



**CLIMATE ACTION PLAN
META UNIVERSITY 2025-2030**

Efficiency 4.1-1 META U-2025
First Edition

Almaty, 2025



Almaty, 2026

1. GENERAL PROVISIONS

- 1.1 This META University Climate Action Plan for 2026-2030 (hereinafter referred to as the Plan) is an official local document of META University LLP and establishes a unified procedure for accounting, reducing and publicly disclosing greenhouse gas emissions, energy and water consumption, waste generation and other indicators of the university's climate impact.
- 1.2 The plan is developed in order to implement the META University Strategy 2025-2030, ESG principles, the UN Sustainable Development Goals. It applies to educational, scientific, administrative, economic and social activities, as well as to buildings, premises, equipment and processes under the operational control of the university.
- 1.3 The requirements of the Plan are mandatory for structural subdivisions within their powers and serve as the basis for the preparation of annual plans, budget requests, reports, registers of evidence and public materials.

PASSPORT OF THE DOCUMENT

Parameter	Set value
Status	META University Official Public Local Document
Validity period	2026–2030 years
Strategic Communication	META University Strategy 2025-2030, primarily Tracks 1, 2, 3, 4, 5 and 6
Base Period	2025-2026 school year with a complete 12-month dataset of validated data
Basic accounting standard	GHG Protocol Corporate Standard and Applicable National Emission Factors
Net Zero's Goal	Scope 1 and Scope 2 — no later than December 31, 2030; Significant Scope 3 Categories – Long-Term Trajectory to 2040
Process owner	Vice-Rector for Development / ESG Coordinator
Frequency of the report	Annually, no later than December 31 of the year following the reporting period



2. RELATIONSHIP TO META UNIVERSITY'S STRATEGY 2025-2030

- 2.1 The Climate Plan is developed as an applied document for the implementation of the university's strategy. It translates the mission, vision, and ESG priorities into measurable actions, deadlines, responsible and supporting documents.
- 2.2 All climate measures are included in the annual plans of the departments and are evaluated simultaneously by two results: the actual environmental effect and the contribution to the strategic KPI of the university.

MISSION OF META UNIVERSITY

To develop teaching and research, forming competent, ethical, socially responsible and enterprising graduates with an entrepreneurial mindset, and to create science-based solutions for technological progress and sustainable growth in Central Asia.

ВИДЕНИЕ META UNIVERSITY

The leading eco-techno-entrepreneurial university in Central Asia, generating knowledge, innovation and technology in business, engineering and sustainable development.

2.1 VALUES IMPLEMENTED BY THE PLAN

- Sustainable development – the climate agenda and ESG are integrated into teaching, research, and campus management.
- Social responsibility – decisions take into account the safety, accessibility, well-being and interests of the university community.
- Innovation – digital monitoring, energy-efficient technologies and student projects are used as tools to reduce impact.
- Freedom and academic integrity – methodologies, data, and assumptions are disclosed transparently and verifiable.
- Diversity and inclusion – climate measures do not create barriers and take into account the needs of different groups.
- Well-being and quality of life – a green, safe and resource-saving environment is considered as part of the well-being of students and employees.

2.2 CONTRIBUTION TO STRATEGIC DIRECTIONS

№	Strategic direction	Contribution of the Climate Plan
1	Research activities	Climate research, applied developments in energy efficiency, water, waste, AI monitoring and sustainable infrastructure; Publishing and commercializing solutions.

№	Strategic direction	Contribution of the Climate Plan
2	Quality Education	Inclusion of cases on climate and rational use of resources in educational programs, project-based learning and student portfolios.
3	Internationalization	Joint ESG projects, exchange of accounting methods, participation in international networks and public disclosure of results in English.
4	ESG approaches	Scope 1-3 Governance, Green Campus, Resource Efficiency, Environmental Procurement, Reporting, and the Plan-Implementation-Evaluate-Improve Management Cycle.
5	Financial stability	Reducing resource costs, assessing the total cost of ownership, attracting grants and partner financing for green projects.
6	Branding and global promotion	The public Climate Action Plan, the annual climate report evidence base strengthen the credibility of the META University brand.

2.3 DIRECT LINKING TO STRATEGY KPIS

№	Strategic KPI	2025	2030	Implementation mechanism in the Plan
4.1.1	Proportion of management and learning processes digitized	40%	80%	Digital register of meters, emissions, waste, procurement and activities; electronic approvals.
4.1.2	Reduction of specific operating costs for infrastructure per 1 student	0%	at least 15%	Energy audit, LED, mode management, water conservation, variance control and life cycle cost procurement.
4.1.3	Occupancy rate of classrooms and laboratories	50%	75%	The schedule and zonal energy consumption are linked to the actual occupancy of the premises.

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№	Strategic KPI	2025	2030	Implementation mechanism in the Plan	
4.1.4	Share of electronic document management	50%	90%	Elimination of overprinting, electronic forms, evidence archive and climate reports.	
4.1.5	Infrastructure improvements implemented according to plan	75%	85%	An annual list of green improvements with budget, deadlines, acts and measured effect.	
4.1.6	Educational programs with projects/cases on sustainable development	20%	50%	Climate cases, research assignments and projects of industrial partners.	
4.1.7	Satisfaction of students and faculty with infrastructure and availability of resources	65%	80%	Annual survey, analysis of thermal comfort, lighting, water, accessibility and quality of the environment.	

Strategic indicators are reproduced as benchmarks for the Strategy 2025–2030; When the Strategy is officially updated, the table is updated without reducing public climate commitments.

3. PRINCIPLES OF CLIMATE MANAGEMENT

3.1 META University adopts a sequential approach: first measurement and avoidance of emissions, then technical reduction, transition to low-carbon energy and only then compensation for unavoidable residual emissions.

3.2 Climate governance is based on an annual cycle of planning, budgeting, execution, review and corrective actions.

- completeness of organizational and operational boundaries of accounting;
- comparability of indicators by years and preservation of the recalculation methodology;
- traceability of each value to the bill, act, device reading or official register;
- the priority of absolute reduction over compensation;
- data owner liability and internal review;
- publicity of goals, methods, results and reasons for deviations;
- participation of employees, students, partners and suppliers.

4. ORGANIZATIONAL BOUNDARIES AND SCOPE 1–3

4.1 The inventory covers sources under the operational control of META University. For international comparability, emissions are grouped into three GHG Protocol scopes.



SCOPE 1 - DIRECT EMISSIONS

The basic principle is that each source is included in the equipment register and is supported by data on fuel, mileage, refrigerants or technological process.

Source	Calculation data	Proof
Stationary fuel combustion	type and volume of fuel	Invoices, invoices, journals
Company transport	liters of fuel or mileage	waybills, receipts
Backup generators	Engine hours and fuel	Operation log
Refrigerants	type, refueling and leaks	Acts of service
Laboratory Processes	Gases & Materials	Laboratory Logs

SCOPE 2 - INDIRECT ENERGY EMISSIONS

Emissions associated with purchased electricity, heat, cooling or steam. The calculation is based on the confirmed consumption and the applicable emission factors.

Source	Calculation data	Proof
Electricity	kWh by month	Bills and meter readings
Thermal energy	Gcal/kWh/other unit	Vendor accounts
Cooling or steam	If available, purchase volume	Contracts & Invoices
Renewable energy	kWh produced and purchased	Separate meter, certificates

SCOPE 3 - OTHER INDIRECT EMISSIONS

Value chain outliers that occur outside the operational control of the university. Categories are included in stages according to the criteria of materiality, data availability, and manageability.

Priority category	Calculation data	Proof
Travel of students and employees	Mode of transport, distance, frequency	Annual Survey
Business trips	Route and Travel Class	orders, tickets, reports
Purchased goods and services	Volume/Cost and Categories	contracts, procurement register

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Priority category	Calculation data	Proof	
Waste	weight by type and method of handling	Acts of transfer	
Water	m ³ and wastewater disposal method	Bills & Meters	
IT & Hardware	Quantity, service life, supplier	Inventory Register	
Dining & Activities	Servings, menus, disposable materials	Orders and Acts	

5. BASE YEAR AND ACCOUNTING METHODOLOGY

- 5.1 The base period is the 2025–2026 academic year, subject to the availability of confirmed data for the full 12 months. If the data for an individual source is incomplete, the first subsequent full period becomes the basis for it, which is disclosed in the report.
- 5.2 The organizational boundary is formed according to the principle of operational control. Emissions are expressed in tonnes of CO₂ equivalent. The university keeps source documents, calculation files, coefficients and a log of changes in the methodology for at least five years.
- 5.3 In the event of a significant change in the area, structure of the campus, acquisition or disposal of the facility, the baseline is recalculated to ensure comparability. The basis and amount of recalculation are published.

Indicator	Formula/Approach	Unit	Source
Source Emissions	Activity Data × Emission Factor	tCO ₂ e	Invoice/Act + Approved Ratio
Scope 1+2	Sum of Certified Scope 1 and Scope 2 Emissions	tCO ₂ e	Inventory
Carbon Intensity	Scope 1+2 / Gross Internal Area	kgCO ₂ e/m ²	inventory + area passport
Energy intensity	Energy Consumption / GIA	kWh/m ²	Invoices + GIA
Reduction progress	(Base - reporting year) / Base × 100%	%	Comparable annual data
Share of renewable energy	Renewable energy / total consumption × 100%	%	Meter/Certificate
Waste disposal	Recycling & Reuse / Total Volume × 100%	%	Operator's Acts



6. CLIMATE GOALS AND KPIS

6.1 META University sets a Net Zero goal for Scope 1 and Scope 2 no later than December 31, 2030. At least 50% of the reduction should be achieved by actual measures relative to the verified baseline; Compensation is allowed only for residual emissions after the implementation of technically and economically feasible measures.

6.2 For Scope 3, the university creates a qualitative record of at least seven essential categories by 2030 and forms a long-term decline trajectory until 2040.

№	Indicator	Unit	2026	2027	2028	2029	Goal 2030
1	Reduction of Gross Scope 1+2 to Base	%	Base	≥10	≥25	≥40	≥50 and Net Zero Remainder
2	Carbon Intensity Scope 1+2	% of the database	Base	-10	-25	-40	-50
3	Electricity per 1 m ²	% of the database	Base	-8	-15	-20	-25
4	Heat energy per 1 m ²	% of the database	Base	-5	-12	-16	-20
5	Share of LED lighting	%	Inventory	70	90	95	100
6	Automatic/Zone Light Control	% of premises	10	30	50	60	≥70
7	Own renewable energy	% of consumption	Feasibility study	Pilot	Growth	≥3	≥5
8	Acquired low-carbon energy	%	Analysis	5	15	20	≥25

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№	Indicator	Unit	2026	2027	2028	2029	Goal 2030
9	Water consumption per 1 person	% of the database	Base	-5	-12	-16	-20
10	Waste for recycling/reuse	%	Base	30	45	55	≥60
11	Office paper reduction	% of the database	Base	-40	-60	-70	-80
12	Environmentally responsible procurement	%	Politics	40	55	65	≥70
13	Workers who have completed climate training	% per year	40	60	70	75	≥80
14	Student Climate Projects	units/year	3	5	7	8	≥10
15	Scope 3 categories with quality accounting	units.	Screening	3	5	6	≥7

After the approval of the verified base, intermediate absolute values are drawn up in an appendix to the annual report. The revision cannot weaken the goal of Net Zero 2030 without a separate public decision by the Scientific Council.

7. ACTION PLAN FOR 2026–2030

7.1 Activities integrate technical, managerial, educational and behavioural measures. For each initiative, a passport is formed with a budget, initial value, expected effect and evidence of implementation.

№	Event	Result/Proof	Term	Responsible	Communication
1	Scope 1-2 Inventory and Scope 3 Screening	Register of sources, calculation file, internal audit report	2026, annually	ESG coordinator; ACS; Finance	4.1.1
2	Campus Energy Audit	Report/Report, List of Measures, Payback and tCO _{2e} Prioritization	2026–2027	ACS; External experts	4.1.2; 4.1.5



No	Event	Result/Proof	Term	Responsible	Communication
3	Switching to LED and sensors	Invoices, installation certificates, photos, consumption measurements	2026–2030	ACS; Procurement	4.1.2; 4.1.5
4	Heating, ventilation and air conditioning control	Temperature regulations, service reports, monthly analysis	annually	AHS	4.1.2; 4.1.7
5	Solar Generation Pilot	Feasibility study, project, separate meter, annual output kWh	2026–2029	Vice-Rector for Development; ACS; Partners	1; 4; 5
6	Water metering system and water saving measures	Meters, aerators, leak log, m ³ dynamics	2026–2030	AHS	4.1.2; 4.1.5
7	Separate collection and agreements with operators	Containers, contracts, acts with mass of waste	2026–2030	ACS; Student Parliament	4; 6
8	Electronic document management and paper-light office	Electronic forms, paper purchase data, printing rules	2026–2030	Digitalization; Office	4.1.1; 4.1.4
9	Sustainable procurement policy	Public policy, environmental criteria, procurement share register	2026–2027	Finance; procurement; Lawyers	4; 5
10	Sustainable Mobility Plan	Survey, bicycle parking, business trip register, online meetings	2027–2030	HR; International Department	3; 4
11	Climate Integration in EP and Project-Based Learning	Syllabuses, cases, projects, portfolios of students	annually	Schools; Leading programs	2; 4.1.6
12	Annual Climate Report	Public RU/EN/KK report, methodology, data, deviations, improvement plan	annually	ESG Coordinator	3; 4; 6



8. EDUCATION, RESEARCH AND ENGAGEMENT

- 8.1 The campus is used as a living laboratory: energy, water and waste data can be applied to educational tasks and research after depersonalization and verification. Climate cases are included in the disciplines of business, engineering, IT, analytics, design, law and management.
- 8.2 The University supports interdisciplinary teams, a student club for sustainable development, hackathons and applied projects with industrial partners. Results are measured not by the number of activities, but by measurable impact, prototype, implementation, publication or partner solution.

Direction	Minimum result	Indicator 2030	Evidence
Educational Programs	Climate and Resource Cases in Programs and Disciplines	$\geq 50\%$ VP	EPs, Discipline Catalogs, Syllabuses
Student Projects	Energy, Water, Waste, Climate Data Solutions	≥ 10 per year	project passports, prototypes, photos, reports
Research	Publications, applications, R&D and commercialization	Annual Growth	Scopus/WoS, contracts, grants
Employee training	Scope 1-3 training, procurement and ESG	$\geq 80\%$ per year	Programs, participation sheets, testing
Partnerships	Joint pilots and open events	at least 3 initiatives per year	contracts, programs, results reports

9. MANAGEMENT, RESPONSIBILITY AND FINANCING

- 9.1 General management is carried out by the President of META University. The Scientific Council approves the Plan and reviews the annual progress. Operational coordination is provided by the Vice-Rector for Development / ESG Coordinator.
- 9.2 Each business unit shall designate a data owner. The financial service checks invoices and payment documents, the ACS checks technical data, schools check educational results, and the science and international relations department checks research and partnerships.

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Participant	Credentials	Reporting
President / Academic Council	Approval, Resources, Monitoring of Strategic Progress	Annual review
Vice-Rector for Development / ESG Coordinator	Methodology, data consolidation, action plan, public report	quarterly/annually
Administrative and Maintenance Service	Meters, equipment, energy, water, waste, operational measures	monthly
Finance & Procurement	Invoice verification, budgeting, environmental criteria, procurement register	quarterly
Leading Schools and Programs	Integration into EPs, Educational Projects, Involvement of Faculty and Students	by semesters
Department of Science and International Relations	Research, grants, international projects, mobility	annually
Student Parliament	Initiatives, feedback, volunteering, information campaigns	by events

9.1 FUNDING

- annual operating and investment budget of the university;
- savings from energy and resource saving measures with partial reinvestment;
- scientific grants and commercialization projects;
- partnership, sponsorship and charitable financing;
- green financing and energy service models with economic feasibility.

"Each project above the established internal limit is accompanied by a calculation of the life cycle cost, payback period and expected reduction in tCO₂e.

10. MONITORING AND PUBLIC REPORTING

- 10.1 Energy and water data are collected monthly; waste, purchases, business trips and events – at least quarterly; Emissions inventory and climate report – annually.
- 10.2 Prior to publication, the report undergoes technical, financial and methodological verification. The report reveals boundaries, coefficients, exceptions, changes in methodology, base year, absolute and intensity indicators, progress, reasons for deviations and corrective measures.
- 10.3 The current version of the Plan, climate reports, procurement and investment policies, the Net Zero public commitment and available supporting materials are stored on the official website.



Data Flow	Frequency	Owner	Control
Electricity, heat, water	monthly	AHS	Bills & Meters
Fuels, transport, refrigerants	quarterly	AHS	Journals & Acts
Waste	quarterly	AHS	Acts of operators
Procurement & Paper	quarterly	Finance/Procurement	Register and primary documents
Travel and mobility	annually	HR/International Department	Orders, tickets, survey
EP, Research, Projects	by semesters/annually	Schools/Science	Academic and project documents
Summary Inventory	annually	ESG Coordinator	Internal Review and Approval



APPENDIX 1. ANNUAL CLIMATE DATA REGISTER FORM

The form is filled out for each object and source. A link to the electronic archive of evidence is attached to each line.

Period	Object/Source	Scope	Indicator	Quantity	Unit	Document/Link
month/year	Electricity	2	Consumption		kWh	Bill/Counter
month/year	Thermal energy	2	Consumption		Gcal	Account
month/year	Fuel	1	Volume		l/m ³	Waybill
month/year	Refrigerant	1	Refilling/Leakage		kg	Act
quarter/year	Waste	3	by type and method		kg	Operator's Act
year	Business trips	3	passenger-km		km	Tickets/Register
year	GIA Area	—	Interior Area		m ²	Registration certificate

