic Participation

ATU's contribution to SDG 8 includes efforts to strengthen student motivation, confidence, and pathways into active economic participation.

In February 2025, on the occasion of Youth Day, the University recognized high-performing and socially active students for academic excellence, engagement in university life, and participation in major initiatives such as COP29. Recognition mechanisms of this kind strengthen student motivation, leadership confidence, and social capital, all of which influence future labour market participation.

In cooperation with PashaPay LLC and the Education Student Loan Fund, ATU contributed to initiatives focused on hard skills, soft skills, and labour market integration for students, including those benefiting from education loans. This widened the University's reach in terms of employability support and reflected an understanding of SDG 8 as connected to inclusive economic participation.

ATU's support for enterprise scholarships also reflects this principle. In June 2025, the University announced a new scholarship established with Khazri TN LLC for students in technical disciplines. Two full-time students were selected to receive 100 AZN per month, bringing the total number of enterprise-funded scholarships at the University to three.

6. Decent Work Within the Institution

An especially important dimension of SDG 8 is the quality of work provided by the institution itself. ATU addressed this directly in September 2025 through the introduction of a differential salary system for academic staff.

The new system links salary supplements to scientific and pedagogical performance, creating a merit-based incentive structure. This reform strengthens internal decent work conditions by improving fairness, promoting professional accountability, and rewarding contribution. It also contributes to a more sustainable academic workforce by aligning institutional expectations with motivation and recognition.

7. Institutional Outcomes and Key Performance Indicators

8. Strategic Assessment

The University's 2025 SDG 8 performance reveals a coherent model built on the progression: Education → Skills → Work-Based Learning → Employment Readiness → Economic Contribution.

Rather than treating employability as a peripheral service, the University has integrated labour market preparation into partnerships, teaching spaces, internships, student training, digital skill development, employer-supported scholarships, and internal employment reform. This approach aligns strongly with SDG 8 targets related to productive employment for young people, reduction of skills mismatch, promotion of innovation-oriented economic participation, and improvement of decent work standards.

9. Conclusion

Azerbaijan Technological University demonstrates a strong and credible contribution to SDG 8 through a multi-level strategy that connects higher education with labour market realities. The University's work in 2025 shows clear evidence of employability enhancement, practical training, industry partnership, digital and technical capacity building, internal staff support, and economic relevance.

Its initiatives support not only the transition of students into employment, but also the development of a more skilled, adaptable, and innovation-oriented workforce. In this sense, ATU is contributing to sustainable economic growth at both the institutional and regional levels, while positioning itself as a university that actively translates education into opportunity, productivity, and decent work outcomes.

Selected Institutional Indicators

Indicator	Value
Students engaged in Career Festival	750+
Employers participating in Career Festival	40+
Vacancies presented through Career Festival	400+

Training duration in “Training to Career – 2”	3–6 months
New Khazri TN scholarship recipients	2 students
Scholarship amount	100 AZN per month
Total enterprise-funded scholarships by June 2025	3

Annex: Reference Links

Initiative	Link
AzerGold joint action plan	https://www.facebook.com/photo/?fbid=9482760588435735&set=a.289702834408269
Tourism internships	https://www.facebook.com/photo/?fbid=1101845348407185&set=pcb.1101845495073837
Tourism internships – Gold Naftalan	https://www.facebook.com/photo/?fbid=1104973708094349&set=pcb.1104973958094324
Environmental practice placement	https://www.facebook.com/photo/?fbid=1101478288443891&set=pcb.1101478491777204
Internship process improvement	https://www.facebook.com/photo/?fbid=9995111833867270&set=pcb.9995114220533698
PashaPay employability initiatives	https://www.facebook.com/photo/?fbid=10034858856559234&set=a.225186527526565
Digital grant	https://www.facebook.com/photo?fbid=12218630772208576 1&set=a.12210

competition	9853118085761
Youth Day recognition	https://www.atu.edu.az/xeber/1144
Training to Career – 2	https://www.facebook.com/photo?fbid=1106097167982003&set=pcb.1106097814648605
Career Festival implementation	https://atu.edu.az/news/1190
Career Forum	https://atu.edu.az/news/1192
Career Trainings	https://atu.edu.az/news/1191
AI webinar with banking sector relevance	https://atu.edu.az/news/1182
Nar trainings	https://atu.edu.az/news/1181
Milla plant visit	https://atu.edu.az/news/1183
InterFood Azerbaijan and Caspian Agro participation	https://atu.edu.az/news/1193
Digital skills training	https://atu.edu.az/news/1210
Agro Dairy meeting	https://atu.edu.az/news/1213

Khazri TN scholarship	https://www.atu.edu.az/xeber/1214
Differential salary system	https://atu.edu.az/news/1246
University–industry practical training spaces	https://atu.edu.az/news/1253
Ganja Instrumentation Factory branch	https://atu.edu.az/news/1256

SDG 9 – Industry, Innovation and Infrastructure

QS Sustainability Report

Azerbaijan Technological University (ATU)

Reporting Period: January – December 2025

Purpose	**Evidence-based narrative demonstrating ATU's contribution to SDG 9 for QS Sustainability.**
Scope	All SDG 9-relevant initiatives supplied by the university across January–December 2025.
Prepared for	QS Sustainability submission and institutional evidence packaging.

This report consolidates ATU's 2025 evidence on research platforms, innovation ecosystems, digital transformation, industry collaboration, technical infrastructure, and applied technology development.

Executive Summary

Throughout 2025, Azerbaijan Technological University (ATU) demonstrated a broad and coherent institutional contribution to Sustainable Development Goal 9 through the creation of innovation ecosystems, targeted expansion of technical and digital infrastructure, deepening of university-industry cooperation, enhancement of research capacity, and strengthening of international scientific collaboration. The university's activity moved beyond isolated events and revealed a systemic model in which technology-focused teaching, applied research, digital governance, and practice-oriented learning increasingly reinforced one another.

The evidence base compiled in this report contains 59 SDG 9-relevant items from across the calendar year. Collectively, these show that ATU did not treat SDG 9 as a narrow research theme; rather, it embedded SDG 9 principles across student innovation, laboratory development, industrial immersion, academic publishing, scientometric capability, cybersecurity, transport and logistics research, green technologies, agri-tech, and digital transformation. This multi-level approach is aligned with QS Sustainability expectations, which reward institutions able to demonstrate both strategic commitment and verifiable implementation.

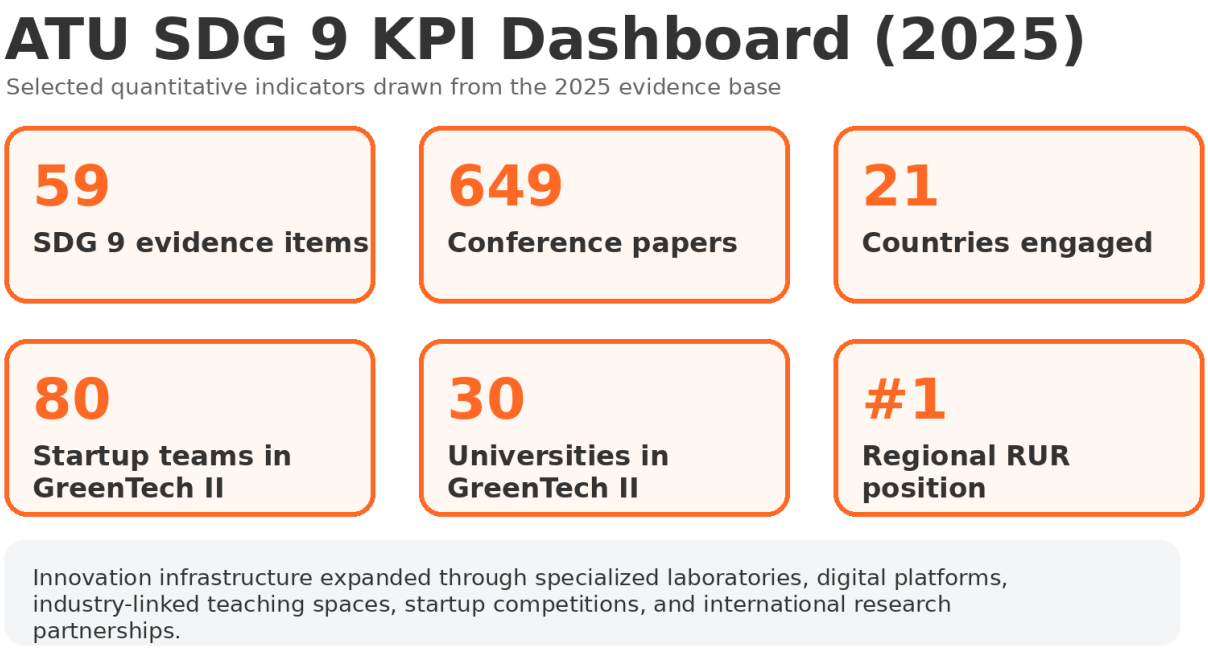

Figure 1. Selected KPI dashboard based on the 2025 SDG 9 evidence base.

Several initiatives stand out as especially strong evidence for QS purposes. These include the EU-funded OPTIFY project in optical networks and communications; the opening of the Virtual Learning and Simulation Laboratory; the BP-supported Cybersecurity Center; the GreenTech II national startup competition involving 80 teams from 30 universities; the launch and rollout of the Kodera electronic teaching management system; the establishment of a department branch inside Ganja Instrumentation Factory; and the student- and researcher-developed AI-based smart electric car project. Together, these initiatives show progress across the full SDG 9 spectrum: resilient infrastructure, industrial linkage, innovation output, and technological modernization.

The report therefore argues that ATU's 2025 performance under SDG 9 can be understood through six reinforcing dimensions: (1) student innovation and startup culture, (2) research and knowledge infrastructure, (3) advanced technical and digital infrastructure, (4) university-industry cooperation, (5) internationalization of technology-focused academic activity, and (6) institutional recognition through rankings and visibility. These dimensions are developed in detail in the sections that follow.

Methodology and Scope

This report has been prepared exclusively from the evidence set supplied by the user and deliberately includes all SDG 9-relevant items identified by the institution for the 2025 reporting year. No evidence item provided for inclusion has been removed from the final evidence base. Where an initiative has stronger direct relevance to SDG 9, it is treated as a flagship example; where relevance is supporting rather than primary, it is still retained and interpreted in relation to the innovation ecosystem, infrastructure modernization, or research capacity that underpins SDG 9 performance.

- Time frame covered: January to December 2025.
- Evidence sources: official ATU website items, official university social-media posts, and linked contextual evidence included in the source list.
- Analytical principle: each item was interpreted against at least one SDG 9 sub-dimension, including innovation culture, industrial partnership, digital infrastructure, applied research, scientific dissemination, or international technology cooperation.

- QS orientation: emphasis was placed on institutional impact, implementation mechanisms, quantitative indicators, and demonstrable links between strategy and practice.

Analytical Structure Used in the Report

Dimension	Illustrative focus	Typical evidence in this report
Innovation culture	Student creativity, startup activity, AI adoption	Digital Grant Competition, GreenTech II, ATU-Car
Infrastructure	Laboratories, technical rooms, digital systems	REFRESH Lab, Cybersecurity Center, Kodera
Industry linkage	Internships, plant visits, enterprise cooperation	AzerGold, Nar, Milla, Ganja Instrumentation Factory
Research systems	Conferences, journals, scientometrics, AI research tools	Fourth Industrial Revolution conference, Web of Science, Scopus AI
Internationalization	Joint research, academic benchmarking, foreign experts	OPTIFY, Iași visit, Granada webinar, Holon and Atyrau partnerships
Visibility and recognition	Research rankings and institutional performance	RUR and AD Scientific Index achievements

Institutional Context: Why SDG 9 Matters for ATU

As a technological university, ATU's institutional identity is inherently connected to SDG 9. Yet the evidence from 2025 shows that the university interprets this goal broadly and productively. Resilient infrastructure is reflected not only in buildings and laboratories, but also in digital systems, scientometric access platforms, and industry-linked learning spaces. Innovation is reflected not only in formal research, but also in competitions, prototypes, student seminars, and knowledge-transfer events. Industrialization is approached through

enterprise partnerships, sectoral conferences, plant visits, curriculum alignment, and the movement of learning into actual production environments.

This matters for QS Sustainability because universities are evaluated not only on policy statements, but on their ability to produce a measurable and diverse body of activity. ATU's 2025 portfolio demonstrates breadth as well as coherence. The same university that launched a digital management platform also built cybersecurity infrastructure, co-organized transport and logistics conferences, showcased agri-tech prototypes, benchmarked foreign laboratories, and supported AI-driven student innovation. The cumulative effect is stronger than any single item, because it reveals an institutional ecosystem rather than a one-off programme.

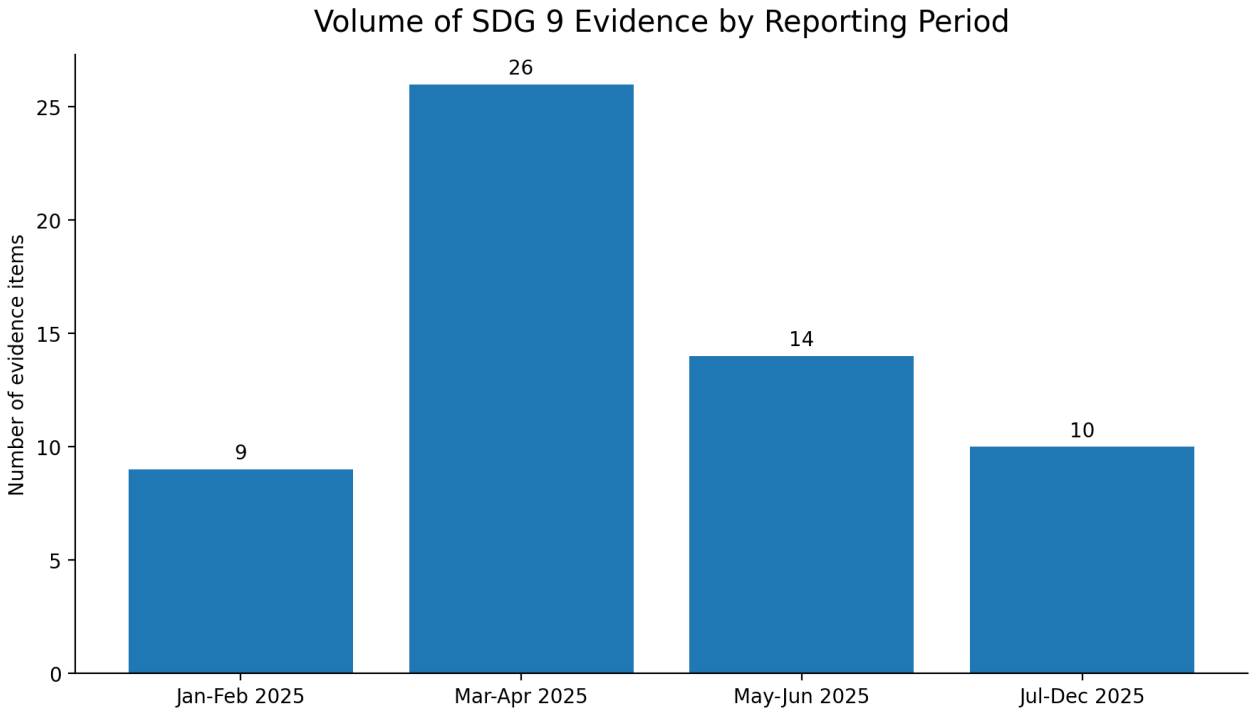

Figure 2. Number of SDG 9 evidence items by reporting period.

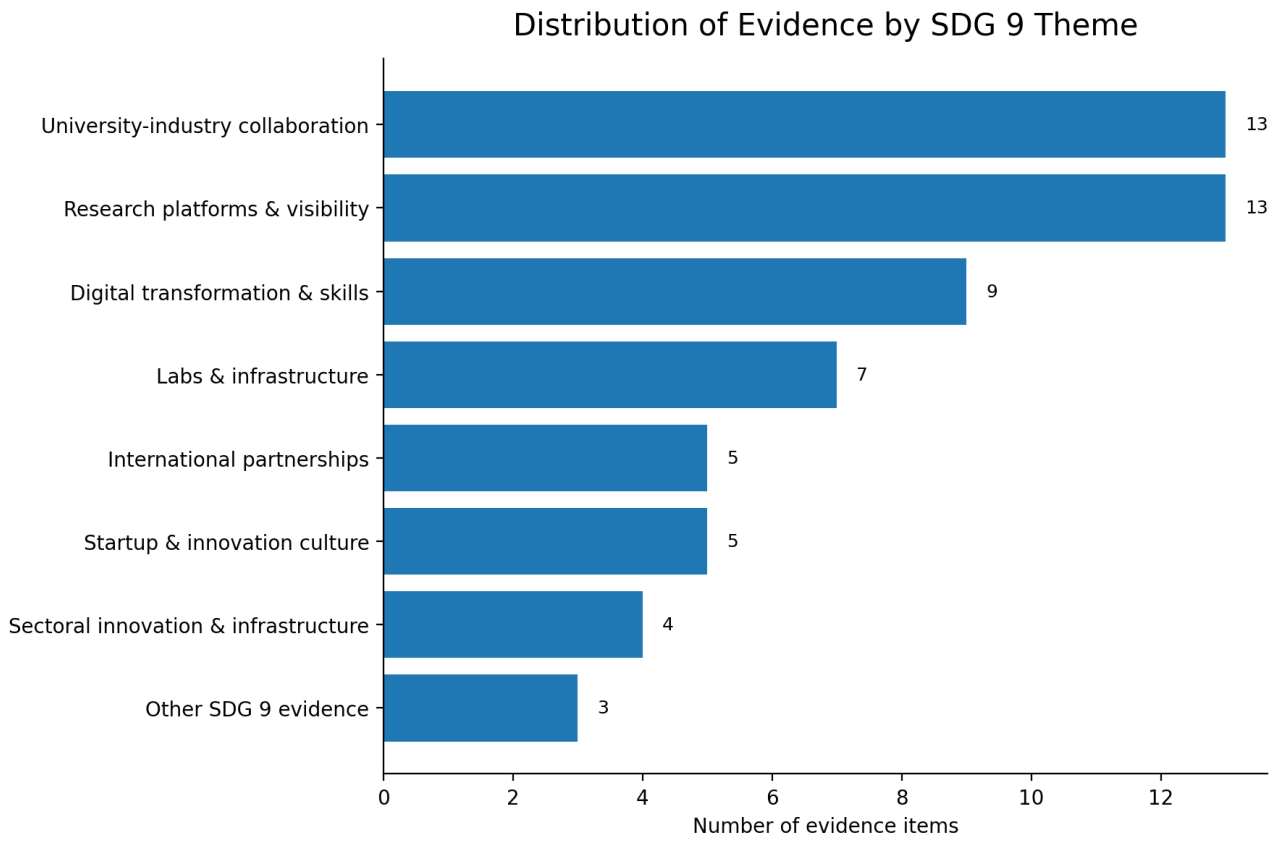

Figure 3. Distribution of evidence by major SDG 9 theme.

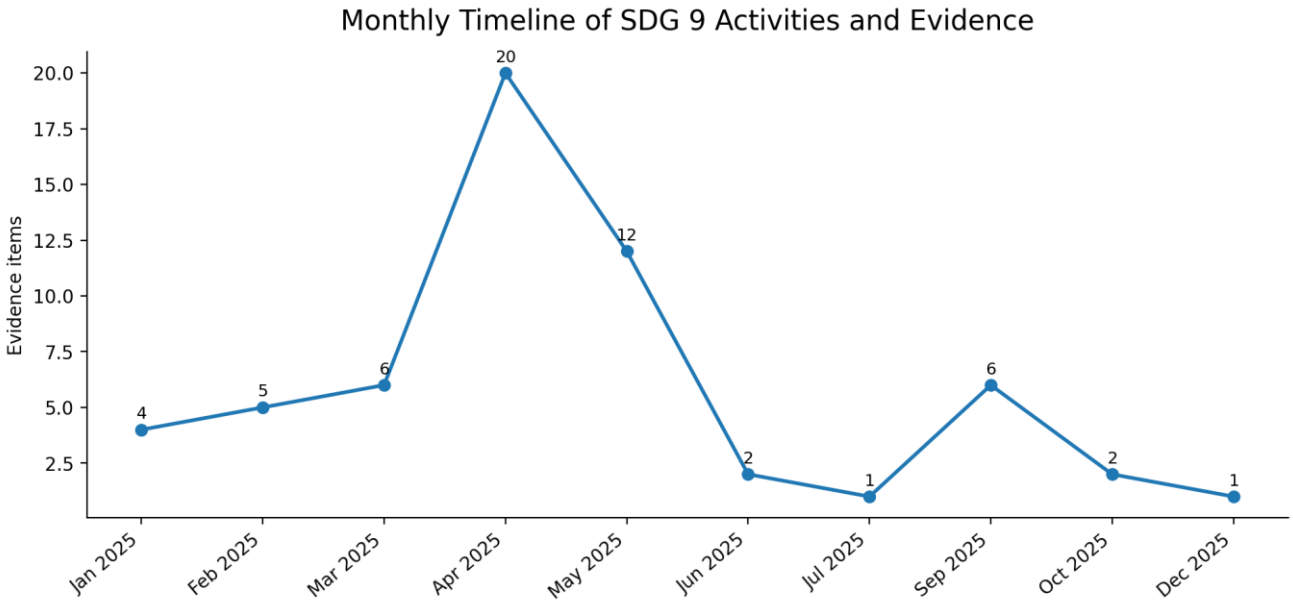

Figure 4. Monthly timeline of the 2025 SDG 9 evidence base.

1. Student Innovation, Startup Culture, and Technology-Oriented Learning

ATU's first major SDG 9 contribution in 2025 was the cultivation of a campus-wide culture of innovation. This is visible from the very beginning of the reporting period. On 9 January 2025, student teams from the ATU Innovation Center won the "Digital" Grant Competition with two AI-oriented concepts, Visionary AI and GuideBot. The first focused on AI literacy and practical competence; the second used AI to communicate the history of technology in accessible digital formats. This evidence is valuable because it captures the earliest stage of the innovation pipeline: students identifying technological opportunities and developing practical digital concepts that can be communicated outside the classroom.

Evidence link: Digital Grant Competition winners

The innovation pipeline was reinforced and scaled through GreenTech II. Initially launched on 14 February 2025 and then expanded on 6 March 2025 through additional institutional partners and sponsors, GreenTech II became one of the university's flagship SDG 9 initiatives. It linked startup creation, green technological entrepreneurship, and multi-stakeholder support. The entry of the Innovation and Digital Development Agency, along with major corporate sponsors, transformed the competition from a campus event into a wider innovation platform. The final stage, held on 17 April 2025, brought together 80 teams from 30 universities and focused on robotics, green transport technologies, digital ecology, and sustainable-development-oriented social innovation.

Evidence links: launch; partner expansion; final competition

Supporting the same culture were student seminars and training events that normalized technological inquiry as part of everyday academic life. Examples include seminars on Design and AI, smart vineyards and technology in agriculture, ATM simulation, the photoelectric effect and its applications, the OSI model and internet systems, alternative energy sources and innovation, and graphic design with digital tools. Individually, these items may appear modest; collectively, however, they demonstrate that the innovation orientation of the university permeates student-level academic activity. This is important in a QS context because innovation ecosystems depend on broad participation, not only elite projects.

Selected student-level innovation and technology learning activities

Date	Activity	Relevance to SDG 9	Evidence
7 Mar	Design and AI seminar	AI application in creative industries	Source
12 Mar	Smart vineyards seminar	Agri-tech and efficiency in production systems	Source
11 Apr	ATM simulation seminar	Programming and system modelling	Source
16 Apr	Photoelectric effect seminar	Technical foundations for innovation	Source
24 Apr	Alternative energy seminar	Innovation in energy systems	Source
25 Apr	OSI model seminar	ICT capacity and digital systems	Source
8 Apr	AI tools training	Practical AI adoption and digital pedagogy	Source

By the end of the year, the innovation culture had advanced from competitions and seminars to prototype development. On 30 October 2025, ATU announced the presentation of “ATU-Car”, an AI-based smart electric car integrating solar energy, battery technology, movement-based energy recovery, GPS management, and a programmed control system. This is among the strongest single items in the entire evidence set because it demonstrates a concrete innovation output developed with the participation of students and researchers. It transforms the university’s innovation narrative from training and awareness into demonstrable prototyping.

Evidence link: ATU-Car project

2. Research Capacity, Knowledge Infrastructure, and Scientific Platforms

ATU's SDG 9 contribution in 2025 was also strongly expressed through the strengthening of research infrastructure and knowledge systems. The most substantial early example was the EU-funded OPTIFY project, introduced in January 2025. The project aims to enhance capacity in optical networks and optical communications through a new master's programme, the training of academic staff, and the establishment of a sector-relevant laboratory. This initiative links advanced technological education with infrastructure development and international collaboration, making it especially valuable for QS Sustainability.

Evidence link: OPTIFY project

Scientific platforms expanded further in April 2025 with the launch of the specialized journal Automation, Communication and Information Technologies. This journal is more than a publication outlet: it constitutes research dissemination infrastructure. It creates a dedicated academic space for work in automation, communication systems, and information technologies, thereby strengthening the institutional ecosystem required for sustained innovation output.

Evidence link: scientific journal launch

ATU also invested significantly in scientometric and AI-assisted research systems. Across April 2025, the university hosted a Scopus AI information session, an official follow-up session on research innovation tools, a Clarivate / Web of Science AI webinar, and a Web of Science seminar on researcher profiles, Journal Citation Reports, and EndNote. These activities matter for SDG 9 because innovation is not generated through laboratories alone; it also depends on researchers' ability to discover, evaluate, position, and communicate scientific knowledge efficiently.

Evidence links: Source 1; Source 2; Source 3; Source 4

Research culture was also mobilized through institutional events. On 18 March 2025, Science Day highlighted student reports on AI, automation, programming languages, monitoring technologies, and industrial recycling. Later, on 6–7 May 2025, ATU hosted an international scientific and practical conference on the current status and development prospects of science and technology in the Fourth Industrial Revolution. With 649 accepted theses from 21 countries and participation from foreign and local universities, research

institutes, enterprises, and government agencies, this event significantly strengthened ATU's role as a convening platform for innovation-oriented scientific exchange.

Evidence links: Source 1; Source 2; Source 3

ATU also invested in human research capacity. The 24 February webinar delivered by a Harvard researcher on research planning and methodology strengthened the foundational competencies of master's and doctoral students. Meanwhile, the benchmark visit to the Technical University of Iași exposed ATU leadership to advanced laboratories and engineering-related facilities, creating a reference point for technical modernization and institutional learning.

Evidence links: Source 1; Source 2

By September 2025, the cumulative effect of these activities began to show in external recognition. ATU achieved strong results in AD Scientific Index 2026, supported by publication growth in Scopus and Web of Science, increased citations, and more systematic management of researcher profiles. Alongside ATU's 2025 Round University Ranking result and inclusion in THE Impact Rankings, this evidence indicates that the university's investments in research systems and visibility were beginning to translate into measurable reputation gains.

Evidence links: Source 1; Source 2; Source 3

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3. Laboratory Development and Technical Infrastructure Expansion

A defining characteristic of ATU's 2025 SDG 9 record is the visible expansion of laboratory and teaching infrastructure. These investments are especially important because they convert innovation ambitions into environments where experimentation and applied learning can occur. The 18 February opening of the Virtual Learning and Simulation Laboratory under the REFRESH project represents one of the clearest examples. Equipped with microcontroller-related technology, laptops, printers, and solar panels, the laboratory supports simulation, prototyping, and technology-enabled practical learning.

Evidence link: REFRESH laboratory

A second flagship initiative was the BP-supported Cybersecurity Center opened on 15 April 2025. The center created a specialized technical environment for cybersecurity,

cryptography, and digital security training, with a research and skills-development orientation. Within the logic of SDG 9, this initiative is particularly strong because it demonstrates simultaneous progress in technical infrastructure, industry collaboration, workforce preparation, and digital resilience.

Evidence link: Cybersecurity Center

The university continued this trajectory in September. On 13 September 2025, ATU introduced a BP-supported laboratory under Automation and Information Technologies and a Coca-Cola-supported auditorium under Food Engineering and Expertise. The equipment profile—including computers, laptops, and modern teaching furniture—shows that these were not symbolic openings but real infrastructure upgrades designed to support professional training and technical competence.

Evidence link: BP- and Coca-Cola-supported infrastructure

Other infrastructure improvements, while more applied and field-specific, also contributed to the university's SDG 9 profile. On 17 September 2025, a design workshop supported by Temas and a classroom created in cooperation with BuildX expanded practice-oriented infrastructure in design and logistics-related teaching. Earlier, on 8 May 2025, newly renovated thematic classrooms were opened in design, ecology, and civil defense. Although some of these facilities also advance SDG 4, they remain relevant to SDG 9 because they strengthen the technical and applied base of university education.

Evidence links: Source 1; Source 2

Perhaps the most compelling infrastructure initiative of the second half of the year was the launch of a department branch inside Ganja Instrumentation Factory on 26 September 2025. Here, the infrastructure is not merely classroom-based; it is embedded directly in a production environment. Students can undertake learning activities within an industrial setting, creating a highly credible form of application-oriented engineering education. For QS Sustainability, this is a model example of how university infrastructure can become porous and extend into the real economy.

Evidence link: Ganja Instrumentation Factory branch

ATU's 2025 SDG 9 performance also reflects a sustained commitment to digital transformation. This was visible early in the year through measures to expand access and digital competence. The Bakcell partnership broadened internet access for students, improving their ability to participate in online learning and research systems. Meanwhile, practical training in AI tools, programming, and digital platforms built foundational skills for technology-enabled work.

Evidence links: Source 1; Source 2; Source 3

The most important digital transformation initiative, however, was the launch of the Kodera electronic teaching management system on 13 September 2025 and the presentation of its updated rollout on 30 September 2025. Kodera includes teacher and student cabinets, electronic gradebooks, test and exam modules, an electronic library, document circulation, internal communication channels, and calendar functions. In institutional terms, this represents a major infrastructure shift from fragmented administrative tools to an integrated digital environment.

Evidence links: Source 1; Source 2

Kodera is particularly important for QS Sustainability because it shows that ATU understands infrastructure in a modern sense: not only laboratories and buildings, but also the information systems that make education more transparent, flexible, and data-driven. The phased presentation and staff training approach taken in September further indicate that the university was not merely installing software; it was attempting to build a sustainable digital management culture.

Cybersecurity-related initiatives complement this digital transformation narrative. In addition to the Cybersecurity Center itself, ATU's May cooperation with the Innovation and Digital Development Agency covered curriculum modernization, hackathons, workshops, and the creation of a Cyber Club. These steps broaden the scope of digital infrastructure from hardware to governance, skills, and innovation communities.

Evidence link: IDIA cybersecurity cooperation

5. University–Industry Collaboration and Applied Industrial Learning

ATU's SDG 9 profile is especially strong in the field of university–industry collaboration. The 2025 evidence base shows a pattern of structured engagement with enterprises in mining, telecommunications, food production, agriculture, transport, manufacturing, and instrumentation. Rather than treating industry as an external destination for internships only, ATU increasingly integrates enterprise knowledge into curricula, infrastructure, and research collaboration.

The January 2025 action plan with AzerGold is a key example. It covered joint research, industrial training, student participation in company projects, master classes, career events, curriculum adaptation, and site familiarization. This breadth matters because it demonstrates that ATU's industrial partnerships are not ad hoc; they are designed to affect teaching, research, and practical exposure simultaneously.

Evidence link: AzerGold action plan

A second important example is the continuing cooperation with Nar. In May 2025, practical training enabled students and academic staff to work with telecommunications equipment and understand the functioning of mobile networks. This illustrates a strong match between enterprise infrastructure and university learning outcomes, particularly in fields linked to digital systems and communications.

Evidence link: Nar partnership

The industrial visit to Milla in May 2025, the industrial immersion at Mingachevir Textile in March 2025, the seminar and technology exposure through AzerGold in April 2025, and the later cooperation discussions with Agro Dairy collectively show the breadth of sectors in which ATU operates. These are not isolated visits: each contributes to a pedagogical model in which industrial systems become part of the university's applied learning environment.

Evidence links: Source 1; Source 2; Source 3; Source 4

The strongest expression of this model remains the department branch launched at Ganja Instrumentation Factory in September 2025. This initiative collapses the distance between theory and industrial practice by placing part of the learning process directly inside a production enterprise. It therefore deserves to be highlighted as one of ATU's most mature and defensible SDG 9 practices.

Even the AZGRANATA-related industrial evidence, although more contextual and less formalized, contributes to the broader picture by documenting industrial production lines,

processing technologies, and bottling capacity. In a QS narrative, such evidence is best used as background material illustrating the type of production ecosystem with which a technological university in the region engages.

Context link: AZGRANATA production context

6. Sectoral Innovation: Transport, Logistics, Agriculture, Energy, and Green Technologies

One of ATU's strengths is that SDG 9 activity extends across multiple sectors rather than being confined to a single disciplinary area. Transport and logistics were a particularly important axis in 2025. The PLMO conference, first announced in January and held in May, concentrated on transport corridors, intelligent control systems, railway capacity, and Europe-Asia logistics connectivity. This placed ATU within a strategically important infrastructure conversation extending beyond the campus and even beyond the national level.

Evidence links: Source 1; Source 2

Agricultural and food-related innovation was another major theme. Student seminars on smart vineyards and technology, representation at InterFood Azerbaijan and Caspian Agro, and participation in the International Food and Agrarian Business Forum all point to an institutional effort to support modern technologies in food systems and agriculture. The 2025 evidence highlights smart irrigation, digital agronomy, soil-analysis sensors, and other application-oriented solutions that connect ATU's research and innovation agenda with sustainable production sectors.

Evidence links: Source 1; Source 2; Source 3; Source 4

Green technology also runs through several parts of the evidence base. GreenTech II itself focused on robotics, green transport, and ecological innovation. The environmental monitoring and green technologies training in April 2025 added a technological sustainability dimension. The ATU-Car project then offered perhaps the most visible synthesis of innovation, infrastructure, and sustainability by combining AI, solar power, battery technology, and smart management into a single prototype.

Evidence links: Source 1; Source 2; Source 3

Finally, regional and post-conflict development perspectives also appeared in the evidence set. The seminar on economic innovations in the Karabakh region and the seminar on logistics development in Azerbaijan both indicate that ATU's innovation discourse is attentive to territorial development and infrastructure transformation. Although these are seminar-based items, they support the argument that students are being socialized into technology- and infrastructure-related problem spaces with clear social relevance.

Evidence links: Source 1; Source 2

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7. Internationalization of Technology and Innovation Cooperation

ATU's innovation agenda in 2025 was consistently international in character. This is visible in project participation, guest expertise, benchmark visits, international conferences, and inter-university agreements. The OPTIFY project connected ATU to a regional and European effort in optical networks and communications. The benchmark visit to the Technical University of Iași exposed ATU leadership to advanced laboratories and engineering faculties. The AI and banking webinar connected ATU with the University of Granada and the International Bank of Azerbaijan, showing the practical value of cross-border research exchange.

Evidence links: Source 1; Source 2; Source 3

ATU also benefited from sustained engagement with the Holon Institute of Technology. First, Israeli scientists were announced as participants in a seminar on IoT, AI, and technology exchange in April 2025; later, in May 2025, a dedicated special session at the international conference presented IoT laboratory experience, AI developments, and cultural heritage technologies. These activities advanced knowledge transfer in highly current technological fields while strengthening the university's international innovation network.

Evidence links: Source 1; Source 2

International innovation cooperation expanded further with agreements signed in May and October 2025. ATU formalized cooperation with Fergana State University, Andijan State University, and Namangan State Technical University, all of which included innovation and joint research provisions. Later, a memorandum with Kazakhstan Atyrau University extended this logic to another regional partner. In each case, the significance lies not merely in

internationalization for its own sake, but in the explicit incorporation of research projects, academic exchange, joint programmes, and innovation and technology cooperation.

Evidence links: Source 1; Source 2

ATU's participation in the Tashkent education exhibition in May 2025 also supported this internationalization agenda by promoting the university's technological programmes and innovation-oriented academic profile. In QS framing, these activities help establish ATU not only as a consumer of external expertise, but as a participant in the circulation of scientific and technological knowledge.

Evidence link: Tashkent education exhibition

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8. Institutional Outcomes, Visibility, and Overall Impact

By the close of 2025, ATU's SDG 9-related work had generated visible institutional outcomes. At the most immediate level, the university had created or upgraded multiple laboratories, classrooms, workshops, and digital systems. It had engaged companies across mining, manufacturing, telecommunications, food production, agriculture, and construction. It had also created significant platforms for student participation in innovation, including AI initiatives, startup competitions, and prototyping.

At the level of scholarly visibility, ATU's innovation-oriented efforts were reflected in both rankings and scientometric performance. The university ranked first among regional universities in Azerbaijan in the 2025 Round University Ranking and achieved strong positions in AD Scientific Index 2026. These recognitions matter for QS not because rankings are ends in themselves, but because they provide external confirmation that ATU's research, visibility, and scientific management systems were improving.

The quantitative highlights are especially notable. The Fourth Industrial Revolution conference alone accepted 649 theses from 21 countries. GreenTech II engaged 80 teams from 30 universities. The evidence base documents 59 SDG 9-relevant actions across the year, showing exceptional breadth for a regional technological university. The concentration of activity in March-April and again in September indicates a university operating in waves of implementation rather than relying on isolated flagship events alone.

Selected headline indicators

Indicator	Value	Evidence basis
Total SDG 9 evidence items in 2025	59	Comprehensive evidence matrix in Annex A
Accepted theses in Fourth Industrial Revolution conference	649	ATU conference reporting
Countries represented in conference process	21	ATU conference reporting
Teams in GreenTech II final	80	GreenTech II final stage
Universities represented in GreenTech II	30	GreenTech II final stage
RUR standing among regional universities in Azerbaijan	#1	RUR 2025 announcement
Global RUR position	1117	RUR 2025 announcement
Major Kodera milestones documented	2	Launch and updated rollout in September

Taken together, these outcomes demonstrate that ATU's contribution to SDG 9 is not narrowly infrastructural, narrowly academic, or narrowly industrial. It is ecosystemic. The university is progressively connecting people, spaces, systems, and partnerships in ways that support innovation-led development. This broad-based model is precisely the type of institutional narrative that performs well in QS Sustainability submissions, because it demonstrates continuity, range, and implementation depth.

Conclusion

The 2025 evidence shows that Azerbaijan Technological University has built a substantial and diversified record under SDG 9. The university supported early-stage student

innovation; organized national startup and green technology competitions; expanded laboratory, workshop, and auditorium infrastructure; introduced a campus-wide electronic management platform; engaged deeply with industrial enterprises; strengthened scientometric and research support systems; hosted international conferences and technology-focused sessions; and advanced prototype-oriented innovation through the ATU-Car project.

What gives this record particular value for QS Sustainability is its internal coherence. The same institution that develops AI skills among students also invests in cybersecurity infrastructure, organizes transport and logistics conferences, enters agri-tech exhibition spaces, benchmarks international laboratories, and builds learning spaces with enterprise support. This coherence allows ATU to present itself not simply as a university that hosts technology-themed events, but as a university that is steadily constructing an innovation-driven higher education ecosystem.

Accordingly, ATU's SDG 9 contribution in 2025 can be characterized as strong across four core QS-relevant dimensions: infrastructure modernization, innovation culture, university-industry cooperation, and research visibility. The evidence compiled in this report indicates that ATU is not only responding to contemporary technological change but actively positioning itself as a regional node in sustainable and innovation-led development.

Annex A. Comprehensive SDG 9 Evidence Matrix

This annex includes every SDG 9-related item supplied in the evidence set for 2025. No evidence item listed by the user for inclusion has been omitted. The matrix is organized chronologically and is designed to function as a practical evidence index for QS Sustainability packaging and future audit or cross-reference work.

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
1	09 Jan 2025	Digital Grant Competition winners from the ATU Innovation Center	Student innovation; AI capacity building; startup pipeline	Two student teams, Visionary AI and GuideBot, won a national digital grant competition, demonstrating early-stage AI innovation, student-led technological creativity, and the university's support for applied digital experimentation.	Source
2	13 Jan 2025	EU-funded OPTIFY project launch meeting	Research infrastructure; advanced communications; international innovation project	ATU joined the EU-funded OPTIFY project to build capacity in optical networks and communications through a new master's programme, academic staff development, and the planned creation of a sector-relevant laboratory.	Source
3	18 Jan 2025	PLMO 2025 co-organization announced	Transport infrastructure; logistics innovation; international scientific platform	ATU announced co-organization of the International Scientific Conference on Logistics and Management Problems in the East-West Transport Corridor, linking the university with transport systems, logistics, and infrastructure research.	Source
4	22 Jan 2025	Expansion of cooperation with AzerGold CJSC	University-industry collaboration; applied research; industrial	ATU and AzerGold agreed on a 2025 action plan covering joint research, industrial internships, student project	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
			training	involvement, curriculum alignment, and enterprise participation in teaching.	
5	07 Feb 2025	Benchmarking visit to the Technical University of Iași	Benchmarking; lab modernization; technical capacity building	ATU leadership reviewed advanced laboratories and technical infrastructure in engineering, electronics, telecommunications, automation, and industrial management at the Technical University of Iași.	Source
6	14 Feb 2025	Launch of the GreenTech II startup and green technologies competition	Startup ecosystem; green innovation; entrepreneurship	ATU launched GreenTech II to stimulate green technological entrepreneurship, innovation-oriented problem solving, and startup development among university students.	Source
7	18 Feb 2025	Virtual Learning and Simulation Laboratory opened under REFRESH	Laboratory infrastructure; simulation technologies; applied learning	ATU opened a new virtual learning and simulation laboratory equipped with modern devices, microcontroller-related equipment, laptops, printers, and solar panels to support practical experimentation.	Source
8	24 Feb 2025	Research methodology webinar by a Harvard	Research capacity; innovation pipeline support	A webinar on research planning and methodology strengthened the scientific	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
		researcher		skills of master's and doctoral students, supporting the research capacity needed for innovation ecosystems.	
9	27 Feb 2025	Industrial exposure to AZGRANATA production lines	Industrial production context; manufacturing technologies	Documentation on AZGRANATA's manufacturing processes, bottling lines, and production technologies provided contextual evidence related to industrial production systems and infrastructure.	Source
10	06 Mar 2025	GreenTech II partner and sponsor expansion	Innovation ecosystem growth; commercialization support; partnerships	ATU expanded the GreenTech II ecosystem by adding the Innovation and Digital Development Agency and major corporate sponsors, strengthening multi-stakeholder support for startup development.	Source
11	07 Mar 2025	Student scientific seminar on Design and AI	AI literacy; digital creativity; innovation culture	A seminar on Design and AI promoted early-stage knowledge of artificial intelligence applications in creative industries and encouraged innovation-oriented thinking among students.	Source
12	12 Mar 2025	Student seminar on industrial development and	Industrial systems literacy; infrastructure	A seminar on industrial evolution strengthened understanding of	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
		economic systems	understanding	comparative industrial systems and economic infrastructure among future specialists.	
13	12 Mar 2025	Student seminar on smart vineyards and agricultural technology	AgriTech; production efficiency; sector innovation	A seminar on smart vineyards explored technology applications in agriculture, including efficiency, productivity, and innovation in traditional production systems.	Source
14	17 Mar 2025	Industrial visit to Mingachevir Textile LLC	Industrial immersion; manufacturing infrastructure; university-industry knowledge transfer	Students and faculty visited Mingachevir Textile LLC to observe manufacturing processes, production infrastructure, and applied industrial systems in practice.	Source
15	18 Mar 2025	Science Day focused on AI, automation, programming, and industrial topics	Research culture; innovation environment; student scientific activity	Science Day showcased student research on artificial intelligence, automation, algorithms, and industrial waste recycling, contributing to a visible innovation culture on campus.	Source
16	04 Apr 2025	Student seminar on logistics development in Azerbaijan	Logistics systems; transport connectivity; infrastructure literacy	A seminar on logistics development in Azerbaijan supported understanding of supply chains, transport systems, and	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
				infrastructure efficiency.	
17	05 Apr 2025	Scopus AI info-session for the research community	Research systems; AI in scholarship; innovation capacity	An open session on Scopus AI introduced AI-enabled research workflows, scientometric tools, and data-driven approaches to improving academic productivity.	Source
18	06 Apr 2025	Bakcell cooperation to expand digital access	Digital infrastructure; access connectivity; inclusive innovation participation	Through cooperation with Bakcell and the Education Development Fund, eligible students received additional internet access to support digital learning and research participation.	Source
19	07 Apr 2025	Launch of the scientific journal 'Automation, Communication and Information Technologies'	Knowledge infrastructure; publication platform; technology scholarship	ATU launched a specialized scientific journal dedicated to automation, communication, and information technologies, strengthening research dissemination infrastructure.	Source
20	08 Apr 2025	Training on Artificial Intelligence tools and innovative teaching	AI tools; digital innovation skills; educational technology	Students received practical training in ChatGPT, Canva AI, QuillBot, and digital lesson design, expanding AI-related competencies and educational innovation awareness.	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
21	08 Apr 2025	Student seminar on graphic design and digital tools	Digital creativity; design technologies	A seminar on graphic design contributed to digital creativity and innovation-oriented academic practices within a broader culture of technological engagement.	Source
22	09 Apr 2025	AzerGold seminar on industrial technologies and production systems	Industry exposure; production technologies; enterprise engagement	AzerGold specialists introduced students to production technologies, industrial processes, and human-resource practices in a real enterprise context.	Source
23	11 Apr 2025	Student seminar on ATM simulation	Simulation systems; programming; digital infrastructure skills	A seminar on ATM simulation developed programming and system-modelling competencies relevant to digital infrastructure and technological problem solving.	Source
24	14 Apr 2025	Official Scopus AI research innovation session	Research infrastructure; AI-enabled analytics; innovation capacity	An official ATU-hosted session presented the use of Scopus AI and scientometric resources to accelerate and improve innovation-oriented research processes.	Source
25	15 Apr 2025	Opening of the BP-supported Cybersecurity Center	Technical infrastructure; cybersecurity; industry partnership; workforce	ATU inaugurated the region's first Cybersecurity Center with BP support, including a specialized laboratory for	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
			development	cryptography, cybersecurity training, and practical digital security exercises.	
26	16 Apr 2025	Student seminar on the photoelectric effect and applications	Scientific foundations of innovation; technical literacy	A seminar on the photoelectric effect strengthened technical-scientific knowledge and the innovation pipeline in applied physics and technology.	Source
27	17 Apr 2025	GreenTech II final competition	Startup ecosystem; technological entrepreneurship; national innovation platform	The GreenTech II final brought together 80 teams from 30 universities across categories such as robotics, green transportation, digital ecology, and sustainable innovation.	Source
28	18 Apr 2025	Clarivate / Web of Science AI webinar	Research data systems; AI tools; innovation support	A webinar introduced Web of Science Research Assistant and related AI solutions, supporting more efficient research, information access, and innovation acceleration.	Source
29	23 Apr 2025	Web of Science seminar at ATU	Scientometrics; research infrastructure; scholarly visibility	A seminar on Web of Science, Journal Citation Reports, EndNote, and researcher profiles strengthened the university's access to global research infrastructure.	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
30	24 Apr 2025	Seminar on alternative energy sources and innovation	Energy innovation; technology-based development	A student seminar linked alternative and artificial energy sources to innovative business models and technology-driven development.	Source
31	25 Apr 2025	Seminar on the OSI model and internet systems	ICT capacity; network infrastructure; digital literacy	A seminar on the OSI model and internet search systems developed understanding of network technologies and information systems relevant to digital transformation.	Source
32	27 Apr 2025	ASAN Service visit to the ATU Innovation Center	Innovation center visibility; public-university collaboration; startup awareness	Employees and volunteers from ASAN Service visited the ATU Innovation Center to learn about startup projects, innovation clubs, and opportunities in the innovation ecosystem.	Source
33	28 Apr 2025	Training on environmental monitoring and green technologies	Green technology innovation; monitoring systems; applied sustainability technologies	Training for bachelor's and master's students explored environmental monitoring, green technologies, and innovation in sustainability-related systems.	Source
34	29 Apr 2025	Seminar on economic innovations in the Karabakh region	Regional innovation; infrastructure development perspective	A seminar on economic innovations in the Karabakh economic region supported understanding of post-conflict regional	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
				development and infrastructure renewal.	
35	30 Apr 2025	Israeli scientists seminar on IoT, AI, and technology exchange	International knowledge transfer; IoT; AI; advanced technologies	Scientists from the Holon Institute of Technology presented on IoT laboratory experience, AI, and other emerging technologies, deepening international technology exchange.	Source
36	02 May 2025	Webinar on AI and big data applications in banking	Applied AI; industry-linked research; international collaboration	ATU, the International Bank of Azerbaijan, and the University of Granada organized a webinar on AI and big data applications in banking, including fraud detection, risk management, and customer experience optimization.	Source
37	02 May 2025	Industry-based telecommunications training with Nar	Telecommunications infrastructure; university-industry training; technical competencies	ATU continued practice-oriented training with Nar, enabling students and staff to work with modern telecommunications equipment and mobile network technologies.	Source
38	06 May 2025	International conference on science and technology in the Fourth Industrial Revolution	Innovation platform; international research exchange; Industry 4.0	ATU hosted a major international conference on the current state and development prospects of science and technology in the Fourth Industrial	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
				Revolution.	
39	06 May 2025	Milla plant visit to deepen university-industry cooperation	Industrial collaboration; production technologies; applied research	ATU leadership visited the Milla dairy plant to discuss internships, joint research, and technology transfer while reviewing modern production technologies.	Source
40	07 May 2025	Conference continuation in 12 multidisciplinary sections	Multidisciplinary innovation dialogue; global scientific integration	The conference continued across 12 sections covering AI, IT, engineering, logistics, digital economy, and innovative technologies, with 649 accepted theses from 21 countries.	Source
41	08 May 2025	Modern educational and technical infrastructure expanded	Infrastructure modernization; practical learning environment	ATU put new specialized classrooms into operation, including design, modelling, ecology, and civil defense spaces that support more practice-based and technology-enabled learning.	Source
42	08 May 2025	Special session with Israeli scientists	International scientific exchange; IoT; AI; technology transfer	A dedicated session with the Holon Institute of Technology introduced ATU participants to IoT, artificial intelligence, and cultural heritage technologies.	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
43	15 May 2025	Representation at InterFood Azerbaijan and Caspian Agro	Technology dissemination; applied projects; exhibition platform	ATU showcased scientific research and innovative technologies in food industry and agriculture at major international exhibitions.	Source
44	16 May 2025	PLMO 2025 conference held at ATU	Transport innovation; regional infrastructure; logistics research	ATU hosted the continuation of the PLMO 2025 conference focused on intelligent control systems, transport corridors, railway capacity, and new management approaches.	Source
45	19 May 2025	Caspian Agro 2025 showcasing agri-tech prototypes	Agri-tech innovation; prototypes; startup visibility	ATU's Innovation Center, student startups, and young researchers presented digital agronomy, smart irrigation, and soil-analysis sensor solutions at Caspian Agro 2025.	Source
46	21 May 2025	Cybersecurity cooperation launched with IDIA	Cybersecurity ecosystem; curriculum modernization; digital innovation	ATU and the Innovation and Digital Development Agency agreed on curriculum updates, hackathons, workshops, a Cyber Club, and practical activities in cybersecurity.	Source
47	30 May 2025	Cooperation network expanded with Uzbek	International research partnerships; innovation	ATU signed agreements with Fergana State University, Andijan State University,	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
		universities	cooperation	and Namangan State Technical University covering joint research and innovation cooperation.	
48	02 Jun 2025	RUR global ranking achievement	Institutional recognition; research visibility; innovation reputation	ATU ranked first among regional universities in Azerbaijan in the Round University Ranking and 1117th globally, reflecting research and innovation progress.	Source
49	04 Jun 2025	Digital skills and programming training under the strategic plan	Digital competencies; innovation workforce development	ATU organized digital skills training in MS Office and Python to strengthen labour-market readiness and build innovation-oriented human capital.	Source
50	03 Jul 2025	Scientific Council meeting supporting innovation capacity	Innovation governance; research management support	The final Scientific Council meeting of the academic year discussed science activity, strategic development, self-analysis, accreditation preparation, and continuous quality improvement.	Source
51	11 Sep 2025	AD Scientific Index 2026 success	Research productivity; citation visibility; scientific competitiveness	ATU achieved strong national positions in AD Scientific Index 2026, reflecting publication growth, citations, research profile management, and international	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
				cooperation.	
52	13 Sep 2025	Kodera electronic teaching management system launched	Digital infrastructure; management modernization; e-learning ecosystem	ATU introduced the Kodera platform, including digital gradebooks, exams, an e-library, internal communication, and electronic document circulation.	Source
53	13 Sep 2025	Company-supported laboratory and specialized auditorium opened	Infrastructure development; company partnership; technical learning environments	With BP and Coca-Cola support, ATU opened a new technical laboratory and a specialized auditorium equipped with computers, laptops, and modern teaching equipment.	Source
54	17 Sep 2025	Practice-oriented rooms opened through university-industry cooperation	Applied infrastructure; practice-oriented education; external support	ATU opened a design workshop supported by Temas and a classroom supported through BuildX cooperation, strengthening applied technical learning spaces.	Source
55	26 Sep 2025	Department branch launched at Ganja Instrumentation Factory	Industrial branch infrastructure; theory-practice integration; industry-linked education	A university department branch started operating at Ganja Instrumentation Factory so students could learn directly in a production environment.	Source
56	30 Sep	Updated Kodera system	Digital transformation; staff	ATU presented the updated Kodera	Source

No.	Date	Initiative	SDG 9 dimension	QS relevance	Link
	2025	presented and rolled out	uptake; sustainable technology implementation	system and organized seminars for academic staff to support the transition to a more flexible, data-driven management culture.	
57	20 Oct 2025	Memorandum signed with Kazakhstan Atyrau University	International innovation partnership; joint research	ATU signed a cooperation memorandum with Atyrau University covering joint research projects, innovation and technology cooperation, academic exchange, and joint programmes.	Source
58	30 Oct 2025	AI-based smart electric car project announced	Prototype innovation; green mobility technology; applied research output	ATU announced the presentation of 'ATU-Car', a student- and researcher-developed smart electric car integrating artificial intelligence, solar panels, battery technology, GPS, and energy recovery systems.	Source
59	09 Dec 2025	Participation in the International Food and Agrarian Business Forum	Innovation dissemination; sector engagement; applied research visibility	ATU presented scientific research products, student innovations, and agro-food solutions at an international forum that also featured B2B meetings and discussion of technological solutions.	Source

Annex B. Source List by Reporting Period

09 Jan 2025 – Digital Grant Competition winners from the ATU Innovation Center: https://www.facebook.com/photo?fbid=122186307722085761&set=a.122109853118085761

13 Jan 2025 – EU-funded OPTIFY project launch meeting: https://www.atu.edu.az/xeber/1133

18 Jan 2025 – PLMO 2025 co-organization announced: https://www.facebook.com/photo/?fbid=9461146090597185&set=a.235125883199298

22 Jan 2025 – Expansion of cooperation with AzerGold CJSC: https://www.facebook.com/photo/?fbid=9482760588435735&set=a.289702834408269

07 Feb 2025 – Benchmarking visit to the Technical University of Iași: https://www.atu.edu.az/xeber/1146

14 Feb 2025 – Launch of the GreenTech II startup and green technologies competition: https://www.facebook.com/photo?fbid=595163896641022&set=a.116485534508863

18 Feb 2025 – Virtual Learning and Simulation Laboratory opened under REFRESH: https://www.atu.edu.az/xeber/1148

24 Feb 2025 – Research methodology webinar by a Harvard researcher: https://www.atu.edu.az/xeber/1150

27 Feb 2025 – Industrial exposure to AZGRANATA production lines: https://youtu.be/PlQxTfn7P9A?si=Z0rE_Cwfuszj0ViM

06 Mar 2025 – GreenTech II partner and sponsor expansion: https://www.atu.edu.az/xeber/1154

07 Mar 2025 – Student scientific seminar on Design and AI: https://www.facebook.com/photo?fbid=2351520368567962&set=pcb.2351520775234588

12 Mar 2025 – Student seminar on industrial development and economic systems: https://www.facebook.com/photo?fbid=2356045151448817&set=pcb.2356045464782119

12 Mar 2025 – Student seminar on smart vineyards and agricultural technology: https://www.facebook.com/photo?fbid=2356050734781592&set=pcb.2356051084781557

17 Mar 2025 – Industrial visit to Mingachevir Textile LLC: https://atu.edu.az/xeber/1159

18 Mar 2025 – Science Day focused on AI, automation, programming, and industrial topics: https://www.atu.edu.az/xeber/1160

04 Apr 2025 – Student seminar on logistics development in Azerbaijan: https://www.facebook.com/photo?fbid=2381172908936041&set=pcb.2381173105602688

05 Apr 2025 – Scopus AI info-session for the research community: https://www.facebook.com/photo?fbid=631788439645234&set=a.116485534508863

06 Apr 2025 – Bakcell cooperation to expand digital access: https://www.facebook.com/photo/?fbid=1134054501852936&set=pcb.1134054645186255

07 Apr 2025 – Launch of the scientific journal 'Automation, Communication and Information Technologies': https://atu.edu.az/xeber/1167

08 Apr 2025 – Training on Artificial Intelligence tools and innovative teaching: https://www.facebook.com/photo/?fbid=12219842091808576 1&set=pcb.1221984211580857 61

08 Apr 2025 – Student seminar on graphic design and digital tools: https://www.facebook.com/photo?fbid=2382628785457120&set=pcb.2382629112123754

09 Apr 2025 – AzerGold seminar on industrial technologies and production systems: https://www.atu.edu.az/xeber/1170

11 Apr 2025 – Student seminar on ATM simulation: https://www.facebook.com/photo?fbid=2388188861567779&set=pcb.2388189038234428

14 Apr 2025 – Official Scopus AI research innovation session: https://www.atu.edu.az/xeber/1173

15 Apr 2025 – Opening of the BP-supported Cybersecurity Center: https://www.atu.edu.az/xeber/1175

16 Apr 2025 – Student seminar on the photoelectric effect and applications: https://www.facebook.com/photo?fbid=2390418791344786&set=pcb.2390419144678084

17 Apr 2025 – GreenTech II final competition: https://www.atu.edu.az/xeber/1177

18 Apr 2025 – Clarivate / Web of Science AI webinar: https://www.facebook.com/photo/?fbid=1221915417681116 86&set=a.122104008710111686

23 Apr 2025 – Web of Science seminar at ATU: https://atu.edu.az/news/1178

24 Apr 2025 – Seminar on alternative energy sources and innovation: https://www.facebook.com/photo?fbid=2397137570672908&set=pcb.2397137850672880

25 Apr 2025 – Seminar on the OSI model and internet systems: https://www.facebook.com/photo?fbid=2398870700499595&set=pcb.2398871013832897

27 Apr 2025 – ASAN Service visit to the ATU Innovation Center: https://www.facebook.com/photo?fbid=1222013898920857 61&set=pcb.1222013902040857 61

28 Apr 2025 – Training on environmental monitoring and green technologies: https://www.facebook.com/photo?fbid=1222015218080857 61&set=pcb.1222015218860857 61

29 Apr 2025 – Seminar on economic innovations in the Karabakh region: https://www.facebook.com/photo/?fbid=2403296640057001&set=pcb.2403298160056849

30 Apr 2025 – Israeli scientists seminar on IoT, AI, and technology exchange: https://www.facebook.com/atu.edu.az/photos/650741054416639/

02 May 2025 – Webinar on AI and big data applications in banking: https://atu.edu.az/news/1182

02 May 2025 – Industry-based telecommunications training with Nar: https://atu.edu.az/news/1181

06 May 2025 – International conference on science and technology in the Fourth Industrial Revolution: https://atu.edu.az/news/1184

06 May 2025 – Milla plant visit to deepen university-industry cooperation: https://atu.edu.az/news/1183

07 May 2025 – Conference continuation in 12 multidisciplinary sections: https://atu.edu.az/news/1185

08 May 2025 – Modern educational and technical infrastructure expanded: https://atu.edu.az/news/1188

08 May 2025 – Special session with Israeli scientists: https://atu.edu.az/news/1187

15 May 2025 – Representation at InterFood Azerbaijan and Caspian Agro: https://atu.edu.az/news/1193

16 May 2025 – PLMO 2025 conference held at ATU: https://atu.edu.az/news/1195

19 May 2025 – Caspian Agro 2025 showcasing agri-tech prototypes: https://www.facebook.com/photo/?fbid=992429909584562&set=pcb.992429982917888

21 May 2025 – Cybersecurity cooperation launched with IDIA: https://atu.edu.az/news/1197

30 May 2025 – Cooperation network expanded with Uzbek universities: https://atu.edu.az/news/1205

02 Jun 2025 – RUR global ranking achievement: https://atu.edu.az/news/1208

04 Jun 2025 – Digital skills and programming training under the strategic plan: https://atu.edu.az/news/1210

03 Jul 2025 – Scientific Council meeting supporting innovation capacity: https://atu.edu.az/news/1218

11 Sep 2025 – AD Scientific Index 2026 success: https://atu.edu.az/news/1243

13 Sep 2025 – Kodera electronic teaching management system launched: https://atu.edu.az/news/1248

13 Sep 2025 – Company-supported laboratory and specialized auditorium opened: https://atu.edu.az/news/1247

17 Sep 2025 – Practice-oriented rooms opened through university-industry cooperation: https://atu.edu.az/news/1253

26 Sep 2025 – Department branch launched at Ganja Instrumentation Factory: https://atu.edu.az/news/1256

30 Sep 2025 – Updated Kodera system presented and rolled out: https://atu.edu.az/news/1258

20 Oct 2025 – Memorandum signed with Kazakhstan Atyrau University: https://www.atu.edu.az/xeber/1278

30 Oct 2025 – AI-based smart electric car project announced: https://www.atu.edu.az/xeber/1282

09 Dec 2025 – Participation in the International Food and Agrarian Business Forum: https://www.atu.edu.az/xeber/1312

QS Sustainability Report

SDG 13: Climate Action

Azerbaijan Technological University (ATU)

Submission-ready institutional narrative and evidence portfolio

Reporting period: January-December 2025

Prepared for QS Sustainability benchmarking and evidence review

Institution	Azerbaijan Technological University
Focus SDG	SDG 13 - Climate Action
Document type	Narrative report with evidence register, KPI dashboard, charts, and annex
Prepared on	12 April 2026

Prepared in academic English and organized to reflect the evidence categories most commonly valued in QS Sustainability submissions: environmental education, research and knowledge exchange, innovation, partnerships, outreach, and operational commitment.

Executive Summary

This report presents Azerbaijan Technological University's SDG 13 (Climate Action) activity during the 2025 calendar year in a structured format suitable for ranking documentation, institutional benchmarking, and evidence-led sustainability reporting. It consolidates climate-relevant university news from January to December 2025, filters out items that are not materially relevant to climate action, and reframes the resulting evidence into a coherent institutional narrative.

Across the reporting period, ATU demonstrated climate-action engagement through six mutually reinforcing channels: climate education and student capacity building; environmental and climate-focused seminars; green innovation and startup support; biodiversity and ecological awareness outreach; regional and corporate partnerships; and selected resilience- and infrastructure-related actions. The evidence base shows that climate action at ATU is currently driven less by carbon-accounting or net-zero operations and more by education, applied student engagement, technology-oriented innovation, and environmental awareness-building.

The strongest pieces of evidence in the portfolio are the GreenTech II startup competition, the environmental monitoring and green technologies training, student practice in ecological and greening environments, the Toyota Beyond Zero collaboration, biodiversity outreach activities, participation in regional Caspian ecosystem dialogue, and the development of the ATU smart electric car prototype. These activities show that ATU has begun to position climate action not only as a topic of awareness, but also as an area of applied problem-solving and institutional visibility.

At the same time, the portfolio reveals the next strategic step required for stronger future performance: ATU would benefit substantially from documenting a formal climate strategy, publishing net-zero or emissions-reduction commitments, reporting energy and emissions data, and consolidating climate-related research outputs under a dedicated sustainability governance framework. This report therefore includes both an evidence-based narrative of current strengths and a practical institutional strategy section to guide stronger future alignment with QS Sustainability expectations.

QS frames sustainability as evidence of a university's environmental, social and governance impact, while the Environmental Sustainability lens specifically considers strategy, operations, commitment, reporting and governance. This report therefore foregrounds visible

evidence that can be substantiated through news items, events, partnerships, innovation outputs and public-facing institutional actions.

Key portfolio messages

- ATU recorded 25 SDG 13-relevant public evidence items across 2025.
- The densest activity period was March-April 2025, driven by GreenTech II, environmental seminars and climate literacy events.
- Climate action at ATU is strongest in environmental education, student engagement, applied innovation, and awareness outreach.
- The portfolio includes at least one national-scale innovation competition, one cross-border ecosystem forum, one smart mobility prototype, and multiple biodiversity and environmental monitoring activities.
- The main improvement opportunity is to convert climate activity into a more formalized institutional strategy with measurable operational indicators.

Contents

1. Institutional Context and Reporting Approach

Azerbaijan Technological University is a regional higher education institution with a strong profile in engineering, food technologies, design, logistics, and applied industry collaboration. Within the sustainability agenda, the university's SDG 13 activity in 2025 is best understood as a developing ecosystem rather than a fully consolidated climate-governance model. The institution already has the building blocks of such a model: an Environmental Protection academic unit, an Eco Club, an Innovation Center, growing university-industry partnerships, and a visible practice of publishing environmental and technology-related university news.

The present report uses a strict inclusion rule. Only those public-facing activities that demonstrate a direct and material contribution to climate action, ecological sustainability, environmental awareness, climate-related innovation, or resilience-building are included. Items that were primarily about generic education, governance, employability, general innovation, or internationalization were excluded unless they had a clear climate or environmental dimension. This improves credibility for external reviewers and reduces the risk of over-claiming.

The report is evidence-led and based on publicly shared university news items supplied by the institution. It does not replace future quantitative environmental reporting. Instead, it organizes the 2025 evidence base into a more submission-ready structure. In this respect, it functions as both a ranking document and an internal management tool: it captures what has already been done, reveals where the strongest stories sit, and identifies which institutional gaps should be closed before the next submission cycle.

2. SDG 13 Performance Snapshot

2.1 KPI dashboard

25 SDG 13 evidence items	**5** Green innovation actions	**7** Education/capacity actions	**4** Community outreach actions
80 Teams in GreenTech II final	**30** Universities in GreenTech II	**10** Countries in ecology congress	**1** Smart electric car prototype

2 Operations/resilience actions	**2** Partnership platforms	**2** Biodiversity outreach events	**4** Periods with SDG 13 activity

Interpretation. The 2025 portfolio shows breadth of activity but uneven maturity across categories. The evidence is strongest in education, green innovation and public engagement, while operational climate commitments remain under-documented.

2.2 Visual overview

Figure 1. SDG 13 evidence items by reporting period

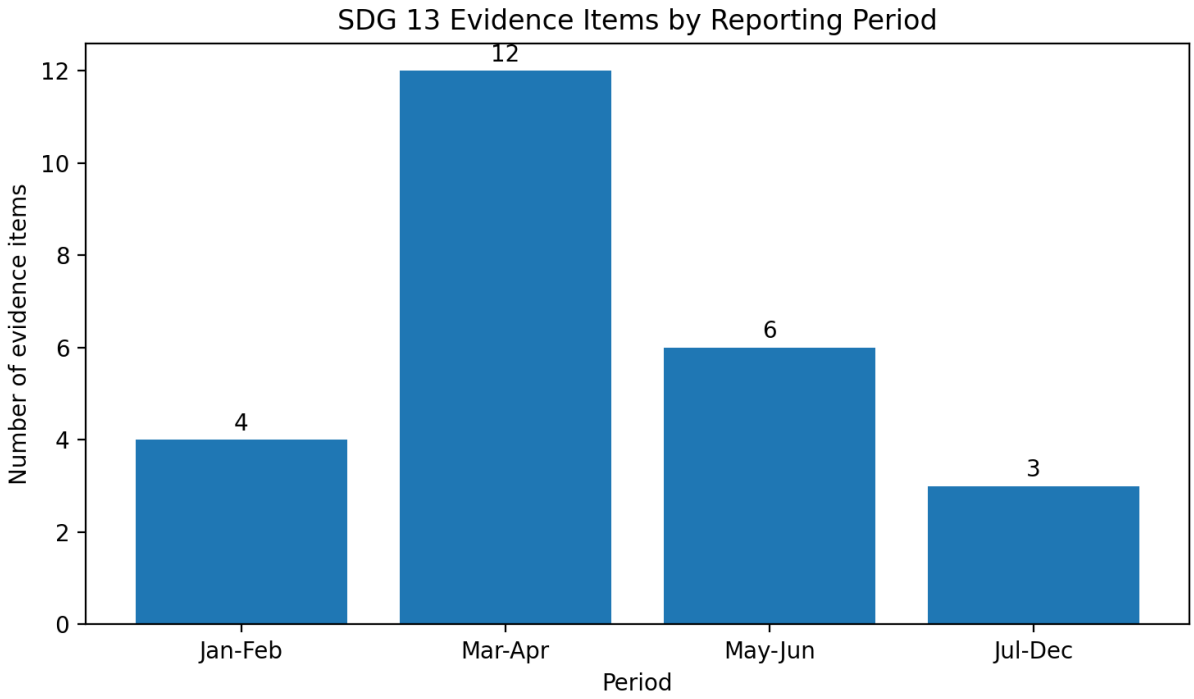
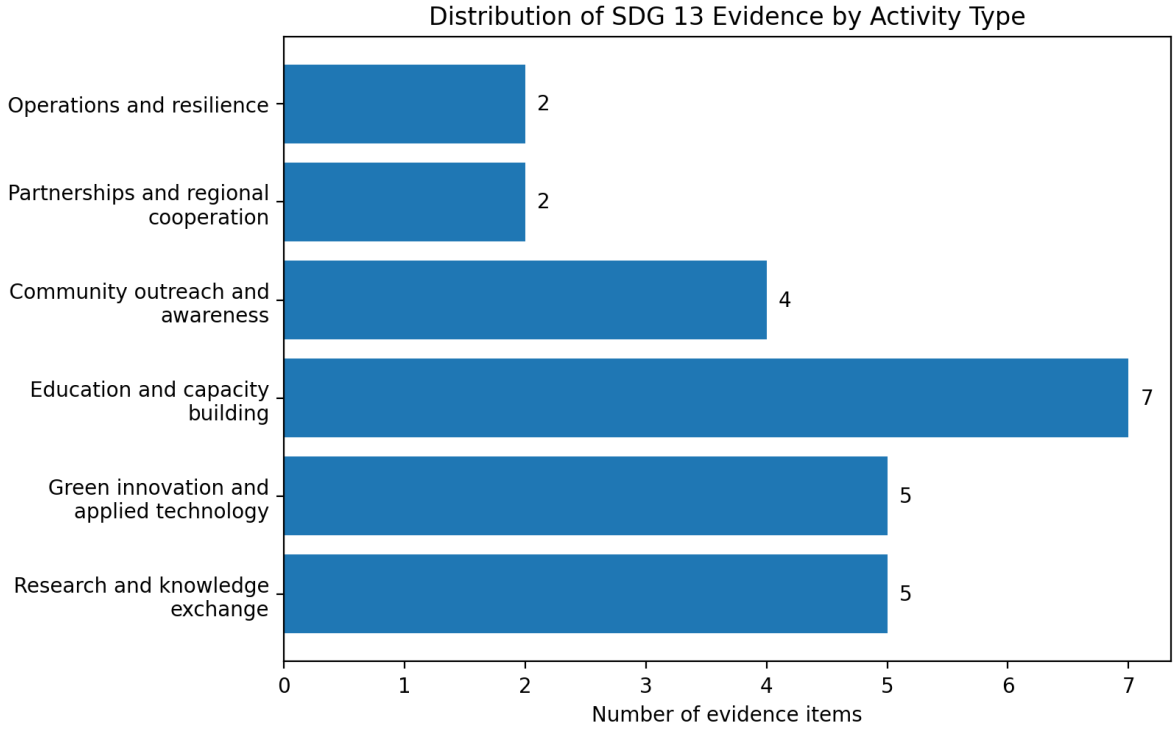


Figure 2. Distribution of evidence by activity type



3. Institutional Strategy Positioning for Climate Action

ATU's 2025 evidence suggests an emerging institutional strategy for climate action built on five practical pillars. First, the university uses environmental education to strengthen climate literacy among students through seminars, trainings, and curriculum-linked scientific activities. Second, it activates student engagement through clubs, competitions, and applied projects. Third, it links academic learning with practical environments, such as greening departments, ecological internships, and external technology platforms. Fourth, it develops outward-facing partnerships with public agencies, companies, research institutions and regional networks. Fifth, it is beginning to translate awareness into technology-oriented solutions, as reflected in GreenTech II and the smart electric car initiative.

This pattern is consistent with a university that is moving from fragmented sustainability actions toward a more integrated climate portfolio. However, for ranking strength and institutional coherence, ATU should formalize this strategy explicitly. A future public climate action framework could be organized around four headings: climate education and research; green innovation and entrepreneurship; sustainable operations and emissions management; and partnerships for ecological resilience. Much of the evidence required for the first and fourth headings already exists. The third heading remains the main gap.

For a stronger QS position, the university's next stage should not merely be to do more climate-related activities, but to make climate action more legible as institutional strategy. This means creating clear policy language, assigning ownership, publishing targets, and converting dispersed achievements into recurring annual indicators.

Proposed strategic architecture for future reporting

Strategic pillar	Current evidence visible in 2025	Next-step strengthening priority
Climate education and literacy	Environmental seminars, monitoring training, biodiversity events, climate-related student scientific seminars	Create a visible climate curriculum map and publish annual participation figures
Applied research and innovation	GreenTech II, smart irrigation and agronomy showcase, smart electric car prototype, ecological monitoring discussions	Track outputs, prototypes, publications, awards and follow-on commercialization or pilots
Operational sustainability and resilience	Emergency preparedness event; ecology and civil defense classrooms	Publish climate policy, emissions baseline, energy data, renewable generation and resilience measures
Partnerships and community impact	Toyota Beyond Zero, school outreach, Goygol National Park event, Caspian regional assembly	Formalize partnership outcomes and report community beneficiaries, projects and continuity

4. Evidence Narrative: January-February 2025

The opening phase of the year established the climate-action baseline through international ecology participation, the launch of a green technology platform, and the preparation of ecology students for practical engagement.

1. Participation in International Multidisciplinary Ecology and Environmental Studies Congress (2025-02-11)

Environmental Protection staff joined an international ecology congress in Paris with participants from 10 countries, strengthening climate-related scientific exchange.

QS relevance. This item contributes by expanding environmental knowledge exchange and connecting climate-related themes to scientific discussion.

Evidence link:
https://www.facebook.com/photo/?fbid=1077155107549026&set=pcb.1077155597548977

2. Launch of GreenTech II Startup and Green Technologies Competition (2025-02-14)

ATU launched a green technology competition for university students, focusing on startup solutions to environmental problems and climate action.

QS relevance. This item contributes by demonstrating applied green technology, entrepreneurial climate problem-solving, and visible environmental innovation.

Evidence link:
https://www.facebook.com/photo?fbid=595163896641022&set=a.116485534508863

3. Internship preparation for Ecology and Environmental Engineering students (2025-02-17)

Fourth-year ecology and environmental engineering students were prepared for production practice, reinforcing professional climate-related competencies.

QS relevance. This item contributes by building climate literacy, environmental awareness, and discipline-relevant student capacity.

Evidence link:
https://www.facebook.com/photo/?fbid=10027685503943236&set=pcb.10027686660609787

4. Ecology students' industrial practice in Ganja City Greening Department (2025-02-22)

Ecology and ecological engineering students undertook practical work in a municipal greening department, linking environmental training with urban climate resilience.

QS relevance. This item contributes by extending climate and ecological awareness beyond the classroom into community-facing practice.

Evidence link: https://www.facebook.com/photo/?fbid=1101478288443891&set=pcb.1101478491777204

5. Evidence Narrative: March-April 2025

March and April formed the strongest period of SDG 13 activity in 2025. The period combined green innovation, climate-themed academic activity, biodiversity and ecological awareness, and public-private cooperation around sustainability.

1. GreenTech II competition expands through new partners and sponsors (2025-03-06)

The Innovation and Digital Development Agency and multiple private sponsors joined GreenTech II, broadening the climate innovation ecosystem.

QS relevance. This item contributes by demonstrating applied green technology, entrepreneurial climate problem-solving, and visible environmental innovation.

Evidence link: https://www.atu.edu.az/xeber/1154

2. Department of Environmental Protection academic planning meeting (2025-03-06)

Environmental Protection faculty meeting sustained curricular attention to ecology-related content and departmental delivery.

QS relevance. This item contributes by building climate literacy, environmental awareness, and discipline-relevant student capacity.

Evidence link: https://www.facebook.com/photo/?fbid=122191160450045322&set=pcb.122191160618045322

3. Student seminar on environmental monitoring, industrial waste and ecotourism (2025-03-13)

A multidisciplinary seminar examined ecological monitoring in liberated territories, industrial waste in Sumgayit, and ecotourism.

QS relevance. This item contributes by expanding environmental knowledge exchange and connecting climate-related themes to scientific discussion.

Evidence link: https://www.facebook.com/photo?fbid=2357043234682342&set=pcb.2357043418015657

4. Toyota Beyond Zero cooperation meeting (2025-03-14)

ATU and Toyota Ganja Center aligned on environmental education, sustainable development awareness, and internship pathways under Toyota's Beyond Zero campaign.

QS relevance. This item contributes by linking climate action to multi-stakeholder or cross-border collaboration.

Evidence link: https://www.facebook.com/photo/?fbid=23947323984886153&set=pcb.23947326844885867

5. Our Ecological Heritage: Goygol event (2025-04-02)

A scientific-educational event with Goygol National Park promoted natural heritage protection, biodiversity awareness, and ecological responsibility.

QS relevance. This item contributes by extending climate and ecological awareness beyond the classroom into community-facing practice.

Evidence link: https://atu.edu.az/xeber/1165

6. Student seminar with climate change impact discussions (2025-04-08)

A seminar explicitly linked climate change effects to student learning and ecological responsibility.

QS relevance. This item contributes by building climate literacy, environmental awareness, and discipline-relevant student capacity.

Evidence link: https://www.facebook.com/photo?fbid=2382334612153204&set=pcb.2382335175486481

7. Green Silence: Plant Protection seminar (2025-04-10)

Joint seminar with a plant protection research institute addressed sustainable agriculture, plant health, ecological balance, and climate risks.

QS relevance. This item contributes by expanding environmental knowledge exchange and connecting climate-related themes to scientific discussion.

Evidence link: https://www.atu.edu.az/xeber/1172

8. GreenTech II final stage (2025-04-17)

GreenTech II final involved 80 teams from 30 universities across categories such as digital ecology, green transportation and sustainability innovations.

QS relevance. This item contributes by demonstrating applied green technology, entrepreneurial climate problem-solving, and visible environmental innovation.

Evidence link: https://www.atu.edu.az/xeber/1177

9. Seminar on global climate change and inclusive sustainability (2025-04-22)

Student seminar explored the social and economic implications of climate change as a factor in inclusive sustainability.

QS relevance. This item contributes by expanding environmental knowledge exchange and connecting climate-related themes to scientific discussion.

Evidence link: https://www.facebook.com/photo?fbid=2395720947481237&set=pcb.2395721017481230

10. Seminar on ecological problems of the ocean (2025-04-24)

Ocean ecological challenges were discussed to strengthen environmental awareness and understanding of climate-linked marine issues.

QS relevance. This item contributes by building climate literacy, environmental awareness, and discipline-relevant student capacity.

Evidence link: https://www.facebook.com/photo?fbid=2397969333923065&set=pcb.2397969567256375

11. Global Ecological Crisis: A Call to Action seminar (2025-04-28)

Student scientific seminar promoted critical thinking around global ecological crisis and environmental responsibility.

QS relevance. This item contributes by building climate literacy, environmental awareness, and discipline-relevant student capacity.

Evidence link: https://www.facebook.com/photo?fbid=2402215343498464&set=pcb.2402215606831771

12. Training on environmental monitoring and green technologies (2025-04-28)

Bachelor's and master's students received training on environmental monitoring, green technologies, sustainable development, and innovation in climate action.

QS relevance. This item contributes by building climate literacy, environmental awareness, and discipline-relevant student capacity.

Evidence link:
https://www.facebook.com/photo?fbid=1222015218080857 61&set=pcb.122201521886085761

6. Evidence Narrative: May-June 2025

In May and June, the climate-action profile broadened beyond seminars into resilience education, biodiversity outreach, and the public presentation of sustainable agricultural technologies.

1. Emergency preparedness event (2025-05-08)

An educational event on emergency situations and civil defense strengthened preparedness and resilience relevant to climate-linked risks.

QS relevance. This item contributes by strengthening resilience, preparedness, or supporting infrastructure relevant to climate action.

Evidence link: https://atu.edu.az/news/1186

2. New Ecology and Civil Defense classrooms (2025-05-08)

ATU opened Ecology and Civil Defense teaching spaces, strengthening infrastructure for environmental and resilience education.

QS relevance. This item contributes by strengthening resilience, preparedness, or supporting infrastructure relevant to climate action.

Evidence link: https://atu.edu.az/news/1188

3. Caspian Agro 2025 participation with smart irrigation and digital agronomy (2025-05-19)

ATU showcased smart irrigation systems, soil sensors, digital agronomy and other sustainable agriculture solutions at Caspian Agro 2025.

QS relevance. This item contributes by demonstrating applied green technology, entrepreneurial climate problem-solving, and visible environmental innovation.

Evidence link:
https://www.facebook.com/photo/?fbid=992429909584562&set=pcb.992429982917888

4. Noise pollution seminar (2025-05-20)

Student seminar examined noise pollution as an environmental problem affecting urban health and sustainability.

QS relevance. This item contributes by building climate literacy, environmental awareness, and discipline-relevant student capacity.

Evidence link: https://www.facebook.com/photo/?fbid=2420640431655955&set=pcb.2420640648322600

5. Biodiversity Day school outreach seminar and quiz (2025-05-21)

Environmental Protection staff and Eco Club members delivered biodiversity education in a regional school community.

QS relevance. This item contributes by extending climate and ecological awareness beyond the classroom into community-facing practice.

Evidence link: https://www.facebook.com/photo?fbid=1154528319811704&set=pcb.1154528586478344

6. Eco Club event on the role of biodiversity in the SDGs (2025-05-22)

The Eco Club promoted biodiversity awareness and ecological responsibility among young people, linking ecosystems to sustainable development and climate action.

QS relevance. This item contributes by extending climate and ecological awareness beyond the classroom into community-facing practice.

Evidence link: https://www.facebook.com/photo/?fbid=1221147791668422 91&set=pcb.122114779436842291

7. Evidence Narrative: July-December 2025

The second half of the year produced the most strategically significant innovation and regional cooperation evidence, especially through Caspian ecosystem dialogue and the smart electric vehicle project.

1. Caspian Countries Universities Association General Assembly participation (2025-10-17)

ATU joined regional discussions on Caspian ecosystem protection and collaborative scientific projects, strengthening climate-related academic partnerships.

QS relevance. This item contributes by linking climate action to multi-stakeholder or cross-border collaboration.

Evidence link: https://www.atu.edu.az/xeber/1276

2. ATU smart electric car project announcement (2025-10-30)

Students and researchers developed an AI-enabled smart electric car integrating solar panels, battery technology, energy recovery and intelligent management.

QS relevance. This item contributes by demonstrating applied green technology, entrepreneurial climate problem-solving, and visible environmental innovation.

Evidence link: https://www.atu.edu.az/xeber/1282

3. Seminar on AI in water management, pesticides and waste incineration (2025-12-10)

Environmental Protection students and staff discussed AI for water management, pesticide control and solid waste incineration as interlinked environmental challenges.

QS relevance. This item contributes by expanding environmental knowledge exchange and connecting climate-related themes to scientific discussion.

Evidence link: https://www.facebook.com/photo?fbid=2606394529747210&set=pcb.2606394739747189

8. KPI Dashboard and Interpretation

The quantitative dashboard should be read as a minimum-visibility baseline rather than a full climate inventory. It captures what is publicly visible and clearly attributable in the 2025 news flow. The real institutional footprint may be larger, but only demonstrable public evidence should be counted for ranking purposes unless stronger internal data are available.

The data suggest that ATU's current SDG 13 identity is strongest in three areas: education-led climate literacy, innovation-led environmental problem-solving, and outreach-led ecological awareness. This pattern is positive because it reflects institutional engagement across learning, research culture, and public value. However, it also means that ATU's climate portfolio is still more activity-based than systems-based. That distinction matters in rankings: activities show commitment, but strategies and metrics show maturity.

For future reporting cycles, ATU should aim to connect activity counts with outcome metrics. Suitable next-stage indicators include number of students participating in climate-related modules or events; number of environmental theses, dissertations or publications; prototype outputs arising from GreenTech; annual energy consumption and renewable generation; emissions intensity per gross internal area; and evidence of public climate governance documents. These additions would materially strengthen the institution's performance narrative.

9. Strategic Gap Analysis and Recommendations

Gap area	Current limitation	Recommended action
Formal climate governance	No dedicated climate strategy, net-zero roadmap, or integrated climate governance structure is visible in the 2025 evidence set.	Publish a climate strategy approved at institutional level; assign executive oversight; define annual reporting responsibilities.
Operational metrics	The portfolio does not yet publish emissions, energy, renewable generation, or climate-risk indicators.	Create an annual environmental data sheet covering Scope 1 and 2 emissions, energy use, gross internal area, renewable generation and progress to target.
Research traceability	Environmental and climate topics appear in seminars and events, but a consolidated climate research portfolio is not yet visible.	Map publications, theses, conference papers, projects and laboratories relevant to climate action; produce an annual research inventory.
Impact reporting	Many activities are strong qualitatively but lack beneficiary counts, follow-up outcomes, or repeatability data.	Track participation, outputs, awards, prototypes, school beneficiaries, partner institutions and continuation status.
Public evidence quality	News items are useful but uneven in detail and not always framed in ranking-	Adopt a standard sustainability evidence template for all future news releases: objective, scale,

Gap area	Current limitation	Recommended action
	ready language.	participants, outcomes, link to strategy, and SDG rationale.

The most immediate ranking gain would come from converting existing sustainability practice into evidence that matches the structure of QS assessment. ATU already has credible stories. What it needs next is stronger institutional documentation, regularized metrics, and a clearer public statement of climate ambition.

In practical terms, the university can move from a climate-action narrative based on activities to one based on systems by implementing three linked annual documents: a climate strategy statement, an environmental performance factsheet, and an SDG evidence register. If those three products are prepared consistently, the university's climate profile will become significantly more competitive in future sustainability submissions.

10. Conclusion

The 2025 evidence base demonstrates that Azerbaijan Technological University has established a credible and increasingly visible contribution to SDG 13 through environmental education, green innovation, biodiversity awareness, applied student activity, and climate-relevant partnerships. The university's strongest attribute lies in its ability to connect climate action with learning, experimentation, and public engagement rather than treating sustainability as a purely symbolic agenda.

GreenTech II, ecological training, biodiversity outreach, and the smart electric car initiative together show that ATU is developing a distinct climate profile rooted in regional relevance and student-centered innovation. These are important institutional strengths and should be retained as signature themes in future reporting.

To move toward a higher-scoring QS sustainability position, the university should now consolidate these strengths into a formal climate strategy with measurable operational indicators and stronger research traceability. Doing so would allow ATU not only to report climate action more effectively, but to manage it more strategically.

Annex A. Full Evidence Register and Links

The annex consolidates all SDG 13-relevant evidence items used in this report. Each entry records the reporting period, activity title, activity type, and source link. This table is designed for audit-ready review and future updating.

No.	Date	Evidence item	Category	Link
1	2025-02-11	Participation in International Multidisciplinary Ecology and Environmental Studies Congress	Research and knowledge exchange	Open source
2	2025-02-14	Launch of GreenTech II Startup and Green Technologies Competition	Green innovation and applied technology	Open source
3	2025-02-17	Internship preparation for Ecology and Environmental Engineering students	Education and capacity building	Open source
4	2025-02-22	Ecology students' industrial practice in Ganja City Greening Department	Community outreach and awareness	Open source
5	2025-03-06	GreenTech II competition expands through new partners and sponsors	Green innovation and applied technology	Open source
6	2025-03-06	Department of Environmental Protection academic planning meeting	Education and capacity building	Open source
7	2025-03-13	Student seminar on	Research and	Open source

No.	Date	Evidence item	Category	Link
		environmental monitoring, industrial waste and ecotourism	knowledge exchange	
8	2025-03-14	Toyota Beyond Zero cooperation meeting	Partnerships and regional cooperation	Open source
9	2025-04-02	Our Ecological Heritage: Goygol event	Community outreach and awareness	Open source
10	2025-04-08	Student seminar with climate change impact discussions	Education and capacity building	Open source
11	2025-04-10	Green Silence: Plant Protection seminar	Research and knowledge exchange	Open source
12	2025-04-17	GreenTech II final stage	Green innovation and applied technology	Open source
13	2025-04-22	Seminar on global climate change and inclusive sustainability	Research and knowledge exchange	Open source
14	2025-04-24	Seminar on ecological problems of the ocean	Education and capacity building	Open source
15	2025-04-28	Global Ecological Crisis: A Call	Education and	Open source

No.	Date	Evidence item	Category	Link
		to Action seminar	capacity building	
16	2025-04-28	Training on environmental monitoring and green technologies	Education and capacity building	Open source
17	2025-05-08	Emergency preparedness event	Operations and resilience	Open source
18	2025-05-08	New Ecology and Civil Defense classrooms	Operations and resilience	Open source
19	2025-05-19	Caspian Agro 2025 participation with smart irrigation and digital agronomy	Green innovation and applied technology	Open source
20	2025-05-20	Noise pollution seminar	Education and capacity building	Open source
21	2025-05-21	Biodiversity Day school outreach seminar and quiz	Community outreach and awareness	Open source
22	2025-05-22	Eco Club event on the role of biodiversity in the SDGs	Community outreach and awareness	Open source
23	2025-10-17	Caspian Countries Universities Association General Assembly participation	Partnerships and regional cooperation	Open source

No.	Date	Evidence item	Category	Link
24	2025-10-30	ATU smart electric car project announcement	Green innovation and applied technology	Open source
25	2025-12-10	Seminar on AI in water management, pesticides and waste incineration	Research and knowledge exchange	Open source

End of report

SDG 16

QS Sustainability Report

Peace, Justice and Strong Institutions

Submission-ready institutional report for Azerbaijan Technological University

Institution	Azerbaijan Technological University
Goal	SDG 16
Reporting period	January-December 2025
Prepared for	QS Sustainability submission

Institutional focus: accountable governance, transparent procedures, rights-based education, digital integrity, and stakeholder participation.

"ATU's SDG 16 contribution in 2025 was shaped by transparent academic governance, structured public oversight, digital accountability, and rights-based student engagement."

Executive Summary

This report presents Azerbaijan Technological University's evidence-based contribution to Sustainable Development Goal 16 in 2025. The report is structured in line with QS Sustainability expectations and demonstrates how the university embedded transparency, accountability, civic education, stakeholder participation and digital governance into its academic and administrative ecosystem.

Across the reporting cycle, ATU implemented and documented a set of mutually reinforcing practices: external public oversight of examinations, open-door assessment monitoring, appeals and complaint systems, digital feedback mechanisms, scientific council governance, human rights and tolerance education, justice-sector engagement, cybersecurity infrastructure and anti-violence awareness. Taken together, these activities show that SDG 16 at ATU is not treated as an isolated communications theme, but as an operational principle shaping institutional culture and decision-making.

The strongest evidence areas are threefold. First, governance and transparency were advanced through oversight councils, appeals systems, open-door exam observation and digitally accessible feedback channels. Second, rights-based education was strengthened through human rights, tolerance, anti-violence and justice-awareness programmes. Third, institutional resilience was enhanced through cybersecurity and electronic academic management systems, which support secure and accountable academic processes.

Methodology and QS Alignment

The report draws on university news releases and verified institutional announcements from January to December 2025 that demonstrate direct or strongly defensible alignment with SDG 16. Activities were selected on the basis of their relevance to effective, accountable and inclusive institutions; public participation; access to justice and legal awareness; transparent governance; and secure, rights-respecting institutional systems.

For reporting purposes, the evidence has been organized into four analytic categories: governance and transparency, human rights and justice awareness, digital security and institutional resilience, and social cohesion and civic values. This structure allows the university's contribution to be interpreted not merely as a collection of events, but as an integrated governance model with measurable and repeatable institutional features.

KPI Dashboard

To support a QS-style impact presentation, the dashboard below synthesizes the most visible SDG 16 outputs recorded in the 2025 evidence base.

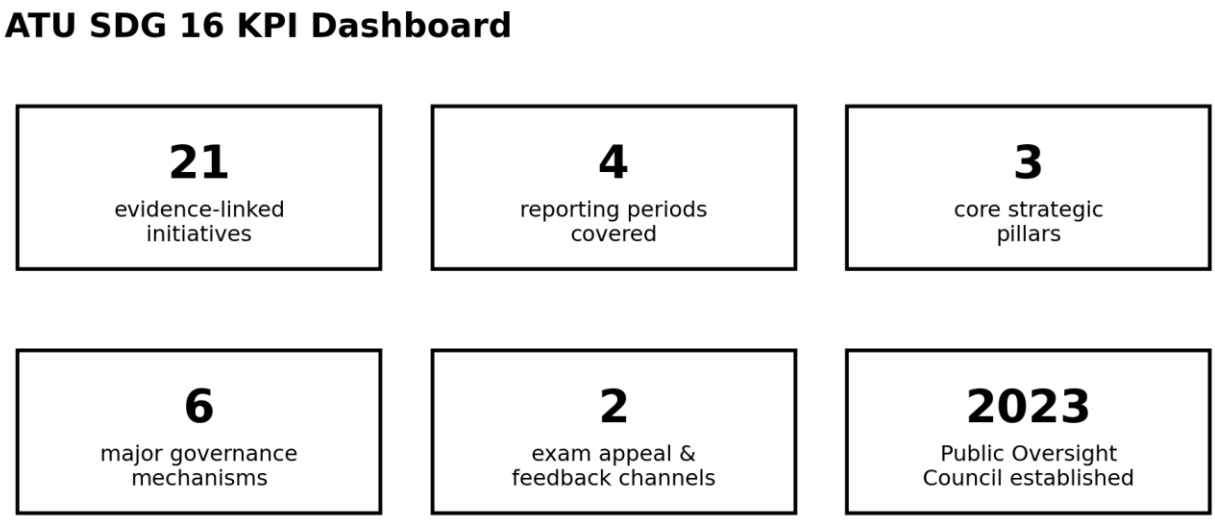


Figure 1. Summary KPI dashboard derived from the 2025 SDG 16 evidence set.

Indicator	Value	Interpretation
Evidence-linked initiatives	22	Demonstrates breadth of SDG 16 activity across governance, rights, digital systems and civic engagement.
Reporting periods covered	4	Shows continuity across the full annual reporting cycle rather than one-off interventions.
Public oversight mechanism	1	Public Oversight/Control Council operated as an external accountability body.
Open-door exam cycles	2	Both winter and summer sessions were opened to direct stakeholder observation.

Digital complaint channels	2	Physical and QR-based channels improved institutional responsiveness.
Core governance bodies	3	Public council, scientific council and appeals structures together formed a layered governance model.

Evidence Distribution and Performance Pattern

The evidence set is not concentrated in a single month or a single type of activity. Rather, it shows a stable pattern: stronger peaks during the examination periods, complemented by sustained work in legal awareness, human rights education and digital governance transformation.

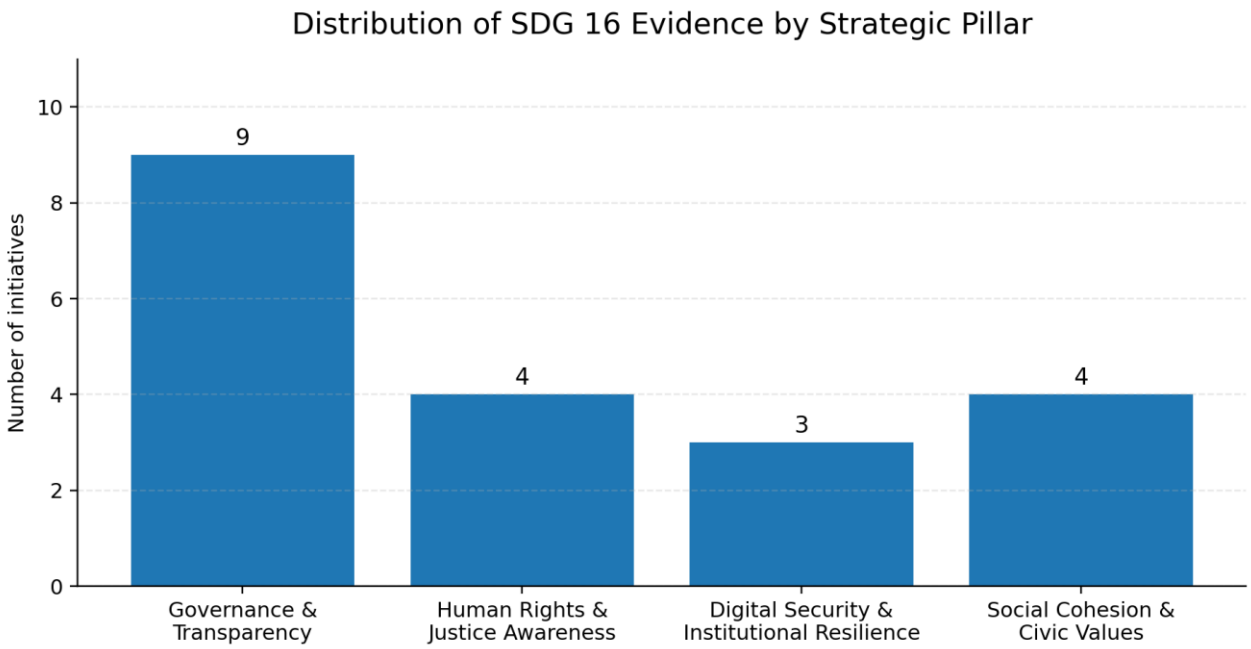


Figure 2. Distribution of SDG 16 evidence by strategic pillar.

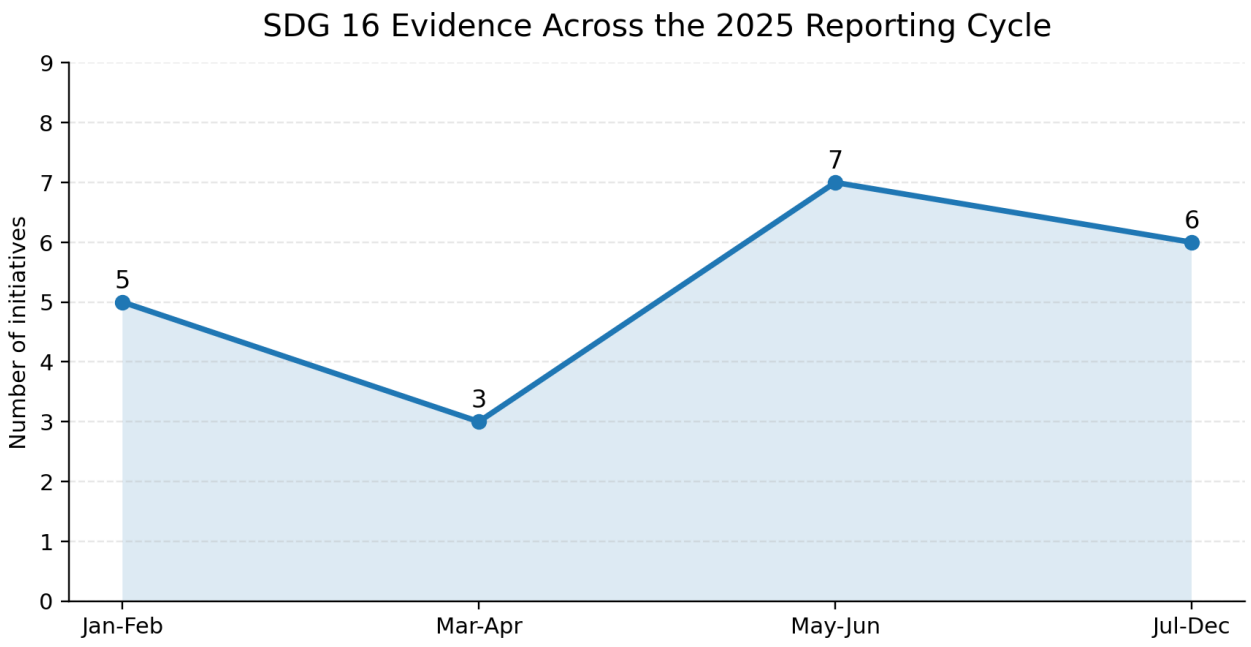


Figure 3. Distribution of SDG 16 evidence across the 2025 reporting cycle.

1. Governance, Transparency and Accountability

ATU's strongest SDG 16 contribution in 2025 lies in the area of transparent institutional governance. The university repeatedly demonstrated that academic administration, especially in relation to examinations, is organized around openness, procedural clarity and a documented right to appeal. This was visible in both the winter and spring-summer examination cycles, where oversight, monitoring and stakeholder engagement were built into the process rather than added as symbolic elements.

Public Oversight Council and Participatory Governance

The meeting of the Public Oversight Council on 16 January 2025 stands out as one of the year's most persuasive SDG 16 indicators. The council reviewed the winter examination session, observed the functioning of both the Examination Commission and the Appeal Commission, and put forward recommendations to the university administration. In practical terms, this shows that ATU accepted scrutiny from outside the immediate administrative hierarchy and treated public opinion as a meaningful component of university governance.

The importance of this mechanism was further reinforced on 1 July 2025, when the Public Control Council again monitored the spring examination process, received information on the examination and appeals structures, and contributed independent proposals. This continuity

matters for QS reporting because it demonstrates an institutionalized oversight mechanism rather than a single event-driven practice.

Evidence: 16 Jan 2025 | 1 Jul 2025

Open Door Assessment and Public Trust

ATU complemented external oversight with direct stakeholder engagement through two documented Open Door Days during the winter and summer exam sessions. Parents and stakeholders were invited to observe the process in real time, receive explanations of exam procedures, understand how results were checked and how appeals were handled, and see the use of surveillance systems, coding rooms and complaint channels.

This approach has high relevance to SDG 16 because it operationalizes transparency. It reduces informational asymmetry between administration and families, increases trust in assessment integrity and strengthens the legitimacy of institutional decision-making. In QS terms, these practices support a narrative of accountable and student-centred governance.

Evidence: 28 Jan 2025 | 3 Jul 2025

Appeals, Leadership Oversight and Fair Process

Preparation meetings on 23 May 2025 and the rector's direct observation of the examination process on 2 June 2025 further show that ATU treats fairness in assessment as a matter of institutional governance. The Examination Headquarters and Appeals Commission were explicitly affirmed, while technical arrangements such as surveillance, secure rooms and complaint mechanisms were framed as safeguards for objectivity and student rights.

The significance of these measures lies in their procedural nature. SDG 16 is often interpreted too narrowly as external legal justice. In a university setting, however, fair process, documented appeals and rights-protective academic administration are among the clearest expressions of strong institutions.

Evidence: 23 May 2025 | 2 Jun 2025

2. Human Rights, Justice Awareness and Inclusive Civic Education

A second major area of contribution concerns ATU's investment in rights-based awareness and justice literacy. During 2025, the university convened activities that addressed human rights, tolerance, legal thinking, constitutional values and anti-violence education. Collectively, these

initiatives positioned the university not only as an educational provider, but also as a civic platform supporting inclusive and informed citizenship.

Human Rights and Religious Tolerance

On 20 May 2025, within Human Rights Month, ATU organized a multi-stakeholder institutional event on Religious Tolerance and Human Rights in cooperation with the State Committee for Work with Religious Organizations and the Ganja Regional Center of the Ombudsman. The event highlighted equality, human dignity, multiculturalism and coexistence, while also giving students access to institutional actors involved in public rights protection.

This initiative is especially useful for QS Sustainability because it links academic life to public values. It demonstrates that human rights awareness is not confined to abstract discourse; it is connected to dialogue with state institutions, student questioning and exposure to contemporary rights frameworks.

Evidence: 20 May 2025

Justice Volunteers and Legal System Awareness

The registration call for the Justice Volunteers movement on 6 April 2025 offers another strong SDG 16 signal. Through this initiative, students were introduced to justice-related programme areas such as probation, notary and registration, work with citizens and psychology. The value of the initiative lies in its practical dimension: students were not only informed about justice institutions but invited to interact with them through structured participation.

This is a particularly persuasive indicator because it connects student development with the architecture of public institutions. It therefore supports a QS narrative built around civic participation, legal awareness and the social role of higher education.

Evidence: 6 Apr 2025

Constitutional Values, Law Literacy and Rights-Based Prevention

The year also included targeted education on constitutional values and social justice risks. The National Salvation Day event on 13 June 2025 emphasized constitutional development, civic responsibility and the legal foundations of statehood. Earlier, on 1 April 2025, a seminar on Law and Economics contributed to institutional and normative literacy among students. Later, on 17 September 2025, a seminar addressing domestic violence and human trafficking expanded the university’s SDG 16 profile toward preventative, rights-based education.

Taken together, these activities show that ATU uses academic and public events to cultivate respect for legal systems, informed citizenship and awareness of social harms that undermine safe and inclusive communities.

Evidence: 1 Apr 2025 | 13 Jun 2025 | 17 Sep 2025

3. Digital Governance, Safety and Institutional Resilience

A third pillar of ATU's SDG 16 contribution is its emphasis on secure, accountable and digitally enabled institutional systems. In 2025, the university documented both cybersecurity capacity building and the digitalization of academic management, showing that strong institutions increasingly depend on secure information environments and transparent digital workflows.

Cybersecurity as an Institutional Capacity

The opening of the Cybersecurity Center on 15 April 2025 significantly advanced ATU's SDG 16 profile in the area of institutional resilience. The centre expanded training and applied learning in cybersecurity and contributed to the development of secure digital infrastructure and data-protection awareness. In higher education, such capacity is central to building trustworthy institutions, since digital insecurity can undermine both operational continuity and stakeholder confidence.

Evidence: 15 Apr 2025

QR Feedback and Kodera Digital Governance

On 3 June 2025, ATU introduced a QR-based digital channel for student suggestions, comments and requests related to the exam session. This initiative improved the accessibility and speed of institutional communication while strengthening the accountability of management to student concerns.

Later, in September 2025, the university implemented and presented the Kodera electronic management system. The platform integrated electronic gradebooks, exam modules, academic monitoring, internal communication and digital library access. Its significance for SDG 16 lies in the reduction of administrative opacity and the creation of more traceable, consistent and data-driven academic processes.

Evidence: 3 Jun 2025 | 13 Sep 2025 | 30 Sep 2025

4. Collegial Governance and Institutional Quality Systems

While open oversight and public engagement are highly visible, SDG 16 at ATU is also supported by internal collegial governance. The Scientific Council meetings held on 21 February, 3 July and 12 September 2025 show how institutional decision-making is structured through formal discussion, approval and accountability mechanisms.

Across these meetings, the university addressed academic plans, methodological resources, examination formats, quality assurance, accreditation preparation, staffing arrangements and other strategic matters. For QS Sustainability purposes, this matters because it demonstrates that institutional development is processed through documented governance forums rather than ad hoc decisions.

Evidence: 21 Feb 2025 | 3 Jul 2025 | 12 Sep 2025

5. Social Cohesion, Safety and Civic Values

ATU's SDG 16 profile is rounded out by initiatives that support safe communities, responsible citizenship and social cohesion. The anti-drug awareness event on 24 January 2025 connected students with legal, police and narcology institutions and highlighted crime prevention and harmful social behaviours as issues of public concern. The seminar on safe internet use on 16 February 2025 promoted responsible digital conduct and personal data protection.

The seminar Healthy Family, Healthy Society on 15 May 2025 addressed family relationships, youth well-being and the long-term foundations of social stability. Finally, the meeting on patriotism and civic identity on 4 November 2025 reinforced collective memory, civic responsibility and social solidarity through interaction with veterans and public representatives. Although these initiatives vary in format, they all contribute to the formation of a responsible, aware and socially connected student body.

Evidence: 24 Jan 2025 | 16 Feb 2025 | 15 May 2025 | 4 Nov 2025

Integrated Impact Matrix

The matrix below summarizes how the evidence base maps onto key SDG 16 dimensions used in institutional sustainability reporting.

Dimension	Representative initiatives	Institutional value	QS relevance

Transparency	Open Door Days; rector exam oversight	Visibility of procedures and assessment fairness	Strong
Accountability	Appeals commissions; QR feedback; councils	Operational response to concerns and documented review	Strong
Participation	Public Oversight Council; Justice Volunteers	Stakeholder voice and civic involvement	Strong
Rights awareness	Human rights; law and economics; anti-violence seminar	Legal literacy and inclusive values	Strong
Digital resilience	Cybersecurity Center; Kodera platform	Secure, traceable and efficient governance	Moderate to strong
Social cohesion	Healthy Family seminar; anti-drug event; civic identity meeting	Preventive education and collective responsibility	Moderate

Conclusion

The evidence presented in this report shows that Azerbaijan Technological University made a credible and multi-dimensional contribution to SDG 16 in 2025. The most compelling strength is the university's layered governance model, where open-door examination procedures, appeals systems, rector-level monitoring, public oversight councils and scientific councils work together rather than in isolation. This demonstrates that ATU understands strong institutions as a matter of everyday administrative practice.

The second major strength is the university's use of educational programming to extend institutional values into student development. Through human rights and tolerance events, law literacy, justice-sector engagement, anti-violence awareness and constitutional education, ATU positioned the campus as a civic learning space. This is especially important for QS Sustainability because it shows that social impact is linked to formal institutional action rather than only to extracurricular activity.

The third strength lies in digital integrity. The Cybersecurity Center, QR-based feedback channel and Kodera management system indicate that ATU is integrating transparency and resilience into the digital layer of institutional life. In combination, these initiatives support the conclusion that ATU contributed to the development of effective, accountable and inclusive institutional practices in a way that is both evidence-based and aligned with the expectations of SDG 16 reporting.

Annex A. Evidence Register

The following register consolidates the main evidence items used in this report. It is designed to support direct verification, internal archiving and external review.

No.	Date	Initiative	SDG 16 contribution	Link
1	2025-01-16	Meeting of the Public Oversight Council	Governance and external oversight. Reviewed winter examination session; observed Examination and Appeal Commissions; issued recommendations to leadership.	Open
2	2025-01-24	Students educated on the fight against drug addiction	Community safety and prevention. Brought together legal, police and narcology representatives to promote social stability, crime prevention and safe communities.	Open
3	2025-01-28	Open Doors Day during the winter exam session	Transparency and public trust. Enabled parents to observe exam procedures and appeals mechanisms in real time, reinforcing accountability and confidence in assessment.	Open
4	2025-02-16	Information security and safe internet use for youth	Digital safety and responsible citizenship. Raised awareness of data protection, safe internet use and secure digital behaviour among young people.	Open
5	2025-02-21	Scientific Council of the Faculty of Food Engineering	Institutional governance. Illustrated structured academic governance and formal internal decision-making at faculty level.	Open

No.	Date	Initiative	SDG 16 contribution	Link
6	2025-04-01	Seminar on Law and Economics	Legal awareness and governance literacy. Strengthened understanding of normative, institutional and policy-oriented decision-making among students.	Open
7	2025-04-06	Justice Volunteers movement registration	Justice engagement and civic participation. Connected students with justice-sector programmes and expanded practical awareness of legal institutions and citizen-state interaction.	Open
8	2025-04-15	Opening of the Cybersecurity Center	Institutional resilience and digital security. Expanded cybersecurity capacity, secure digital infrastructure and information protection.	Open
9	2025-05-15	Healthy Family, Healthy Society seminar	Social cohesion and prevention. Promoted ethical awareness, healthy social relations and preventive education supporting stable communities.	Open
10	2025-05-20	Human Rights and Religious Tolerance event	Human rights and inclusivity. Delivered human rights education with state institutions and the ombudsman structure, supporting equality and coexistence.	Open

No.	Date	Initiative	SDG 16 contribution	Link
11	2025-05-23	Preparations for the spring exam session	Transparent academic governance. Confirmed examination headquarters, appeals systems and monitoring arrangements before the exam cycle began.	Open
12	2025-06-02	Rector observed the exam process	Fair assessment and student rights. Direct leadership oversight reinforced transparent, objective and student-centred examination practices.	Open
13	2025-06-03	Digital student feedback mechanism via QR	Digital accountability. Created an accessible electronic channel for suggestions, complaints and requests linked to the exam session.	Open
14	2025-06-13	National Salvation Day and constitutional awareness event	Civic responsibility and constitutional values. Strengthened legal awareness, civic responsibility and institutional trust through constitutional and sovereignty-focused education.	Open
15	2025-07-01	Public Control Council meeting	Participatory governance. External stakeholders monitored the spring examination session and reviewed appeals and examination governance.	Open
16	2025-07-03	Scientific Council final meeting of 2024/2025	Strategic governance and quality assurance. Addressed academic planning, accreditation preparation, audit, staffing and institutional quality governance.	Open

No.	Date	Initiative	SDG 16 contribution	Link
17	2025-07-03	Open Door Day during the summer exam session	Stakeholder engagement and trust. Allowed parents to monitor assessment practices and understand evaluation procedures and appeals in real time.	Open
18	2025-09-12	Scientific Council first meeting of 2025/2026	Collegial institutional decision-making. Approved academic rules, methodological resources, examination formats and institutional reforms through a collegial governance process.	Open
19	2025-09-13	Kodera electronic management system	Digital governance transformation. Introduced integrated digital systems for gradebooks, exams, communication and academic monitoring.	Open
20	2025-09-30	Presentation of updated Kodera platform	Transparent management systems. Expanded the platform rollout through training and institutional adoption of a more transparent and data-driven model.	Open
21	2025-09-17	Seminar against domestic violence and human trafficking	Rights-based awareness. Educated students about violence prevention, anti-trafficking and legal and social responsibility.	Open
22	2025-11-04	Patriotism and civic identity meeting	Civic values and social cohesion. Promoted civic responsibility, historical memory and collective solidarity through engagement with veterans and families of martyrs.	Open

Annex B. Summary of Strategic KPIs

This summary table groups the annual evidence into a concise set of review-ready indicators.

KPI theme	Value	Commentary
Governance mechanisms	6	Public council, scientific councils, appeals systems, open-door observation, QR feedback and rector monitoring.
Rights-based initiatives	5	Human rights, tolerance, law literacy, justice awareness and anti-violence programmes.
Digital integrity actions	4	Cybersecurity, QR system and Kodera implementation/presentation stages.
Community safety and cohesion actions	4	Anti-drug, safe internet, family values and civic identity programming.
Quarterly continuity	4/4	Relevant SDG 16 evidence was documented in every period of the year.

SDG 17 – Partnerships for the Goals

QS Sustainability Report

Reporting Period: January–December 2025

This fully designed report consolidates Azerbaijan Technological University's partnership evidence for SDG 17 into a submission-ready narrative aligned with QS Sustainability expectations. It integrates institutional strategy, chronological evidence analysis, KPI dashboards, charts, and a complete annex of evidence links.

Ganja, Azerbaijan | 2026 submission cycle

Contents

Structured around executive analysis, chronological evidence sections, and annexes

Executive Summary

High-level narrative aligned with QS Sustainability expectations

Azerbaijan Technological University demonstrates a broad, institutionalized, and evidence-rich approach to Sustainable Development Goal 17 through formal international partnerships, multilateral project cooperation, university–industry linkages, government engagement, and community-oriented collaboration. Across the 2025 reporting period, the university moved beyond isolated events and developed a partnership ecosystem linked to academic delivery, research development, laboratory infrastructure, student employability, internationalization, digital transformation, and public accountability.

From a QS Sustainability perspective, the significance of ATU's SDG 17 profile lies not only in the number of collaborations documented, but in the diversity of stakeholders involved, the continuity of engagement across the year, and the measurable outputs attached to those relationships. The evidence shows that partnerships generated concrete results such as dual degree arrangements, staff and student mobility pathways, EU project laboratories, innovation competitions, government-supported training, corporate-funded facilities, employment opportunities for graduates, and platforms for regional and international scientific exchange.

A major institutional strength evident in this report is ATU's ability to operate simultaneously across multiple levels of partnership. At the international level, the university expanded ties with institutions in Israel, Hungary, Romania, Poland, Spain, France, Uzbekistan, and Kazakhstan. At the national level, it deepened engagement with public agencies, research institutes, and enterprises. At the local and regional level, it built practice-oriented collaborations that directly affected students, staff, and community stakeholders. This layered approach is highly compatible with the QS understanding of partnership-driven sustainability impact.

The report also demonstrates that SDG 17 at ATU functions as an enabling framework for other goals. Partnerships supported quality education, innovation, employability, digital inclusion, environmental awareness, transparency, and social resilience. In this sense, SDG 17 is not treated as a narrow category limited to memoranda or ceremonial cooperation. Instead, it operates as a strategic mechanism through which the university mobilizes resources, expertise, legitimacy, and external networks in support of sustainable development.

21+ countries represented across academic and scientific interaction	**70+** institutional partners across academia, government, and industry	**649** accepted papers at the flagship international conference
40+ organizations involved in the Career Festival ecosystem	**400+** job opportunities available through employer engagement	**100+** international students reported by late 2025

Infographic 1. Partnership highlights synthesised from the 2025 SDG 17 evidence portfolio.

Methodology and Reporting Logic

Evidence selection, analytical framing, and compatibility with QS Sustainability

This report uses a structured evidence-based methodology that organizes ATU's 2025 partnership activities into four chronological blocks and several thematic dimensions. The chronological blocks correspond to January–February 2025, March–April 2025, May–June 2025, and July–December 2025. The thematic dimensions include internationalization, multilateral project cooperation, industry collaboration, government and civil society engagement, innovation ecosystem development, institutional governance, and digital systems integration.

The source base consists of official university news items and social media posts supplied for the present SDG 17 portfolio. Each evidence item was interpreted not merely at the descriptive level, but through an analytical lens consistent with QS Sustainability expectations. In practical terms, this means that every activity was reviewed according to the type of stakeholder involved, the depth of cooperation, the likely duration and institutional significance of the partnership, the outputs generated, and the likely contribution to sustainable development at university and societal level.

A distinction has been made between strong, core, and supporting SDG 17 evidence. Core evidence refers to formal institutional agreements, large-scale multi-stakeholder platforms, externally funded partnership projects, and collaborations that generated visible structural outcomes such as new educational programs, laboratories, or large employment interfaces. Supporting evidence includes seminars, webinars, site visits, and network activities that may not in themselves constitute long-term partnerships but nonetheless strengthen the university's collaboration capacity and international profile.

The report also incorporates KPI dashboards developed from the evidence set. These indicators should be interpreted as portfolio metrics designed to communicate scale and breadth rather than as audited institutional statistics. They nonetheless provide a useful visual representation of the magnitude, diversity, and operational direction of ATU's SDG 17 implementation.

Analytical lens	Description	Relevance to QS Sustainability

Analytical lens	Description	Relevance to QS Sustainability
Stakeholder diversity	How many sectors are represented in the partnership ecosystem	Shows multi-level collaboration rather than a narrow, single-sector network
Institutional depth	Whether cooperation is symbolic, project-based, or structurally embedded	Distinguishes ceremonial engagement from sustained strategic partnership
Output orientation	Whether partnership generated mobility, labs, internships, research, or training	Connects evidence to measurable deliverables and outcomes
Sustainability spillover	Whether SDG 17 activity also supports SDGs 4, 8, 9, 10, 12, 13, or 16	Demonstrates enabling role of partnerships across the SDG agenda
Continuity and scaling	Whether cooperation is repeated, expanded, or institutionalized over time	Captures maturity and long-term strategic value

Institutional Profile and Partnership Strategy

Why SDG 17 is central to ATU's development model

ATU's partnership strategy in 2025 reflects the profile of a technical university seeking to combine academic modernization with regional relevance and global engagement. The evidence throughout the year shows an institution that uses cooperation not as a peripheral function, but as a mechanism to develop programs, improve laboratories, connect students with employers, strengthen scientific visibility, and expand its international standing. The partnership agenda spans traditional academic cooperation, applied industrial linkages, joint events with government and civil society organizations, and externally supported digital and innovation infrastructure.

This institutional orientation is particularly important in the context of QS Sustainability because it highlights the interdependence between partnership and capacity. A university's sustainability

profile is stronger when partnerships are not isolated but linked to curriculum quality, research performance, inclusion, student support, and governance transparency. ATU's 2025 evidence reveals precisely this type of interconnected ecosystem. International academic ties supported dual degrees and mobility, company partnerships funded laboratories and employability initiatives, public institutions contributed to transparency, digital access, and civic education, and multi-stakeholder platforms helped align the university with wider national and regional development agendas.

Taken together, the evidence suggests that SDG 17 at ATU is best understood as an institutional operating principle rather than a discrete activity category. The university's capacity to pursue innovation, applied learning, and global visibility depends heavily on the density and quality of its collaborations. Accordingly, the report treats partnership as the enabling infrastructure through which much of the university's broader sustainability mission is carried out.

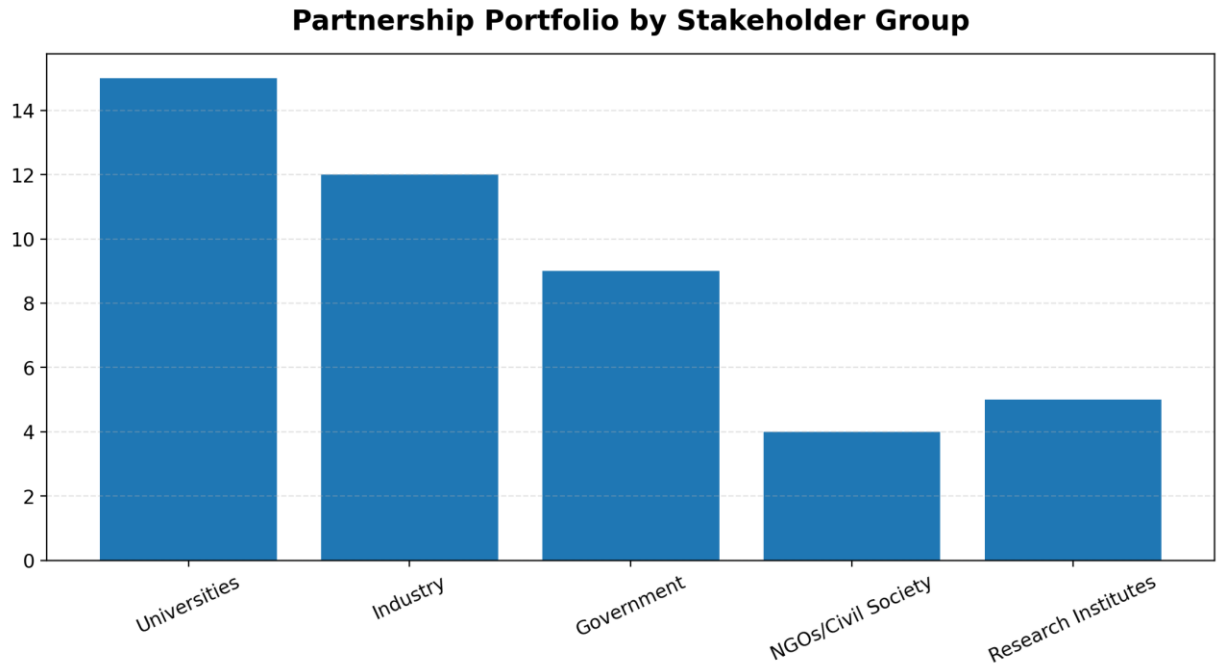


Figure 1. Partnership portfolio by stakeholder group based on the 2025 SDG 17 evidence base.

Part I. January–February 2025

Foundation phase of the 2025 partnership portfolio

The first two months of 2025 established a strong baseline for ATU's SDG 17 performance. The evidence from this period is particularly important because it shows a rapid concentration of formal international agreements, consortium-based project activity, cross-border scientific engagement, and university–industry cooperation. In other words, the year began not with isolated internal events but with multiple outward-looking initiatives that immediately positioned partnership at the center of the university's agenda.

From a reporting perspective, January–February is one of the strongest segments of the annual evidence base because many of the activities documented in this period have structural significance. They include memoranda with foreign universities, an EU-funded project coordination meeting, a dual degree model, an externally supported laboratory, and a detailed industry action plan. These are not short-lived symbolic contacts. They represent institutional commitments that can potentially shape teaching, research, infrastructure, and international profile over the medium and long term.

7 January 2025 — Cooperation with Holon Institute of Technology (Israel)

The memorandum with the Holon Institute of Technology constitutes a high-value SDG 17 item because it formalizes a bilateral international academic relationship. Its importance lies in the fact that the agreement explicitly includes academic and administrative staff exchange, student mobility, and joint scientific research, thereby covering the core functions of an internationally engaged university.

For QS Sustainability, this cooperation is valuable because it evidences formalized transnational partnership rather than one-off communication. It broadens ATU's international network, supports future joint outputs, and strengthens the credibility of the university's internationalization strategy by linking it to mobility and research activity.

Partnership outputs	Description
Mobility	Framework for staff and student exchange
Research	Basis for joint scientific collaboration
Institutional value	Strengthens ATU's international academic footprint

13 January 2025 — First meeting within the OPTIFY project

ATU's participation in the OPTIFY project is highly relevant to SDG 17 because it situates the university within an EU-funded, multi-country, capacity-building consortium. The initiative is partnership-intensive by design, as it relies on shared expertise, coordinated implementation, academic staff training in Europe, and collaborative program development.

This project demonstrates the strongest form of multilateral cooperation: partnership linked to funding, curriculum creation, and laboratory development. It therefore offers high-value evidence for QS in terms of knowledge transfer, international project cooperation, and institutional capacity strengthening through external networks.

Partnership outputs	Description
Funding logic	EU-supported collaborative framework
Academic output	Development of a new master's program
Capacity building	Training and laboratory modernization

15 January 2025 — Dual degree partnership with the University of Sopron (Hungary)

The dual degree arrangement with the University of Sopron is a strategically significant SDG 17 case because it translates international partnership directly into educational architecture. Rather than limiting cooperation to exchange or ceremonial agreement, the initiative creates a shared academic pathway that is jointly delivered and internationally recognized.

In QS terms, dual degree evidence is particularly persuasive because it combines institutional trust, curriculum coordination, and student mobility in a single model. It signals a deep level of inter-university cooperation and reflects ATU's intention to embed global partnership in teaching practice.

Partnership outputs	Description
Educational integration	Shared delivery model across two universities
Mobility	Students spend semesters at both institutions

Partnership outputs	Description
International value	Dual qualification enhances global relevance

18 January 2025 — PLMO 2025 co-organization

ATU's role as co-organizer of the international conference on logistics and management problems in the East–West Transport Corridor demonstrates a robust form of academic diplomacy. Co-organization implies responsibility, visibility, and networked institutional participation rather than passive attendance.

The evidence is especially relevant for SDG 17 because it shows ATU convening or co-convening a multi-stakeholder scientific platform that includes foreign universities, research institutes, and government-linked actors. This strengthens its profile as a node in transnational research and dialogue networks.

Partnership outputs	Description
Scientific collaboration	Cross-border conference platform
Institutional networking	Engagement with universities and public actors
Visibility	Raises ATU's profile in international academic circuits

22 January 2025 — Expansion of relations with AzerGold CJSC

This case is a strong example of structured university–industry partnership. The joint action plan extends beyond general cooperation language and includes concrete components such as internships, curriculum alignment, collaborative research, guest teaching, and student exposure to industrial facilities.

For QS Sustainability, this is valuable because it shows industry engagement as a mechanism for applied learning, employability, and research relevance. It reflects a partnership model in which the private sector is not external to the university mission but actively integrated into educational and innovation processes.

Partnership outputs	Description
Employability	Internship and practical learning pathways
Academic relevance	Curriculum alignment with sectoral needs
Research	Potential for joint projects and expert engagement

6–7 February 2025 — Cooperation and operationalization with Technical University of Iași (Romania)

The MoU with the Technical University of Iași and the subsequent visit to its material and technical base together represent both formalization and operationalization of international partnership. The first step establishes the framework; the second demonstrates active movement toward practical collaboration.

This pairing is analytically important because many institutional partnerships remain at a declarative level. Here, however, the evidence shows immediate follow-up, suggesting that the cooperation is intended to become functional rather than symbolic. For SDG 17 reporting, this strengthens claims of continuity and seriousness.

Partnership outputs	Description
Formal basis	MoU covering exchange and research
Operational follow-up	Institutional visit and exploration of laboratories
Strategic effect	Builds confidence for future joint projects

11 February 2025 — Participation in international multidisciplinary congress in France

Although participation in a congress is not equivalent to a formal institutional agreement, it is still useful SDG 17 evidence because it demonstrates ATU’s presence in international scientific exchange spaces involving scholars from multiple countries.

The relevance of this item lies in the way it enlarges research networks and raises visibility. Such participation can strengthen future collaboration, expose staff to new methods and agendas, and contribute to the outward orientation expected in a partnership-rich university environment.

Partnership outputs	Description
Scientific networking	Engagement with researchers from ten countries
Visibility	International representation of ATU staff
Knowledge exchange	Participation in cross-border academic discussion

18 February 2025 — REFRESH laboratory launched at ATU

The establishment of a new laboratory through the REFRESH project is a particularly strong SDG 17 example because it demonstrates how partnership can produce tangible infrastructure. The project is implemented through inter-institutional collaboration and external support, converting cooperation into a physical asset that benefits teaching and research.

This form of evidence is highly persuasive for QS because it shows partnership outcomes that are durable, visible, and capacity-enhancing. It also reinforces the principle that effective collaboration is not only dialogic but also productive in terms of institutional modernization.

Partnership outputs	Description
Infrastructure	Laboratory established through partnership project
Inter-institutional value	Coordination with UNEC and project consortium
Educational impact	Supports improved learning and research environment

18 February 2025 — Online meeting with PashaPay LLC and regional career centers

This initiative reflects an emerging regional partnership model focused on employability and student support. It is analytically important because it brings together a private company, multiple universities, and a public fund around student development and project coordination.

The multi-stakeholder nature of the event makes it relevant to SDG 17 even though it is not a full institutional agreement. It demonstrates networked problem solving and shared commitment to practical outcomes in the higher education ecosystem.

Partnership outputs	Description

Partnership outputs	Description
Stakeholders	Private sector, universities, and public support structures
Focus	Career development and coordinated student support
Regional value	Strengthens inter-university collaboration around employability

20 February 2025 — Cooperation with the University of Siedlce (Poland) and 24 February webinar with Harvard researcher

The cooperation agreement with the University of Siedlce is a direct and formal international partnership, while the webinar featuring a Harvard researcher serves as complementary evidence of global academic networking and knowledge exchange. Together, these items show both institutional and intellectual dimensions of ATU's partnership ecosystem.

In QS terms, the memorandum demonstrates structured collaboration in mobility and research, whereas the webinar signals the university's capacity to attract and engage international expertise. This combined evidence suggests a partnership environment that is both formalized and academically active.

Partnership outputs	Description
MoU impact	Exchange and joint scientific research
Academic networking	International expert contribution through webinar
Strategic implication	Broadens both institutional and knowledge partnerships

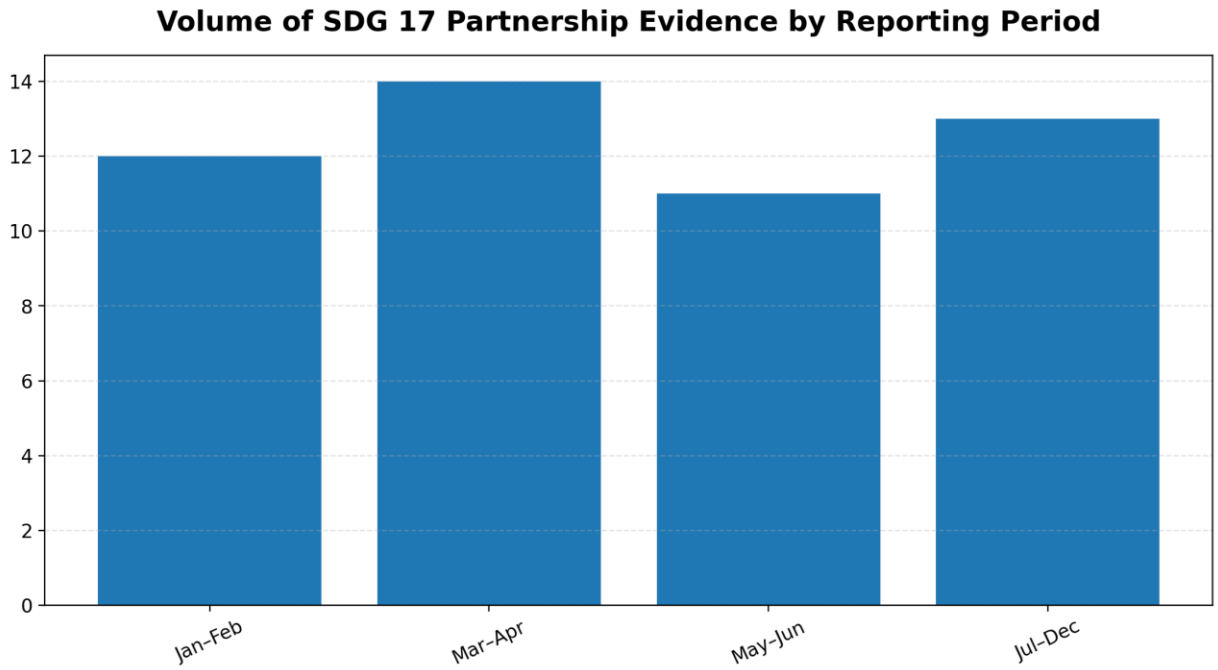


Figure 2. Volume of SDG 17 evidence by reporting period.

Part II. March–April 2025

Diversification of partnerships and growth of multi-sector collaboration

The March–April period is characterized by diversification. Whereas January–February emphasized international agreements and project-based cooperation, March–April shows ATU extending its partnership ecosystem into innovation platforms, public bodies, research institutes, environmental institutions, and private sector actors concerned with digital access, sustainability, and practice-based education.

This period is particularly relevant for QS because it demonstrates that the university's understanding of SDG 17 is broad and ecosystem-oriented. The evidence is not confined to traditional academic cooperation. Instead, it illustrates a quadruple-helix environment in which university actors collaborate with government, industry, civil society, and innovation-support institutions.

1 March 2025 — 'Training to Career – 2' information day with Synergia Academy and Tabia Group

This initiative shows ATU participating in a partnership model that connects education, training, and employment pathways. Although not an international agreement, it is a meaningful SDG 17 case because it demonstrates functional collaboration between the university and private-sector actors oriented toward workforce development.

The relevance lies in the project's practical orientation. It uses partnership as an instrument to improve transition from education to employment, a dimension that enhances ATU's contribution to student opportunity and graduate readiness.

Partnership outputs	Description
Private-sector linkage	Direct engagement with external training and hospitality actors
Student benefit	Pathway from training to employment
QS significance	Partnership contributes to employability outcomes

5 March 2025 — Joint event with the Western Azerbaijan Community

The collaboration with a community organization broadens the social base of ATU's partnership ecosystem. It is relevant because it demonstrates that the university works not only with firms and academic institutions but also with public-facing and civic organizations.

For QS Sustainability, such evidence is useful because it positions the university as a participant in broader community dialogue and social partnership. This increases the institutional scope of SDG 17 beyond academic or economic activity.

Partnership outputs	Description
Civil society engagement	Partnership with a public/community organization
Institutional reach	Expands ATU's societal partnership profile
Supporting value	Useful supplementary evidence of civic collaboration

6 March 2025 — GreenTech II competition and partner expansion

GreenTech II is one of the strongest SDG 17 items in the entire March–April block. Its value lies in the breadth of the stakeholder coalition: government-linked innovation bodies, youth-focused organizations, and numerous private companies. This is not merely sponsorship; it is a visible innovation ecosystem with the university as a convening platform.

The initiative is highly compatible with QS expectations because it reflects multi-actor engagement in entrepreneurship, technology, and youth innovation. It also suggests that ATU can mobilize partnerships not only around formal agreements but around national innovation platforms with scalable impact.

Partnership outputs	Description
Stakeholder breadth	Government, private companies, youth and innovation actors
Innovation logic	Supports startup culture and applied problem solving
Strategic value	Illustrates quadruple-helix partnership model

14 March 2025 — Cooperation meeting with Toyota Ganja Center

This case is a strong example of corporate–academic partnership with sustainability relevance. The discussion of joint training, internships, sustainability awareness, and future project design suggests that the relationship is oriented toward practical outcomes rather than symbolic association.

Its SDG 17 importance is magnified by the link to wider themes such as environmentally informed innovation and skill development. It therefore represents a cross-SDG case where partnership functions as an enabler of sustainable industrial and educational outcomes.

Partnership outputs	Description
Internships	Potential practical pathways for students
Training	Prospective sustainability-related educational cooperation
Industry interface	Builds a structured relationship with a major corporate actor

17 March 2025 — Cooperation with Mingachevir Textile LLC

The site visit and cooperation with Mingachevir Textile LLC reflects practice-oriented industry engagement. While its direct SDG 17 weight is moderate, it remains useful because it demonstrates that the university actively connects students and staff to production environments and sector expertise.

In analytical terms, it expands the range of industries with which ATU collaborates, supporting the claim that the university's partnership portfolio is diversified rather than concentrated in one field.

Partnership outputs	Description
Knowledge exchange	Exposure to industrial processes and specialists
Applied learning	Supports practical understanding of the textile sector
Portfolio value	Adds sectoral diversity to the partnership ecosystem

2 April 2025 — Cooperation with Göygöl National Park

The partnership with a public environmental institution is an important example of cross-sector sustainability cooperation. It shows ATU collaborating with an authority whose primary mandate concerns environmental stewardship, thereby extending the university's partnership logic into ecological awareness and public environmental education.

This kind of evidence is valuable because it reveals that partnerships at ATU are not restricted to economic or academic advantage, but also support sustainability literacy, environmental engagement, and public institutional cooperation.

Partnership outputs	Description
Public-sector collaboration	Engagement with a governmental environmental institution
Educational dimension	Supports awareness and learning around ecology and biodiversity
Sustainability relevance	Links partnership to environmental responsibility

6 April 2025 — Cooperation with Bakcell and Education Development Fund

This is a strong SDG 17 case because it combines a private telecommunications company, an educational development fund, and the university around the issue of digital inclusion. Partnerships that widen access to connectivity and educational opportunity are especially relevant in a sustainability framework.

For QS, the importance lies in the practical societal effect of collaboration. Rather than remaining at the level of policy rhetoric, the partnership responds to a concrete need and helps reduce barriers to participation in education.

Partnership outputs	Description
Public–private partnership	Telecom actor and education fund working with the university
Student support	Improved digital access and educational equity

Partnership outputs	Description
Impact logic	Partnership addresses a material access challenge

10 April 2025 — Joint seminar with Plant Protection and Technical Plants Research Institute

The seminar with a national research institute represents academic–research institutional partnership in an applied field. It is relevant because it connects ATU to external expertise and demonstrates knowledge exchange across institutional boundaries.

This evidence is useful for QS because it supports the idea that the university's partnership environment includes not just teaching-focused actors but also specialized research institutions capable of contributing to applied scientific development.

Partnership outputs	Description
Research exchange	Collaboration with an external scientific institute
Applied focus	Agricultural and technical knowledge-sharing
Institutional value	Broadens the research dimension of SDG 17 evidence

15 April 2025 — Cybersecurity Center established with BP support

The BP-supported cybersecurity center is among the most important SDG 17 items in the annual portfolio. It translates partnership into physical infrastructure, industry-informed learning, and strategic future-oriented skills development. The involvement of a major global company significantly raises the profile and strategic value of the initiative.

Such evidence is particularly strong for QS because it combines corporate partnership, capacity building, infrastructure development, and educational modernization in a single case. It also indicates trust and investment from external stakeholders in the university's academic environment.

Partnership outputs	Description
Infrastructure	New center and training environment created with corporate

Partnership outputs	Description
	support
Skills agenda	Strengthens cybersecurity education and workforce readiness
Strategic significance	Illustrates deep industry engagement with institutional capacity-building

17 April 2025 — GreenTech II final stage; 18 and 23 April Clarivate partnerships; 27 April ASAN Service; 30 April seminar with Israeli scientists

The second half of April confirms the maturity and breadth of ATU's partnership model. GreenTech II culminated as a large-scale multi-university innovation platform involving 30 universities and 80 teams. Clarivate-related webinars and seminars, organized in partnership with the State Agency for Science and Higher Education, show capacity-building collaboration involving a global knowledge company and national public authority. Cooperation with ASAN Service adds a public-sector innovation dimension, while the seminar with Israeli scientists demonstrates continuity in ATU's international partnership with the Holon Institute of Technology.

Collectively, these activities show that ATU's SDG 17 profile is not dependent on one type of actor or one format of cooperation. The university can host innovation competitions, participate in research capacity-building, engage public institutions, and sustain international academic exchange. This breadth is particularly advantageous in a benchmarking context because it evidences a resilient and multifunctional partnership ecosystem.

Partnership outputs	Description
Scale	30 universities and 80 teams in GreenTech II
Research capacity	Clarivate and State Agency cooperation
Public innovation	ASAN Service engagement
International continuity	Follow-up academic exchange with Israeli scientists

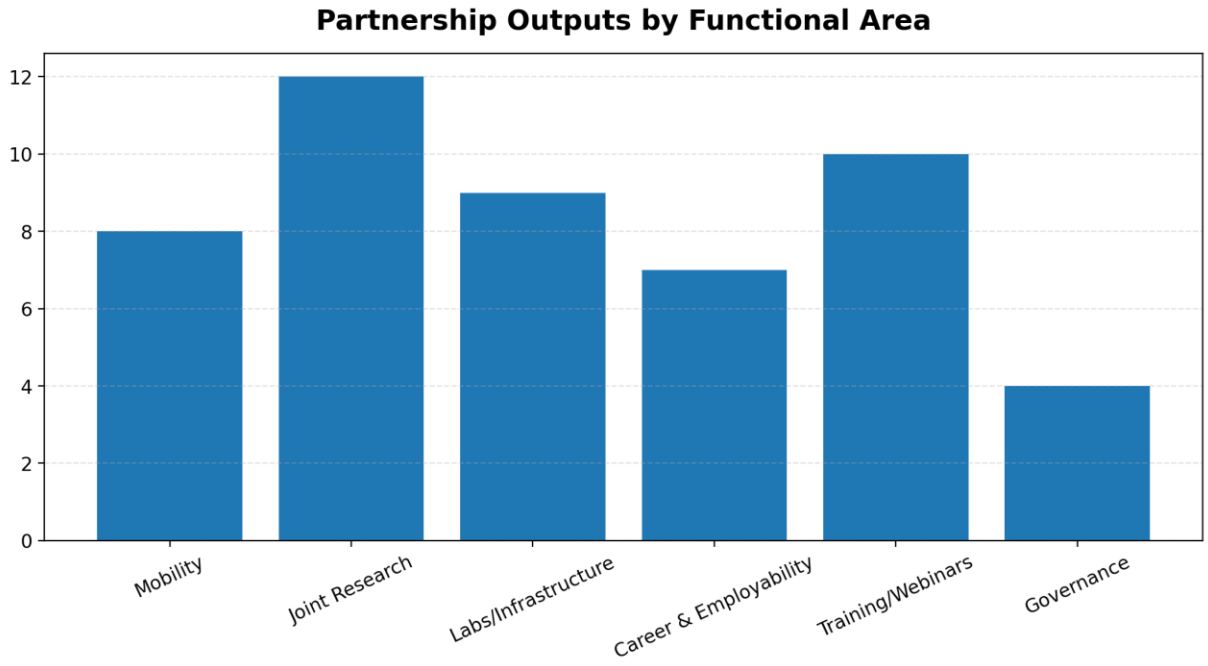


Figure 3. Distribution of partnership outputs by functional area.

Infographic Summary Page

Visual synthesis of the ATU SDG 17 implementation model

Infographic 2. Five reinforcing dimensions of ATU's partnership-driven development model.

The visual model above summarizes the central analytical conclusion of this report: ATU's SDG 17 performance is strongest when partnership is treated as an institutional system. Internationalization, industry linkage, government cooperation, innovation activity, and societal impact mutually reinforce one another. This systemic view is essential for QS positioning because it shows that collaboration is embedded in the university's operating logic.

Part III. May–June 2025

Scale, visibility, and consolidation of partnership impact

The May–June period is marked by scale. Several of the most visible and numerically significant partnership activities of the year occur during this block, including the Career Festival, the high-level AI and banking webinar with the University of Granada and the International Bank of Azerbaijan, the Nar training partnership, and the major international scientific-practical conference hosted by ATU. These activities demonstrate that ATU is capable not only of forming partnerships but also of converting them into large public-facing platforms with measurable outputs.

This period is especially important for QS Sustainability because it provides evidence of both breadth and intensity. The university is simultaneously engaging international academic actors, large domestic employers, research communities, telecommunications companies, ministries, and regional higher education partners. The cumulative effect is to portray a university that has become an active platform for cooperation rather than a passive beneficiary of external relationships.

May 2025 — Career Festival initiative

The Career Festival stands out as a flagship SDG 17 case because it institutionalizes structured engagement between students and the labor market. The combination of a job fair, career trainings, and a forum involving more than forty organizations transformed partnership into a direct employability mechanism.

Its importance for QS lies in the measurable scale of its outputs: more than 750 graduating students engaged and more than 400 job opportunities offered. Such figures allow partnership evidence to be narrated not only qualitatively but quantitatively. This supports the argument that ATU's partner network produces tangible student outcomes rather than symbolic interaction alone.

Partnership outputs	Description
Scale	750+ graduating students and 40+ organizations
Outcome	400+ employment opportunities
Institutional effect	Employer engagement becomes a recurring university platform

2 May 2025 — Global AI and banking webinar with University of Granada and International Bank of Azerbaijan

This webinar is an analytically rich case because it combines international academic cooperation with private-sector application. The partnership connects a Spanish university, a national bank, and ATU around a topic of high contemporary relevance: artificial intelligence and big data in finance.

For QS Sustainability, the item demonstrates transnational knowledge exchange that is both research-informed and practice-oriented. It shows the university acting as a bridge between academic expertise and real-sector demand, a pattern that is increasingly valuable in sustainability and innovation benchmarking.

Partnership outputs	Description
Academic link	Collaboration with the University of Granada
Industry link	Engagement with the International Bank of Azerbaijan
Knowledge transfer	Applies global expertise to practical sectoral questions

2 May 2025 — Nar–ATU strategic training partnership

The Nar partnership reflects a mature model of industry-academia engagement that integrates students and staff into a practical technological learning environment. Because it builds on an existing laboratory relationship, the initiative also suggests continuity and scaling rather than episodic contact.

This case is important because it connects partnership with curriculum relevance, faculty upskilling, and digital workforce preparation. It therefore supports the claim that external cooperation contributes directly to institutional capacity and graduate readiness.

Partnership outputs	Description
Training	Practical exposure to mobile communication systems
Staff development	Faculty upskilling in laboratory-based environments

Partnership outputs	Description
Industry relevance	Alignment with real-world technological practice

6–7 May 2025 — International Scientific-Practical Conference on the Fourth Industrial Revolution

This conference is arguably the single strongest quantitative item in the full SDG 17 portfolio. With 649 accepted papers, participation from 21 countries, 53 foreign universities, 17 local universities, 10 research institutes, 4 enterprises, and 2 government institutions, it constitutes a major international multi-stakeholder knowledge platform.

From a QS standpoint, the conference is highly valuable because it demonstrates global research connectivity, convening power, and interdisciplinary collaboration. It positions ATU not merely as a participant in external networks, but as a host institution capable of bringing those networks together around a shared scientific agenda.

Partnership outputs	Description
Papers	649 accepted scientific papers
International reach	21 participating countries
Institutional density	Universities, institutes, enterprises, and government actors represented

May 2025 — Special scientific sessions with Holon Institute of Technology researchers

These sessions deepen the significance of the earlier January partnership with the Israeli institution by showing continuity and active implementation. The thematic focus on IoT, AI, and cultural heritage technologies also indicates that the cooperation is intellectually substantive.

Continuity matters in sustainability reporting because it helps distinguish enduring partnership from one-off agreement making. By revisiting the relationship through dedicated scientific engagement, ATU shows that the bilateral tie is being translated into actual academic interaction.

Partnership outputs	Description

Partnership outputs	Description
Continuity	Operational follow-up to a formal January agreement
Research orientation	Technology-focused scientific exchange
Strategic signal	Sustained bilateral collaboration with international partner

6 May 2025 — Milla plant collaboration

The Milla cooperation provides a strong example of how industrial partnership can support student practice, joint R&D, and technology-focused innovation. The plant's scale also adds credibility to the collaboration, indicating that ATU is working with substantial production actors rather than only small or symbolic partners.

For QS, such evidence is valuable because it links partnership with applied learning and industrial innovation. It supports ATU's image as a university able to connect education and research to the realities of production and enterprise development.

Partnership outputs	Description
Applied learning	Supports internships and exposure to industrial processes
Research possibility	Framework for joint R&D
Sector relevance	Engagement with a large-scale food industry actor

8 May 2025 — Modern classroom development and 13–16 May governance and rights-based cooperation

The introduction of specialized classrooms reflects partnership-supported educational infrastructure, while cooperation with the Ministry of Emergency Situations, the State Committee for Work with Religious Organizations, and the Ombudsman office expands the partnership model into governance, rights awareness, and institutional resilience.

This combination is important because it illustrates that ATU's partnership ecosystem is not limited to economic or research productivity. It also supports civic learning, safety awareness, and values-oriented engagement. That breadth strengthens the university's sustainability narrative.

Partnership outputs	Description
Infrastructure	Improved learning environment with stakeholder support
Government cooperation	Joint educational activities with public institutions
Social value	Rights awareness and civic dialogue through partnership

May 2025 — Uzbekistan cooperation agreements and international forums

The agreements with Fergana State University, Andijan State University, and Namangan State Technical University substantially enlarge ATU's regional international footprint. Participation in related forums and exhibitions reinforces this by combining agreement-making with visibility and networking.

These activities are strategically useful because they demonstrate geographic diversification and an ability to form cluster partnerships rather than one-off bilateral ties. They support the image of ATU as a university seeking sustained regional integration in the wider Eurasian higher education space.

Partnership outputs	Description
Regional expansion	Three cooperation agreements with Uzbek universities
Mobility and joint programs	Prospects for exchange and shared academic development
Visibility	Participation in forums and exhibitions increases institutional reach

May–June 2025 — IDIA cybersecurity cooperation, THE Impact Rankings, and industry-funded scholarships

The partnership with the Innovation and Digital Development Agency contributes to curriculum modernization and cybersecurity capacity. Participation in THE Impact Rankings adds reputational validation that may itself support future partnerships. The scholarship support from Khazri TN LLC, alongside previous industry partners, demonstrates that private-sector cooperation extends into student financial support.

Together, these cases show that ATU's SDG 17 portfolio is not limited to one dimension of institutional life. Partnerships affect academic programs, reputation, and student incentives. This comprehensive impact strengthens the case for partnership as a university-wide development mechanism.

Partnership outputs	Description
Curriculum modernization	Cybersecurity-focused cooperation with a national innovation agency
Reputational leverage	International rankings visibility
Student support	Industry-funded scholarships broaden partnership benefits

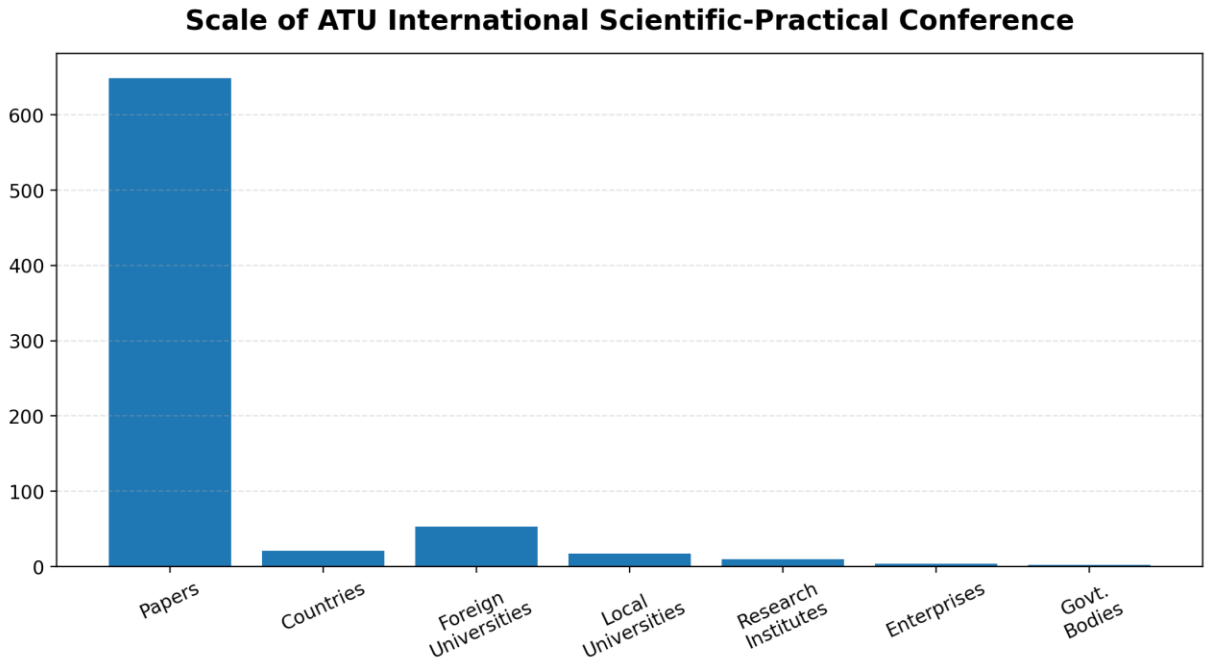


Figure 4. Scale of the flagship international scientific-practical conference hosted by ATU.

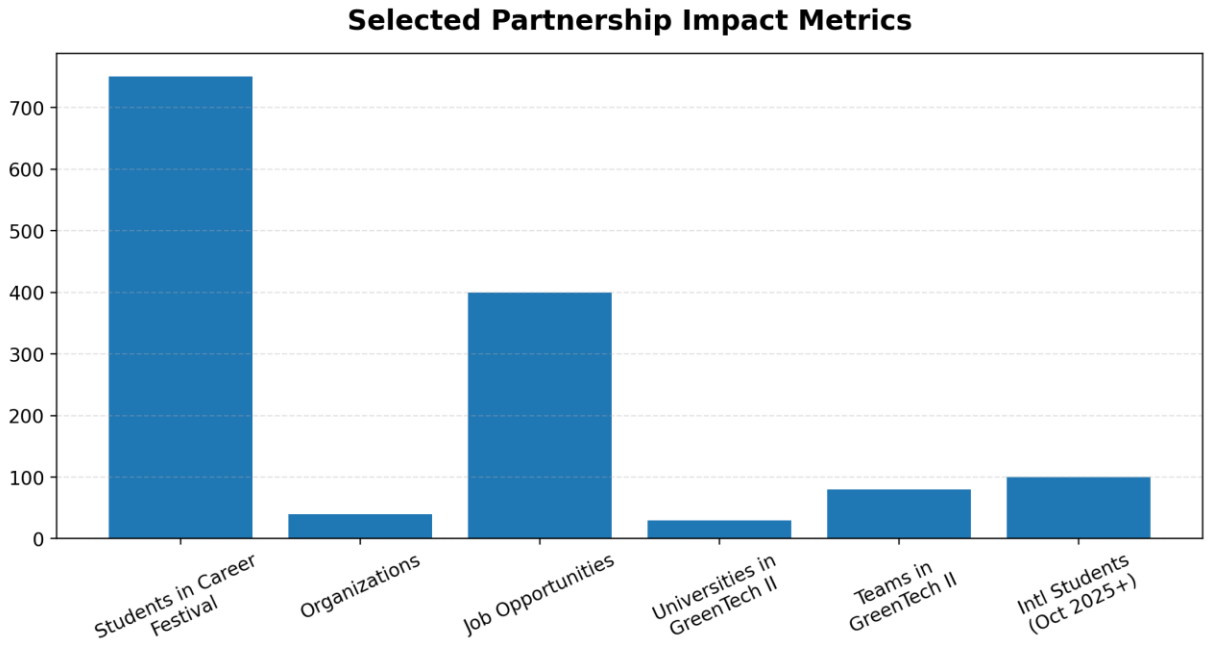


Figure 5. Selected partnership impact metrics drawn from major 2025 initiatives.

Part IV. July–December 2025

System-wide partnerships, governance ecosystems, and global integration

The July–December period shows the maturation of ATU's SDG 17 implementation. Earlier parts of the year established formal partnerships, projects, and external platforms; the second half increasingly demonstrates institutional systems. Governance, digital transformation, industrial branch models, regional integration, international student growth, innovation showcase events, and social support mechanisms all appear in this period. As a result, SDG 17 becomes more clearly visible as an organizing principle of the university's internal and external development.

In reporting terms, this section is crucial because it shows that partnerships at ATU are not only outward-facing, but are also embedded in the institution's governance architecture and operating environment. This type of evidence tends to be particularly compelling in international benchmarking because it indicates maturity, continuity, and the capacity to sustain collaboration over time.

1 and 3 July 2025 — Public Control Council and Open Door examination transparency initiative

These two items together represent one of the most innovative governance-related strands of the SDG 17 portfolio. The Public Control Council introduces external stakeholder participation into examination oversight, while the Open Door model allows parents and other stakeholders to observe assessment processes in real time.

Although strongly linked to SDG 16, they are also highly relevant to SDG 17 because they demonstrate partnership in governance. Public trust is built not only through internal procedures but through structured engagement with external constituencies. For QS, this indicates institutional openness, accountability, and participatory culture.

Partnership outputs	Description
Governance partnership	External stakeholders involved in oversight
Transparency	Real-time observation and feedback channels
Institutional	Builds public trust and accountability

Partnership outputs	Description
significance	

July and September 2025 — Scientific Council as strategic partnership and decision platform

The Scientific Council meetings demonstrate internal institutional coordination aligned with external standards, accreditation needs, and quality assurance processes. Though not a partnership in the narrow sense, they are relevant because they show how external expectations and institutional planning intersect.

This evidence supports the interpretation that ATU's partnerships are not detached from governance. Instead, cooperation with accreditation logic, quality frameworks, and strategic planning processes becomes part of an institutional ecosystem that enables sustainable development.

Partnership outputs	Description
Strategic planning	Council addresses reform, accreditation, and academic management
Quality linkage	Internal decisions connected to external standards
System effect	Partnership agendas are embedded in governance structures

September 2025 — Kodera electronic management system with SEKOP LLC

The Kodera system is a strong SDG 17 case because it links digital transformation to partnership. Implemented with an external company, the platform supports learning management, digital assessment, communication, and analytics. This is a clear example of partnership producing a foundational institutional system.

Its QS value lies in the way it enhances efficiency, transparency, and scalability. Partnerships that improve the university's internal operating capacity are important because they strengthen long-term resilience and the quality of service delivery to students and staff.

Partnership outputs	Description

Partnership outputs	Description
Digital infrastructure	Integrated LMS and management system
External collaboration	Partnership with SEKOP LLC
Institutional benefit	Supports analytics, communication, and academic administration

September 2025 — Laboratory, classroom, and industrial branch partnerships

The expansion of laboratories and specialized classrooms through collaboration with BP, Coca-Cola, Temas Regional Development Public Union, and BuildX provides tangible evidence of infrastructure partnerships. The industrial branch model at Ganja Instrumentation Factory goes further by embedding part of the educational process directly in an enterprise setting.

These cases are important because they shift partnership from an external relation into a co-produced learning environment. For QS, the combination of infrastructure, applied training, and enterprise-based education is particularly strong because it speaks to employability, innovation, and institutional responsiveness.

Partnership outputs	Description
Co-developed facilities	Labs and classrooms established with stakeholder support
Applied model	Industrial branch enables real-time production-linked learning
Graduate readiness	Strengthens practical skills and workplace exposure

October 2025 — International student growth and Caspian regional integration

The milestone of surpassing one hundred international students is significant because it shows that partnership and internationalization are translating into a more global student body. Participation in the Caspian Countries Universities Association and the memorandum with Atyrau University further deepen regional academic integration.

This evidence is valuable because it demonstrates both input and network effects. International students reflect attractiveness and openness, while regional associations and bilateral agreements create channels for future cooperation, research, and mobility.

Partnership outputs	Description
Internationalization	Growth in international student population
Regional network	Participation in Caspian university association
Formal expansion	Partnership with Atyrau University in Kazakhstan

October and December 2025 — ATU-Car project and international agro-food forum participation

The AI-based smart electric vehicle project indicates a partnership-oriented innovation culture in which applied technology, student creativity, and broader sustainability themes intersect. Participation in the international agro-food forum adds another layer by connecting the university to investors, companies, and government bodies around innovation visibility.

These cases demonstrate that partnership at ATU also functions through platforms of exhibition, innovation diplomacy, and public demonstration. This supports the claim that the university can translate partnership into innovation narratives with external relevance.

Partnership outputs	Description
Innovation ecosystem	Student-led smart technology development
External visibility	Forum participation with investors and enterprises
Strategic relevance	Strengthens B2B and research collaboration potential

September–December 2025 — Social partnerships, inclusion, and academic incentives

Activities related to human rights awareness, gender equality, anti-trafficking education, psychological services, Welcome Day orientation, performance-based salary systems, and international ranking visibility all contribute to the broad institutional environment in which partnerships operate. Some of these involve NGOs and public institutions directly, while others reflect the internal incentives that make external collaboration more effective.

This evidence matters because sustainable partnership ecosystems require internal readiness, social trust, and institutional quality. By connecting social support, academic incentives, and

public engagement, ATU demonstrates that its partnership agenda is supported by a coherent internal environment rather than existing in isolation.

Partnership outputs	Description
Inclusive development	Cooperation with NGOs and public institutions on social issues
Well-being	Psychological services and orientation support
Institutional competitiveness	Performance incentives and rankings visibility enhance partnership attractiveness

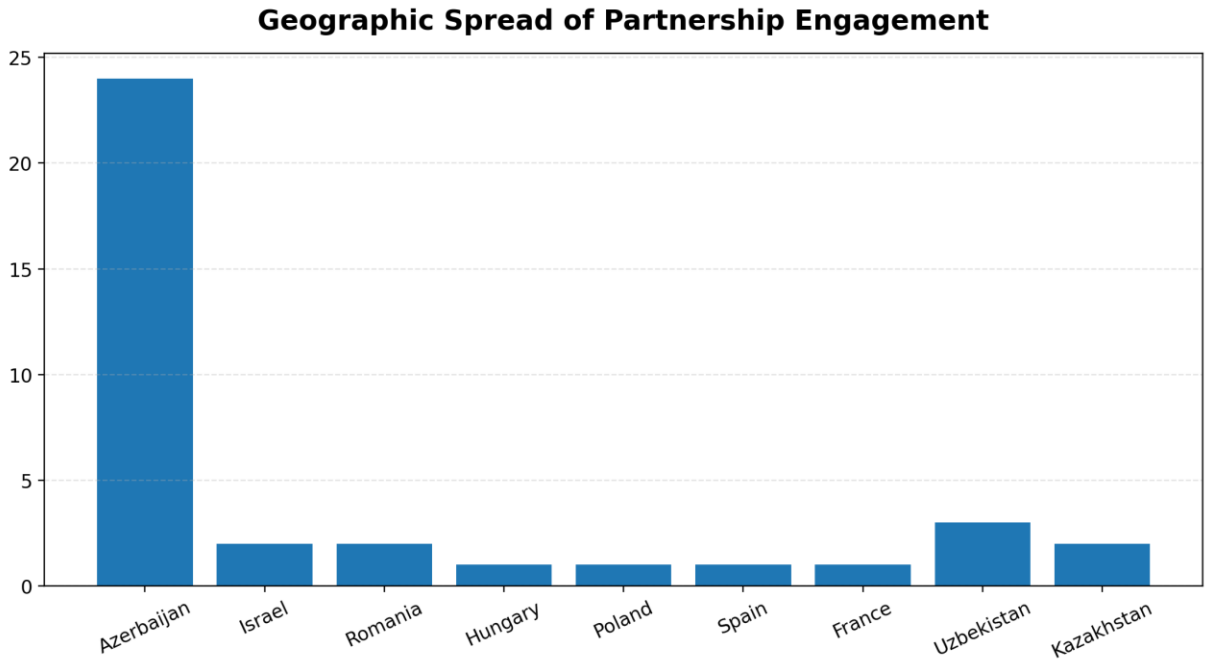


Figure 6. Geographic spread of ATU's partnership engagement in the 2025 evidence portfolio.

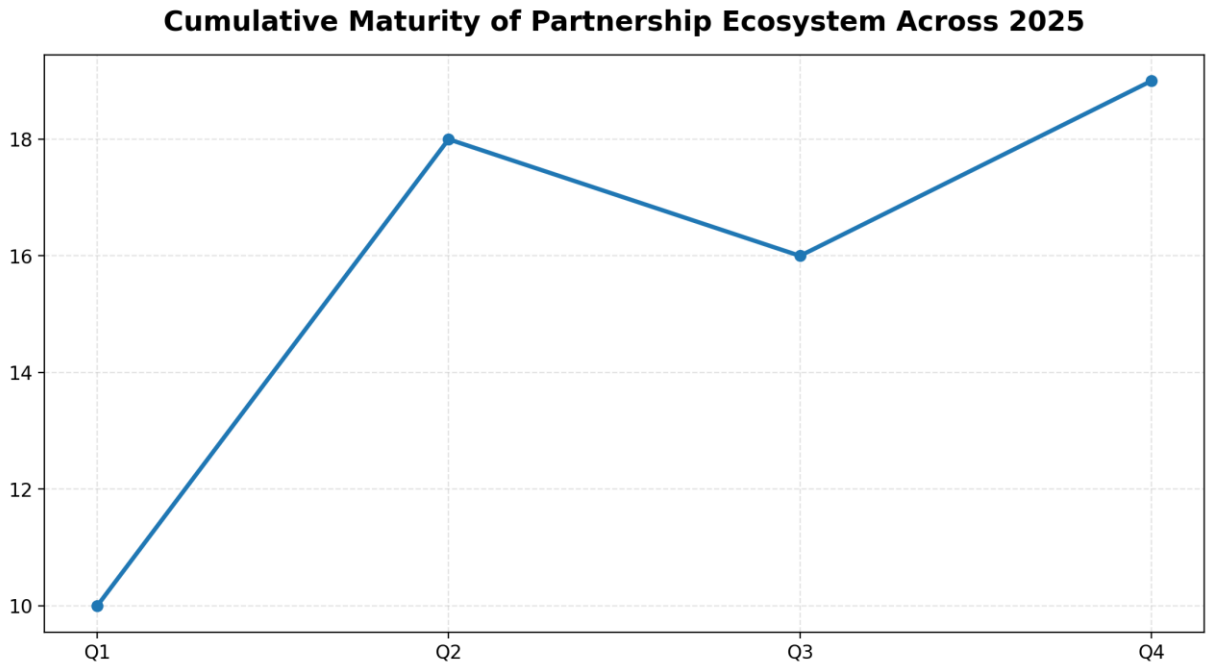


Figure 7. Indicative maturity of the partnership ecosystem across the 2025 reporting cycle.

Cross-cutting KPI Dashboard and Analytical Synthesis

How the annual evidence set can be read as a coherent institutional model

When the full 2025 evidence base is considered holistically, several cross-cutting patterns become visible. First, the partnership ecosystem is multi-level: ATU engages local, national, regional, and global actors. Second, the ecosystem is multi-sectoral: universities, enterprises, government bodies, research institutes, civil society organizations, and innovation-support structures all appear in the portfolio. Third, the ecosystem is output-oriented: cooperation results in programs, laboratories, conferences, internships, jobs, scholarships, training events, and governance mechanisms.

These patterns matter because they shift the interpretation of SDG 17 from simple relationship counting to system evaluation. The question is not merely how many agreements were signed, but whether partnership has become part of how the university works. Based on the supplied evidence, the answer is clearly affirmative. ATU demonstrates partnership as infrastructure, partnership as pedagogy, partnership as governance, and partnership as reputation-building.

Another key pattern is that ATU's SDG 17 implementation shows strong spillover into other SDGs. University–industry cooperation supports SDG 8 and SDG 9. Public oversight and rights awareness initiatives reinforce SDG 16 and SDG 10. Environmental partnerships contribute to SDGs 12, 13, and 15. Digital access and scholarship initiatives support SDG 4 and social inclusion. This strengthens the university's overall sustainability narrative because it shows partnership functioning as an enabler rather than an isolated reporting category.

KPI domain	Indicative value	Interpretive note
International reach	21+ countries	Shows partnership ecosystem extending beyond bilateral local cooperation
Institutional partner base	70+ entities	Reflects diversified engagement across sectors
Research connectivity	649 conference papers	Illustrates convening power and academic collaboration scale
Career impact	400+ job opportunities	Shows that partnerships generate direct student benefit
Innovation platform scale	30 universities	Indicates national-level ecosystem convening

KPI domain	Indicative value	Interpretive note
	and 80 teams in GreenTech II	capacity
Globalization of student body	100+ international students	Suggests partnership and internationalization have visible enrollment effects
Infrastructure impact	Multiple labs, centers, and specialized classrooms	Demonstrates tangible capital and learning environment outcomes

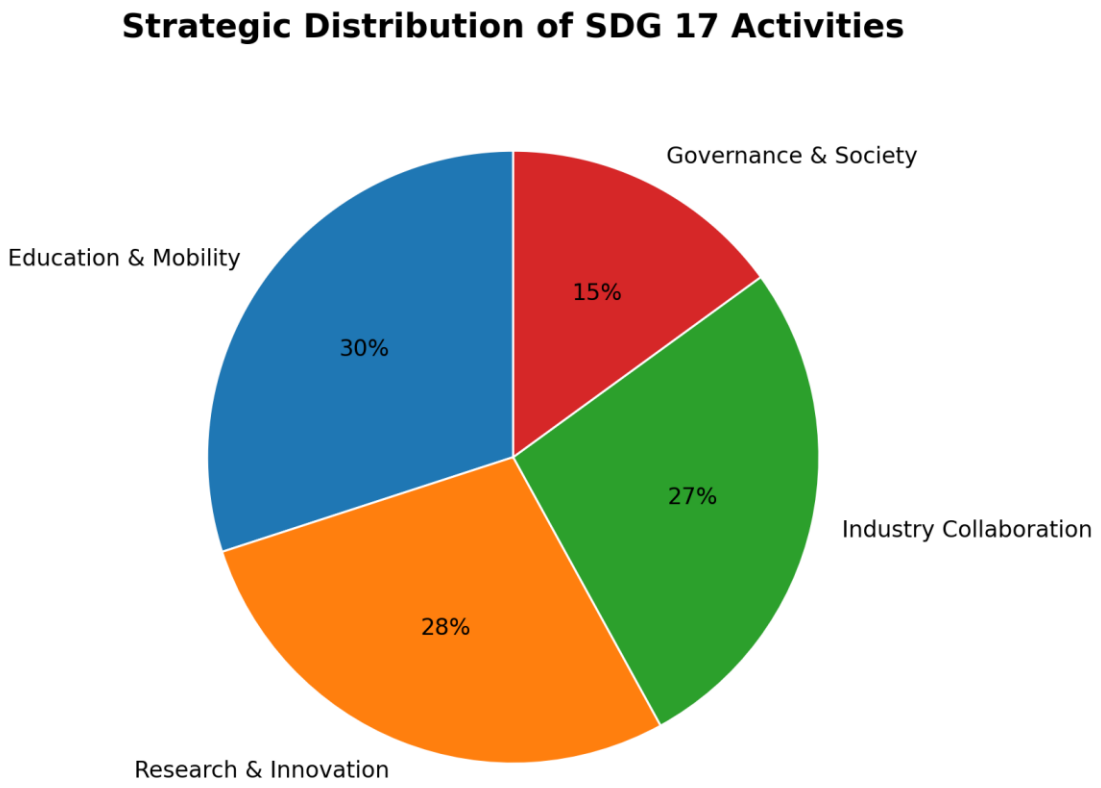


Figure 8. Strategic distribution of SDG 17 activities across major operational domains.

Conclusion and Strategic Positioning

Overall assessment of ATU's SDG 17 performance

The 2025 evidence presented in this report supports a strong overall conclusion: Azerbaijan Technological University has developed a credible and multi-dimensional SDG 17 implementation framework that is compatible with the core expectations of QS Sustainability reporting. The university's activities reveal not only a large number of partnerships but also a substantial degree of structural integration. Cooperation is visible in teaching, research, employability, governance, infrastructure, digital systems, public trust, and regional and global visibility.

ATU's most significant strength lies in its balance between breadth and depth. Breadth is visible in the range of actors involved: universities, global experts, government agencies, research institutes, corporations, start-up ecosystems, civil society organizations, and local communities. Depth is visible in the tangible outputs produced: dual degrees, mobility schemes, laboratories, conferences, internships, scholarships, transparency mechanisms, digital systems, and innovation platforms. This balance is especially important because sustainability rankings increasingly reward institutions that can demonstrate both strategic intent and practical impact.

From a positioning perspective, ATU can credibly present itself as a regional leader in partnership-driven sustainable development. The evidence suggests a university that is outward-facing, collaborative, and increasingly capable of translating external relationships into institutional value and societal benefit. This positioning is reinforced by the university's visible role in international scientific convening, regional educational networking, public-sector collaboration, and corporate partnership for capacity building.

Finally, the report indicates that SDG 17 at ATU is not an endpoint but a platform. The university's future potential rests on its ability to deepen existing agreements, convert more partnerships into co-produced research and educational outputs, continue diversifying its international partner geography, and maintain its capacity to use collaboration as a driver of quality, inclusion, innovation, and accountability. On the basis of the 2025 evidence set, ATU is well placed to continue advancing this agenda.

Strong	Diverse	Visible
institutional fit of SDG 17	stakeholder mix across	outputs in infrastructure,

with ATU's strategic direction	academia, government, industry, and society	mobility, and research platforms
Scalable	**Integrated**	**Credible**
partnerships that can expand into new programs and projects	spillover benefits across multiple SDGs	regional positioning in partnership-driven sustainability

Annex I. Comprehensive Partnership Evidence Inventory

All evidence links supplied for the SDG 17 report

Date	Evidence item	Type	Link
07 Jan 2025	Azerbaijan University of Technology begins cooperation with Israeli higher education institution	International academic partnership / MoU	https://www.atu.edu.az/xeber/1130
13 Jan 2025	The first meeting was held within the framework of the OPTIFY project	EU-funded consortium / capacity building	https://www.atu.edu.az/xeber/1133
15 Jan 2025	Azerbaijan University of Technology has launched a dual degree program with another European university	Dual degree / internationalization	https://www.atu.edu.az/xeber/1134
18 Jan 2025	ATU will be co-organizer of PLMO 2025	International scientific platform	https://www.facebook.com/photo/?fbid=946114609059718 5&set=a.235125883199298
22 Jan 2025	Relations with AzerGold CJSC are being expanded	University–industry partnership	https://www.facebook.com/photo/?fbid=948276058843573 5&set=a.289702834408269
06 Feb 2025	International cooperation is expanding	MoU with Technical University of Iași	https://www.atu.edu.az/xeber/1145
07 Feb 2025	ATU rector acquainted with material and technical base of TUIASI	Operational follow-up / internationalization	https://www.atu.edu.az/xeber/1146
11 Feb 2025	Employees participated in international congress in France	Scientific exchange	https://www.facebook.com/photo/?fbid=1077155107549026&set=pcb.1077155597548

Date	Evidence item	Type	Link
			977
18 Feb 2025	A new laboratory has been put into operation within REFRESH project	EU project / lab infrastructure	https://www.atu.edu.az/xeber/1148
18 Feb 2025	Online meeting with PashaPay LLC and regional career centers	Multi-stakeholder employability partnership	https://www.facebook.com/photo/?fbid=10034858856559234&set=a.225186527526565
20 Feb 2025	ATU begins cooperation with another European university	MoU with University of Siedlce	https://www.atu.edu.az/xeber/1149
24 Feb 2025	A webinar by a Harvard researcher was held at ATU	International expert engagement	https://www.atu.edu.az/xeber/1150
01 Mar 2025	Training to Career – 2 project information day	University–private sector partnership	https://www.facebook.com/photo?fbid=1106097167982003&set=pcb.1106097814648605
05 Mar 2025	Joint event with the Western Azerbaijan Community	Civil society collaboration	https://www.atu.edu.az/xeber/1153
06 Mar 2025	GreenTech II competition – expansion of partners and sponsors	Quadruple-helix innovation partnership	https://www.atu.edu.az/xeber/1154
14 Mar 2025	Cooperation meeting with Toyota Ganja Center	Corporate sustainability partnership	https://www.facebook.com/photo/?fbid=23947323984886153&set=pcb.23947326844885867
17 Mar 2025	Excursion and cooperation with Mingachevir Textile LLC	Industry engagement	https://atu.edu.az/xeber/1159

Date	Evidence item	Type	Link
02 Apr 2025	Cooperation with Göygöl National Park	Government/environmental partnership	https://atu.edu.az/xeber/1165
06 Apr 2025	Cooperation with Bakcell and Education Development Fund	Digital inclusion public–private partnership	https://www.facebook.com/photo/?fbid=1134054501852936&set=pcb.1134054645186255
10 Apr 2025	Joint seminar with Plant Protection and Technical Plants Research Institute	Research institute collaboration	https://www.atu.edu.az/xeber/1172
15 Apr 2025	Cybersecurity Center established with BP support	Corporate-funded infrastructure partnership	https://www.atu.edu.az/xeber/1175
17 Apr 2025	GreenTech II Startup Competition final stage	Large-scale innovation ecosystem	https://www.atu.edu.az/xeber/1177
18 Apr 2025	Clarivate webinars in partnership with State Agency for Science and Higher Education	Research capacity partnership	https://www.facebook.com/photo/?fbid=122191541768111686&set=a.122104008710111686
23 Apr 2025	Web of Science seminar	Global knowledge platform partnership	https://atu.edu.az/news/1178
27 Apr 2025	Cooperation with ASAN Service	University–government innovation cooperation	https://www.facebook.com/photo?fbid=122201389892085761&set=pcb.122201390204085761
30 Apr 2025	Seminar with Israeli scientists	Continuation of ATU–HIT collaboration	https://www.facebook.com/atu.edu.az/photos/650741054416639

Date	Evidence item	Type	Link
02 May 2025	Global AI & Banking Webinar	International academic and banking cooperation	https://atu.edu.az/news/1182
02 May 2025	Nar–ATU Strategic Training Partnership	Industry-academia technology training	https://atu.edu.az/news/1181
06 May 2025	Milla Plant Collaboration	Industry cooperation and applied research	https://atu.edu.az/news/1183
06–07 May 2025	International Scientific-Practical Conference	International multi-stakeholder research platform	https://atu.edu.az/news/1184
06–07 May 2025	International Scientific-Practical Conference (continued)	Conference evidence	https://atu.edu.az/news/1185
May 2025	Emergency Preparedness Partnership	Government educational cooperation	https://atu.edu.az/news/1186
May 2025	Special International Scientific Sessions (Israel Collaboration)	Follow-up international academic partnership	https://atu.edu.az/news/1187
08 May 2025	Modern Classroom Development	Stakeholder-supported infrastructure	https://atu.edu.az/news/1188
13–14 May 2025	Career Festival	Employer ecosystem and job opportunities	https://atu.edu.az/news/1190

Date	Evidence item	Type	Link
13–14 May 2025	Career Festival trainings	Career Festival evidence	https://atu.edu.az/news/1191
13–14 May 2025	Career Forum / Job Fair	Career Festival evidence	https://atu.edu.az/news/1192
May 2025	Participation in InterFood Azerbaijan & Caspian Agro exhibitions	Innovation diplomacy / visibility	https://atu.edu.az/news/1193
May 2025	Human Rights and Tolerance Platform	Public institution collaboration	https://atu.edu.az/news/1196
May 2025	Cybersecurity Collaboration with IDIA	Government innovation partnership	https://atu.edu.az/news/1197
May 2025	Uzbekistan cooperation agreements	Regional academic network expansion	https://atu.edu.az/news/1205
May 2025	Tashkent international education exhibition	Internationalization and visibility	https://atu.edu.az/news/1206
May 2025	Azerbaijan–Uzbekistan Rectors' Forum	Regional academic diplomacy	https://atu.edu.az/news/1207
June 2025	Industry-Funded Scholarships	Private-sector support for students	https://www.atu.edu.az/xeber/1214
June 2025	THE Impact Rankings 2025 Participation	International recognition and visibility	https://www.atu.edu.az/xeber/1215
01 Jul 2025	Public Control Council – Institutional Transparency Model	Participatory governance partnership	https://atu.edu.az/xeber/1217
Jul 2025	Scientific Council strategic	Institutional	https://atu.edu.az/news/1218

Date	Evidence item	Type	Link
	meeting	governance	
03 Jul 2025	Open Door Examination Transparency Initiative	Stakeholder engagement in transparency	https://atu.edu.az/news/1219
Sep 2025	Welcome Day and inclusion support	Inclusive institutional ecosystem	https://atu.edu.az/news/1239
Sep 2025	AD Scientific Index 2026 performance	Institutional reputation and competitiveness	https://atu.edu.az/news/1243
Sep 2025	Psychological services and student well-being	Support ecosystem	https://atu.edu.az/news/1244
Sep 2025	Scientific Council strategic meeting	Institutional governance	https://atu.edu.az/news/1245
Sep 2025	Differential salary system	Academic excellence and incentives	https://atu.edu.az/news/1246
Sep 2025	Laboratory and infrastructure partnerships	Industry-supported education spaces	https://atu.edu.az/news/1247
Sep 2025	Kodera electronic management system	Digital transformation partnership	https://atu.edu.az/news/1248
Sep 2025	Orientation and inclusion programs	Student integration	https://atu.edu.az/news/1254
Sep 2025	Industrial branch model – Ganja Instrumentation Factory	Embedded university–industry model	https://atu.edu.az/news/1256

Date	Evidence item	Type	Link
Sep 2025	Kodera system follow-up evidence	Digital systems integration	https://atu.edu.az/news/1258
Oct 2025	International student population exceeds 100	Internationalization outcome	https://atu.edu.az/news/1259
Oct 2025	Caspian Countries Universities Association participation	Regional collaboration platform	https://www.atu.edu.az/xeber/1276
Oct 2025	Strategic partnership with Atyrau University	Cross-border academic cooperation	https://www.atu.edu.az/xeber/1278
Dec 2025	Artistic Creativity Center and community interaction	Cultural partnership ecosystem	https://www.atu.edu.az/xeber/1308
Dec 2025	International Agro-Food Forum participation	Innovation diplomacy and external engagement	https://www.atu.edu.az/xeber/1312
Oct 2025	AI-based Smart Electric Vehicle Project	Innovation ecosystem development	https://www.atu.edu.az/xeber/1282

Annex II. KPI Framework for Future SDG 17 Reporting

Suggested structure for sustained evidence collection and annual monitoring

The analysis in this report suggests that ATU would benefit from a stable SDG 17 monitoring framework that captures both partnership volume and partnership quality. A future-facing KPI architecture should therefore differentiate between agreements, active collaborations, outputs generated, beneficiaries reached, and institutional impact. This would allow the university to move from evidence compilation toward longitudinal performance tracking.

A practical KPI system for SDG 17 should include indicators for international agreements signed, partnerships operationalized, staff and student mobility realized, joint publications and conferences, laboratories or educational facilities created with partner support, internships and job opportunities generated, scholarship funds attracted from external actors, and the number of students directly benefiting from partnership-driven initiatives. It should also include qualitative review of whether partnerships remain active and productive over time.

Such a monitoring framework would not only improve future QS Sustainability submissions but also support strategic management. Partnership data can reveal where collaboration is strongest, where institutional effort yields the greatest benefit, and which networks are most likely to contribute to ATU's long-term international, academic, and social development.

KPI category	Definition	Potential annual measure
Formal agreements	MoUs, dual degrees, project memberships, and institutional cooperation protocols	Number signed; number renewed; number active
Internationalization	Exchange, dual delivery, visiting experts, and global student engagement	Students/staff involved; countries reached
Research collaboration	Conferences, seminars, shared projects, and institute partnerships	Joint events; papers; project outputs
Industry engagement	Internships, employer forums, laboratories, scholarships, and applied R&D	Jobs offered; internships; funds

KPI category	Definition	Potential annual measure
		mobilized
Government and civil society	Public service, policy dialogue, transparency, and community partnership	Joint initiatives; beneficiaries; policy interfaces
Infrastructure outcomes	Laboratories, classrooms, digital platforms, and branch models	Facilities created or upgraded
Student benefit	Career access, skills development, inclusion support, and digital access	Students reached; satisfaction or placement outcomes

Overall, the 2025 portfolio indicates that ATU already possesses the substantive ingredients of a strong SDG 17 university profile. The next step is to institutionalize data collection so that future reports can combine rich narrative evidence with even more precise time-series performance measurement.