

Report on Potential Physical and Transition Climate Risks of NJSC “K.I. Satbayev Kazakh National Research Technical University”

This report presents the results of a pilot qualitative assessment of physical and transition climate risks, as well as climate-related opportunities for NJSC “K.I. Satbayev Kazakh National Research Technical University” (Satbayev University).

Summary of the Report:

The assessment was conducted taking into account the recommendations of the international Task Force on Climate-related Financial Disclosures (TCFD).

The analysis is based on CMIP6 ensemble modeling data (IPCC) for two internationally recognized contrasting climate scenarios with planning horizons up to 2030, 2040, and 2059: a baseline scenario of moderate decarbonization (SSP2-4.5) and a pessimistic stress scenario (SSP5-8.5).

Key conclusion of the assessment: The operations, infrastructure, and academic base of Satbayev University demonstrate a high level of resilience to climate change. Under the most probable baseline scenario (SSP2-4.5), the identified climate risks are largely assessed as manageable, especially in the near-term horizon of the next five years. Global climate change and the transition to a low-carbon economy do not pose a critical threat to the continuity of the University’s operations in the foreseeable future. The main strategic focus can be directed not toward immediate radical capital expenditures, but toward “smart” infrastructure adaptation and the monetization of emerging technological opportunities.

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