



PURC Tariff Setting

WASH SECTOR FINANCING AND TARIFF SETTING IN GHANA

Thursday 26th August, 2010
Coconut Grove Regency Hotel



PURC - The Commission Act 538

Functions

- **Provide guidelines for rates to be charged by utilities.**
- **Examine and approve rates to be charged by utilities for services provided**
- **Monitor standards of performance for provision of utility services**
- **Protect interest of both consumers and providers of utility services**
- **Promote fair competition among public utilities**
- **to conduct studies relating to economy and efficiency of public utilities;**
- **to make such valuation of property of public utilities as it considers necessary for the purposes of the Commission;**



PURC - The Commission

- Independent regulatory institution
 - ✓ Established by an Act of Parliament (Act 538), Oct, 1997
 - ✓ To regulate and oversee the provision of utility services
- Commissioners
 - ✓ Appointed by the President in consultation with Council of State
 - ✓ Appointed for 5 year term
 - ✓ Comprises of 9 commissioners
 - ✓ Chairman
 - ✓ Institutional Representation
 - ✓ Labour - TUC
 - ✓ Industries - AGI
 - ✓ Domestic Consumers
 - ✓ 4 Experts
 - ✓ Executive Secretary

PURC Directorates

- Directorate of Energy
- Directorate of Water
- Directorate of Regulatory Economics and Research
- Directorate of Consumer Services
- Legal Directorate
- Directorate of Finance and Administration
 - *Public Relations Department* { Under office of }
 - *Internal Audit Department* { Executive Secretary }



Development of Regulatory Mechanisms

- **Regulatory Philosophy**
 - ✓ Consultation and collaboration with Stakeholders
- **Development of Tariff Guidelines/Tariffs**
- **Consumer Protection**
 - ✓ Regulations on service termination
 - ✓ Regulations on complaint procedure
 - ✓ Regulation on Consumer Service Committee
- **Monitoring of Utility Operations**
 - ✓ Reporting – Operational and Financial
 - ✓ Monitoring task force



Purpose of PURC Tariff Policy

- Foundation of overall regulatory structure
- Protection of customers, especially the poor
- Ensuring that the GWCL can finance its activities
- Public accountability when determining tariffs

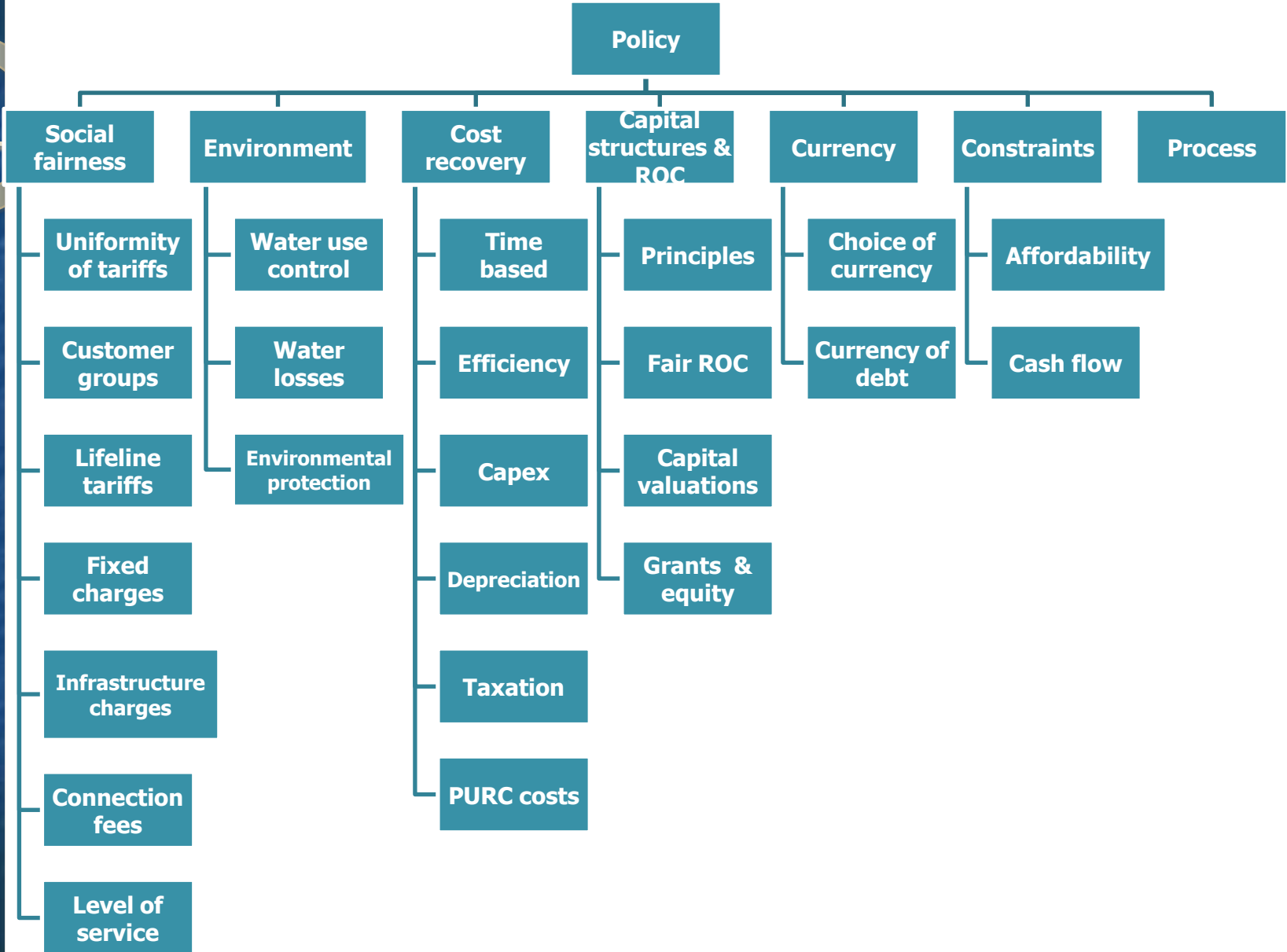
Stakeholders of a Tariff Policy

- **Customers** – to provide the best value level of service that can be afforded by promoting maximum efficiency
- **GWCL** – to ensure that its financial integrity is maintained
- **The environment** – to ensure that water resources are exploited at sustainable levels by promoting efficiency in the use of water
- **National treasury** – to reduce or remove the economic burden of subsidies
- **Society** – to promote social fairness
- **International development agencies** – to promote economic development and poverty alleviation in a sustainable and affordable manner

Policy areas

- Social fairness
- Environment
- Cost recovery
- Capital structures and return on capital
- Currency
- Constraints
- Process

PURC Tariff Policy Structure



Guiding principles

- A holistic approach to a Tariff Policy is necessary
 - No single policy option is mutually exclusive, the selection of one option will have a bearing on the selection of other options
- The Tariff Policy must be made public and subject to public scrutiny
- The Tariff Policy must enjoy general support by all the stakeholders
- The Tariff Policy must allow PURC a degree of discretion in interpretation and implementation
- The Tariff Policy must be flexible enough to adapt to changing circumstances

Social fairness – Major issues

- Uniformity of tariffs
 - Major impact on tariff determination calculation
- Lifeline tariffs
 - Conflict between VVB and conventional wisdom
- Infrastructure development charges and connection fees
 - May require a radical shift from current practices to achieve objectives
- Levels of service
 - Treatment of standpipe customers etc.

Environment – Major issues

- Tariffs to constrain consumption
 - Abstraction and other charges vs pro poor objectives
- Water losses
 - Targets vs economic levels of leakage

Cost recovery – Major issues

- Time based
 - Long or short term cost recovery
- Efficiency expectations
 - How determined
- Capital investment and depreciation
 - Many options available requiring considerable analysis of implications
- Taxation
 - Pre-tax or post-tax returns on capital
- PURC costs
 - How financed (government or through the tariff)

Capital structures and ROC – Major Issues

- General principle
 - Is capital structure a PURC concern or is it a GWCL internal management issue?
- What is a fair return on capital?
- Capital values on which a return is earned
 - Book value or current cost (or MEA) value?
- Grants and equity investment
 - Government expectations of returns on its equity
 - Can (or should) short term grant inputs be converted into long term tariff benefits?

Key Tariff Considerations

Objectives of tariff

- ✓ **Ensure full Cost recovery of reasonable and efficient costs**
- ✓ **Encourage efficiency through performance targets**
- ✓ **Provide incentives for operational efficiency**
- ✓ **Ensure financial viability of utilities**



PURC Tariff Responsibilities

- **Develop tariff setting mechanism which is fair and predictable.**
- **Ensure transparency in the tariff making process.**
- **Set efficient economic tariffs, based on efficient production costs**
- **Provide opportunity for utilities to earn reasonable margin**
- **To enable utilities to improve quality of service**



Tariffs - Consumer Considerations

a. Utilities



Performance benchmarks instituted

- * System loss and Non Revenue Water levels**
- * Collection rate**

b. Domestic consumers

- * Life line: ensure better targeting to low income consumers**
- * Compound house reduce punitive effect of the compound house problem**
- * Affordability**

c. Non-Residential Consumers

- * Ensure banks, Commercial houses, Offices pay economic tariffs**



Consumer Considerations continued

d. Industrial Consumers

- * **Maximum demand/ capacity adequately covered**
- * **Water Component – as a “pass through”**
- * **Tariffs realigned to reflect cost.**

e. Public awareness/education

- * **to sensitize the public**

f. Explain rationale for tariff decision

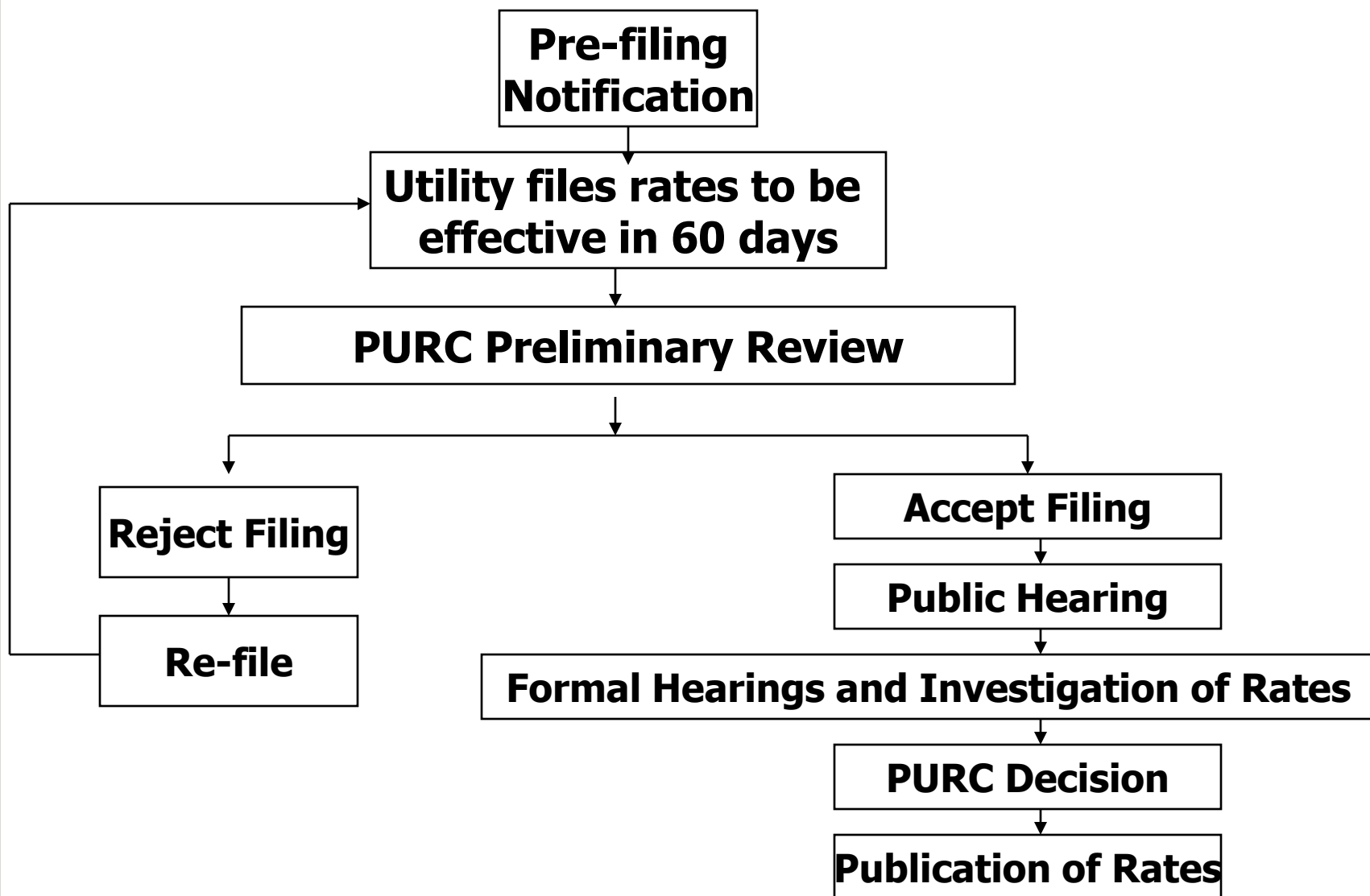


Tariff Decision Process

- **Submission of tariff proposals by utilities to PURC**
- **Submission of tariff proposals to key institutions**
- **Publicized proposals – through electronic & print media**
- **Organize Public hearings**
- **Consultation with key stakeholders**
 - ✓ **Utilities**
 - ✓ **Consumers – all major classes**
 - ✓ **Government**



PURC RATE-SETTING PROCESS





Tariffs

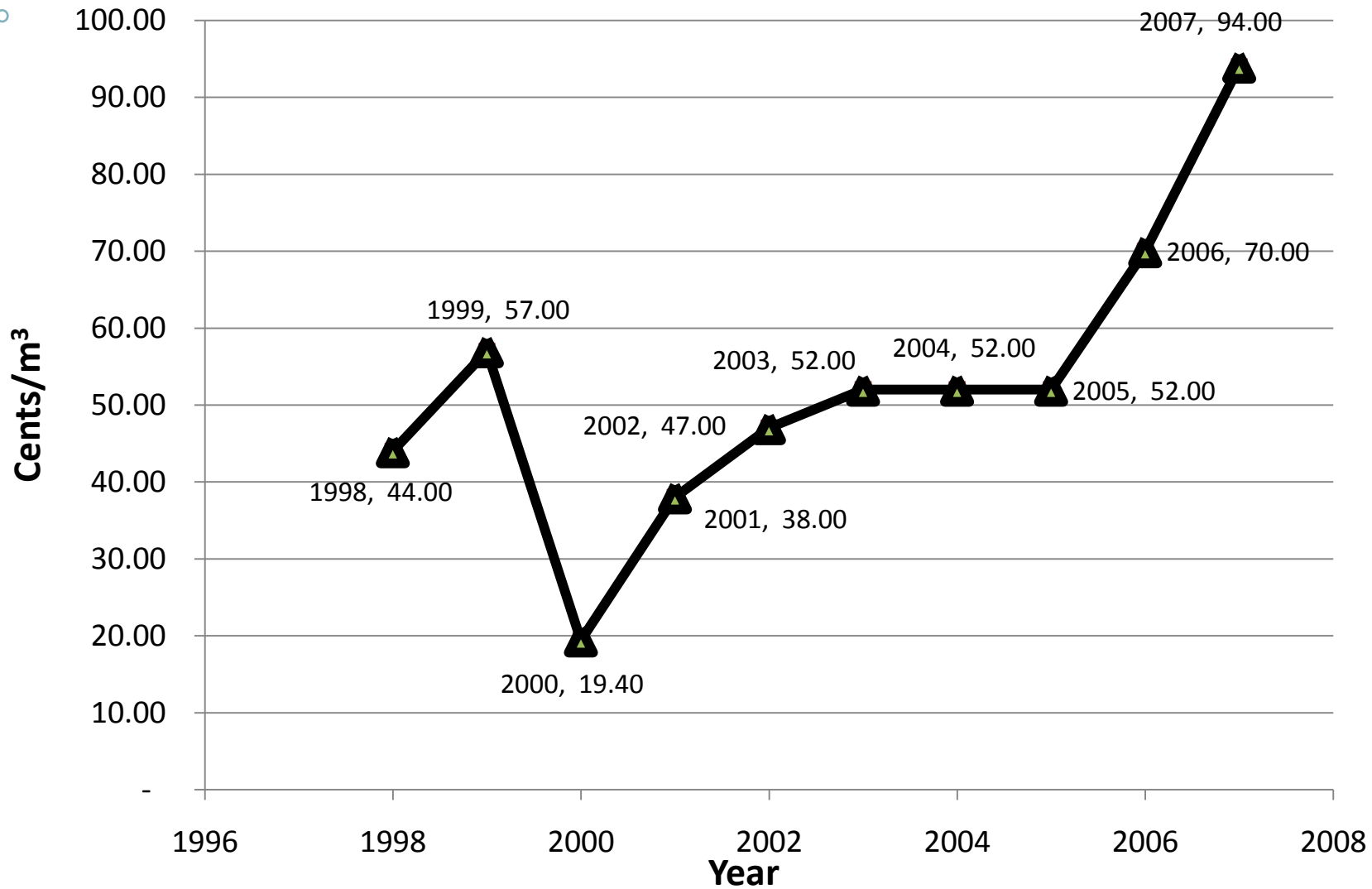
History of Utility Tariffs in Ghana

- Previously determined by Government (both as Regulator and operator)
- Tariff structure was not cost reflective/Tariff levels too low to cover cost of production)
- Low tariffs resulted in chronic lack of investment and poor quality of service
- PURC constituted as an independent body to take charge of regulatory functions including tariffs setting
- 2000 PURC developed and issued Electricity Rate Setting Guidelines



WATER TARIFF HISTORY

End User Tariff for GWCL



Current Tariff

- Metered Domestic
 - 0 to 20,000l - 80 GHp/1000l
 - above 21,000l - 120 GHp/1000l

- Commercial/Industrial -Flat Rate - 180 GHp/1000l
- Public Inst'tions/Gov't Depts -Flat Rate - 154 GHp/1000l
- Unmetered Premises -Flat Rate/house/month - 520 GHp/1000l
- Premises without connection (standpipe) - 80 GHp/1000l
- Special Commercial - 479 GHp/1000l

- Reconnection Fee
 - Domestic (GH¢/m³) - 37.44
 - Commercial/Industrial (GH¢/m³) - 119.86

Currency – Major issues

- Currency used for tariff calculations
 - Who absorbs forex risk: government, GWCL or customers?
 - Can (or should) hedging instruments be used, the costs of which incorporated in the tariff?
 - *(PURC has not taken on hedging as an option but many regulators around the world do so as a means of ensuring low fuel prices. It is however a high risk insurance mechanism. Hedging affects the water sector for as long as the price of oil affects energy cost. The government of Ghana has however within the last couple of days decided on hedging as an option to control cost of fuel for the nation)*



Criteria for Financial Viability

- Full coverage of cost – based on efficiency benchmarks – e.g..
- Reasonable rate of return to cover debt service obligation and agreed reasonable investments
- Cash flow – adequate to cover above.

Approaches for cost estimates

- **Tariff philosophy is forward looking**
Tariff based on projections for ensuing tariff period
- **Tariff required to cover reasonable operational costs**
 - ✓ based on international best practice
 - ✓ based on utilities own past performance
- **Benchmarking**
 - ✓ benchmark for efficient production given the infrastructure in place.
 - * **NRW - 5% reduction**
 - * **collection rate - 95%**
 - * **system loss level**

Constraints – Major issues

- Affordability
 - Household income (poor not average)
 - Socio-economic data etc.
- Cash flow
 - GWCL management issue