ICMA
Economic Intelligence
Vol: 24.2
Shaping Pakistan's Economic Future

ICMA INTERNATIONAL
lead strategically

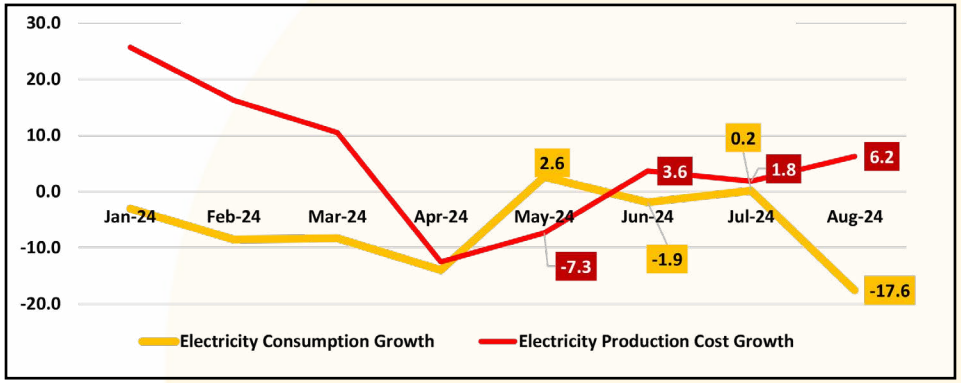
Rising Electricity Prices discouraging Industrial Consumers to stay in the National Grid

ICMA's analysis of DISCOs-wise data for Pakistan's power sector from 2013 to 2023 shows that rising electricity prices over the last 2-3 years have led to a declining growth trend in the number of industrial electricity consumers staying on the national grid, causing many to leave. This trend is most noticeable in K-Electric, which lost 0.4% of its industrial consumers in 2023 compared to 2022. However, electricity distribution companies in Hyderabad (HESCO) and the Tribal Area (TESCO) have experienced a steady increase in industrial consumers. The declining trend in overall industrial electricity consumers has raised concerns about the rising electricity production costs, which could lead to even higher prices in the future.

Decreasing Total Electricity Consumption (%) & Rising Electricity Production Cost in Pakistan (%) 2024 Vs. 2023 (YoY)

The following graph indicates that from June 2024 to August 2024 (Year on Year), the growth in total electricity consumption is declining, which is resulting in an increase in electricity production costs.

Figure: 1

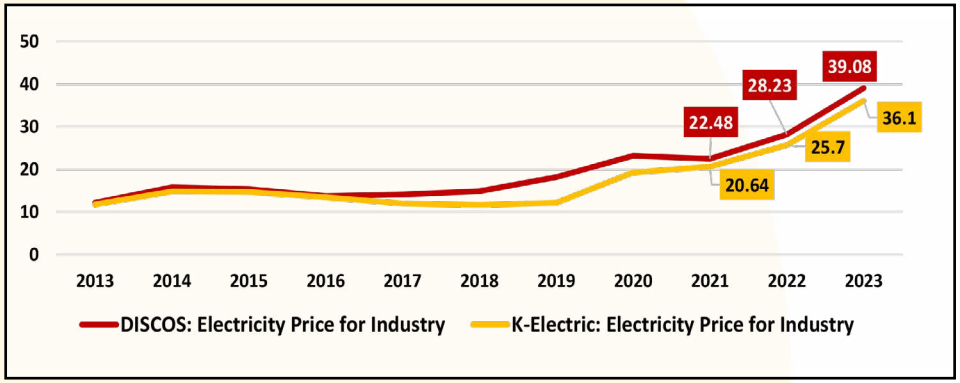


Source: NEPRA, CPPAG XWDISCOs Energy Purchase Data from August 2023-2024.

Rising Electricity Prices for INDUSTRY in Pakistan (Rs./KWh) DISCOs Vs. K-Electric

The following graph shows the persistent rise in electricity price for industry consumers, both in DISCOs and K-electric.

Figure: 2



Source: NTDC, Power System Statistics 48th Edition

Analysis Methodology

- The "Total Energy Sold" data from NEPRA is converted into a growth rate to determine "Electricity Consumption Growth." **(See Figure: 1)**
- The "Total Energy Cost" data from NEPRA is first converted into "Average Cost" and then into a growth rate to calculate "Electricity Production Cost Growth". **(See Figure: 1)**
- The data for the average electricity price (Rs./KWh) for industrial consumers in DISCOs and K-Electric has been obtained from the National Transmission and Despatch Company (NTDC). **(See Figure: 2)**

Analysis Methodology

Figures: A to K

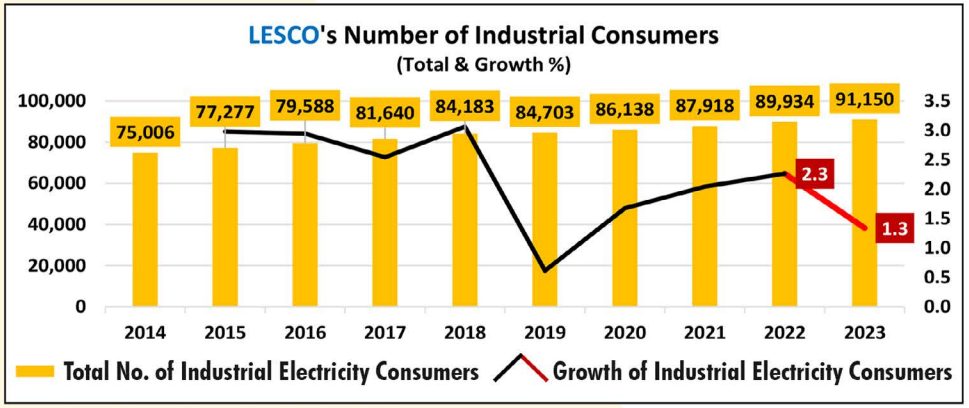
- The figures show DISCO-wise and K-Electric data on the total number of industrial consumers, sourced from NTDC.
- The total number of industrial consumers is also converted into a growth rate to analyze the retention and exit rates of these consumers from the national electricity grid.

Economic Analysis

Figure: A to K

- Although the data shows a slow increase in the total number of industrial electricity consumers in DISCOs, their growth rate has been steadily declining over the past 2-3 years. Specifically, K-Electric lost 0.4% of its industrial consumers in 2023 compared to 2022.
- This trend highlights the economic issue that industrial consumers are being discouraged from staying on the national electricity grid due to the continuous rise in electricity prices.
- It also raises concerns about the increasing electricity production costs, driven by fixed costs, which could lead to even higher prices in the future.

Figure: A



Source: NDTC, Power System Statistics 48th Edition

Figure: B

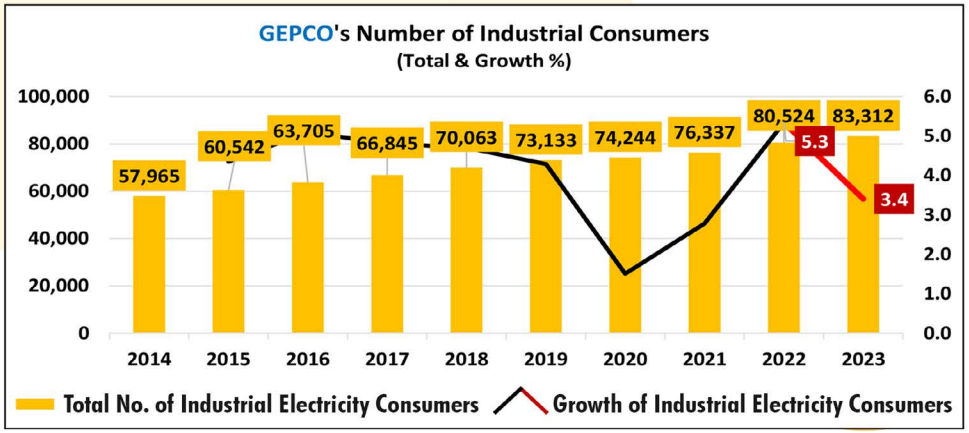


Figure: C

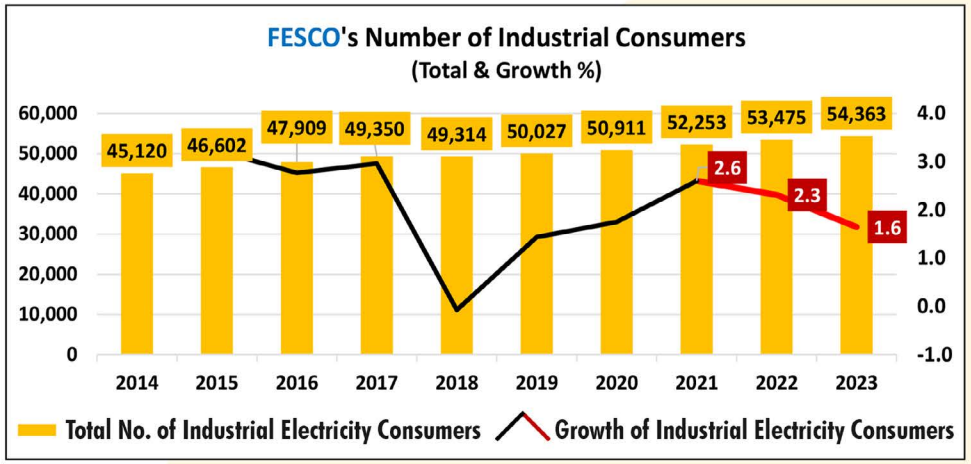


Figure: D

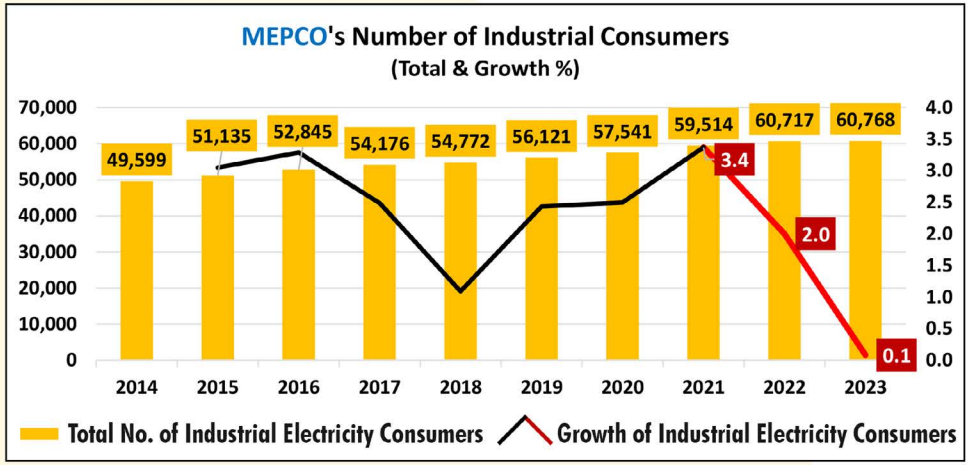


Figure: E

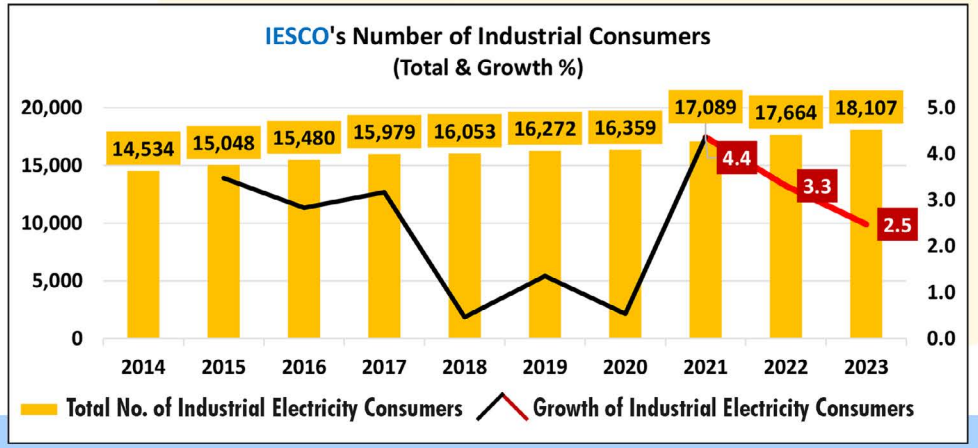


Figure: F

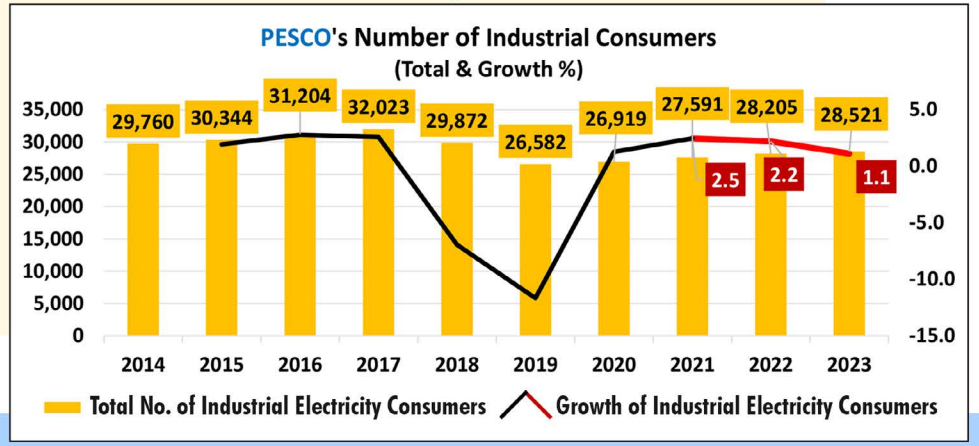


Figure: G

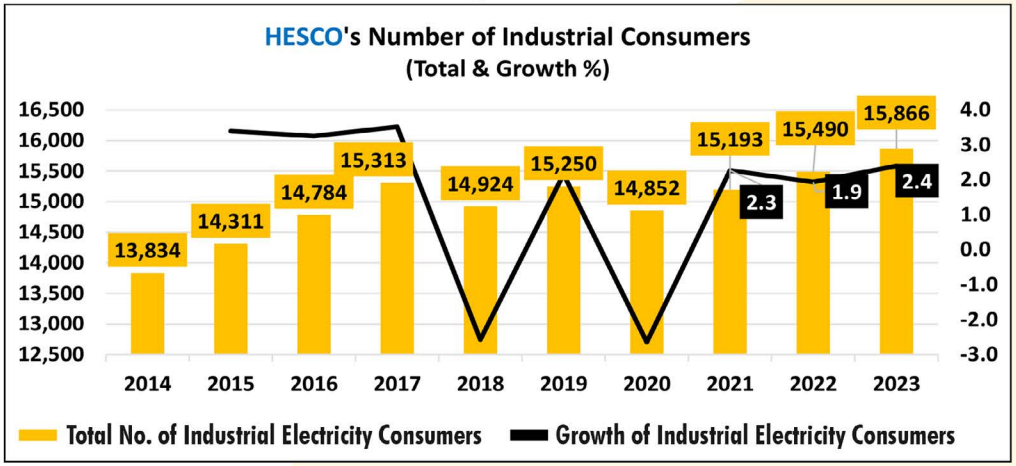


Figure: H

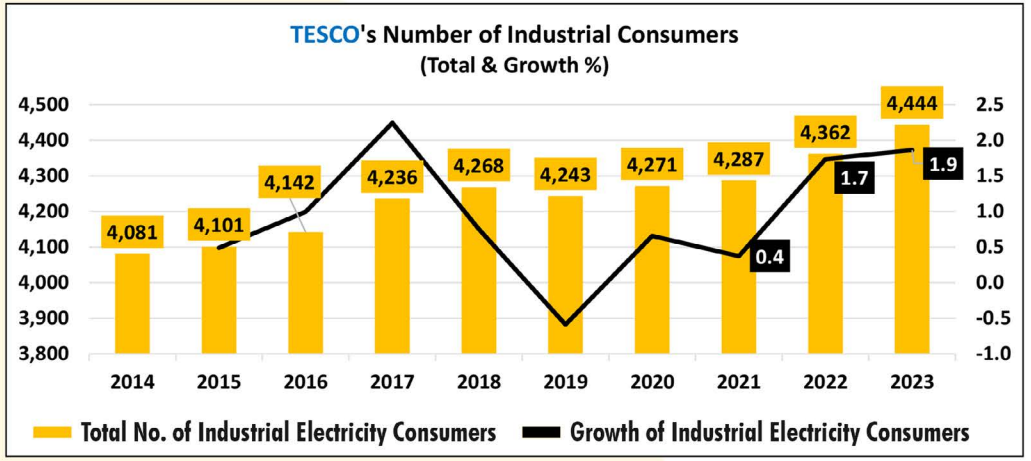


Figure: I

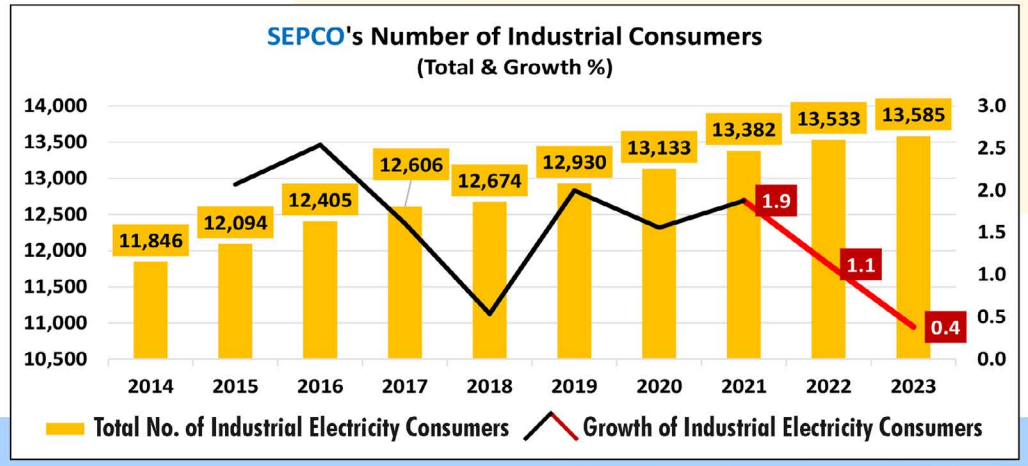


Figure: J

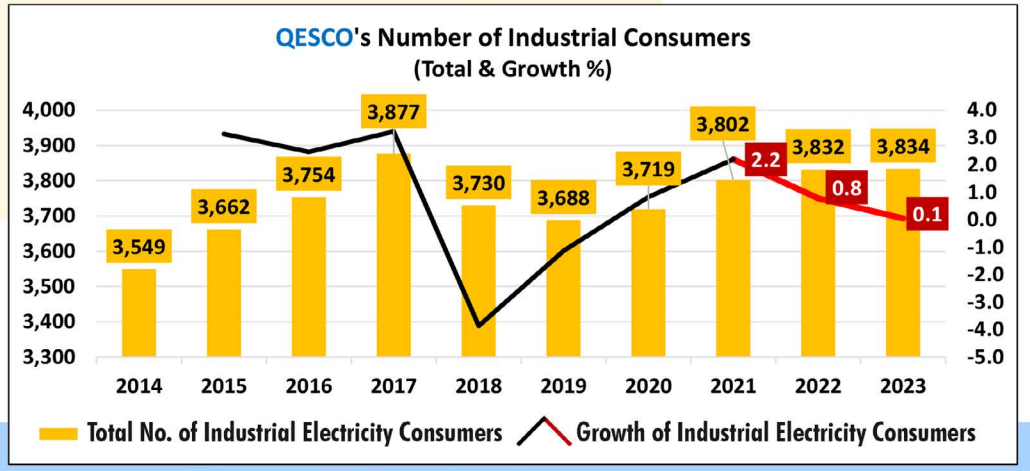
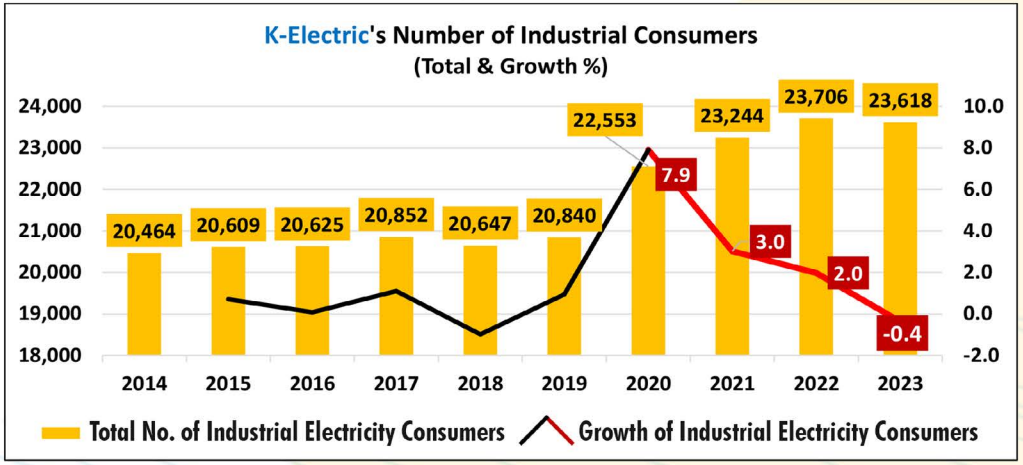


Figure: K



Key Reasons for Declining Power Consumers

- Rising cost of government-supplied electricity
- The percentage of Capacity charges is 62%-65% of the Overall tariff in FY 2023-24, increasing costs
- IMF program restricting fiscal flexibility and hindering immediate consumer relief
- Import of 12,000 MW of solar panels by 2024 significantly affecting energy demand
- Sahiwal Coal Power Plant operating below capacity, leading to significant financial losses
- Consumer shift towards self-generated power, particularly solar energy
- Various taxes i.e. GST, Extra Sales Tax, Further Sales Tax, Advance Income Tax and Electricity Duty inflate energy tariff for industrial consumer
- The under-utilization of 'Take or Pay' generation capacity, the currency devaluation, the increased KIBOR, LIBOR, US CPI and Local CPI leading to higher cost of energy

OUR PREVIOUS ISSUE

Scan QR code

To download previous issue

Key reforms for reducing electricity tariffs and boosting industrial demand

Provide Special Relief Packages for Industrial Consumers: Offering targeted tariff relief to industries will help lower production costs, making industrial goods more competitive domestically and internationally.

Renegotiate Power Purchase Agreements (PPAs): Revisiting agreements with Independent Power Producers (IPPs) can help reduce costs, especially by addressing "take-or-pay" clauses that require payments for unused electricity.

Optimize the Energy Mix by Shifting to Local Resources: Prioritizing the use of indigenous energy sources, such as renewable energy, will reduce dependency on expensive imported fuels and lower long-term energy costs.

Implement Reforms in Transmission and Distribution: Introducing structural changes to reduce transmission losses, minimize electricity theft, and improve revenue recovery will help alleviate the burden of circular debt and make the energy sector more sustainable.

Complete Hydropower Projects: Fast-tracking the completion of key hydropower projects like Suki Kinari and reactivating the Neelum-Jhelum Hydropower Project will add affordable, renewable energy to the grid.

Expand Renewable Energy Projects: Focusing on wind, solar, and other renewable energy sources will reduce reliance on costly imported fuels and help stabilize electricity prices.

Privatize Distribution Companies (DISCOs): Privatizing electricity distribution can improve efficiency, reduce technical and non-technical losses, and attract investment to upgrade infrastructure.

Develop a Competitive Wholesale Electricity Market: Establishing a market-based mechanism for electricity procurement will increase competition, driving down prices and lowering production costs for industries.

Abbreviations

CPPA-G : Central Power Purchasing Agency (Guarantee) Limited
NEPRA : National Electric Power Regulatory Authority
DISCOs : Distribution companies
FESCO : Faisalabad Electric Supply Company
GEPCO : Gujranwala Electric Power Company Limited
HESCO : Hyderabad Electric Supply Company
IESCO : Islamabad Electric Supply Company
LESCO : Lahore Electric Supply Company
MEPCO : Multan Electric Power Company
NTDC : National Transmission & Despatch Company
PESCO : Peshawar Electric Supply Company
QESCO : Quetta Electric Supply Company
SEPCO : Sukkur Electric Supply Company
TESCO : Tribal Electric Supply Company

References

National Electric Power Regulatory Authority (NEPRA):
- CPPAG XWDISCOs Energy Purchase Data from August 2023-2024.

https://nepra.org.pk/news.php

National Transmission & Despatch Company Description (NTDC):
- Power System Statistics 47th & 48th Edition.

The Express Tribune:
https://tribune.com.pk/story/2497324/power-demand-slumps-17-in-aug#:~:text=Electricity%20demand%20from%20Pakistan's%20national,the%20end%20of%20the%20heatwave.

Business Recorder:
https://www.brecorder.com/news/40319835

Disclaimer: This document uses figures from reliable sources, though they may be subject to revision. The R&P Department's analysis, intended to offer economic insight, relies on these figures.