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**Bio :**

**Ayagoz Khamzina** is a Research Fellow at the Department of Science and Innovation, Astana IT University (Astana, Kazakhstan), and a Ph.D. candidate in Project Management. She holds an M.Sc. and a B.Sc. in Chemical Technology from al-Farabi Kazakh National University. Her doctoral work centers on project management frameworks for large-scale energy and digital-infrastructure initiatives.

Her research interests include energy-system modeling and scenario analysis (PyPSA, LEAP), integration of renewable energy and energy storage, electricity-market design and tariff policy, carbon-pricing instruments, smart-city data analytics, and machine learning applications in the energy sector. She has served as a researcher on nationally funded projects, including the modeling and digitalization of Kazakhstan's power system to inform new market models and tariff policies, the KZLEAP fuel-and-energy balance for decarbonization and carbon-pricing analysis, and the Climate-Resilient Economic Development (CRED) initiative. Her publications cover hydrogen and thermal energy efficiency, national decarbonization pathways, and policy evaluation for Kazakhstan's energy transition.