Republic Kazakhstan Natural Monopolies
Regulation Agency

Saving - energy resources: tariff policy priority area

Astana - 2010

NMRA – Regulator of infrastructure sectors

On January 1, 2009, establishment of the full-fledged regulator was legally completed.

Functions of price and tariffs regulation are concentrated in one governmental agency and include:

- tariff and technical regulation of the CEM
- Price regulation of the subjects of regulated markets (dominant in related areas and under the nomenclature).
- Compliance control (CEM, dominants, energy-generating and energy-supplying organisations).
- Licensing and post-license control.

Объекты регулирования NMRA

1016 subjects of natural monopolies on rendering of 1544 regulated services, including:

808 - In the area of water sewer systems;

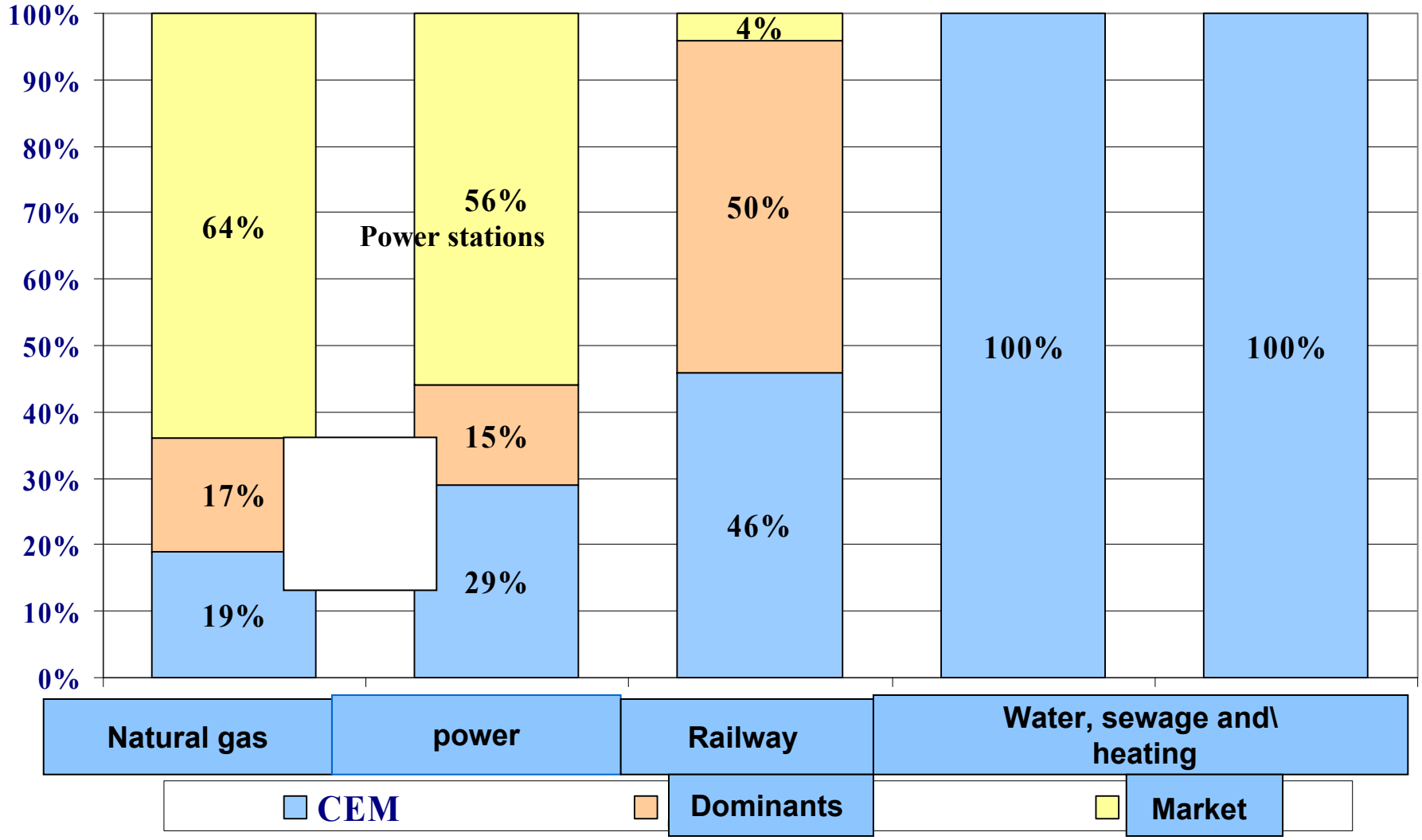
447 - In the area of electro-and thermal power system;

51 - In the area of transportation of gas and oil;

227 - In transport area

- **15 subjects of state monopolies**
- **about 400 dominants**

Share of the NMRA regulated services in final value of the different sectors output



Key areas of tariff policy

1. Implementation of the Agency Strategic Action Plan

-Modernization of municipal networks through increase in quantity of CEMs, working on investment (mid - and long-term) tariffs.

2.Power saving

- elimination of the above- permitted standard losses and decrease in standard losses;
- Introduction for household consumers of differentiated tariffs for power and water depending on volumes of consumption.

3.Resource saving

-Optimization of norms for use of raw materials, fuel and energy;
-Reduction of administrative costs

Amendments to the law,

Came into force on March, 31st , 2010

1. Introduction of the differentiated tariffs for water depending on volume of consumption for the household users with a view of power saving.

2. Introduction of the comparative analysis method for the REC tariffs, with development of incentives for improvement of efficiency indicators of the REC.

1. Water supply sector: Introduction of the differentiated tariffs for water supply services

In 2009 and in the first quarter of 2010, the tariffs, differentiated by consumer groups, have been introduced in 12 regions (Almaty and Oblasts:, Akmolinskaya, Almatinskaya, Karagand inskaya, Pavlodarskaya, NKO, EKO, SKO, WKO, Zhambylskaya, Kyzylordinskaya, Atyrauskaya).

In 2010 introduction of the differentiated tariffs will be provided in the others 4 regions (Astana, Aktyubinsk, Kostanajsky, Mangistausky Oblasts)

As a result of introduction of the differentiated tariffs

Wodocanals will increase incomes by 12,5 billion tenge (83 million $), including:

Almaty city – by 6,8 Billion tenge,

Atyrau city – by 2,4 Billion tenge,

Karaganda city – by 1,2 Billion tenge,

Kokshetau city – by 563,8 Billion tenge.

Differentiated (step-by-step) water tariffs in foreign countries

Differentiation (steps)	Consumption volume, м3	*tenge/м3*
1. China (per household) (population - 1,328 billion persons)		
1.1. Shanghai		
1 level	15	56,35
2 level	15-25	84,63
3 level	above 25	112,70
1.2. Dunoan		
1 level	22	56,35
2 level	22-30	84,63
3 level	above 30	112,70
2. USA, State of California (population - 36,75 million persons)		
1 level	0 - 7 980 Gallon (0 - 30 м$^{3)}$	0,23 tenge/ Gallon 60,84 tenge/м^3
2 level	7 981 - 15 960 Gallon (31 - 60 м$^{3)}$	0,28 tenge/ Gallon 73,01 tenge/м^3
3 level	Above 15 960 (above 60 м$^{3)}$	0,37 tenge/ Gallon 97,35 tenge/м^3
3. Australia (population - 22,1 million persons)		
1 level	Up to 40	99,34
2 level	from 41 to 80	116,56
3 level	from 81 and above	172,19

Differentiated (step-by-step) water tariffs in foreign countries

Differentiation (steps)	Consumption volume, м3	*tenge/м3*
4. Singapore (tariffs since 2000) (population - 4,5 million persons)		
1 level	Up to 20	154,97
2 level	From 21 to 40	154,97
3 level	From 41 and above	163,80
5. UAE (population - 4,8 million persons)		
Household		
Green	0 - 6 000 gallon (0 - 27 м^3)	1,18 tenge/gallon 259,57 tenge/м^3
Yellow	6 001 - 12 000 gallon (27 - 54 м^3)	1,47 tenge/gallon 323,36 tenge/м^3
Orange	12 001 gallon and above (54 м^3 and above)	1,62 tenge/gallon 356,36 tenge/м^3
Industrial and Commercial		
Green	0 - 10 000 gallon (0 - 45м^3)	1,18 tenge/gallon 259,57 tenge/м^3
Yellow	10 001 - 20 000 gallon (45 - 90 м^3)	1,47 tenge/gallon 323,36 tenge/м^3
Orange	20 001 gallon and above (90 м^3 and above)	1,62 tenge/gallon 356,36 tenge/м^3

Action Plan for introduction of dif. tariffs for water by groups of consumers and consumption volumes

International experience:

1) **China – 3 levels**

Shanghai /per household/	1 level – up to 15 м3
	2 level - 15 – 25 м3
	3 level above 25 м3

2) **Australia - 3 levels**

1 level – up to 40 м3
2 level - 41 – 80 м3
3 level above 80 м3

3) **Singapore – 3 levels**

1 level – up to 20 м3
2 level - 21 – 40 м3
3 level above 40 м3

4) **USA (State of California) – 3 levels**

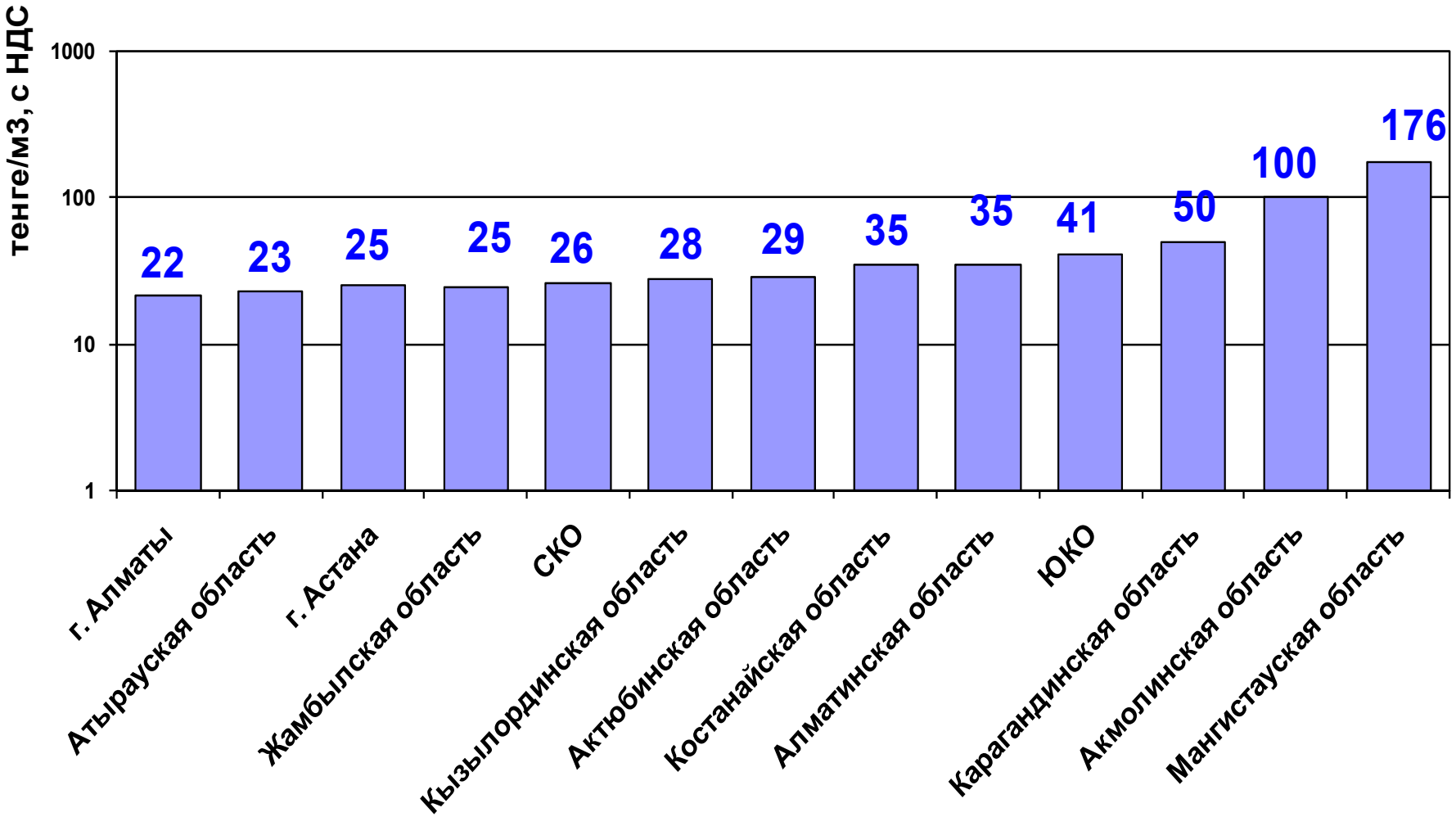
5) **United Arab Emirates – 3 levels**

1. **Introduction of dif. tariffs by groups of consumers, 2009 – 2010**

2. **Introduction of dif. tariffs by volumes of consumption:**
   - **2010 - Preparation and beginning of introduction with 2 levels**
   - **2011 –Full introduction with 2 levels.**
   - **2012 – 2013 – Introduction of 3 level system of tariffs.**

Under support of the World Bank of Reconstruction and Development

Tariffs for water in some regions of Kazakhstan (for households)



Electric power industry: supply sector.
2. differentiated tariffs for electric power

Depending on consumption volumes

By time zones within 24 hours

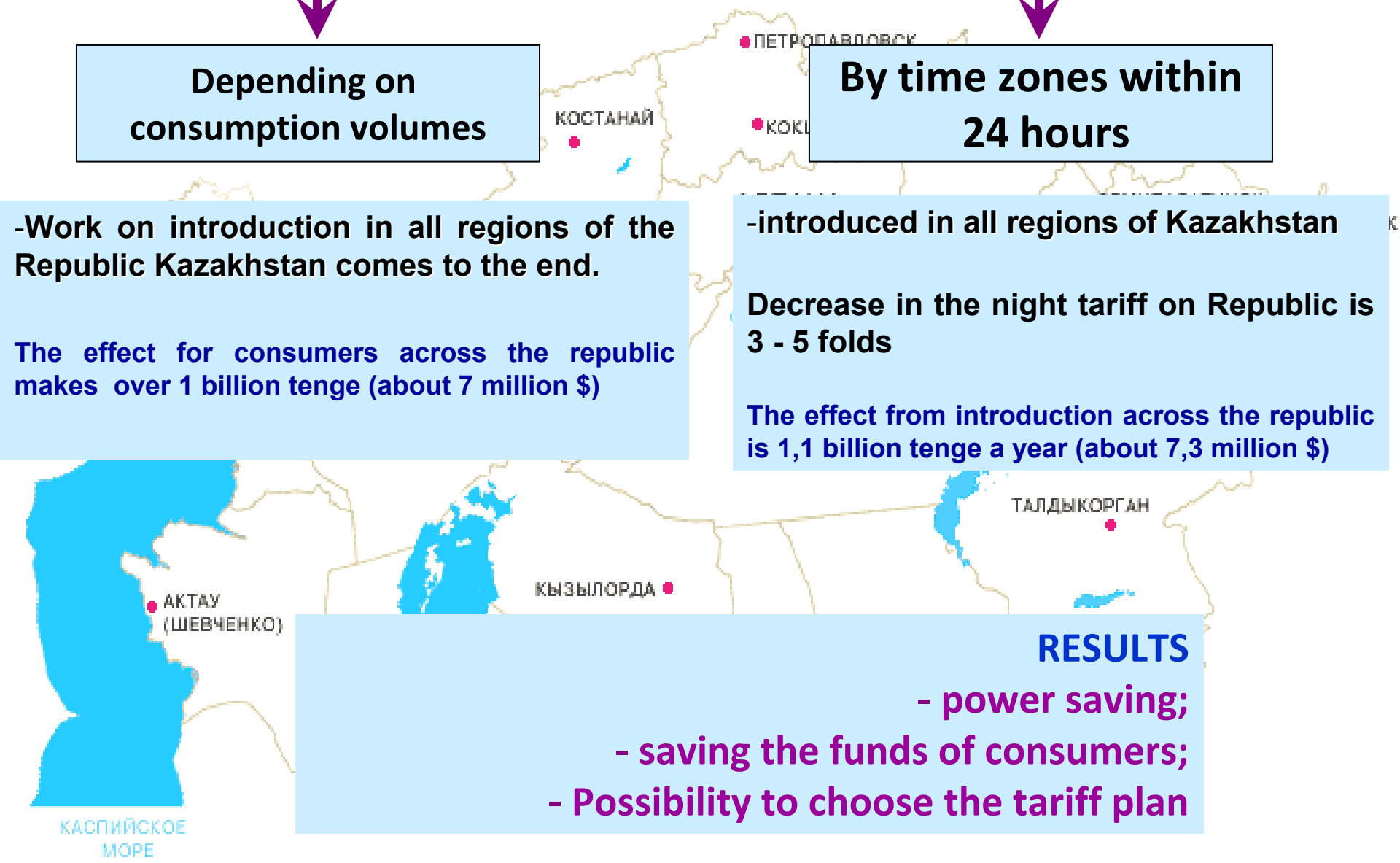
-Work on introduction in all regions of the Republic Kazakhstan comes to the end.

The effect for consumers across the republic makes over 1 billion tenge (about 7 million $)

-introduced in all regions of Kazakhstan

Decrease in the night tariff on Republic is 3 - 5 folds

The effect from introduction across the republic is 1,1 billion tenge a year (about 7,3 million $)



RESULTS

- power saving;
- saving the funds of consumers;
- Possibility to choose the tariff plan

Differentiated (step by step) power tariffs in foreign countries

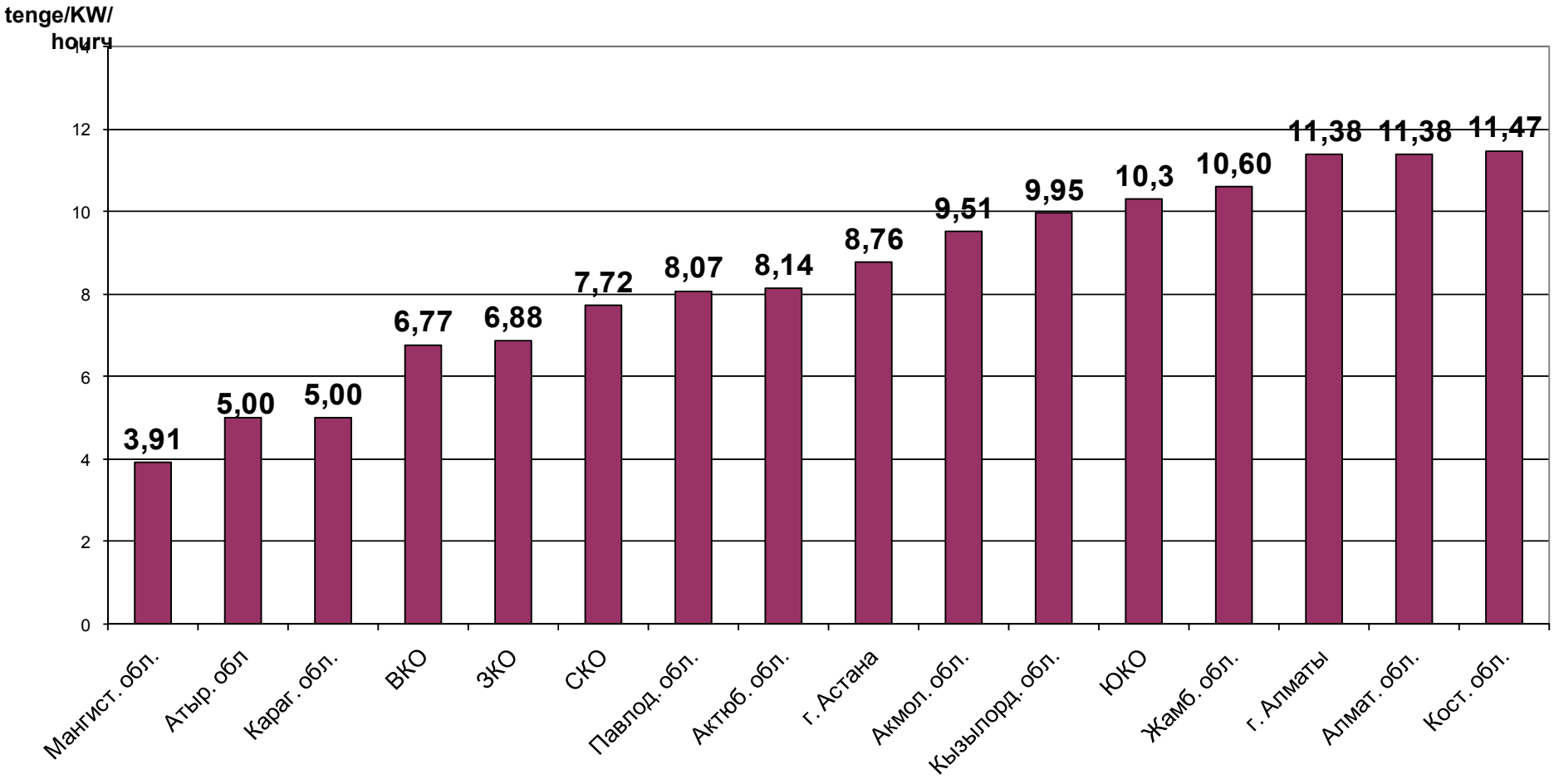
Differentiation (steps)	consumption, KW/hour	*tenge*/KW/hour
1. China (per household), (population - 1,328 billion persons)		
1.1. Shanghai		
first stage	60	12,26
second stage	61 to 100	13,34
third stage	from 101 to 150	13,99
fourth stage	from 151 and above	15,07
1.2. Hong Kong		
first stage	150	14,83
second stage	from 150 to 1000	
third stage	above 1000	21,25
1.3. Hanchdhou		
first stage	50	12,26 - in peak time 6,22 - in usual time
second stage	from 50 to 200	12,91 - in peak time 6,87 - in usual time
third stage	from 200 and above	13,77 - in peak time 8,38 - in usual time
2. Japan (population - 127 million persons)		
1 level	to 120	25,83
2 level	from 120 to 300	33,78

Differentiated (step by step) power tariffs in foreign countries *(Continuation)*

3. Egypt (population - 81,7 million persons)		
1 level	50	1,33
2 level	from 51 to 200	2,216
3 level	from 201 to 350	2,937
4 level	from 351 to 650	4,005
5 level	from 651 to 1000	5,607
6 level	above 1000	6,675
5. United Arab Emirates (population - 4,8 million persons)		
Household / Commercial		
green	0 - 2 000	8,09
yellow	2 001 - 4 000	9,86
orange	4 001 - 6 000	11,48
Red	6 001 and above	13,54
Industrial		
green	0 - 10 000	8,09
yellow	10 001 and above	13,54
6. Republic Kazakhstan (population - 16,1 million persons) Astana		
	Up to 70 / upto 90	7,04 / 7,34
	above 70 / above 90	9,38

Information about the cost of electric power for end users (population) in the regions of the Republic Kazakhstan

As of July 1, 2010, with VAT



Average cost in the Republic is 6,76 cents/KW/hour

Introduction of of the comparative analysis method

1. Alternative to the normative (cost-based) method of tariff making

2. Method that for establishment of tariffs takes into consideration the degree of CEM efficiency
3. Introduction of comparative analysis method is recommended by the consultants of the European bank of reconstruction and development

Degree of efficiency for the REK is defined taking into account comparison of following indicators:

- ✓*The area of territory of service;*
- ✓*Number of consumers;*
- ✓*Total extent of transmission lines;*
- ✓*Number and capacity of transformers;*
- ✓*maximum load;*
- ✓*Power losses;*
- ✓*Transmission volume.*

The REK tariffs confirmed by the method of comparative analysis will be implemented in 2013

Key objectives of the Agency

1. Increase the number of SEMs, working on investment (mid - and long-term) tariffs. By 2020 all SEMs should work under investment tariffs.

2. Implement the activities on power saving regarding optimisation of the standard and elimination of the above–permitted-standard losses, promotion of energy saving.

By 2014 to achieve the full elimination of the above–permitted-standard losses of power, heating and water with economic effect amounting to above 13,5 billion tenge.

By 2020 reduction of standard losses – for heat – 17 %, for water – 15, for power-12 % with economic effect amounting to more than 16 billion tenge

Strategic plan for development of Republic Kazakhstan by 2020, confirmed by the Decree of the President of the Republic Kazakhstan fdated 01.02.2010, #922.

(continuation)

3. Introduction of the differentiated tariffs for water based on the volumes of consumption and by the groups of consumers.

Implementation period:

2009-2010 – by the groups of consumers,

2010 – 2011 – by the consumption volumes (2 levels),

2012 – 2013 –by the volumes consumption (3 levels).

4. Preparatory work for implementation of the regulation of RECs based on the method of comparative analysis.

Implementation period 2010-2012 гг.

Introduction of tariffs с 01.01.2013 г

Thanks for attention!