Azerbaijan TECHNICAL University

Azerbaijan Technical University

Sustainability Plan - 2030

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Message from the Rector

Undoubtedly, the imperative to ensure a sustainable society has never been more pressing, given the evolving needs and obstacles we face. Our dynamic world demands our attention in areas like energy, waste management, healthcare, and climate preservation, presenting opportunities for enhancement. Azerbaijan Technical University is firmly committed to spearheading the drive towards a more sustainable future, tackling environmental, economic, and social justice issues in unison.

I am delighted to present Azerbaijan Technical University's Sustainability Plan for 2030. Crafted under the auspices of the Sustainability Development Institution, this plan aims to establish a "sustainability ecosystem," envisioning our campus as a dynamic environment for both living and learning. Leveraging our collective strengths and partnerships globally, we aim to confront the challenges of sustainability on a worldwide scale.

This plan's development has been a collaborative effort involving students, faculty, and staff from all corners of our campus. It delineates sustainability objectives and tasks across academic disciplines, research endeavors, operational facets, and community engagement. While our goals and initiatives are ambitious, they are crucial in addressing the most pressing issues of our era.

Crucially, Azerbaijan Technical University's sustainability plan hinges on the collective efforts of every member of our community—locally, nationally, and internationally. We set lofty aspirations for ourselves, aspiring to lead in a manner that inspires others to join us in forging a more sustainable future.

Prof. Dr.

Vilayat Valiyev

Introduction/Background

Azerbaijan Technical University's Sustainability Plan has acted as a roadmap for advancing sustainability within the institution. Overall, substantial progress has been made towards our sustainability objectives, laying a robust groundwork for continued engagement with the campus community and positioning WPI as a frontrunner in sustainability.

We acknowledge that the demands and obstacles in the realm of sustainability have intensified. As a leading technological institution, Azerbaijan Technical University is dedicated to assuming a prominent role in addressing these challenges. It encompasses guiding principles, our vision, the broader sustainability framework, and the goals, and tasks essential for the realization and advancement of this plan.

Vision:

Our aspiration is to set a prominent benchmark for sustainable practices within higher education, sparking transformative impact within our community and extending it further.

Mission:

We are dedicated to embedding sustainability across all facets of Azerbaijan Technical University's functions, including operations, curriculum, research endeavors, and campus ethos. This commitment aims to cultivate a comprehensive perspective on environmental, social, and economic stewardship.

The Imperative: Addressing Global Sustainability Challenges

In the contemporary landscape, the call for sustainable practices resonates louder than ever before. Across the globe, we are confronted with a myriad of challenges that demand urgent attention and concerted action. From the depletion of natural resources to the escalating impacts of climate change, the need for sustainable solutions has never been more pressing.

Environmental Degradation: Our planet is facing unprecedented levels of environmental degradation, driven by deforestation, pollution, habitat destruction, and the unsustainable exploitation of natural resources. This degradation threatens biodiversity, disrupts ecosystems, and undermines the stability of our planet's life-support systems.

Climate Crisis: The escalating effects of climate change, including rising temperatures, extreme weather events, and sea-level rise, pose existential threats to both human societies and ecological systems. Urgent action is needed to mitigate greenhouse gas emissions, adapt to changing climatic conditions, and build resilience in vulnerable communities.

Resource Scarcity: As the global population continues to grow, the demand for finite resources such as water, energy, and food intensifies. Ensuring equitable access to these resources while minimizing waste and environmental degradation is crucial for sustainable development and the well-being of future generations.

Social Inequities: Inequities in access to resources, opportunities, and basic human rights persist, exacerbating poverty, inequality, and social unrest. Addressing social injustices and promoting inclusive development are essential for building sustainable and resilient societies.

Economic Instability: Unsustainable patterns of production and consumption, coupled with volatile financial markets, contribute to economic instability and exacerbate inequalities within and between nations. Transitioning towards a more sustainable and equitable economic model is imperative for long-term prosperity and well-being.

The Path Forward: Towards a Sustainable Future

Addressing these global sustainability challenges requires a holistic approach that integrates environmental, economic, and social considerations. It demands collaboration across sectors and borders, as well as innovative solutions that prioritize sustainability, resilience, and equity.

By embracing sustainable practices, fostering technological innovation, promoting social justice, and adopting responsible governance, we can create a more equitable, resilient, and sustainable future for all. Together, let us rise to the challenge and chart a course towards a world where people and planet thrive in harmony.

Objective of the Sustainability Plan:

The primary aim of our Sustainability Plan is to implement comprehensive strategies and initiatives that promote sustainability across all facets of Azerbaijan Technical University's operations. This includes integrating sustainable practices into our infrastructure, curriculum, research endeavors, and campus culture. Through this concerted effort, we seek to minimize our environmental footprint, enhance social equity, and foster economic resilience, thereby contributing to a more sustainable future for our university and the broader community.

Goals of the Sustainability Plan:

Promoting actions and initiatives in support of new models of growth and conscious lifestyles, until 2030 the university identifies 5 areas in which the main work to implement the principles of sustainable development will be concentrated:

Positioning the university as a University of sustainable development

    a) specifying the principles of sustainable development among the university's strategic development goals;

    b) correcting the text and content of strategic and long-term program documents of the university, taking into account the goals of sustainable development;

    c) adaptation of the university's strategic goals to the sustainable development goals of the UN.

Educational programs

a) Inclusion of sustainable development issues in university curricula.

b) Creating new educational programs and revising existing educational programs with the inclusion of sustainable development issues

c) Development of new subjects on sustainable development as an optional component of educational programs

d) Updating the topics of student, master, and candidate theses in all faculties to include sections on environmental protection and sustainable development.

Science and research

a) Inclusion of topics related to the UN sustainable development goals and issues of sustainable development of the university, city, region, and country at all educational programs and levels of study;

b) Conducting fundamental and applied research for the university and all interested stakeholders, with the attraction of internal and external funding;

c) Organization of internships for researchers in specialized laboratories, institutes, and centers on research topics;

d) To stimulate student research on the topic of sustainable development, organize educational student excursions and short courses at institutes, and centers on ecology, nutrition, and health;

e) Studying the possibility of conditions for research by teaching staff and students about green energy and resource conservation, for the further use of acquired skills in the development of innovative business projects within technology parks, business incubators, and the creation of start-up companies;
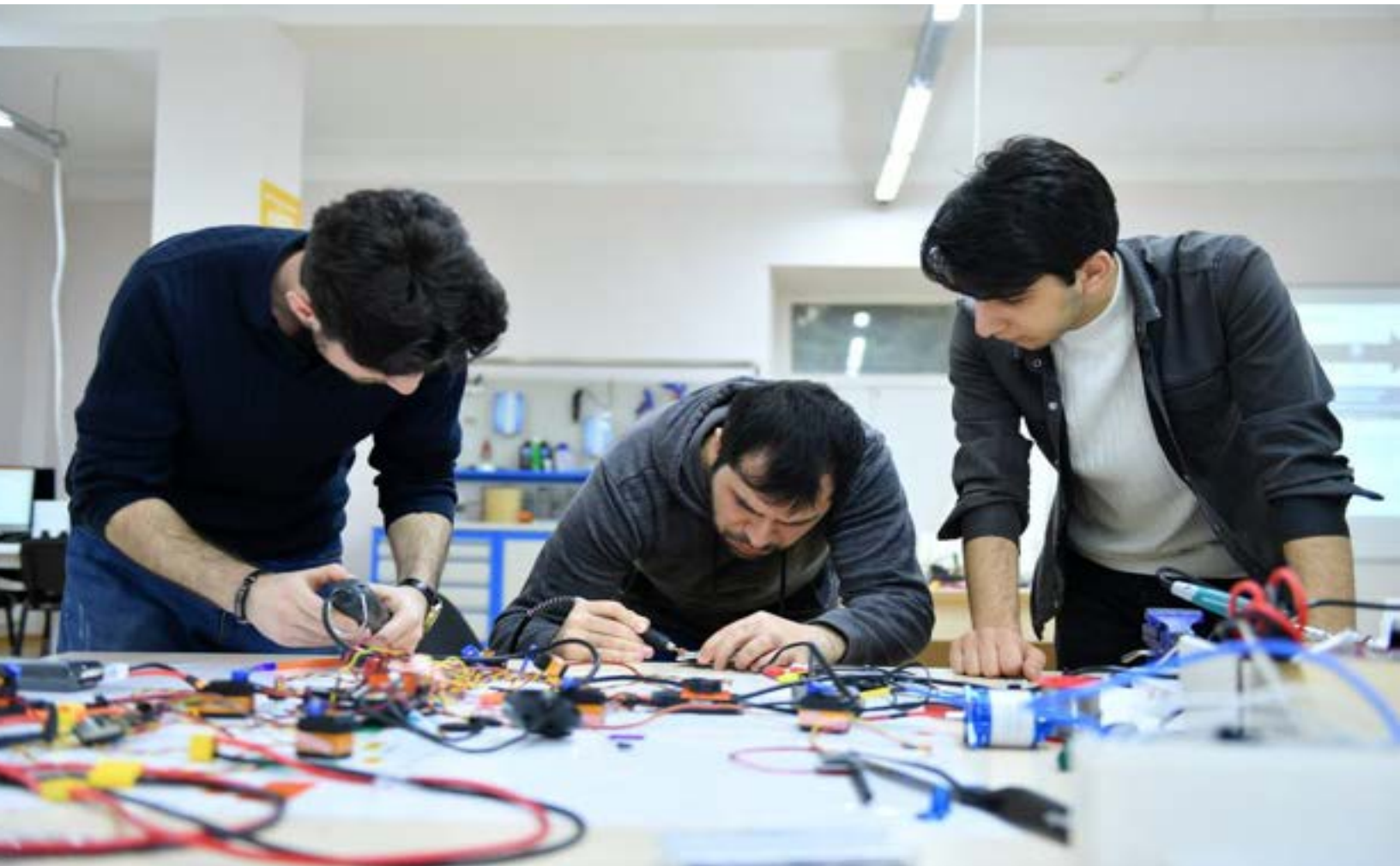
f) Based on the library collection and the conducted scientific research of the university teaching staff, the creation of a special catalog/knowledge base on a wide range of issues and principles of sustainable development, regular exhibitions of literature on the topic, holding special library open days with access to working with the knowledge base for city residents;

g) Organization of round tables, discussions, and scientific, theoretical, and practical conferences on current issues of sustainable development;

h) Study of the possibilities and conditions for publishing university teaching staff in specialized scientific publications.

Green University

a) Creation of a working group to prepare proposals for improving the energy efficiency of structures and buildings of the University,

b) Reconstruction of buildings and improvement of thermal insulation, replacement of outdated equipment with more efficient ones, installation of motion sensors for automatic power shutdown, etc.

c) Development of a university energy plan to rationalize the consumption of primary resources, increase the energy efficiency of buildings, and reduce greenhouse gas emissions

d) Regular monitoring and analysis of energy consumption dynamics, compilation of energy balances, publication of energy data, and informing teaching staff and students about the university's achievements in the field of energy saving - ensuring economical use of water, installing limiters

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e) Saving paper, developing electronic means of communication, and transitioning to paperless office work

f) Organizing waste paper collection on university campuses

g) Study of best practices and experiences of sustainable national and international campuses, develop initiatives to assess the volume of waste produced, to reduce it, conduct waste management policy

h) Organizing separate collections for the main types of waste (paper/cardboard, plastic, glass), initiating agreements with city organizations for their recycling or environmentally friendly disposal

Promotion of sustainable development ideas

a) Development of cooperation with local or regional authorities in the implementation of specific programs for the sustainable development of an industry, region, or territory;

b) Participation in city events to improve and green the territory and other initiatives;

c) Development of mutually beneficial cooperation with local enterprises and support of business initiatives aimed at sustainable development, organization of internships for university students in organizations guided by the principles of sustainable development;

d) Holding joint conferences, round tables, preparing scientific publications;

Inter-university cooperation on sustainable development issues

a) Explore the possibilities and conditions for joining national and international associations and networks of interuniversity cooperation on sustainable development issues

b) Study the successful experience of domestic and foreign universities to use best practices in the university's sustainable development policy

Roles and responsibilities

- ✓ The university will be responsible for the implementation of this policy and has the authority to develop appropriate procedures regarding, among other things:
- ✓ Setting standards for sustainable development
- ✓ Creation of policy implementation mechanisms
- ✓ Highlighting the processes by which all departments and departments must monitor, measure, evaluate, and report to the rector on their progress towards achieving the goals set out in the university's sdp.

Environmental Sustainability:

- Reduce greenhouse gas emissions by 3% by 2030 compared to 2024 levels through energy efficiency measures, renewable energy adoption, and behavioral change campaigns.
- Implement a comprehensive waste management system to minimize landfill waste, increase recycling rates, and promote composting across campus.
- Enhance water conservation efforts through efficient usage, rainwater harvesting, and wastewater treatment technologies.
- Promote sustainable transportation options such as cycling, walking, and public transit, and incentivize the use of electric vehicles among staff and students.
- Preserve and enhance biodiversity on campus through green spaces, native landscaping, and habitat restoration projects.
- Establish a waste audit program to assess current waste streams and develop tailored strategies for waste reduction, reuse, and recycling.
- Introduce segregated waste collection bins for recyclables, organic waste, and non-recyclable materials, accompanied by educational signage and outreach efforts.
- Partner with local recycling facilities and waste management companies to ensure proper handling and disposal of waste, prioritizing the circular economy principles.
- Promote campus-wide composting initiatives, utilizing organic waste from dining halls, landscaping, and agricultural activities to produce nutrient-rich compost for use in campus gardens and green spaces.
- Install water-efficient fixtures and appliances in campus buildings, such as low-flow toilets, faucets, and irrigation systems.
- Implement rainwater harvesting systems to capture and store rainwater for non-potable uses such as landscape irrigation and toilet flushing.
- Conduct regular leak detection surveys and repairs to minimize water losses and ensure efficient water distribution throughout campus.

- Introduce educational programs and workshops to raise awareness about the importance of water conservation and encourage responsible water usage among students and staff.
- Develop designated bike lanes, pedestrian pathways, and bike-sharing programs to promote active transportation and reduce reliance on single-occupancy vehicles.
- Offer incentives such as preferential parking for carpooling, discounted public transit passes, and electric vehicle charging stations to encourage sustainable commuting options.

- Establish a campus transportation demand management program to optimize vehicle fleets, promote carpooling, and facilitate alternative transportation modes for commuting and campus-related travel.
- Integrate sustainability into transportation planning and infrastructure development, collaborating with local authorities and urban planners to enhance connectivity and accessibility to public transit networks.
- Conduct biodiversity assessments to inventory existing flora and fauna species on campus and identify areas of ecological significance for conservation.
- Implement habitat restoration projects to enhance biodiversity and create wildlife corridors, incorporating native plant species and natural landscaping techniques.
- Establish protected areas and green spaces designated for biodiversity conservation, limiting human disturbance and preserving critical habitats for native wildlife.
- Engage students and volunteers in citizen science initiatives and ecological monitoring programs to contribute to biodiversity research and conservation efforts on campus.

Social Responsibility:

- Foster a culture of inclusivity, diversity, and equity throughout the university community, ensuring equal access to opportunities for all individuals regardless of background or identity.
- Enhance health and well-being initiatives for students, faculty, and staff, including mental health support services, fitness programs, and healthy dining options.
- Strengthen community engagement and outreach programs, collaborating with local stakeholders to address social issues, promote education, and empower disadvantaged communities.
- Prioritize ethical sourcing and fair labor practices in procurement processes, supporting local suppliers and businesses committed to social responsibility.
- Incorporate sustainability education and awareness into the curriculum across disciplines, equipping students with the knowledge and skills to become agents of positive change in their respective fields.
- Implement diversity training programs for faculty, staff, and students to foster a culture of inclusivity and respect for diverse perspectives, backgrounds, and identities.

- Establish support networks and affinity groups for underrepresented communities within the university, providing resources and mentorship opportunities to promote retention and success.
- Enhance accessibility features and accommodations across campus facilities and services to ensure equitable access for individuals with disabilities or special needs.
- Celebrate cultural diversity through multicultural events, festivals, and awareness campaigns that highlight the richness of the university's diverse community.
- Expand mental health services and counseling resources for students, faculty, and staff, including confidential support hotlines, peer support groups, and counseling sessions.
- Offer wellness programs and recreational activities such as yoga classes, meditation workshops, and outdoor fitness activities to promote physical and mental well-being.
- Enhance campus dining options to include healthier, locally sourced, and sustainably produced food choices, catering to diverse dietary preferences and nutritional needs.
- Provide access to green spaces and outdoor recreation areas on campus, creating opportunities for relaxation, stress reduction, and social interaction in natural environments.
- Establish partnerships with local schools, community organizations, and NGOs to offer educational outreach programs, mentorship opportunities, and enrichment activities for underserved youth.
- Organize volunteer initiatives and community service projects that address pressing social issues such as poverty alleviation, environmental conservation, and disaster relief efforts.

- Host community forums, town hall meetings, and public lectures to facilitate dialogue and collaboration between the university and local residents on issues of mutual interest and concern.
- Support community-based research projects and participatory action research initiatives that empower local stakeholders and contribute to sustainable development solutions at the grassroots level.
- Develop sustainable procurement guidelines and ethical sourcing policies to prioritize suppliers and vendors that demonstrate a commitment to fair labor practices, environmental stewardship, and social responsibility.
- Conduct supplier assessments and audits to evaluate compliance with sustainability criteria and ethical standards, establishing partnerships with certified suppliers and fair trade organizations.
- Integrate sustainability criteria into procurement decision-making processes, considering life cycle impacts, social value, and environmental certifications when selecting products and services for university operations.
- Engage with suppliers and industry stakeholders to promote transparency, accountability, and continuous improvement in supply chain management practices, fostering a culture of responsible sourcing and ethical business conduct.

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- Embed sustainability principles and concepts into the curriculum across disciplines, integrating interdisciplinary perspectives and real-world case studies into course content and learning outcomes.
- Offer sustainability-focused degree programs, minors, and certificate courses that provide students with the knowledge, skills, and competencies to address complex sustainability challenges in their fields of study.
- Facilitate experiential learning opportunities such as internships, research projects, and service-learning initiatives that allow students to apply sustainability concepts in practical settings and contribute to positive social and environmental impact.
- Establish a Sustainability Learning Center or hub for interdisciplinary collaboration, research, and innovation, providing resources, networking opportunities, and mentorship for students, faculty, and community members engaged in sustainability-related activities.
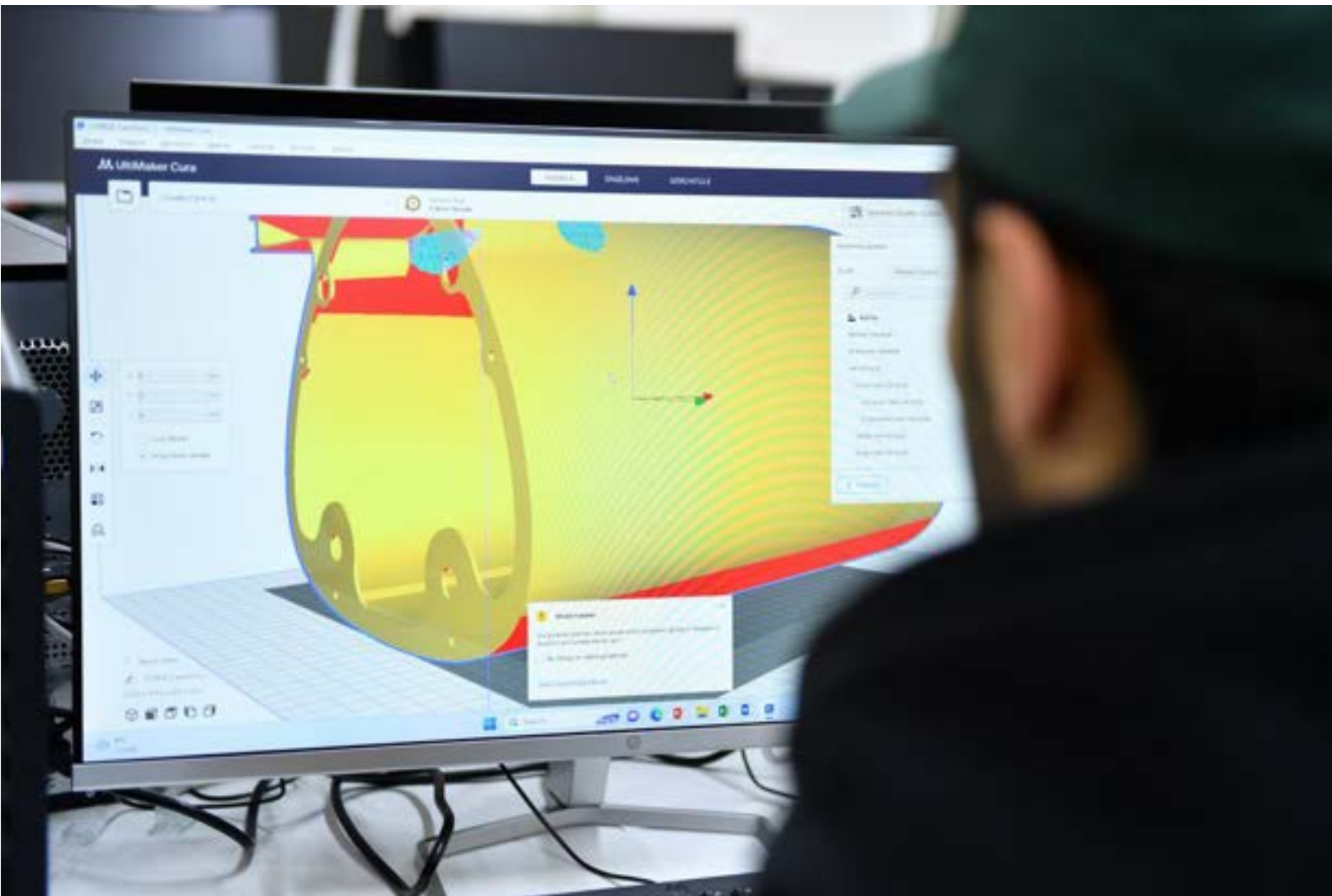
Economic Sustainability:

- Implement cost-saving measures through energy efficiency upgrades, resource optimization, and waste reduction strategies, reallocating savings towards further sustainability initiatives.
- Develop partnerships with industry, government agencies, and non-profit organizations to secure funding for sustainability projects, research grants, and educational programs.
- Support entrepreneurship and innovation in sustainability-related fields, providing resources and mentorship to students and alumni seeking to launch green startups or initiatives.
- Invest in renewable energy technologies and green infrastructure projects to reduce long-term operating costs and enhance the resilience of campus facilities.
- Conduct regular assessments and evaluations of financial performance to ensure the long-term viability and sustainability of university operations.
- Establish a Sustainability Institution or Committee tasked with overseeing the implementation of the Sustainability Plan, monitoring progress, and engaging stakeholders.
- Develop a timeline with specific milestones and targets for each strategic goal, regularly reviewing and updating the plan as needed.
- Foster collaboration and interdisciplinary cooperation among departments, faculty, students, and staff to leverage diverse expertise and resources toward common sustainability objectives.
- Promote a culture of innovation and continuous improvement, encouraging experimentation with new technologies, practices, and initiatives to achieve sustainability goals.
- Communicate progress and achievements transparently through annual sustainability reports, newsletters, events, and digital platforms to engage and inspire the university community and external stakeholders.
- Prioritize the safety and preservation of the University's capital while generating reasonable returns.
- Maintain sufficient liquidity to meet operational needs and unforeseen expenses.
- Diversify investments across asset classes to mitigate risk and enhance portfolio stability.
- Seek competitive returns while considering the risk tolerance and investment horizon of the University.
- Conduct periodic risk assessments to identify and mitigate potential risks associated with the investment portfolio.
- Implement risk management strategies to safeguard the University's capital and optimize the risk-return profile.
- Adhere to ethical investment principles, avoiding investments in industries or companies engaged in activities that conflict with the University's values and mission.

- Integrate environmental, social, and governance (ESG) factors into investment decisions to promote socially responsible investing.
- Collaboration with industry initiatives, shareholder advocacy, and participation in sustainability forums will be pursued to enhance the impact of AzTU's investments.

Implementation Plan

    - Short-term Goals (2024-2025)

    - Mid-term Goals (2024-2027)

    - Long-term Goals (2024-2030)

Monitoring, Reporting, and Evaluation

This section will provide an overview of the AzTU Sustainability Plan 2020-2030, highlighting the key goals and strategies across environmental, social, and economic dimensions. It will summarize the plan's vision to integrate sustainability into all aspects of university life, from campus operations and curriculum development to community involvement and research initiatives.

Creating a Sustainability Plan for Azerbaijan Technical University for the decade of 2024-2030 involves several key steps. This plan will need to encompass various dimensions of sustainability, including environmental, economic, and social aspects, tailored to the university's context.

Sustainability Steps:

1. Establish a Sustainability Institution or Committee:

- Form a dedicated team responsible for overseeing the implementation of the Sustainability Plan.
- Define roles and responsibilities within the committee, ensuring representation from different departments and stakeholders across the university.
- Develop a communication strategy to engage the university community and raise awareness about sustainability initiatives.

2. Conduct Baseline Assessments:

- Conduct comprehensive assessments to establish baseline data for key sustainability metrics such as energy consumption, waste generation, water usage, and greenhouse gas emissions.
- Identify priority areas for improvement based on the assessment findings and set specific targets for each sustainability goal.

3. Develop Action Plans for Each Goal:

- Create detailed action plans for achieving the objectives outlined in the Sustainability Plan, specifying tasks, timelines, responsible parties, and resource requirements.
- Break down each goal into actionable steps and milestones, aligning them with the overall timeline for the 2024-2030 period.

4. Implement Energy Efficiency Measures:

- Implement energy efficiency upgrades in campus buildings, such as retrofitting lighting systems, installing energy-efficient appliances, and optimizing HVAC systems.
- Explore opportunities for renewable energy generation, such as solar photovoltaic panels, wind turbines, or geothermal heating systems.
- Launch energy conservation campaigns to promote behavior change and encourage students, faculty, and staff to adopt energy-saving practices.

5. Enhance Waste Management Practices:

- Establish a comprehensive waste management system, including segregated waste collection bins, recycling facilities, and composting programs.
- Conduct waste audits to track waste generation, identify opportunities for waste reduction, and optimize recycling efforts.
- Educate the university community about proper waste disposal practices and the importance of recycling and composting through workshops, signage, and outreach activities.

6. Promote Sustainable Transportation:

- Improve infrastructure for sustainable transportation options such as bike lanes, pedestrian pathways, and electric vehicle charging stations.

- Encourage the use of alternative transportation modes through awareness campaigns, incentives for carpooling, and discounts on public transit passes.
- Implement transportation demand management strategies to reduce single-occupancy vehicle trips and promote car-sharing programs among students and staff.

7. Foster Inclusivity and Diversity:

- Implement diversity training programs for faculty, staff, and students to promote inclusivity and respect for diverse perspectives and identities.
- Establish support networks and affinity groups for underrepresented communities within the university to provide mentorship and resources.
- Enhance accessibility features and accommodations across campus facilities to ensure equitable access for individuals with disabilities.

8. Enhance Community Engagement:

- Forge partnerships with local schools, community organizations, and NGOs to offer educational outreach programs and volunteer opportunities.
- Organize community service projects and engagement events that address social issues and promote sustainable development in the local community.

9. Monitor Progress and Evaluate Performance:

- Establish key performance indicators (KPIs) and metrics to track progress towards sustainability goals.
- Implement monitoring systems to regularly collect data on energy consumption, waste generation, water usage, and other relevant metrics.
- Conduct periodic evaluations and assessments to measure the effectiveness of sustainability initiatives and identify areas for improvement.
- Communicate progress and achievements transparently through annual sustainability reports and engage stakeholders in the review process.

10. Continuously Improve and Adapt:

- Foster a culture of innovation and continuous improvement, encouraging feedback and ideas from the university community.
- Stay informed about emerging trends, best practices, and technological advancements in sustainability to adapt strategies accordingly.
- Regularly review and update the Sustainability Plan to reflect changing priorities, goals, and external circumstances.
- Celebrate successes and recognize achievements to inspire continued commitment to sustainability across the university.

The Sustainability Committee

The Sustainability Committee will engage in consultation with the Academic Senate and pertinent academic and research committees regarding sustainability initiatives that impact curriculum and research. Furthermore, the Sustainability Committee will collaborate with other pertinent committees on sustainability initiatives that influence various areas. Additionally, the Sustainability Committee will synchronize with and guide Colleges and Divisions throughout the University concerning internal sustainability affairs and initiatives. The Sustainability Committee is integral to realizing the University's sustainability goals outlined in the Azerbaijan Technical University. This committee will fulfill its role by offering top-level guidance and recommendations on environmental, social, and economic sustainability throughout the University. This includes evaluating and formulating advice on policy, strategy, and planning to foster sustainable results for both the University and the wider community. This encompasses various areas such as facilities and operations, education and research, collaborations, engagement initiatives, as well as leadership and governance practices.

The committee also oversees the advancement and tracking of the Azerbaijan Technical University Sustainability's objectives and targets. It offers direction on additional measures and initiatives necessary to meet these goals. Furthermore, it advocates for an environment of ongoing enhancement in sustainability, encouraging the identification and dissemination of practices and initiatives within Colleges and Divisions that integrate sustainability principles and yield beneficial results.

Member Roles

1. "Regularly Identify and Share Actions and Initiatives": Members are expected to consistently identify and disseminate actions and initiatives that incorporate sustainability principles and yield positive outcomes within their respective areas.
2. "Proactively Liaise and Report": Members should proactively communicate with and update their areas within the University regarding the Committee's efforts. They serve as a link between their area and the Committee, ensuring that activities are communicated effectively and feedback is provided.
3. "Delegates": Delegates are responsible for formally reporting back to the Committee and seeking direction from their appointed member regarding Committee activities.

Membership Appointment and Terms

1. "Chair and Deputy Chair Appointment": The Vice-rector appoints the Chair and Deputy Chair of the Committee.
2. "Membership Term": Members (excluding student representatives) serve a two-year term, with the possibility of reappointment. Student representatives serve a one-year term coinciding with their roles in the Student Youth Organization.
3. "Co-opted Members": The Chair, in collaboration with the may appoint up to two co-opted members with relevant expertise or background for a maximum of one year, with the option of reappointment.
4. "Invitees": The Chair may invite additional individuals to participate in discussions on relevant agenda items.

Mode of Operation

1. "Scheduled Meetings": The Committee must hold a minimum of five scheduled meetings per year, with the option to schedule additional meetings at the Chair's discretion.

2. "Working Groups": Specific initiatives may be advanced through the Working Groups of the Committee, which operate under Committee oversight.
3. "Quorum": Quorum is achieved when more than half of the members, including the Chair and/or Deputy Chair, are present.

A Sustainability Working Group

A Sustainability Working Group within the University Executive Team will be closely involved in the Committee's efforts. This group will comprise the following members:

Rector	Prof. Vilayat Valiyev
Vice-rector for Educational Affairs	Prof. Nurali Yusifbayli nuraliyusifbeyli@aztu.edu.az
Vice-rector for Science and Innovation	Prof. Subhan Namazov subhan.namazov@aztu.edu.az
Vice-Rector for International Relations	Ass. Prof. Fariz Mammadov fariz.mammadov@aztu.edu.az
Vice-rector for Financial and Economic Affairs	Ass. Prof. Rashad Aliyev rashad.aliyev@aztu.edu.az
Vice-rector for social issues and public relations	Ass. Prof. Narmin Rzayeva narmin.rzayeva@aztu.ed.az
Faculty of Transport and Logistics	Ass. Prof. Allahverdi Sharifov sharifov.allahverdi@aztu.edu.az
Faculty of Energy and Automation	Ass. Prof. Huseyngulu Guliyev huseyngulu@aztu.edu.az
Faculty of Metallurgy and Materials Science	Ass. Prof. Nizami Poladov nizami_poladov@aztu.edu.az
Faculty of Economics and Management	Ass. Prof. Fargana Musayeva farganamusayeva@aztu.edu.az
Institute of Logistics and Transport	Ass. Prof. Fuad Dashdamirov dashdamirov.fuad@aztu.edu.az
Energy Research Institute	Ass. Prof. Gara Hasanov garahasanov@aztu.edu.az
Institute of Higher Education	Ass. Prof. Anar Eminov anar.eminov@aztu.edu.az
Institute for Sustainable Development	Ass. Prof. Natavan Namazova natavan.namazova@aztu.edu.az
Research and development department	PhD[(c)] Bakhtiyar Badalov bakhtiyar.badalov@aztu.edu.az
Department of mechanical engineering technology	Prof. Nizami Yusubov nizami.yusubov@aztu.edu.az
Department of chemical technology, recycling, and ecology	Prof. Fakhraddin Yusubov yusubov.faxraddin@aztu.edu.az
University-Industry Cooperation and Lifelong Learning Center	Ass. Prof. Aynura İsmayilova aynura.ismayilova@aztu.edu.az

Action Plan for Azerbaijan Technical University

N	Goal	Action Steps	Timeline	Responsible Party	Resources Required
1.	Establish Sustainability Committee	Form a dedicated team for overseeing sustainability initiatives.	Month 1	Sustainability Committee	Personnel, Meeting Space
2.		Define roles and responsibilities within the committee.	Month 1	Sustainability Development Institution	
3.	Conduct Baseline Assessments	Assess current energy consumption, waste generation, water usage, and greenhouse gas emissions.	Months 1-3	Sustainability Development İnstitution	Data collection tools
4.		Identify priority areas for improvement based on assessment findings.	Month 4	Sustainability Development İnstitution	
5.	Develop Action Plans for Each Goal	Create detailed action plans for achieving objectives outlined in the Sustainability Plan.	Months 5-6	Sustainability Development İnstitution	Stakeholder input
6.	Implement Energy Efficiency Measures	Retrofit lighting systems, install energy-efficient appliances, and optimize HVAC systems.	Months 7-12	Energy Research Institute	Funding, Contractors
7.		Explore renewable energy options such as solar panels, wind turbines, or geothermal heating.	Months 7-12	Energy Research Institute	Funding, Contractors
8.	Enhance Waste Management Practices	Establish segregated waste collection bins, recycling facilities, and composting programs.	Months 7-9	Institute of New Materials and Nanotechnologies	Equipment, Education
9.		Conduct waste audits to track waste generation and identify opportunities for reduction.	Months 10-12	Institute of New Materials and Nanotechnologies	Data collection tools
10.	Promote Sustainable Transportation	Improve infrastructure for biking, walking, and electric vehicles.	Months 7-12	Institute of Logistics and Transport	Funding, Contractors
11.		Launch transportation demand management strategies to reduce single-occupancy vehicle trips.	Months 7-12	Institute of Logistics and Transport	Education, Incentives
12.	Foster Inclusivity and Diversity	Implement diversity training programs for faculty, staff, and students.	Months 13-15	Institute of Logistics and Transport	Training materials
13.		Establish support networks and affinity groups for	Months 13-15	Institute of Logistics and Transport	Mentorship programs

		underrepresented communities.			
14.	Enhance Community Engagement	Forge partnerships with local schools, community organizations, and NGOs.	Months 16-18	Community Engagement	Networking, Resources
15.		Organize community service projects and engagement events.	Months 19-21	Community Engagement	Volunteers, Materials
16.	Monitor Progress and Evaluate Performance	Establish KPIs and metrics for tracking progress towards sustainability goals.	Month 22	Sustainability Development İnstitution	Data collection tools
17.		Implement monitoring systems for energy consumption, waste generation, water usage, etc.	Months 23-24	Sustainability Development İnstitution	Technology, Training
18.	Continuously Improve and Adapt	Foster a culture of innovation and continuous improvement.	Ongoing	All Departments	Communication, Leadership
19.		Stay informed about emerging trends and best practices in sustainability.	Ongoing	Sustainability Development İnstitution	Professional Development
20.		Review and update the Sustainability Plan as needed.	Annually	Sustainability Development İnstitution	Stakeholder input

The Sustainability Plan for Azerbaijan Technical University

N	Goal	Action Steps	Timeline	Responsible Party	Resources Required
1.	Energy Efficiency Measures	Conduct energy audits for all campus buildings to identify areas for improvement.	Months 1-3	Energy Research Institute	Energy audit tools, Personnel
2.		Implement energy-saving measures such as LED lighting upgrades and HVAC optimization.	Months 4-9	Energy Research Institute	Funding, Contractors
3.	Waste Management Practices	Establish a centralized waste management system with proper segregation and recycling facilities.	Months 1-6	Institute of New Materials and Nanotechnologies	Recycling bins, Education
4.		Implement composting programs for organic waste generated on campus.	Months 7-12	Institute of New Materials and Nanotechnologies	Composting equipment, Education
5.	Sustainable Transportation	Improve campus infrastructure for biking and walking, including bike lanes and pedestrian pathways.	Months 1-6	Institute of Logistics and Transport	Funding, Contractors
6.		Install electric vehicle charging stations and promote carpooling initiatives.	Months 7-12	Institute of Logistics and Transport	Charging stations, Incentives
7.	Water Conservation	Conduct water audits to identify areas of excessive water usage and leaks.	Months 1-3	Institute of New Materials and Nanotechnologies	Water audit tools, Personnel
8.		Implement water-saving measures such as installing low-flow fixtures and drought-resistant landscaping.	Months 4-9	Institute of New Materials and Nanotechnologies	Fixtures, Landscaping
9.	Biodiversity Conservation	Identify areas on campus for habitat restoration and biodiversity enhancement projects.	Months 1-3	Institute of New Materials and Nanotechnologies	Biodiversity assessments, Personnel
10.		Implement native landscaping and habitat restoration initiatives in designated areas.	Months 4-9	Institute of New Materials and Nanotechnologies	Native plants, Equipment

Outlining Actions for integrating sustainability into the curriculum at Azerbaijan Technical University (Academic Plan)

N	Goal	Action Steps	Timeline	Responsible Party	Resources Required
1.	Curriculum Integration	Review existing curriculum across disciplines to identify opportunities for integrating sustainability concepts.	Months 1-3	All Faculties	Curriculum review tools, Personnel
2.		Develop sustainable learning outcomes and competencies for each academic program.	Months 4-6	Curriculum Committee	Expertise, Stakeholder input
3.	Faculty Training and Development	Provide training workshops and professional development opportunities for faculty on sustainability pedagogy.	Months 7-9	Center for Teaching and Learning	Training materials, Expert facilitators
4.		Facilitate peer learning communities and interdisciplinary collaborations among faculty members.	Months 10-12	Center for Teaching and Learning	Networking opportunities, Support resources
5.	Student Engagement	Establish student-led sustainability clubs and organizations to promote awareness and action on campus.	Months 1-3	Student Affairs Office	Funding, Leadership guidance
6.		Create opportunities for student research, projects, and internships focused on sustainability topics.	Months 4-9	Academic Departments, Career Services	Research grants, Internship placements
7.	Experiential Learning Opportunities	Develop service-learning courses and community-based projects that address real-world sustainability challenges.	Months 7-12	Faculty	Community partnerships, Project resources
8.		Facilitate study abroad programs and experiential learning trips with a sustainability focus.	Months 10-12	International Programs Office	Travel funding, Partner institutions
9.	Sustainability Education Resources	Develop online learning modules, multimedia resources, and open educational materials on sustainability topics.	Months 4-9	Center for Teaching and Learning	Multimedia tools, Content development
10.		Curate a sustainability library collection and resource center for students and faculty.	Months 10-12	Library Services	Collection development, Space allocation

Action Plan for Community Engagement Initiatives at Azerbaijan Technical University

N	Goal	Action Steps	Timeline	Responsible Party	Resources Required
1.	Community Partnerships	Identify potential community partners, including local schools, NGOs, and government agencies.	Months 1-3	Community Engagement Office	Networking and Outreach
2.		Establish formal partnerships through memorandums of understanding (MOUs) or collaboration agreements.	Months 4-6	Community Engagement Office	Legal support, Documentation
3.	Outreach Events	Organize outreach events such as workshops, seminars, and public lectures on sustainability topics.	Months 7-9	Community Engagement Office	Venue, Speakers, Promotion
4.		Host community forums and town hall meetings to solicit input and feedback on sustainability initiatives.	Months 10-12	Community Engagement Office	Facilitation and Communication
5.	Volunteer Programs	Develop volunteer programs that engage students, faculty, and staff in community service projects.	Months 4-6	Student Affairs Office, Faculty	Volunteer coordination, Training
6.		Collaborate with community organizations to identify service opportunities and project needs.	Months 7-9	Community Engagement Office	Partner coordination, Resources
7.	Educational Outreach	Offer educational outreach programs for local schools and youth organizations on sustainability topics.	Months 10-12	Academic Departments, Student Clubs	Curriculum development, Materials
8.		Develop interactive workshops, field trips, and hands-on activities to engage participants.	Months 13-15	Community Engagement Office	Educational resources, Transportation
9.	Community Projects	Launch community-based projects that address local sustainability challenges and provide tangible benefits.	Months 16-18	Academic Departments, Student Clubs	Funding, Project management
10.		Collaborate with community partners to implement projects such as urban gardens, recycling programs, or energy audits.	Months 19-21	Community Engagement Office	Resources, Project coordination

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