TSUL Below

Zero Program

Strategic Plan

Purpose

Resources utilization as well as the manufacturing and mining industries have played a significant role in the amazing economic progress of Uzbekistan over the past few decades. The nation's economy today ranks sixth in the world in terms of greenhouse gas (GHG) emissions, and first in Europe and Central Asia, as a result of its high reliance on fossil fuels, energy-intensive industrial sector, and low overall energy efficiency. (about half of all energy-related GHG emissions are attributable to inefficient housing stock)

Like the rest of Central Asia, Uzbekistan is also highly vulnerable to climate change. Climate change increases the likelihood of natural disasters and affects the country's natural resources, agriculture, land, and water efficiency. The country ranks 96 out of 191 countries in climate vulnerability (ND-GAIN 2019). It is prone to earthquakes and floods that affect an average of 1.4 million people and cause almost $3 billion in losses every year. A regional study estimates that about 70% of developmental problems in the Central Asia region is caused by freshwater shortages. According to the World Resources Institute, Uzbekistan is among the 25 countries most exposed to water stress, and the changing climate will likely further exacerbate water scarcity. Severe water scarcity and land degradation threaten agricultural productivity and food security.

The Tashkent state University’s leadership and community members are highly supportive of action to be taken and recognize that both organizational change and individual behavioral change are required in equal measure (TSUL Below Zero

Initiative Baseline Survey). The first stage is to understand our goals, and the next is to take action. The Below Zero Program is the University's commitment to understand and demonstrate concrete, ambitious and transparent climate action, using the University as a living laboratory. Through the program, we will also build knowledge, frameworks and capacity to support climate action at scale and at pace in Uzbekistan, in our region and globally.

The TSUL Council declared in May 2022 that by 2030, we will have direct on-campus greenhouse gas emissions for energy, waste, work, and transport that were below zero. To fully realize the environmental, social, and economic advantages of hostile climate action, new skills are needed in addition to systemic change in our infrastructure, behaviors, organizational norms, data gathering, and decision-making processes. As the national university, we have not only a unique responsibility but most importantly, the capability to lead the nation and be at the forefront of leading this transformational change.

Mission

Contribute to global environmental sustainability, through our research, teaching and operations by becoming a greenhouse gas emissions negative university through the TSUL Below Zero Program.

Emissions boundary

The initial emissions boundary for TSUL Below Zero includes:

- All direct (Scope 1) emissions
- All energy-related (Scope 2) emissions
- University travel (excludes commuting) and waste (partial Scope 3) emissions.

This boundary may be expanded throughout the course of the program to include additional Scope 3 emissions, in line with the University's commitment to deliver and role-model ambitious climate action.

Targets

- Net zero GHG emissions by 2025
- Below zero emissions by 2030

We will meet our targets in the most ethical, sustainable and efficient way by:

- **Reducing** emissions as much as possible within the emissions boundary, first and foremost
- **Offsetting** difficult to abate emissions, only as a last resort, and by using only high-quality, carbon credits on Uzbekistan land

• **Removing** more emissions than we produce through carbon removal activities connected to TSUL land, research, teaching or partnerships ("TSUL-connected carbon removal activities")

Approach

• To be successful, climate action requires systemic, large scale and integrated infrastructural, institutional and behavioural transformations (See Figure 1).

• We will follow and contribute to improvements in international best practice where they exist. However as many of these practices are emerging we will play a role in establishing and testing best practice models.

• Iteration and experimentation will underpin our approach and we will rapidly upscale and integrate successful outcomes.

• Engaging our community through opportunities for research, teaching and shared learning will be crucial to achieve the TSUL goals and build capacity for others.

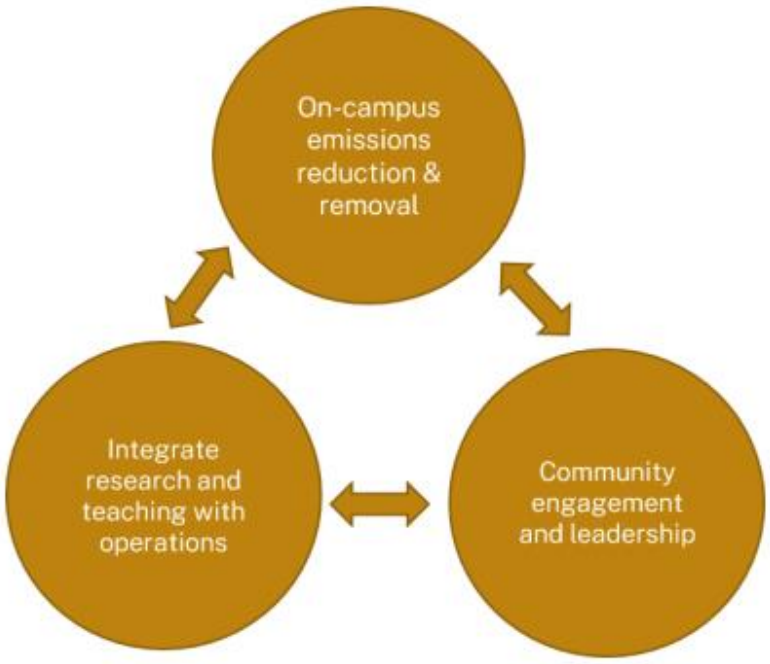

Figure 1: TSUL Below Zero three-pronged approach to climate action

Process

Below Zero uses a logic model to capture and simplify the breadth and interconnections of activities required to deliver our commitments. This logic model builds on and integrates information from scientific literature, benchmarking, community consultation and pilot activities to establish our vision and the six

necessary outcomes for TSUL to achieve by 2030 to deliver the vision. These results are divided into a customized set of constitutive outputs, from which the initial set of specific activities to be organized, funded, and carried out are determined. (see Figure 2). The logic model further makes explicit the key assumptions underpinning the development of the actions>output>outcome framework, as well as known barriers and risks to progress.

Below Zero engagement

The Below Zero Program team must collaborate with other organizations on campus in order to inspire dispersed action if it is to be effective in implementing the essential change at scale and pace in a sustainable manner. Climate action at the scale and pace proposed by TSUL requires more than a program, it requires creating a movement within our community. The necessary engagement will take place on three different levels.

Led by Below Zero – Actions that the Below Zero team will lead and is accountable for delivering.

Partnership with Below Zero – Actions that Below Zero will conduct in partnerships with Divisions, Colleges and other local areas, under a joint accountability and joint resourcing model.

Influenced by Below Zero – Actions that Below Zero will influence by providing support and information to Divisions, Colleges and other local areas to resource and deliver outcomes.

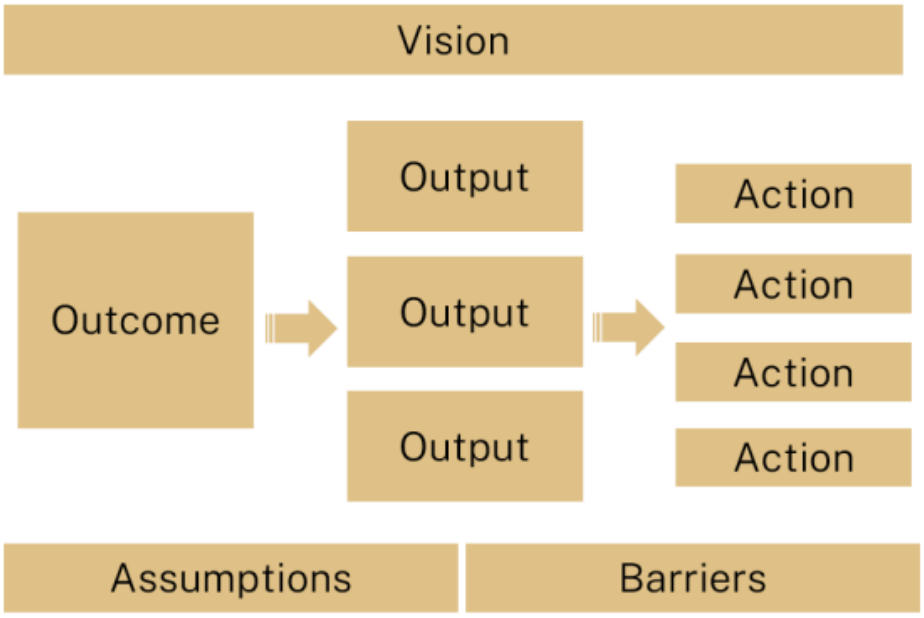

Figure 2: Overview of the logic model underpinning the Below Zero strategic plan

Vision

By 2030 we have:

• Embedded green-house gas reduction and removal in our business operations and culture.

• Powered transformational change by integrating the expertise of our staff students and partners and in turn, creating capability to drive at scale and at pace climate action outside of TSUL.

• Shared our learnings, contributed to the national and global climate action agenda and inspired others to follow our lead.

Outcomes for 2030

People

A climate-literate and climate-capable culture throughout the University, where transparency and achieving climate and sustainability goals are drivers of success across the organization and for individuals.

TSUL institutional action is necessary but not sufficient for the Below Zero commitments to be met and sustained into the foreseeable future. Mutually supportive institutional, local area and individual leadership and action are necessary to effect and sustain change. Our staff and students need to be climate-literate to allow them to meaningfully engage in the change program, so that they understand why change is necessary, how it may impact them and how they can be proactive participants. We need networks of climate capable staff and students to build capacity to design, develop and implement many of the proposed actions or apply them to their own context. Transparency is required to ensure that we can accurately measure our progress towards our targets.

Environment

An interconnected natural, built and digital environment that demonstrates, enables and encourages climate-positive decisions and behaviours.

The TSUL campuses, systems and online presence are windows into our actual collective values and priorities. They must consistently and legibly align with our commitment and narrative for those to be credible in the public eye. As individuals and groups, we inhabit a range of ANU environments and systems that enable (or discourage) particular behaviours and ways of thinking. Outcome 1 (People) cannot

be achieved without consistent positive reinforcement and enablement from our environments.

Leadership

Demonstrated leadership through establishing and identifying catalyzing and remodeling best practice and a systemic approach to ambitious climate action.

The rapidly dwindling timeframes for meaningful climate action mean that leadership is required now to reduce complexity and build capacity. Leadership and role-modelling are first internal: our Executive and Senior Leaders must ostensibly champion the TSUL commitment in everything they do.

To establish and/or continuously develop best practices for aggressive climate action, we must find and work with a variety of partners and "cotravellers" who share our values. Achieving and sustaining Below Zero for TSUL is a critical first step we have a unique responsibility to leverage our action by sharing our learnings and building capacity to accelerate climate action by others. We have unique expertise and resources, as well as access to many national fora. Our advocacy in these spaces must be consistent, legible and sustained to drive societal change.

Net Zero

Achieve net zero for the emissions boundary for 1 Jan-31 Dec 2025 and sustain net zero year on year from 2026-2029 (inclusive).

Achieving net zero for TSUL within 5 years of launching the Below Zero program drives us to act at pace and demonstrate the feasibility of ambitious and systemic climate action, especially in terms of reducing emissions. Maintaining net zero in the following years demonstrates that such rapid climate action can be sustained for extended periods of time. Establishing a “steady state” of net zero operations enables us to test the robustness of our approach to changes (positive or negative) in our context and activities, study and document the benefits and challenges of net zero operations, and consolidate and share these learnings. Sustaining net zero operations provides additional time to scale up new capability and capacity to deliver TSUL-connected carbon removal activities.

Below Zero

Achieve below zero emissions for the emissions boundary for 1 Jan-31 Dec 2030 using only TSUL-connected carbon removal activities.

It motivates us to recommit to ambitious climate action: continue rapid emissions reductions, to minimize the amount of carbon removal required to meet our annual emissions needs, and instead turn our focus to draw down our historical emissions.

We committed to achieving below zero for TSUL within 5 years of achieving net zero. Ensuring that there is an TSUL connection with all carbon removal activities serving our net and below zero targets not only provides assurance and oversight that TSUL carbon The Tashkent state university of law 8 of 18 removal activities are of the highest quality but also serves as an opportunity for capacity building amongst researchers and students in the emergent field of carbon removal.

Plan

1. People

A climate-literate and climate-capable culture throughout the whole University, where success for the organization as a whole and for individuals depends on openness and the achievement of climate and sustainability goals.

	Output	Below Zero engagement	By 2025	By 2030
1.1	Executives, staff, students and our partners are climate literate and understand the Below Zero program and its importance.	HR, Student Services, International Office, Advancement.	Staff training and student education modules and activities are developed and pilot delivery completed. Good climate/ sustainability citizenship is included as an Tsul graduate outcome	Training modules and activities are embedded in staff and student induction and development processes.
1.2	Climate-capability is embedded across all functions across the University.	Partnership with all Colleges	Key roles in each College are formally identified as requiring climate capability and performance metrics are set and tracked	All Colleges and Portfolios have sustainability plans in place and demonstrate proactive and continuous performance and improvement
1.3	Climate and sustainability goals are incorporated into human resource management policy and practices, including recruitment, position descriptions and the professional development review process		Integration completed for all new TSUL leadership recruitments (all senior appointment and general appointments)	Integration completed for all recruitments, Academic Promotions and Professional Staff (re)classificat ions

1.4	Staff and students, as members of the community, have an opportunity to contribute to the goals of Below Zero		Green Impact is established and participation meets the national average.	Below Zero internships, seed funding and community partnerships are established into "business as usual" TSUL operations

2. Environment

An interconnected natural, built and digital environment that enables, encourages and progresses climate-positive decisions and behaviours.

	Output	Below Zero engagement	By 2025	By 2030
2.1	Our built and natural environments demonstrate our commitment to climate action	Influence with Facilities and Services and Campus Planning Committee.	Informative signage on TSUL campuses. Development of a "living lab" for testing innovations	Climate-action is an explicit consideration in all TSUL campus plans and implemented projects
2.2	Our built and natural environments foster low-carbon decisions and behaviours by our community.	Influence with Facilities and Services.	The University campus is host to one pilot mobility node integrated with a thermal hub. There is an established campus-wide management program to divert waste from landfill	The University Campus Masterplan, Below Zero plans, Environmental Management Plan and local area/precinct plans work toward a common goal, and shared actions are prioritised
2.3	Climate action is highly visible on the TSUL digital platforms and in key corporate documents	Influence with organizations	Below Zero has a presence on TSUL website. Below Zero content is included in key corporate documents.	Climate and sustainability performance are an explicit part of all TSUl public-facing documents.
2.4	TSUL policies, procedures, enterprise systems and processes guide day-to-day		Embedding of Below Zero in priority TSUL policies and	Climate action and sustainability are integrated

	climate positive decisions and behaviours		procedures is backed by integrated updates to corresponding TSUL enterprise systems and processes such as Concur, Travel Management System	throughout all TSUL operational systems and processes

3. Leadership

Demonstrated leadership through establishing and identifying best practice and a systemic approach to deliver transformative change on climate action.

	Output	Below Zero engagement	By 2025	By 2030
3.1	TSUL has built capability and capacity in staff and students to empower them to be ambassadors and leaders or positive climate action both at, and beyond TSUL		Below Zero monitors and reports annually on the progress and impact of "alumni" (staff or students) of the program	TSUL is publicly recognised as a primary source of expertise and talent in Uzbekistan for climate action via performance on relevant rankings and awards, media mentions, and employability metrics
3.2	TSUL has demonstrated leadership on climate action by providing information and sharing experiences with other organisations to help them to set and reach targets	organizations	TSUL has released and publicised a foundation al "building blocks" for achieving net zero	Below Zero has released and actively publicised an integrated series of building blocks for achieving and sustaining net zero operations
3.3	TSUL practically demonstrates the financial co-benefits of ambitious climate action by measuring and reinvesting savings and income into the Program to sustain and accelerate action		All net operational savings and income streams delivered by Below Zero are reinvested in the Program	TSUL transparently publishes sources of funding (both internal and external) and spend on Below Zero as part of our annual report
3.4	TSUL has influenced and encouraged transformational changes by demonstrating the		Annual community attitudinal surveys	Below Zero encourages TSUL research to find

	value of embedding climate action in organisational and business processes		show year on year improveme nt awareness and support for Below Zero	relationships between ambitious climate action and corporate performance

4.Net Zero

Achieve net zero for the emissions boundary for 1 Jan-31 Dec 2025 and sustain net zero year on year from 2026-2029 (inclusive).

	Output	Below Zero engagement	By 2025	By 2030
4.1	We use a recognised accreditation program for our carbon accounting framework		TSUL carbon accounting is transparent and thirdparty verified	
4.2	We have improved our monitoring of Scope 3 emissions outside of the Below Zero Emissions Boundary.		We have estimated emissions from commuter transport, and audited current contracts.	We have mapped and estimated other Scope 3 emissions.
4.3	We have mapped and estimated other Scope 3 emissions	Partnership with Facilities and Services	10% reduction in energy consumption per m2 net lettable area from 2019	20% reduction in energy consumption per m2 net lettable area from 2019
4.4	20% reduction in energy consumption per m2 net lettable area from 2019	Partnership with Facilities and Services	35% of natural gas use is eliminated on university campus	35% of natural gas use is eliminated on university campus
	Our campuses are powered by renewable energy	Partnership with Facilities and Services	All non-ACT campuses use 100% renewable energy 2% of total electrical consumption at Acton Campus is contributed by onsite renewables	University Campus is powered using 100% renewable electricity 10% of total electrical consumption at University Campus is contributed by onsite renewables. All campuses use 100% renewable electricity, from onsite generation where possible
	We have implemented integrated processes and systems to operationalise the TSUL “Polluter pays" principle		Pilot implementati on in 2024 and incorporate in planning and budgeting from 2025	Part of core TSUL functions and continuously improved.

5.Below Zero

Achieve below zero emissions for the emissions boundary for 1 Jan31 Dec 2030 using TSUL-connected carbon removal activities.

	Output	Below Zero engagement	By 2025	By 2030
5.1	Marginal emissions are offset or inset with TSUL-connected carbon removal activities		First strategic suite of TSUL connected Carbon removal activities are being developed and deployment is planned	TSUL-connected carbon removal activities demonstrate capacity to sustain Below Zero and scaling up potential to accelerate the drawdown of historical emissions and/or broadening of TSUL Emission Boundaries.

Endnotes

1. United Nations Environment Program. Emissions Gap Report 2021 - The Heat is On: A world of climate promises not yet delivered – published October 2021 - https://www.unep.org/resources/emissions-gap-report-2021

2.Tashkent state university of law. TSUL by 2025 Strategic Plan – published 2022 - link