

INNOVATION SCIENCE AND TECHNOLOGY

ISSUE 6, PART 1 / JUNE 2026

 Acceptance of papers



**Acceptance of
papers**

Published monthly



Topics

economics,
technology, social
sciences



EDITOR-IN-CHIEF:

Mirzaliyev Sanjar Makhmatjon ugli

DEPUTY EDITOR-IN-CHIEF:

Makhmudov Nosir Makhmudovich
DSc., Prof., Academician

DEPUTY EDITOR-IN-CHIEF:

Ochilov Bobur Bakhtiyor ugli – Senior
lecturer at TSUI

THE SCIENTIFIC-POPULAR ELECTRONIC
JOURNAL **"INNOVATION SCIENCE AND
TECHNOLOGY"** HAS BEEN REGISTERED
UNDER THE NUMBER **C-5669633** BY THE
AGENCY FOR INFORMATION AND MASS
COMMUNICATIONS (AOKA) OF THE
REPUBLIC OF UZBEKISTAN, EFFECTIVE
FROM OCTOBER 9, 2024.

CONTACTS

Phone: **+998 50 737 87 88**

Website: <https://ist-journal.uz>

Email: innovationist2025@gmail.com

The scientific electronic journal "Innovation Science and Technology" has been included in the list of scientific publications recommended for the publication of main scientific results of dissertations for the award of PhD and DSc degrees in economics and technical sciences, in accordance with the Resolution No. 370 of the Presidium of the Higher Attestation Commission of the Republic of Uzbekistan, dated May 8, 2025.

Editorial board:



Sharipov Kongiratbay Avezimbetovich,
Doctor of Technical Sciences (DSc), Professor



Abdurakhmanova Gulnora Kalandarovna, Doctor of
Economic Sciences (DSc), Professor



Cham Tat Huei,
Doctor of Philosophy (PhD), Professor (Malaysia)



Muhammad Imran Sadiq
Doctor of Philosophy in Economics (PhD), Professor,
Malaysia



Ahmed Aziz Ismail
Doctor of Technical Sciences (DSc),
Professor (Egypt)



Lee Chin
Doctor of Philosophy in Economics (PhD), (Malaysia)



Asongu Simplice
Doctor of Philosophy in Economics (PhD), Cameroon



Rui Dang
Doctor of Chemistry (DSc), Professor, China



Zahoor Ahmed
Doctor of Philosophy in Economics (PhD), Turkey



Shujaat Abbas
Doctor of Philosophy in Economics (PhD), Russia



Tina A Coffelt
Doctor of Philosophy in Educational Sciences (PhD),
USA



Abdikarimova Dinara Rustamxanovna
Doctor of Economic Sciences (DSc), Professor

Kurbonbekova Mohichehra Turobjonovna
Doctor of Economic Sciences (DSc), Professor

Alimardonov Ilkhom Muzrabshokovich
Doctor of Economic Sciences (DSc), Professor



Razakova Barno Sayfieva
Doctor of Philosophy in Economics (PhD)



Khasanov Sarvar Ulugbek ugli
Doctor of Philosophy in Economics (PhD)



Kholikova Rukhsora Sanjarovna
Associate Professor (PhD)

CONTENTS

BUDGETING BASED ON THE BALANCED SCORECARD SYSTEM IN STRATEGIC MANAGEMENT ACCOUNTING.....	8
Pardaeva Shakhnoza Abdinabievna	
TURIZM SOHASIDA TARJIMA NAZARIYASINING O'RNI	13
Bahronova Charos Mirabbos qizi	
THE ROLE OF ESG PRINCIPLES AND DIGITAL TECHNOLOGIES IN THE DEVELOPMENT OF CORPORATE SOCIAL MANAGEMENT SYSTEMS	16
Shokhrukh Abdisalimovich Muratkosimov	
A COMPARATIVE SEMANTIC FIELD ANALYSIS OF "BENEFIT" ACROSS ENGLISH AND UZBEK CULTURES	23
Mohira Husanovna Divanova	
ROSSIYA TIJORAT BANKLARIDA DEPOZIT OPERATSIYALARINI RIVOJLANTIRISHNING O'ZIGA XOS JIHATLARI	30
Rahimov Akmal Matyaqubovich	
USE OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES AGAINST CYBER THREATS IN THE PUBLIC SECTOR.....	37
Nuratdinov Xushnid Begzadovich, Erejepov Kewlimjay Kaymatdinovich	
PUL-KREDIT SIYOSATI INSTRUMENTLARIDAN FOYDALANISH AMALIYOTINI TAKOMILLASHTIRISH ..	42
A.A. Ismailov	
"O'ZBEKISTON TEMIR YO'LLARI" AJNING AMALIY IQTISODIY HOLATI TAHLILI VA OPSIONLARNI ANIQLASH	48
Bobojonova Zarnigor Shokirovna	
COMPARATIVE ANALYSIS OF DEEP LEARNING ALGORITHMS FOR AUTOMATED SKIN DISEASE DIAGNOSIS FROM DERMOSCOPIC IMAGES.....	56
Nazirova Elmira Shodmonovna, Abdusalomova Shokhista Boboyor qizi	
STRATEGY FOR THE DEVELOPMENT OF THE FINANCIAL MARKET OF UZBEKISTAN IN THE CONTEXT OF DIGITAL AND GREEN TRANSFORMATION	61
Muftaydinov Mansur Kiyomidinovich	
TOURISM POTENTIAL OF UZBEKISTAN AND FINANCIAL FACTORS FOR ITS DEVELOPMENT	68
Bau Long	
CASH FLOWS OF "TERRITORIAL ELECTRIC NETWORKS" JSC: COMPREHENSIVE ACCOUNTING ANALYSIS AND METHODOLOGICAL APPROACHES TO IMPROVEMENT.....	75
Djuraev Davlat Djonibekovich	

CASH FLOWS OF “TERRITORIAL ELECTRIC NETWORKS” JSC: COMPREHENSIVE ACCOUNTING ANALYSIS AND METHODOLOGICAL APPROACHES TO IMPROVEMENT

Djuraev Davlat Djonibekovich

Doctoral student of Tashkent State University of Economics

Abstract. The article presents the cash flow statement of “Regional Electric Networks” JSC and its 14 constituent units for 2020–2024. Based on empirical data, a complex analysis was carried out.

Keywords: HET JSC, cash flow analysis, line 095 methodology, IFRS 8, econometric model, $R^2 = 0.987$, state subsidy, cross-subsidization, 14 territorial divisions, investment attractiveness.

Annotatsiya. Maqolada “Hududiy elektr tarmoqlari” AJ va uning 14 ta tarkibiy hududiy bo‘linmasining 2020–2024-yillardagi pul oqimlari to‘g‘risidagi hisoboti empirik ma‘lumotlar asosida kompleks tahlil qilingan.

Kalit so‘zlar: HET AJ, pul oqimlari tahlili, 095-satr metodologiyasi, IFRS 8, ekonometrik model, $R^2 = 0.987$, davlat subsidiyasi, kross-subsidiyalash, 14 ta hududiy bo‘linma, investitsion jozibadorlik.

Аннотация. В статье на основе эмпирических данных проведён комплексный анализ отчёта о движении денежных средств АО «Hududiy elektr tarmoqlari» и его 14 территориальных подразделений за 2020–2024 годы.

Ключевые слова: АО «HET», анализ денежных потоков, методология строки 095, IFRS 8, эконометрическая модель, $R^2 = 0.987$, государственная субсидия, перекрёстное субсидирование, 14 территориальных подразделений, инвестиционная привлекательность.

INTRODUCTION

Regional Electric Networks JSC is the main and largest enterprise in the electricity distribution network of the Republic of Uzbekistan. The company was established in 2019 as part of the reform of Uzbekenergo JSC and currently consists of 14 structural divisions: 2 regional JSCs and 12 regional branches. The annual revenue of Regional Electric Networks JSC as of 2024 amounted to 7,820 billion soums, which is approximately 2.3% of the country’s GDP. In recent years, reforms in the electricity sector of Uzbekistan have increased the need to improve financial accounting, transparency, and cash flow analysis in distribution companies.

PP-282 (2025), “Reforms on Financial Accounting”, accelerates the transition to international standards (IFRS, IAS) in the industry [1]. In this context, a comprehensive analysis and improvement of the current state of cash flow accounting of HET JSC is an important research task.

LITERATURE REVIEW

Largay and Stickney (1980), the founders of the world scientific school of cash flow accounting, were among the first to substantiate the importance of cash flow ratios in predicting enterprise bankruptcy in their work “Cash Flows, Ratio Analysis and the W. T. Grant Company Bankruptcy”.

In a later study, Bowen et al. (1987) analyzed the difference between cash flows and accruals.

In the world scientific school of the electric power industry, Joskow (2007), in his work “Regulation of Natural Monopoly”, sheds light on the theoretical foundations of the regulation of natural monopoly and its impact on accounting.

Pollitt (2008) analyzed the challenges of electricity and gas regulation in a low-carbon policy environment in his work “The Future of Electricity and Gas Regulation in a Low-Carbon Policy World”.

Stoft (2002) wrote a seminal monograph on the economics and pricing models of electricity markets.

RESEARCH METHODOLOGY

The following methodological approaches were used in the research: systematic analysis, comparative analysis, historical analysis, and case study methods.

ANALYSIS AND RESULTS

HET AJ's key cash flow indicators for 2020–2024 are presented in Table 1.

Table 1

Cash flow indicators of HET JSC (2020–2024, billion soums)¹

No.	Index	2020	2021	2022	2023	2024
1	Tariff revenue	3,950	4,870	5,840	6,720	7,820
2	Operating Cash Flow (OCF)	680	840	1,020	1,240	1,480
3	State subsidy	280	340	450	520	620
4	Accounts Receivable	950	1,180	1,380	1,620	1,840
5	Volume, billion kWh	58.2	61.8	64.5	67.4	70.1

As can be seen from the table, the tariff revenue of HET JSC has increased twofold in 5 years (3,950 → 7,820 billion soums) — CAGR 18.6%. However, at the same time, state subsidies (280 → 620 billion soums; CAGR 22.0%) and accounts receivable have increased (950 → 1,840 billion soums; CAGR 18.1%). This trend indicates that tariff revenues are not growing at an appropriate rate and financial risks are increasing.

According to the methodology of line 095, the indicators of HET JSC in 2024 are as follows: 095.1 = +620 billion soums (state subsidy); 095.2 = –160 billion soums (net cross-subsidization); 095.3 = +780 billion soums (preferential category); total 095 = +1,240 billion soums. This volume is equal to 15.9% of total tariff revenue — the fact that it is not reflected in a separate line is a significant issue from the point of view of transparency.

The results of the IFRS 8 §13 reportable test for 14 divisions of HET JSC are presented in Table 2.

Table 2

IFRS 8 reportable analysis of HET JSC divisions (2024)²

No.	Segment	Revenue, billion soums	Share, %	Category
1	Tashkent City Electricity Company JSC	1,760	22.5	Reportable §13 (mandatory)
2	Tashkent region ET JSC	1,080	13.8	Reportable §13 (mandatory)
3	Samarkand HET	720	9.2	Reportable §16 (optional)
4	Fergana HET	665	8.5	Reportable §16 (optional)
5	Karakalpakstan HET	365	4.7	Reportable (high subsidy)
6–14	The rest (9)	3 230	41.3	All Others

One of the most important scientific results is a multifactor econometric regression model. Based on the data of the State Economic Development Agency for 2020–2024 (60 months), the following model was determined:

$$OCF = b_0 + b_1 \cdot VOLUME + b_2 \cdot RATE + b_3 \cdot CPI + b_4 \cdot RATE + b_5 \cdot USD + e$$

Model quality indicators are high: $R^2 = 0.987$; Adjusted $R^2 = 0.985$; F-statistic = 87.4 ($p < 0.001$); MAPE = 1.2%. Odds: $b_0 = -124.5$ $b_1 = 18.7$ (volume); $\beta_2 = 0.082$ (rate); $\beta_3 = -6.4$ (CPI); $b_4 = -8.2$ (percent); $\beta_5 = -0.45$ (USD). The biggest influence is the volume of electricity sales (43.5%) and the tariff rate (28.2%).

Based on the model, the OCF forecast for 2030 under three macroeconomic scenarios is as follows: optimistic - 3,120 billion soums (CAGR 13.2%); baseline - 2,650 billion soums (CAGR 10.2%); pessimistic - 1,900 billion soums (CAGR 4.3%). These forecasts serve as the basis for the investment plan and decision-making of HET JSC.

¹ Prepared by the author based on information from Olingpan

² Prepared by the author

CONCLUSION AND SUGGESTIONS

As a result of the research conducted, the following conclusions were drawn:

A comprehensive analysis was conducted on the basis of empirical data, and it was found that although tariff income has increased twofold (3,950 → 7,820 billion soums), state subsidies (280 → 620 billion soums) and receivables (950 → 1,840 billion soums) are also growing at the same rate.

The line 095 methodology (095.1 = 620, 095.2 = -160, 095.3 = 780, total = 1,240 billion soums) and the “5+1 reportable” segmental model based on IFRS 8 (Tashkent city, Tashkent region, Samarkand, Fergana, Karakalpakstan + “All Others”) may improve the accounting of HET JSC in terms of transparency and investment attractiveness.

The multivariate econometric regression model ($R^2 = 0.987$; MAPE = 1.2%) provides a good basis for forecasting the operating cash flow of HET JSC. Forecasts for three macroeconomic scenarios until 2030 are as follows: optimistic — 3,120 billion soums; baseline — 2,650 billion soums; pessimistic — 1,900 billion soums.

References

1. Resolution of the President of the Republic of Uzbekistan No. PQ-282 dated September 15, 2025. *On Measures to Improve the Financial Reporting System in Accordance with International Requirements and Standards*. Available at: <https://lex.uz/docs/7732281>
2. Bowen, R. M., Burgstahler, D., & Daley, L. A. (1987). The incremental information content of accrual versus cash flows. *The Accounting Review*, 62(4), 723–747.
3. Damodaran, A. (2012). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* (3rd ed.). Hoboken: John Wiley & Sons.
4. Joskow, P. L. (2007). Regulation of natural monopoly. In A. M. Polinsky & S. Shavell (Eds.), *Handbook of Law and Economics* (Vol. 2, pp. 1227–1348). Amsterdam: Elsevier.
5. Largay, J. A., III, & Stickney, C. P. (1980). Cash flows, ratio analysis and the W. T. Grant Company bankruptcy. *Financial Analysts Journal*, 36(4), 51–54.
6. Mills, J. R., & Yamamura, J. H. (1998). The power of cash flow ratios. *Journal of Accountancy*, 186(4), 53–61.
7. Pollitt, M. G. (2008). The future of electricity and gas regulation in a low-carbon policy world. *The Energy Journal*, 29(Special Issue 2), 63–94.
8. Stoft, S. (2002). *Power System Economics: Designing Markets for Electricity*. Piscataway, NJ: IEEE Press/Wiley-Interscience.

Proofreader: Zokir ALIBEKOV
Layout and Designer: Oloviddin Sobir ugli

2026. № 6

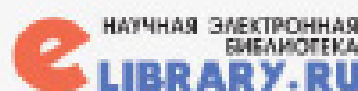
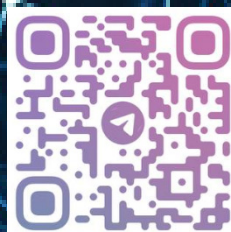
© When materials are reproduced, the INNOVATION SCIENCE AND TECHNOLOGY journal must be cited as the source. Authors are responsible for the accuracy of the information in materials and advertisements published in the journal. Editorial opinions may not always align with those of the authors. Submitted materials will not be returned to the editorial office.

To publish articles in this journal, you may submit articles, advertisements, stories, and other creative materials through the following links. Materials and advertisements are published on a paid basis.

You may subscribe to the journal at any time using the following details. Once subscribed, please send a screenshot or photo of your payment confirmation to our Telegram page @iqtisodiyot_77. Based on this, we will send the latest issue of the journal to your address each month.

“The journal “INNOVATION SCIENCE AND TECHNOLOGY” has been registered by the Agency for Information and Mass Communications under the Administration of the President of the Republic of Uzbekistan from 09.10.2024 under the registration number №390637. License number: C-5669633. PNFL: 30407832680027

Our address: Tashkent city, Yunusobod district, 19th block,
House 17.



Acceptance of articles

Published every
monthly



Directions

Social, economic, political,
technological, scientific



Scopus || Scientific electronic journal specializing in Scopus

CERTIFICATE NUMBER: №390637

**ORDER NUMBER ACCORDING TO
THE LICENSE REGISTER: C-5669633**

CONTACT:



Contact us
+998 50 737 87 88



Telegram channel
t.me/scopus_IST2100



Journal official website
<https://ist-journal.uz/index.php/IST>