

Energy Regulatory Office

Public Hearing: Public Announcement of the Allowed Costs and Revenues for KEK JSC and KOSTT

Introduction and Purpose

Dr. Nick Frydas

Chairman of the ERO Board

Prishtinë

12 September 2006



ERO

Background

- **ERO is undertaking the First Price Review for electricity licensees, in accordance with its powers under law (Law on Energy Regulator, Chapter 9) to determine revenues and approve tariffs**
- **The review establishes**
 - allowed revenues for KEK and KOSTT
 - approved tariffs which conform with these allowed revenues
- **This public hearing presents the proposed allowed revenues for comment**
 - these proposals have been prepared with the assistance of consultants to ERO
 - supporting documents will be available on ERO's website
 - a final decision on allowed revenues will be taken following a period for further comments



Timetable

- **Price review commenced in March 2006**
- **Deadline for written comments on allowed revenues is 25 September 2006**
- **Decision on allowed revenues to be taken by ERO by 29 September 2006**
- **Proposals on tariffs, conforming with allowed revenues, to be submitted to ERO by 12 October 2006**
- **Decision on tariffs to be taken by ERO by 6 November 2006**
- **New tariffs to take effect from 1 January 2007**



Principles

- **Allowed revenues are adequate to allow licensees to finance their activities**
 - recovery of reasonable operating and maintenance costs
 - support commercial financing of assets where donor funds not available
- **Proposed revenues include incentives for improved efficiency**
 - KOSTT and KEK are set challenging but achievable targets for key performance measures
 - retain profits from beating targets and incur losses if they are not achieved
 - new lower costs are used to reset allowed revenues at end of Price Review Period
- **Allowed revenues are set for a three-year period**
 - provides sufficient time for incentives to be effective
 - more stable and predictable revenues and tariffs, to allow forward planning and budgeting



Overall approach

- **Establish allowed revenues for three-year period (2007-09)**
 - determined in real terms
 - price control will index to inflation and correct for differences in energy purchase costs
- **Allowed revenues are built up from ‘building blocks’**

Power Purchase Costs

 - + operating costs (OPEX)
 - + allowed maintenance spend (pre-2006 assets)
 - + depreciation (on post-2005 assets only)
 - + return [WACC * asset base] (on post-2005 non donor-funded assets only)
- **Separately determined for KOSTT and each KEK business**
 - mining (KEK)
 - generation (KEK)
 - transmission (KOSTT)
 - distribution (KEK)
 - public supply (KEK)
 - corporate costs allocated across businesses in proportion to their share of opex



Key assumptions

- **Approach conforms with tariff methodology, in particular**
 - no depreciation on pre-2006 assets, but maintenance charge allowed
 - no return on grant-funded assets
- **Assumed that Kosovo A4 rehabilitation and new mine only commissioned in 2010**
 - capital costs of these assets not included in this price review
 - expected to be privately-financed
- **Donor funding assumed to decline over period**

	2007	2008	2009
Share of capex that is donor/KCB-funded	75%	50%	25%

Energy Regulatory Office

Public Hearing: Public Announcement of the Allowed Costs and Revenues for KEK JSC and KOSTT

Allowed Costs and Revenues for KOSTT

Theranda Beqiri
Head of Tariffs and Pricing Department
Member of the ERO Board

Prishtinë
12 September 2006



ERO

Contents

- 1. Approach taken to review**
- 2. Operating costs (opex)**
- 3. Capital expenditure (capex)**
- 4. Cost of purchasing allowed transmission losses**
- 5. Summary of individual components**



Approach to review of revenue requirements

Figures presented below are based on:

- Submissions from KOSTT
- Studies by Consultants of demand, transmission asset values and maintenance, metering requirements.
- Studies done under earlier donor-funded projects in Kosovo
- Discussions with KOSTT
- Estimated affordability for Kosovo and revenue requirements for KEK



Opex – Staff Costs

Key Assumptions	2006	2007	2008	2009
Staff Numbers	180	215	230	230
Staffing Cost (000 Euros)	1,047	1,400	1,600	1,690

Take into account:

- Establishment of KOSTT as new company and take on new corporate functions and establish the Market Operator role
- Signal incentives to increase efficiency
- Analysis includes benchmarking with other international and regional transmission companies

Opex – Maintenance Costs

(all costs €000s)	2006	2007	2008	2009
Maintenance (pre 2006 assets)	1,865	4,000	6,000	8,000
Metering Recalibration	0	11	12	13
Maintenance (post 2006 assets)	0	350	450	550
Total	1,865	4,361	6,462	8,563

Key Assumptions:

- Recognition of importance of transmission assets for supply
- Assessment of condition of transmission assets in Kosovo
- Need to move towards an improved maintenance regime
- Metering results from detailed study

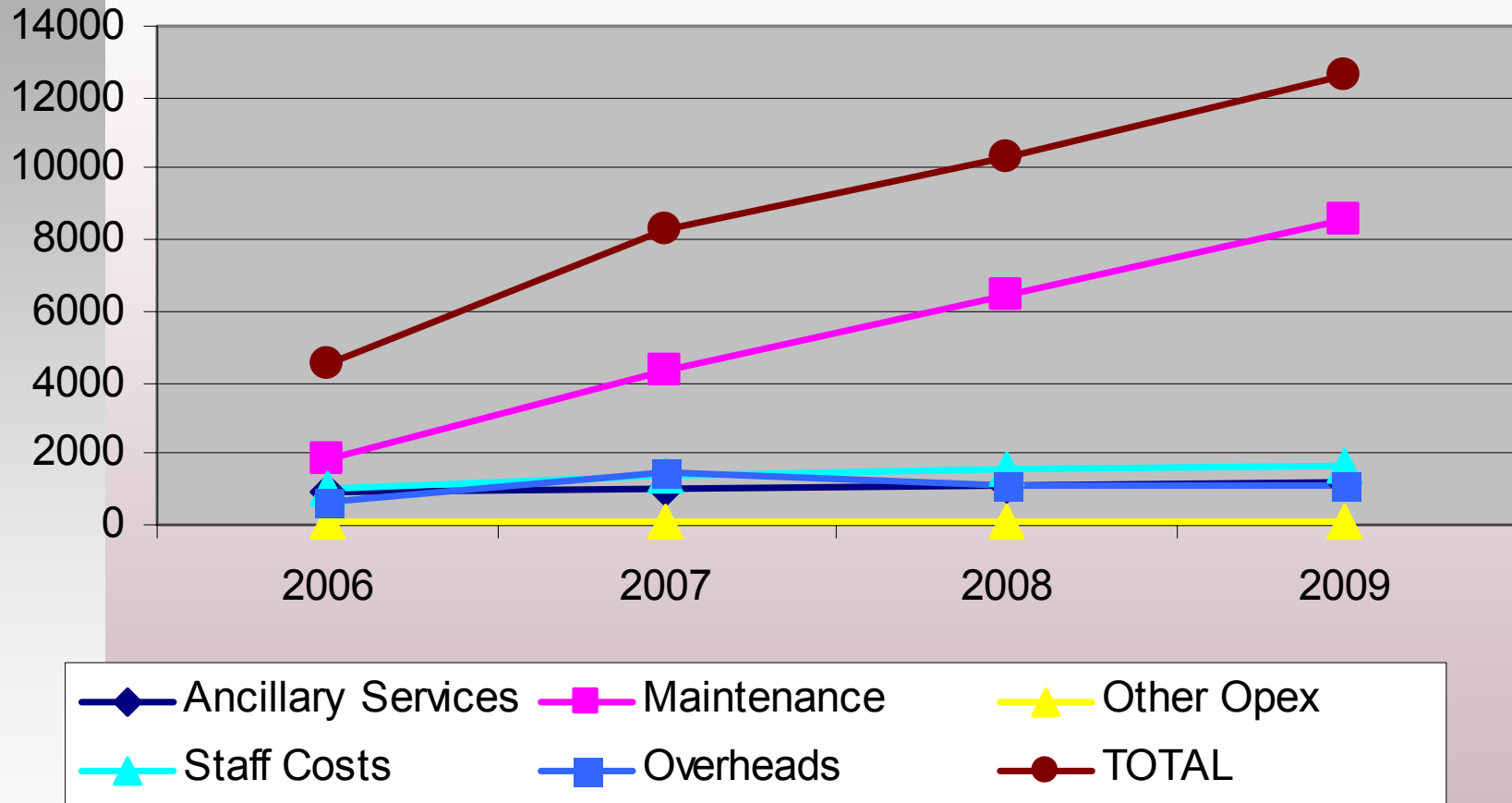


KOSTT – OPEX Summary

(€000s)	2006	2007	2008	2009
Ancillary Services	895	985	1,083	1,191
Maintenance	1,865	4,361	6,462	8,563
Other Opex	50	50	51	52
Staff Costs	1,047	1,400	1,600	1,690
Overheads	615	1,578	1,100	1,100
TOTAL	4,472	8,374	10,296	12,596



KOSTT – Summary of OPEX (€000s)



Capex - 2006 & Forecasts

(€000s)	2006	2007	2008	2009
Start-up costs	0	2,185	0	0
Network	5,190	31,840	40,222	34,960
Vehicles	180	820	0	0
Metering	0	1,170	0,172	0
TOTAL	5,370	36,015	40,394	34,960
Funding	100%	75%	50%	25%

Network capex:

- Considers existing state of assets & Financial recovery Plan
- Includes new assets & replacement of existing

Allowed cost of transmission losses

	2006	2007	2008	2009
Losses % of energy	3%	3%	3%	3%
Forecast Demand on transmission system (GWh)	4,700	4,820	4,995	5,333
Transmission Losses (GWh)	141	135	140	149
Total Costs (€000s)	3,199	2,864	2,929	3,380

Losses occur on all electricity networks, KOSTT will be incentivised to reduce losses on its network

Losses allowance =

*Allowed losses rate * energy entering network * cost of energy*

Assumptions:

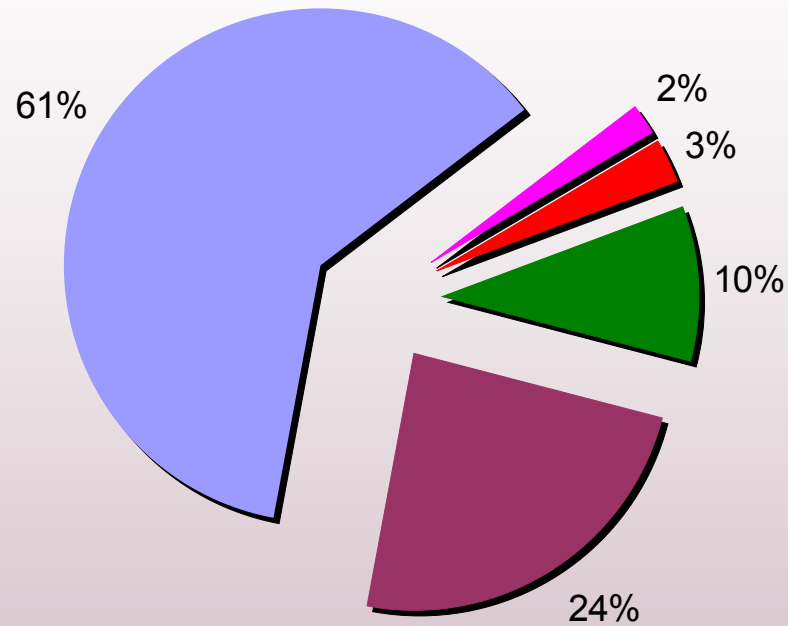
- 3% based on limited technical analysis and international benchmarking
- Cost of losses based on forecast average cost of electricity purchased

Summary of KOSTT Revenue Requirements

(€000s)	2006	2007	2008	2009
O&M Costs	4,472	8,374	10,296	12,596
Cost of Transmission Losses	3,199	2,864	2,929	3,380
Post 2006 Assets Depreciation	0	482	909	1,844
Post 2006 Assets Return	0	219	527	1,159
TOTAL	7,671	11,940	14,661	18,980



Transmission comprises 10% of total costs



- Cost of power purchases to serve non-eligible customers
- Supply margin
- Retail costs
- Transmission Charges
- Distribution Charges



**Thank
You**



ERO

Energy Regulatory Office

Public Hearing: Public Announcement of the Allowed Costs and Revenues for KEK JSC and KOSTT

Allowed Costs and Revenues for KEK

Theranda Beqiri
Head of Tariffs and Pricing Department
Member of the ERO Board

Prishtinë
12 September 2006



ERO

Contents

- 1. Approach taken to review**
- 2. Overview of revenue requirements**
- 3. Operating costs (opex)**
- 4. Capital expenditure (capex)**
- 5. Depreciation on post 2005 assets**
- 6. Return on post 2005 assets**
- 7. Cost of purchasing allowed distribution losses**
- 8. Summary of individual components**



Approach to review of revenue requirements

Figures presented below are based on:

- Submissions from KEK
- Studies by Consultants of demand, generation, mining, distribution and supply costs
- Studies done under earlier donor-funded projects in Kosovo and ESBI KEK Recovery Plan
- Discussions with KEK and ESBI
- Estimated affordability for Kosovo



KEK Mining Opex

Headline points –

- **Maintain production to meet needs of power stations**
- **Transfer of costs to new mine**
 - Development costs
 - Reduce maintenance spend on assets soon to be redundant
 - Personnel transfers to new mine
- **Seek efficiencies in operating costs**
 - Maintenance costs are very high by historic standards – propose 25% reduction of KEK forecast over 3 years of Price Review period
 - Improve maintenance procedures and organisation

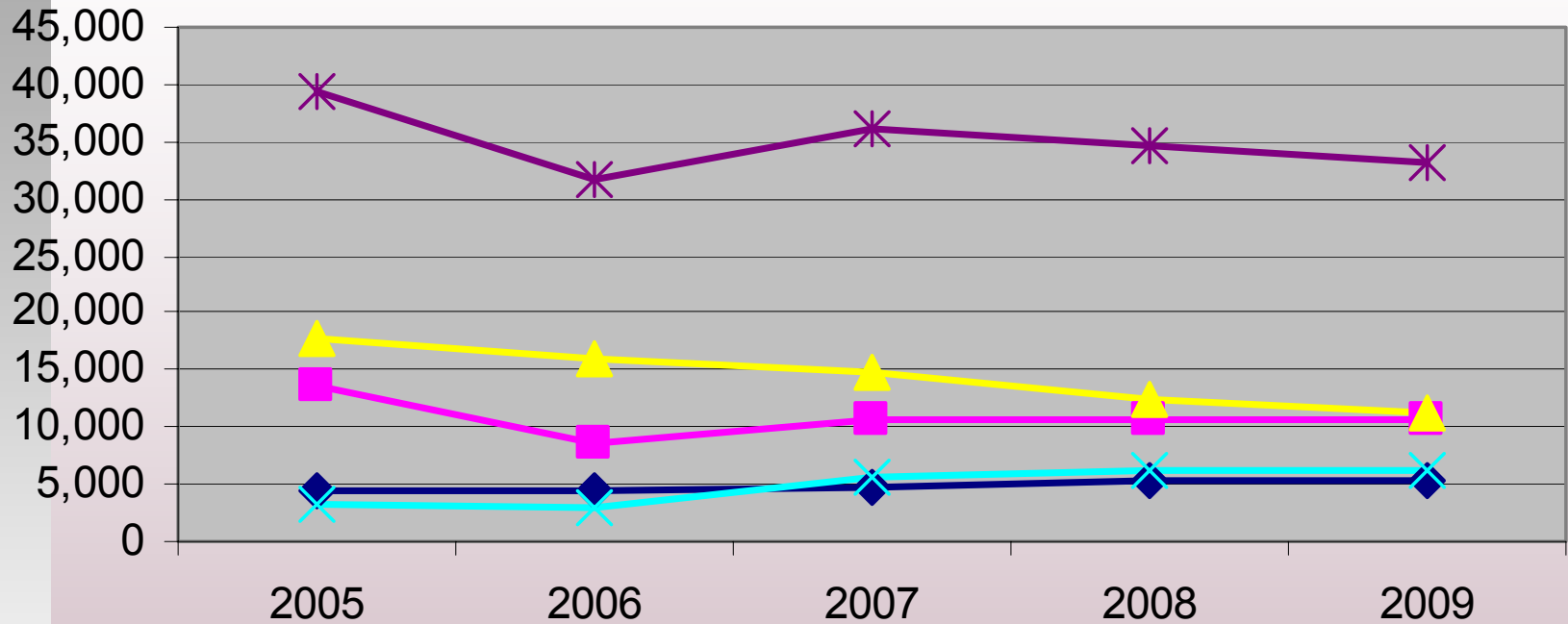


KEK Mining OPEX

(€000s)	2005	2006	2007	2008	2009
Operating cost	4,435	4,499	4,868	5,185	5,185
Maintenance Costs	13,689	8,450	10,670	10,670	10,670
Staffing cost	17,812	15,850	14,871	12,574	11,123
Overheads	3,379	2,870	5,702	6,091	6,251
TOTAL	39,315	31,669	36,111	34,520	33,229



KEK Mining OPEX (€000s)



KEK Generation OPEX

Headline Points –

- **Importance of Kosovo A and B to Kosovo**
- **Kosovo B units recently overhauled and refurbished, the issue is Kosovo A**
- **Commissioning of Kosovo A Unit 4 now not expected until 2010 – vital to keep output of other units as high as possible**
- **Agree KEK's forecasts of maintenance costs**
- **Seek CAPEX for rehabilitation and refurbishment of Kosovo A units 1, 3 and 5.**

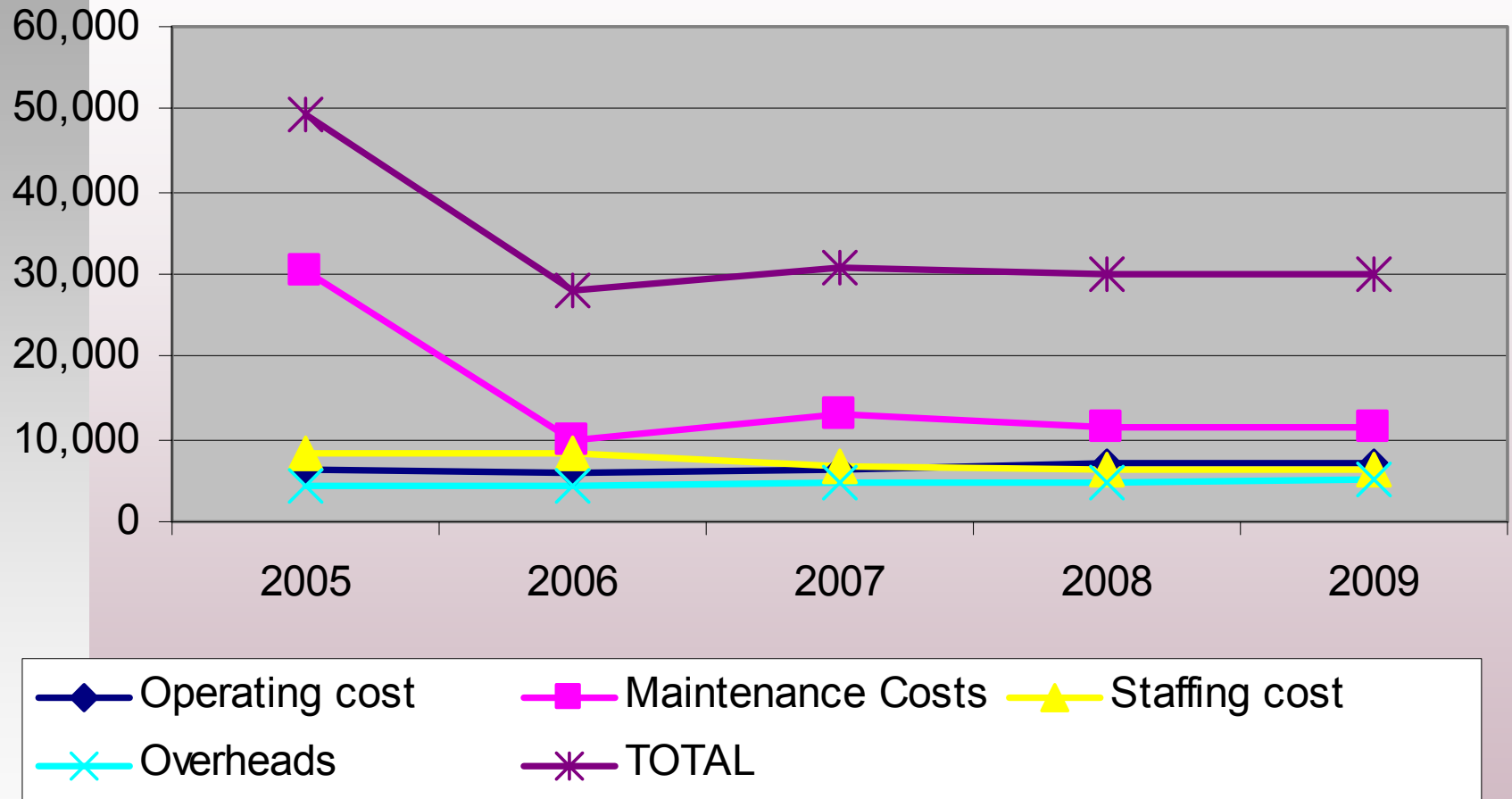


KEK Generation OPEX

(€000s)	2005	2006	2007	2008	2009
Operating cost	6,242	5,900	6,473	7,036	7,036
Maintenance Costs	30,347	9,690	12,902	11,555	11,555
Staffing cost	8,291	8,290	6,703	6,461	6,151
Overheads	4,281	4,301	4,729	4,921	5,137
TOTAL (excl coal costs)	49,161	28,181	30,807	29,973	29,879



KEK Generation OPEX (€000s)



KEK Distribution OPEX

Headline Issues –

- **Distribution network is major weakness in Kosovo system**
- **Emphasis is on improving reliability and security**
- **Increase maintenance spend to move towards international standards**
- **Encourage KEK to improve efficiencies and reduce technical losses on system**
- **Staff numbers are high but it is vital in short term to improve system and improve non-technical losses**

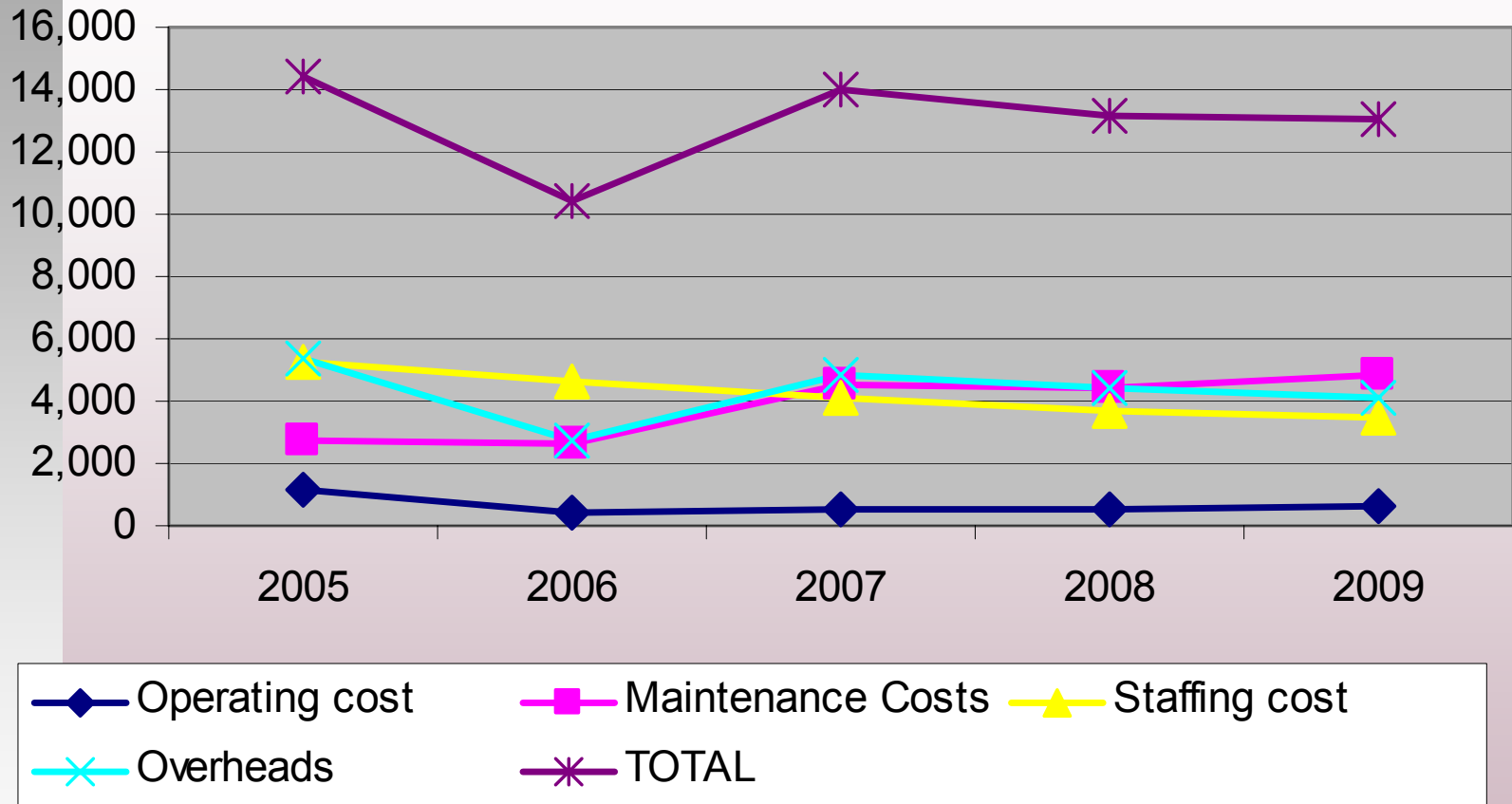


KEK Distribution OPEX

(€000s)	2005	2006	2007	2008	2009
Operating cost	<i>1,120</i>	<i>460</i>	503	549	600
Maintenance Costs	<i>2,700</i>	<i>2,640</i>	4,498	4,451	4,860
Staffing cost	<i>5,235</i>	<i>4,630</i>	4,144	3,719	3,467
Overheads	<i>5,343</i>	<i>2,720</i>	4,845	4,447	4,093
TOTAL	<i>14,398</i>	<i>10,450</i>	13,989	13,166	13,020



KEK Distribution OPEX (000s)



KEK Supply OPEX

Headline Issues –

- **Supply function is not asset-based**
- **Major objective is to improve collection rate**
- **Opportunities for efficiencies – support KEK's forecasts for reducing costs**

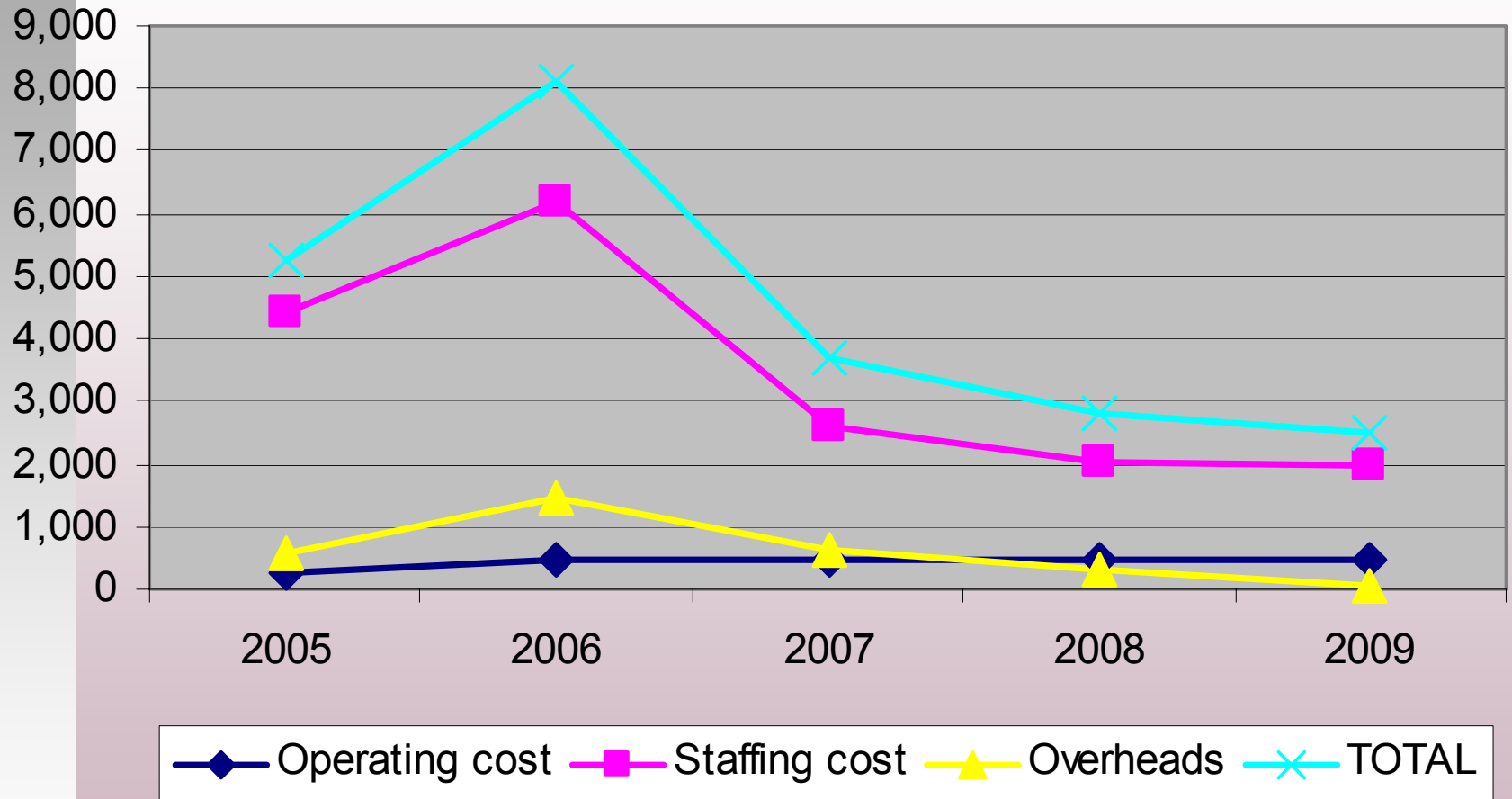


KEK Supply OPEX

(€000s)	2005	2006	2007	2008	2009
Operating cost	265	450	460	460	460
Staffing cost	4,398	6,170	2,582	2,031	1,983
Overheads	578	1,470	639	320	36
TOTAL	5,242	8,090	3,681	2,811	2,479



KEK Supply OPEX (€000s)



KEK Corporate OPEX

Headline Issues –

- **KEK Corporate costs are too high**
- **Major opportunities for efficiencies in restructuring**
 - Separation of KOSTT has shown benefits on increasing divisionalisation
 - Mining, Generation, Distribution and Supply will need to operate as separate organisations
 - KEK will need assistance to achieve this
- **ERO cannot support KEK's high Corporate forecasts**

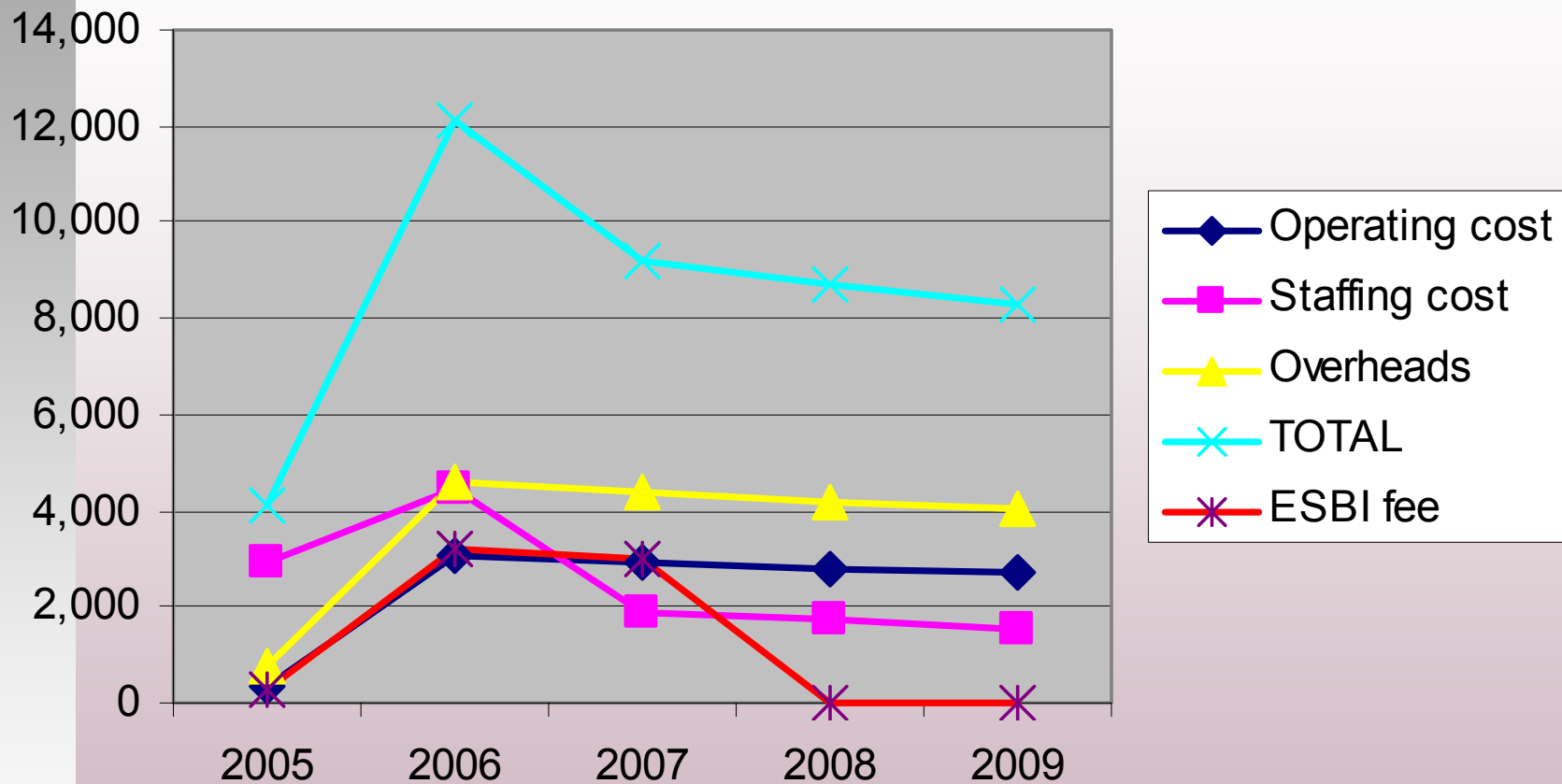


KEK Corporate OPEX

(€000s)	2005	2006	2007	2008	2009
Operating cost	365	3,040	2,904	2,793	2,708
Staffing cost	2,935	4,450	1,915	1,724	1,551
Overheads	797	4,620	4,405	4,213	4,042
TOTAL	4,098	12,110	9,223	8,729	8,301
ESBI fee	300	3,200	3,000	0	0



KEK Corporate OPEX (€000s)

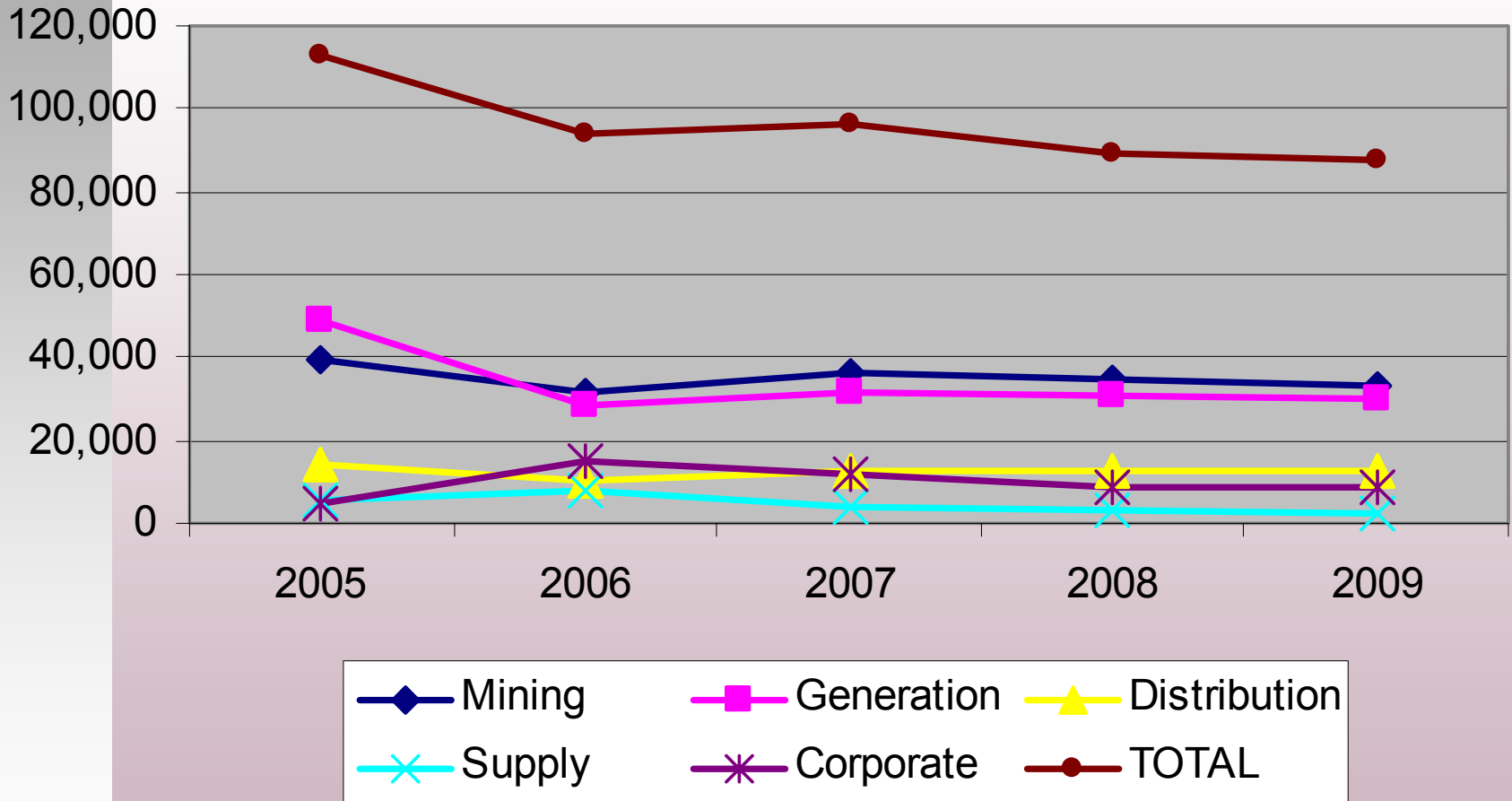


Proposed KEK Total OPEX 2007-09

(€000s)	2005	2006	2007	2008	2009
Mining	39,315	31,669	36,111	34,520	33,229
Generation	49,161	28,181	30,807	29,973	29,879
Distribution	14,398	10,450	13,989	13,166	13,020
Supply	5,242	8,090	3,681	2,811	2,479
Corporate	4,398	15,310	12,223	8,729	8,301
TOTAL	112,514	93,700	96,812	89,199	86,908



Proposed KEK Total OPEX 2007 - 09



KEK Forecast CAPEX

	2006	2007	2008	2009
Mines	7,650			
Generation	42,565			
Distribution	15,380	30,050	59,000	81,000
Supply	5,274	1,200	1,200	1,200
HO & restructuring	3,100	3,000	3,000	3,000
Project management	4,000	4,000	4,000	4,000
TOTAL	77,969	38,250	67,200	89,200

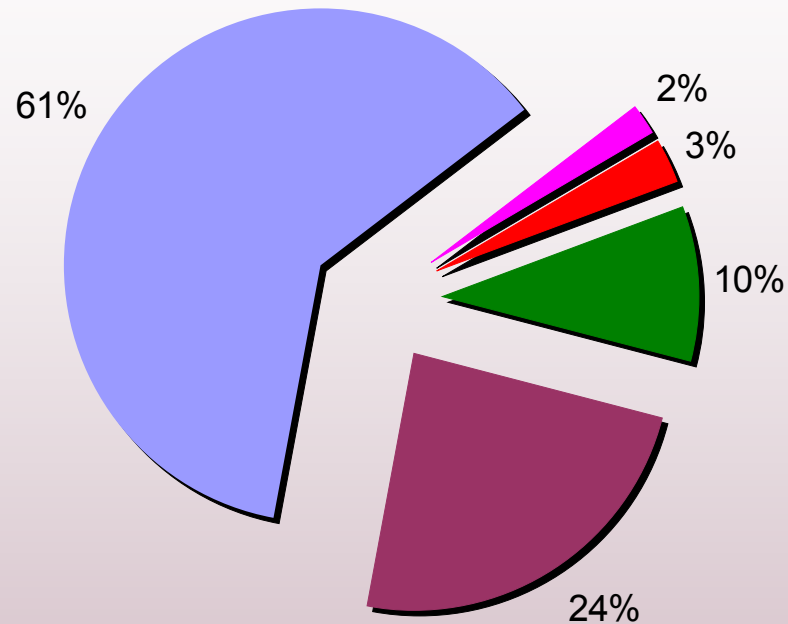


Summary of KEK Costs

(€000s)	2006	2007	2008	2009
O&M Costs	93,700	96,812	89,199	86,908
Cost of Distribution Technical Losses	15,093	12,741	11,474	12,334
Post 2006 Assets Depreciation	0	1,448	3,707	6,793
Post 2006 Assets Return	0	52	622	2,997
Supply Margin	1,714	1,829	1,936	2,404
TOTAL	110,507	112,882	106,938	111,436



KEK Costs comprises 90% of total costs



- Cost of power purchases to serve non-eligible customers
- Supply margin
- Retail costs
- Transmission Charges
- Distribution Charges



Basis of Tariff Calculation

Tariff constructed as building blocks –

- **Demand forecast**
- **Generation availability**
- **Imports**
- **Generation & Mining Costs**
- **Transmission Costs**
- **Distribution Costs**
- **Supply Costs**
- **Loss Costs**
- **Total then divided by customer demand to provide cents/kWh average tariffs**



Summary of Required Revenues

	Required Revenues 2006 prices		
	2007	2008	2009
(‘000 Euro)			
KOSTT (includes cost of technical losses)	11,940	14,661	18,980
Distribution (includes cost of technical losses)	28, 801	27,761	32,544
KEK Public Supply (excludes cost of losses & energy for Eligible Customers)	66,500	69,031	84,913
Total	107,241	111,453	136,437
Gross Demand (with 8% load-shedding) (GWh)	4,821	4,995	5,333



Commercial losses and collection rates

- **Scenarios look at impacts of commercial losses and collection rates on required average revenue to be recovered**
- **Commercial losses assumed to decrease in line with KEK Financial Recovery Plan**

<i>On energy entering distribution network</i>	2006 <i>(est)</i>	2007	2008	2009
Commercial (non-technical) losses	31%	22%	17%	13%

- **Collection rates assumed to increase to target level (80%) in MEM Strategy**

<i>Share of revenues billed in year</i>	2005 <i>(actual)</i>	2007	2008	2009
Collection rate	67%	70%	80%	80%



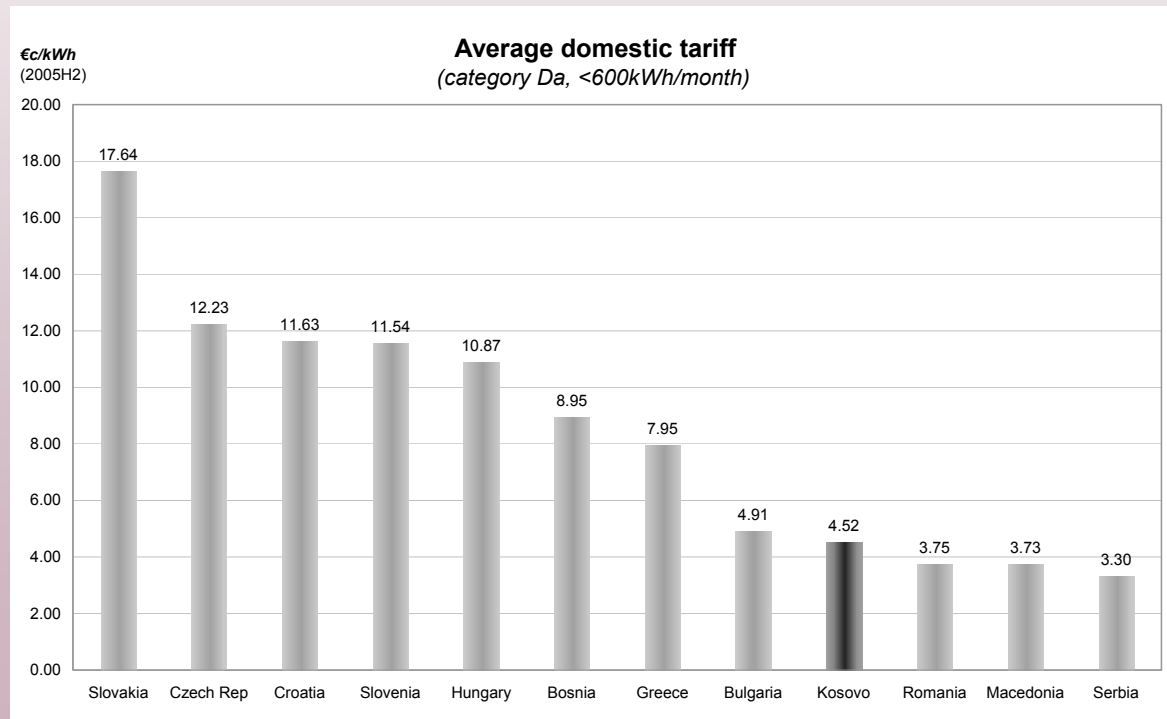
Average Tariff (cents/kWh; 2006 prices; no VAT)

Assumptions –does the customer pay for: -Distribution non-technical losses? -Cost of uncollected bills?	Average estimated Tariff		
	07	08	09
Scenario 1: Customer does not pay for distribution non-technical losses			
1a – Customer does not pay for uncollected bills	4.4	4.2	4.4
1b – Customer pays for uncollected bills, assuming collection rates : 70%; 80%; 80%	6.2	5.3	5.5
Scenario 2: Customers pay for all non-technical losses (at target rate)			
2a – Customer does not pay for uncollected bills	5.2	4.8	4.9
2b – Customer pays for uncollected bills, assuming collection rates : 70%; 80%; 80%	7.3	6.0	6.1



Kosovo's tariffs compared (1)

- **Kosovo's current domestic tariffs are among the lowest in the SE European region**
- **Tariffs would need to increase by almost 100% to reach the levels seen in Bosnia, for example**



Source
IRG 2005 (Boania,
Kosovo,
Macedonia, Serbia)
Eurostat (all
others)

Kosovo's tariffs compared (2)

- Similarly, Kosovo's current industrial tariffs are low by regional standards
- Macedonia and Serbia have both domestic and industrial tariffs below those in Kosovo, while Kosovo's current tariffs fall in the same range as those in Bulgaria

