

# ECONOMIC AND TECHNICAL CRITERIA APPLIED TO BENCHMARKING



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# Accountancy of Licensed Companies

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- The energy companies keep separate accounting records for:
  - Each activity subject to licensing pursuant to the ESEEA (Energy Sector and Energy Efficiency Act) and other activities
  - Each branch and enterprise

# Accountancy in Licensed Companies

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- The energy companies develop their own accounting policy and their own system for costs accounting and control

# Assets

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**In pricing only assets directly related to the activities under the license are recognized**

# Assets

- In cases of combined production of electric power and thermal energy the assets are separated per products
- Assets that cannot be directly assigned to the production of thermal energy or electric power are divided by a coefficient, which is calculated as the ratio of installed electric power facility to the total installed capacity of the power plant

# Assets

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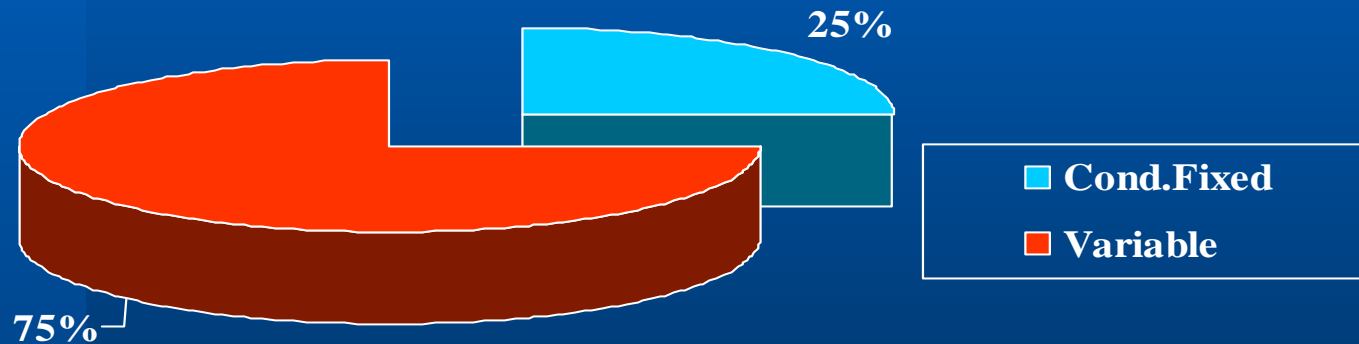
**For gas distribution companies the allocation of assets per groups of users is done by applying a coefficient accounting for the portion of fixed assets relevant to the respective group of users of the total value of fixed assets**

# Costs

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- **Cost projections are made as of the beginning of the regulatory period**
- **Prices include only the costs directly related to the activities under the license, divided into conditionally fixed costs and variable costs**

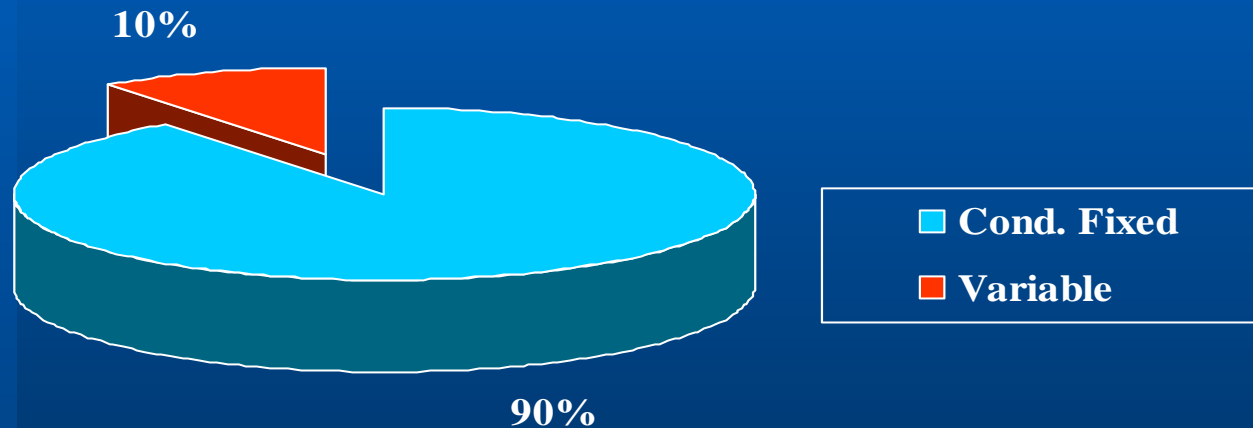
# Cost Structure in Thermal Energy Companies



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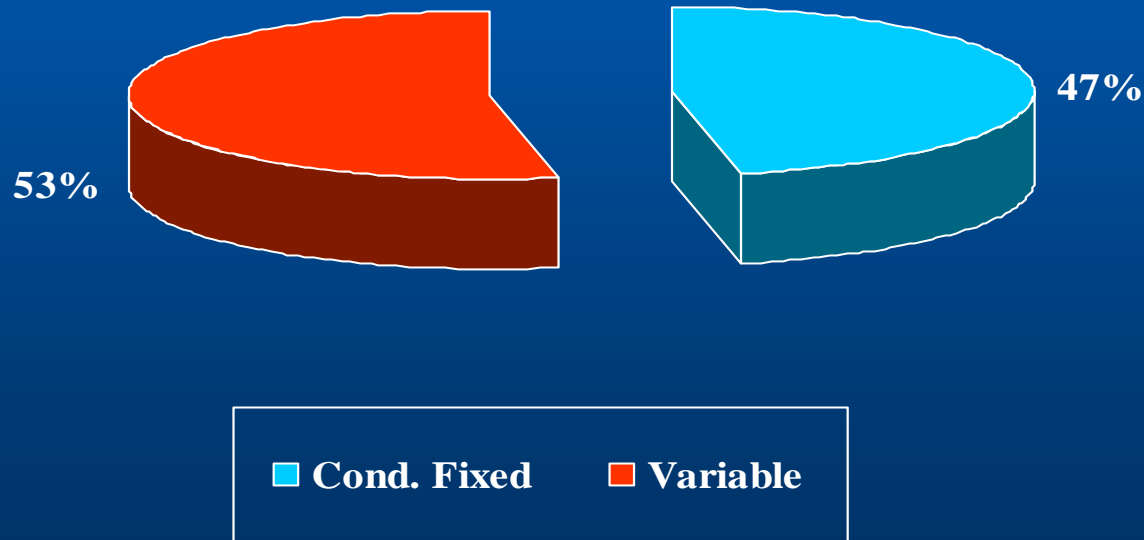


# Cost Structure in Gas Distribution Companies

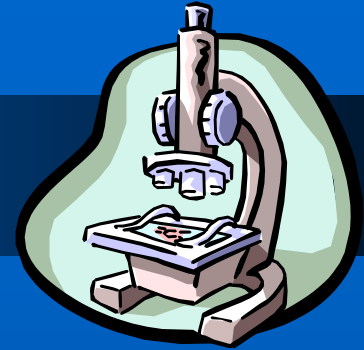


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# Cost Structure in Power Generating Companies



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**For regulating the activities in generation, transfer and distribution of electric power, the natural gas transfer and distribution, and the generation and transfer of thermal energy, the SERC issues guidelines regarding the information, which the energy companies should provide**

# Information Provided by Energy Companies

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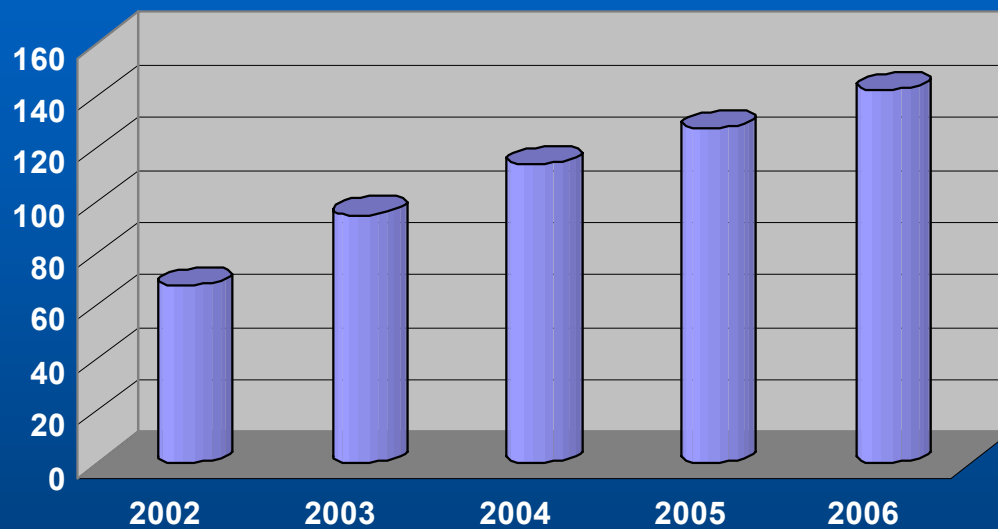
- **Costs**
- **Assets**
- **Capital structure**
- **Technical indicators**
- **Annual financial statements**
- **Investments and repair programs**
- **Further information**

# **Control over the Financial and Technical Performance of the Submitted Estimated and Reported Data**

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- **Comparison of estimated and reported data**
- **In case the regulatory period is longer than one year SERC adjusts the approved prices of energy companies over the years depending on the investment program implementation**
  - **Over-collected or under-collected revenue is accounted for**

## Investments in the Natural Gas Sector (BGL Million)



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# Control over the Financial and Technical Performance of the Submitted Estimated and Reported Data

- **Efficiency**

- **Analysis of average fixed cost;**
- **Analysis of average variable cost;**
- **Analysis of average total cost.**

# Control over the Financial and Technical Performance of the Submitted Estimated and Reported Data

- **Horizontal analysis**
  - Comparison of indicators of plants of similar scale, fuel base and production technology is made
  - Reasons for deviations are analyzed



# Control over the Financial and Technical Performance of the Submitted Estimated and Reported Data

- **Consumption**
  - Comparison between estimates and reported data;
  - Control over the implementation of the approved by MEER projections and programs for the country's energy balance and the efficient consumption of electric power and thermal energy, and natural gas.

# **Control over the Financial and Technical Performance of the Submitted Estimated and Reported Data**

## **Technical indicators used for benchmarking**

- **Reported technical indicators**
- **Calculated technical indicators**

# Technical Indicators Used for Benchmarking

- **Reported technical indicators**
  - Level of in-house needs of electric power;
  - Level of in-house needs of thermal energy;
  - Ratio of combined and forced electric power
  - Fuel consumption for plant ignition

# Technical Indicators Used for Benchmarking

- **Reported Technical Indicators**
  - Fuel consumption for plant ignition
  - Loss of steam and condensate in the cycle
  - Quantity of added water **XOB** in the plant
  - Feeding water temperature

# Technical Indicators Used for Benchmarking

- **Calculated technical indicators**
  - **Specific consumption of conditional fuel for thermal energy and electric power**
  - **Specific thermal energy consumption for electric power generation**
  - **Specific consumption of electric power for transfer of thermal energy**

# Technical Indicators Used for Benchmarking

- **Calculated technical indicators**
  - **Co-generation ratio**
  - **Distribution ratio**
  - **Ratio of thermal energy losses**
  - **Energy unit usage, time and capacity ratio**
  - **Technological costs for transfer and distribution**

# Prospective Activities

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- **Development of proposals for upgrading the pricing rules in the bylaws after the new Energy Sector Act enters into force**
- **Establishing of a uniform standardized accounting format for regulatory reporting, including development of regulatory accounting standards**

# PROSPECTIVE ACTIVITIES

- **Devising a uniform methodology for cost allocation per products and activities**
- **Devising a uniform methodology for determining technological costs**



# THANK YOU !

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