



Tariff Reforms in Azerbaijan

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Motivation for the second Tariff Reform

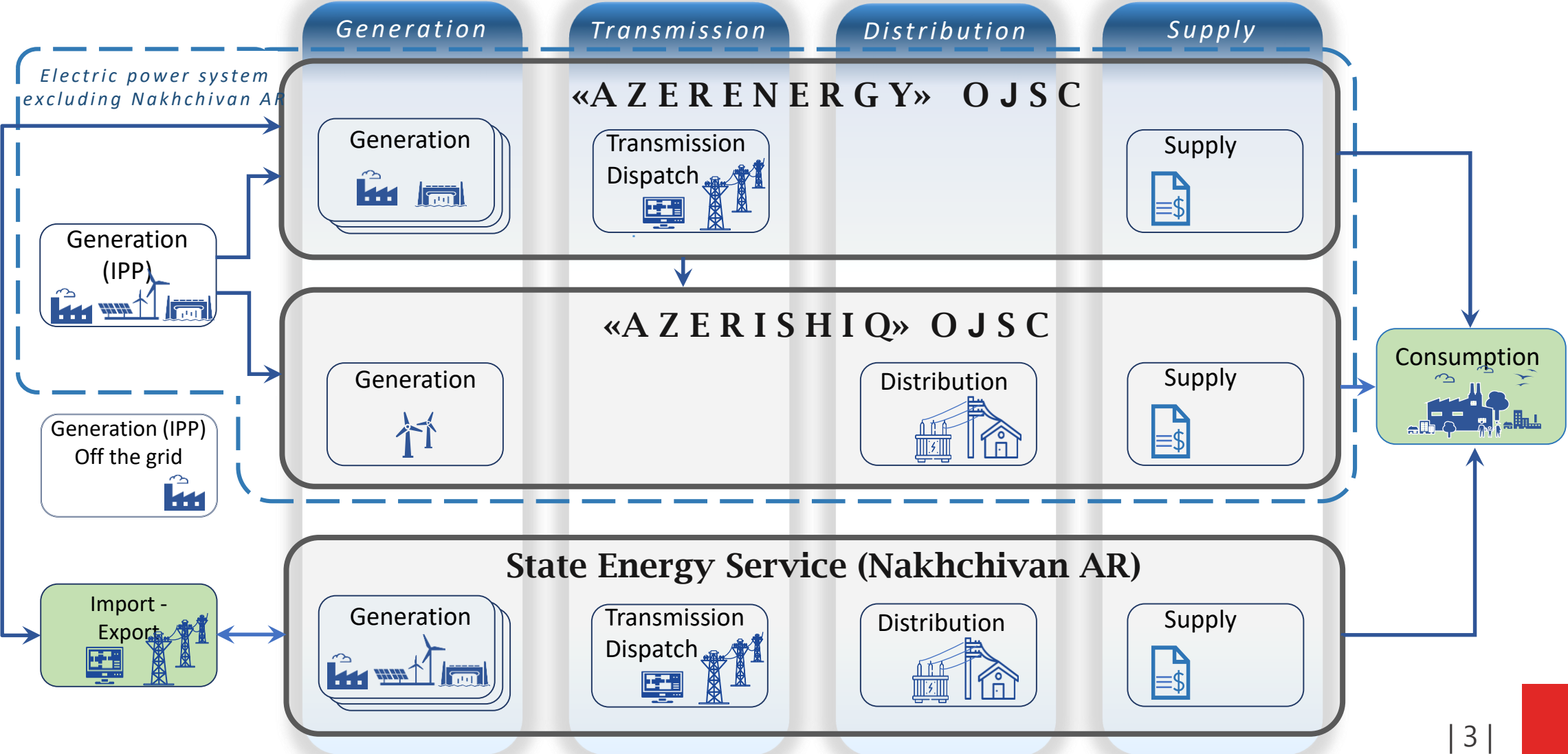
New Methodology, target market design, expected results, target approval process

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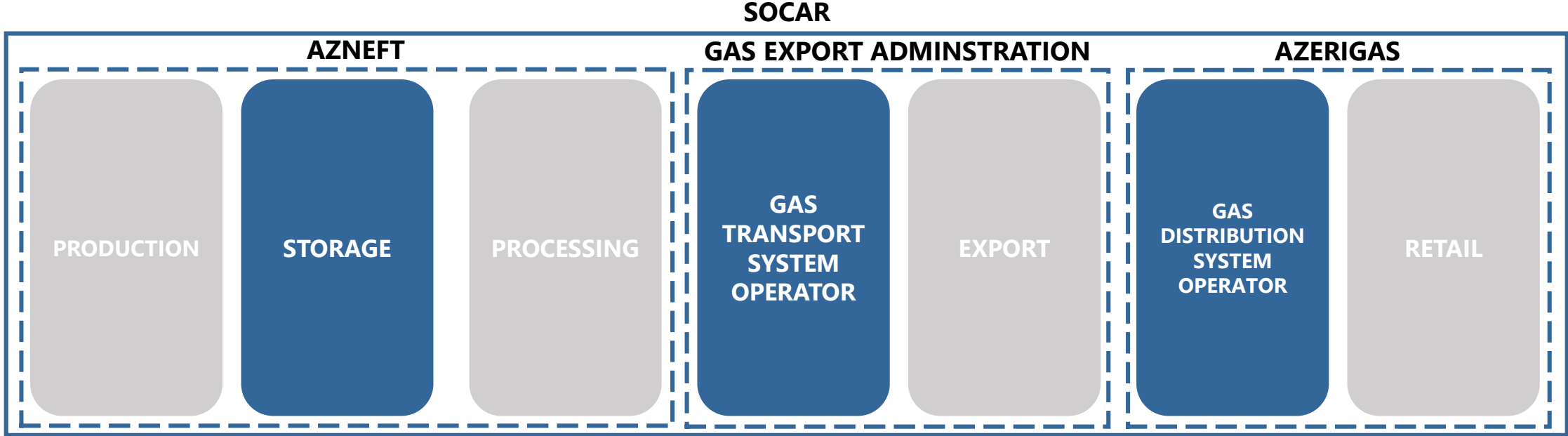


Q&A

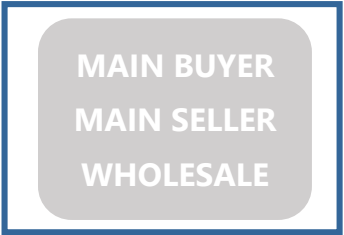
Electricity Market design of Azerbaijan



Natural gas market design of Azerbaijan



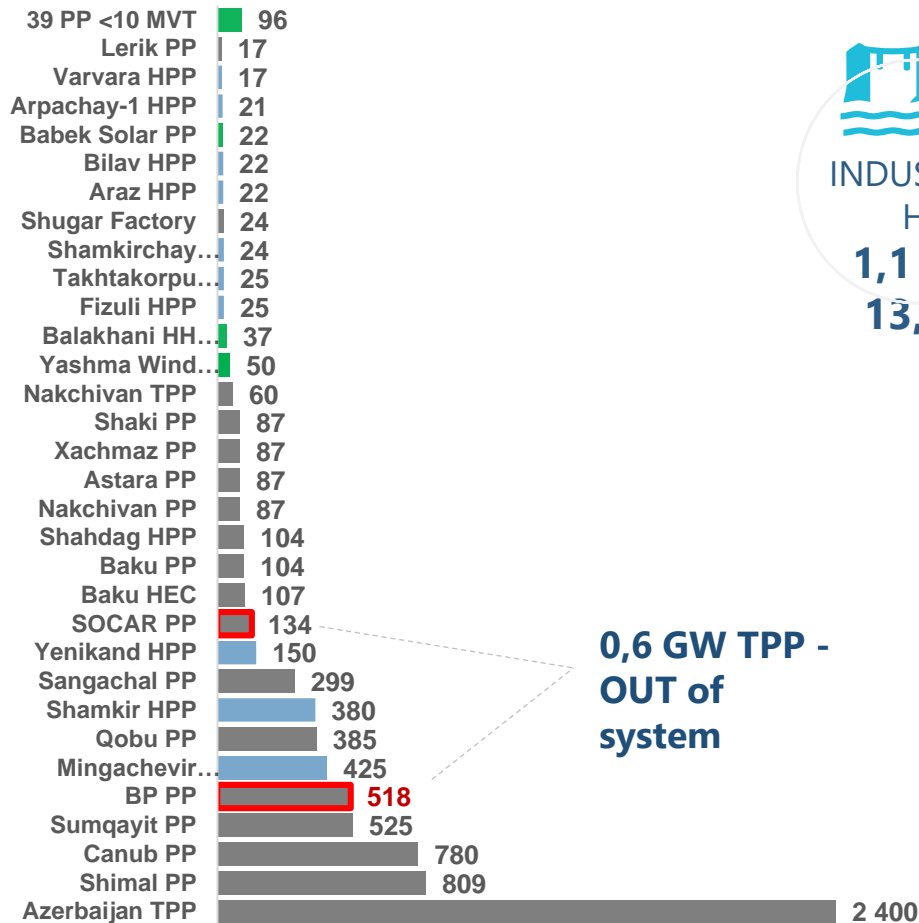
AZERKONTRAKT OJSC



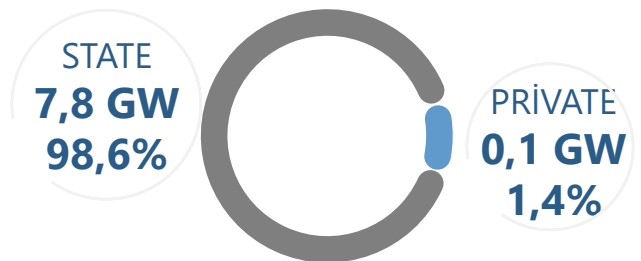
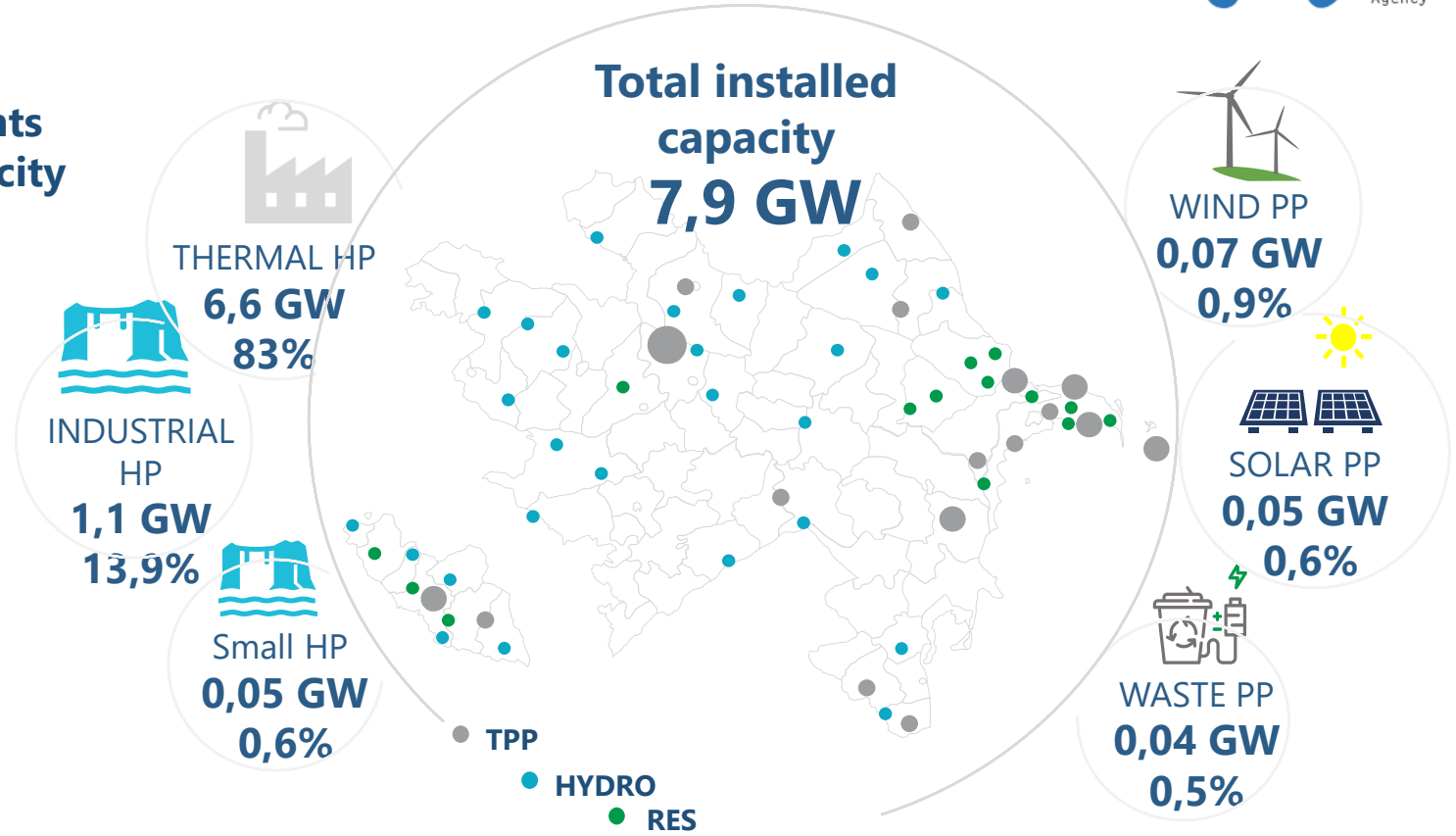
- Separate ownership
- Infrastructure activity
- Separate legal entity
- Supply activity

Installed Capacity

- RES including all hydropower plants is 1,3 GW, 16,5% of the total capacity

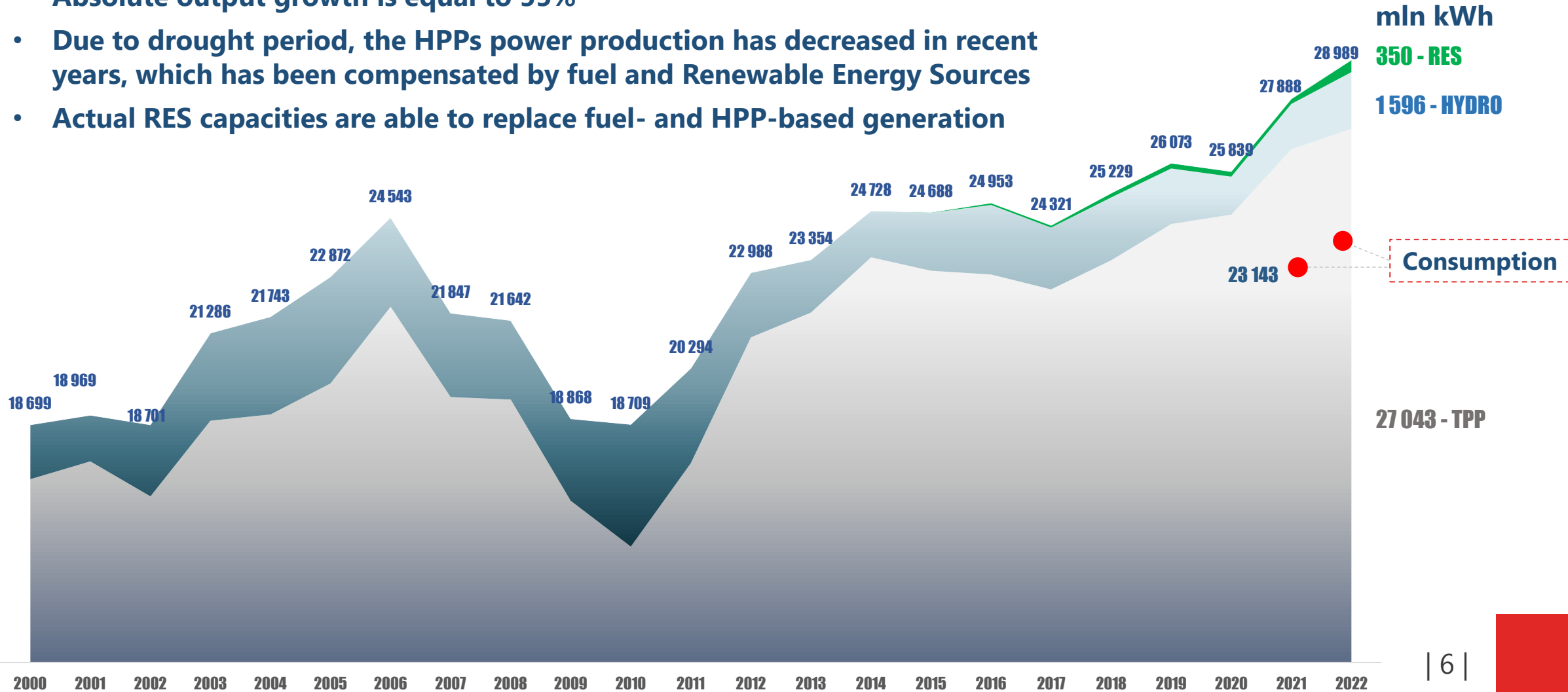


0,6 GW TPP - OUT of system



Electricity Production/Consumption

- Absolute output growth is equal to 55%
- Due to drought period, the HPPs power production has decreased in recent years, which has been compensated by fuel and Renewable Energy Sources
- Actual RES capacities are able to replace fuel- and HPP-based generation



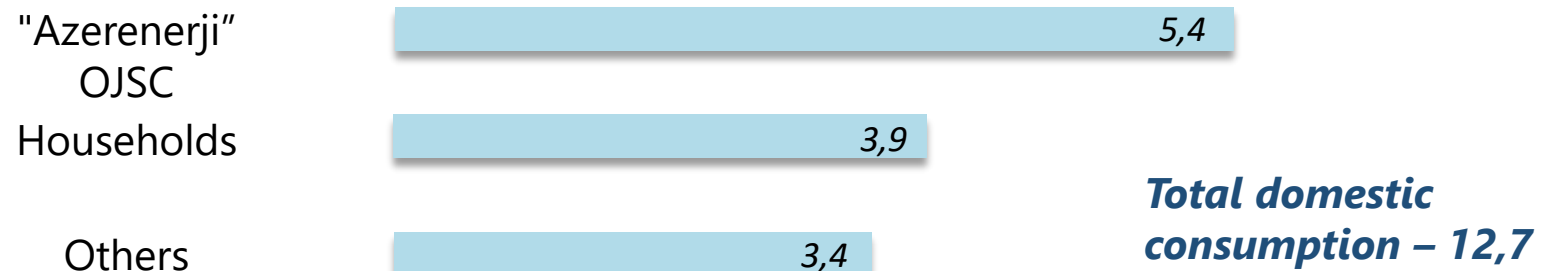
Natural Gas Production/Consumption (2022)



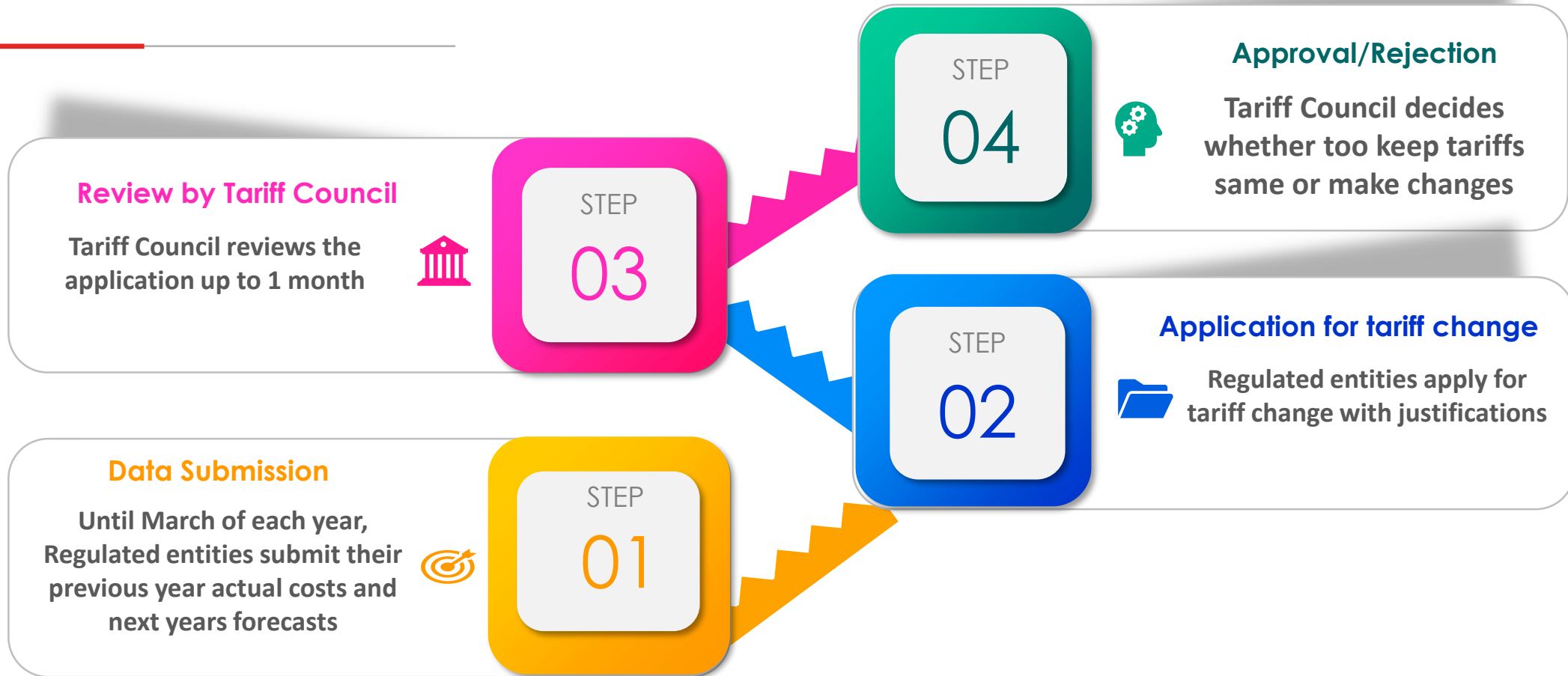
Production (bln.m³)



Domestic Consumption (bln.m³)



Current Tariff Approval Process

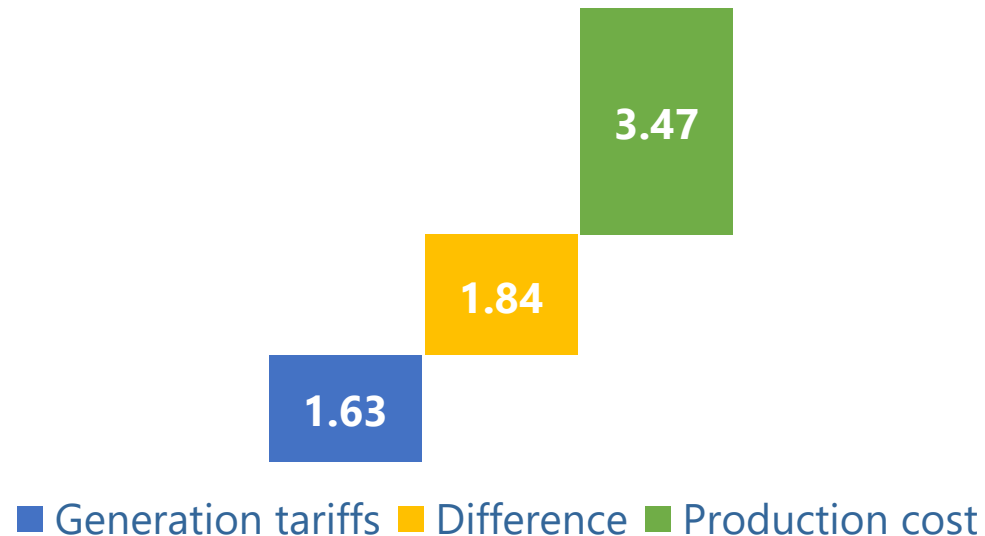


Tariff Council doesn't have annual adjustment scheme. It reviews tariffs based on requests of regulated entities, inflation, trends on costs, macroeconomic situation and other relevant factors.

Motivations for the first tariff reform (2007)

- A sharp difference between the cost of electricity generation and approved generation tariffs
- Continuous demand for subsidies (a serious burden on the state budget)
- Inefficient use of electricity by households & business

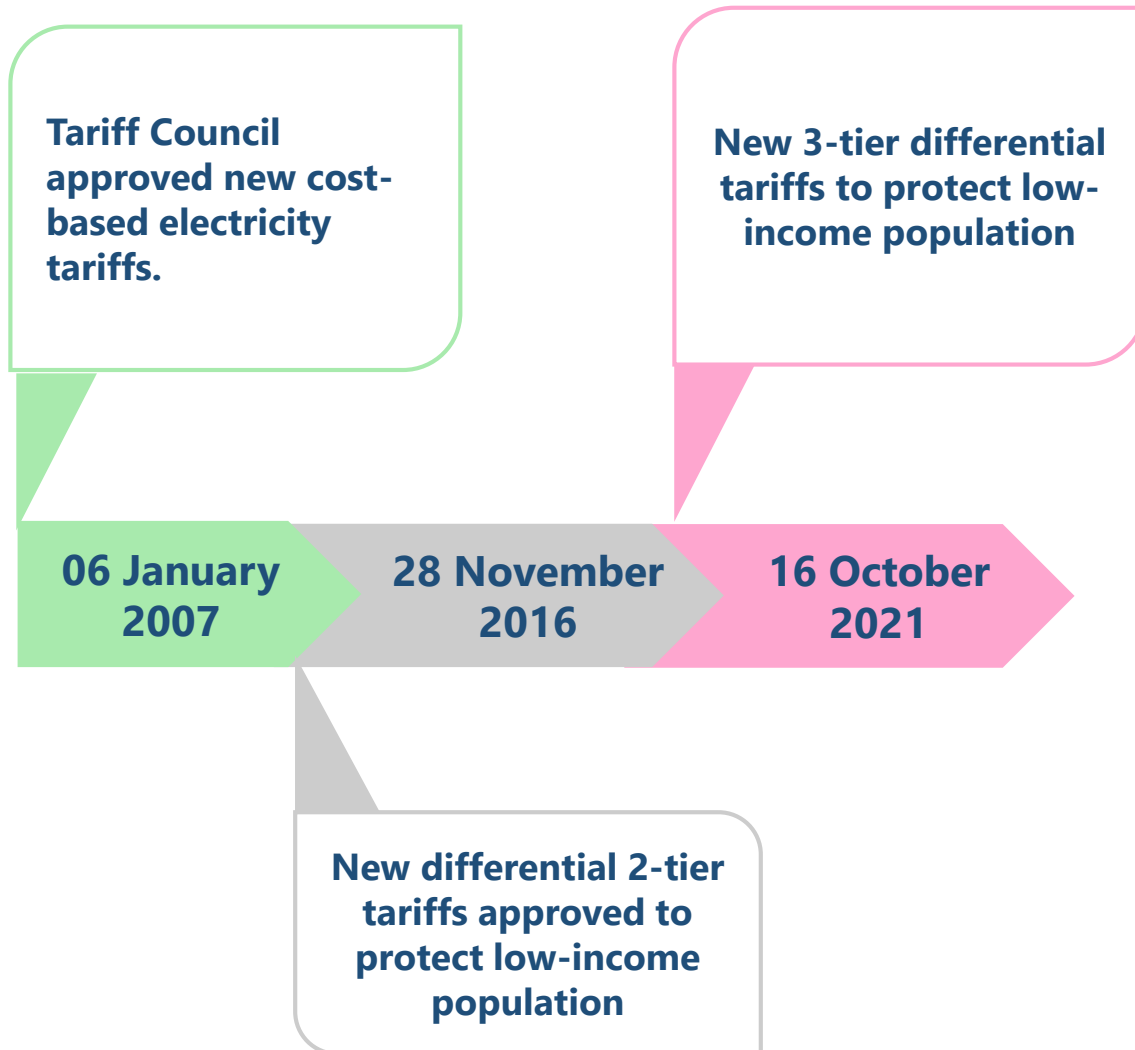
2006-Cost-Tariff difference (USDc/kWh.)



- As it is seen there is **1.84 cents** gap between cost of production and approved generation tariff. The amount of subsidy for 2005 and first half of 2006 was around **631 mln. USD**. Subsidy mainly was assigned to cover the cost of the natural gas used to produce electricity.

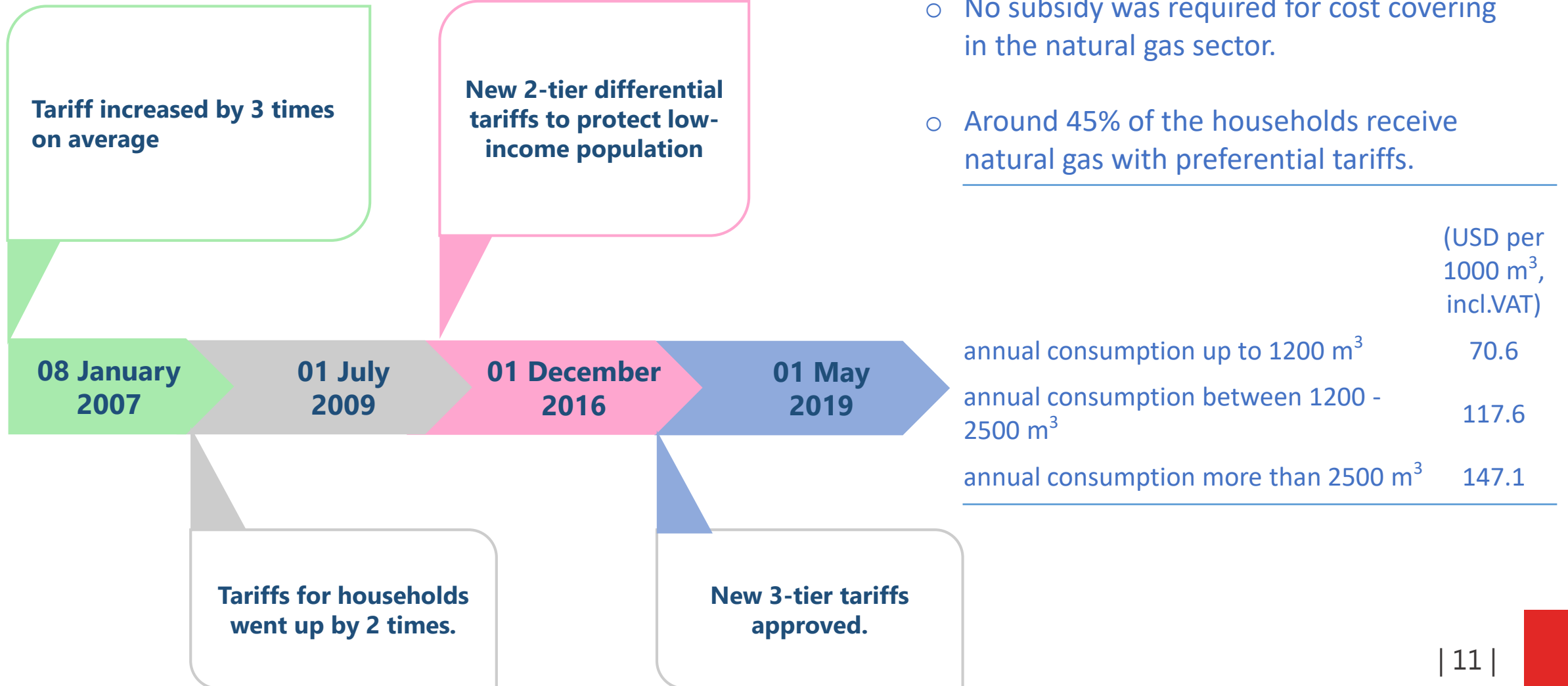
**Note that exchange rate in 2006 used for conversion.*

Tariff Reform Process (Electricity)



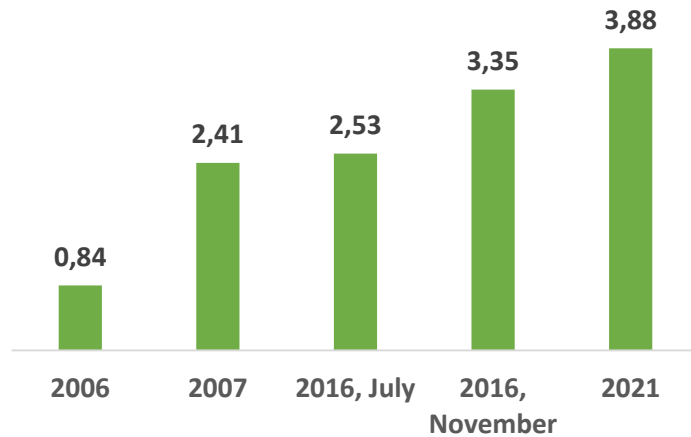
Tariffs are set by the Tariff (Price) Council Decision – 16.10.2021 №14		USD cent/kWh
Purchase from the producer:		
• On private small hydropower plants		2,9
• On wind power plants		3,2
• Other renewable sources		3,4
Wholesale tariffs		3,9
• From 35 and 110 kV (for Aluminum industry)		
○ Daytime		3,8
○ Night time		1,8
Retail tariffs		
• Residential		
○ Monthly consumption up to 200 kWh (incl.200)		4,7
○ Monthly consumption 200 ÷ 300 kWh (inc.300)		5,3
○ Monthly consumption greater 300 kWh		7,7
• Trade and service		6,5
• Others		5,9

Tariff Reform Process (Natural Gas)

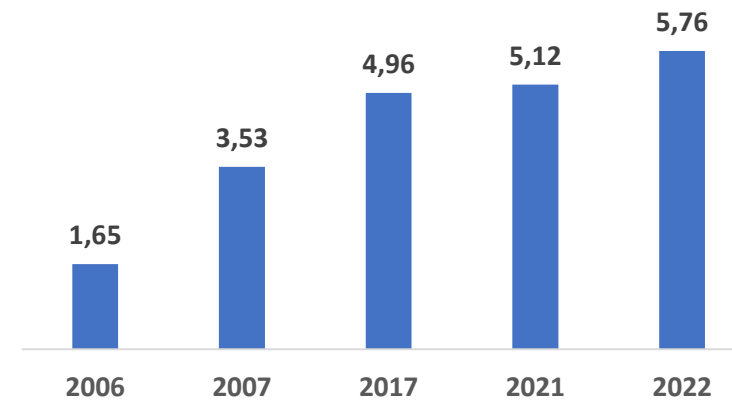


Average tariffs

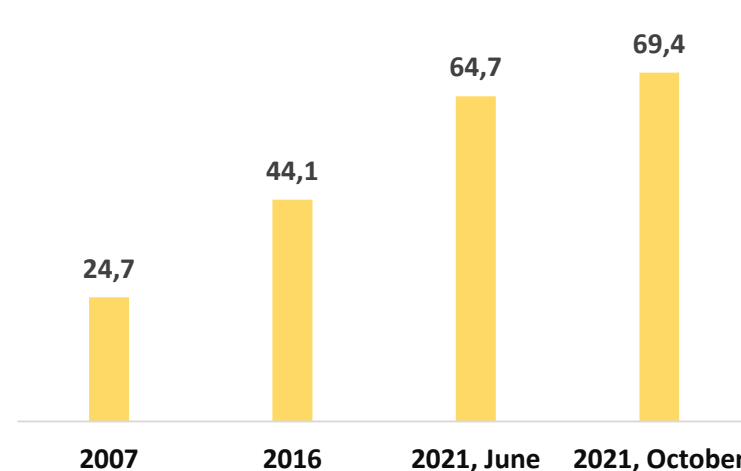
Approved electricity generation tariffs (USDc/kWh)



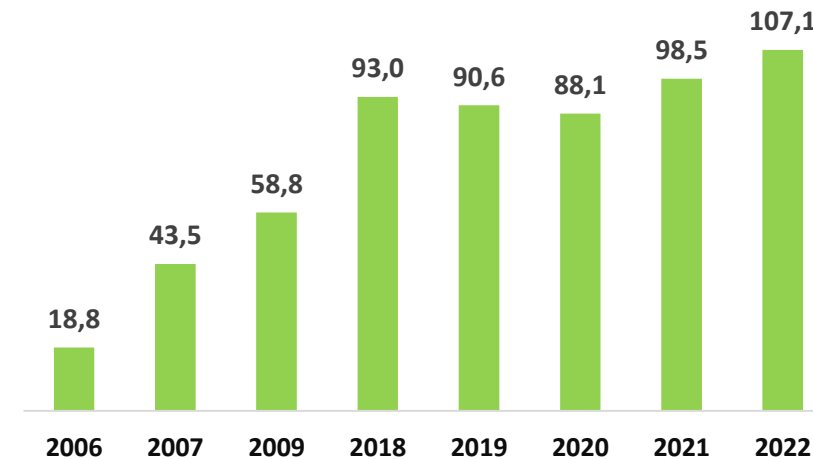
Average end user electricity tariffs (USDc/kWh)



Wholesale of natural gas to gas distributors (USD/1000 m³)



Average end user natural gas tariffs (USD/1000 m³)

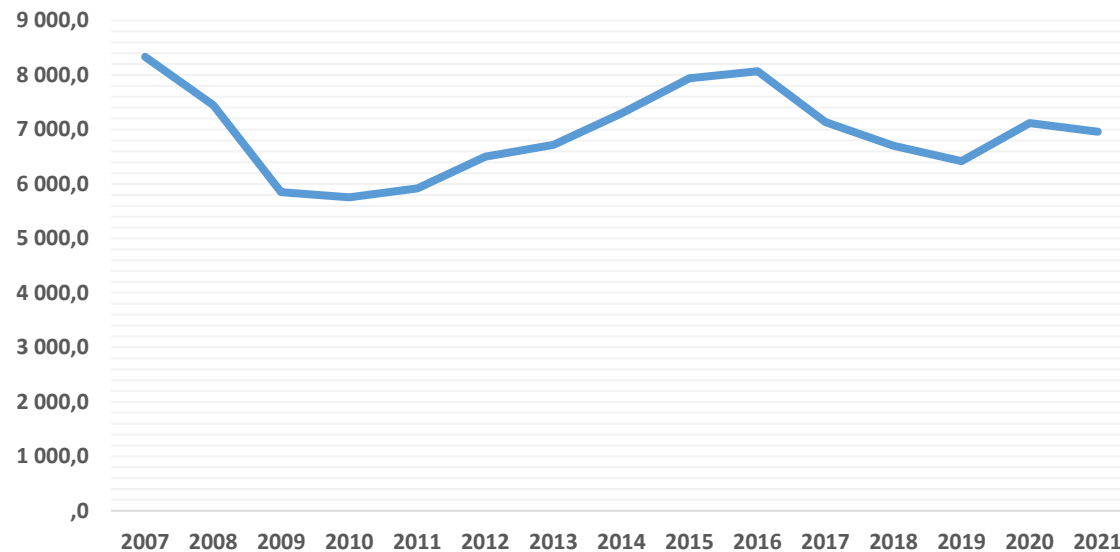


*To avoid effects of currency devaluation, current AZN-USD rate was used for conversion. 1 USD = 1.70 AZN

Results of the first Tariff Reforms

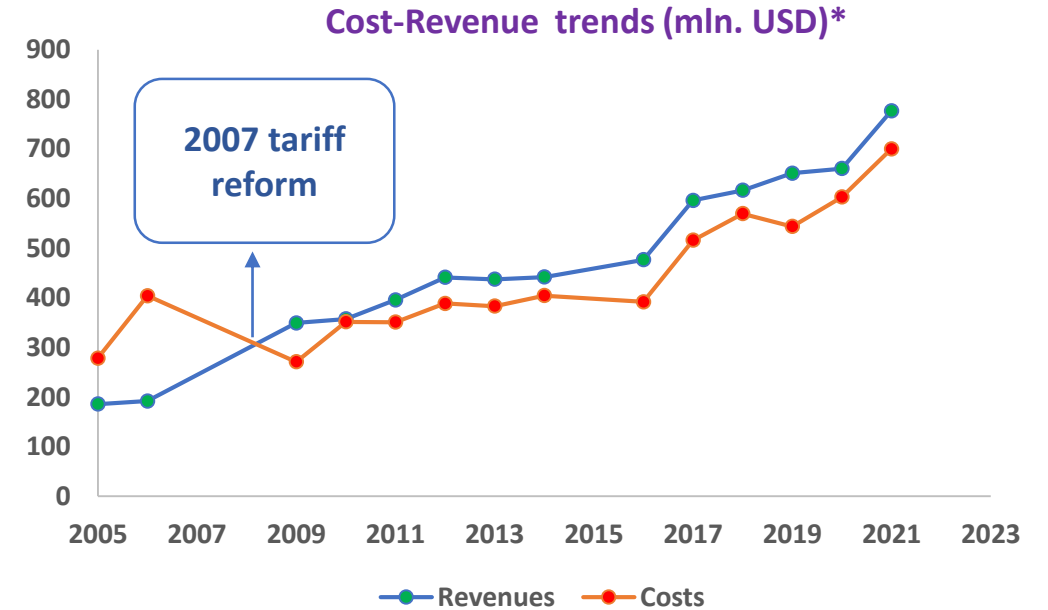
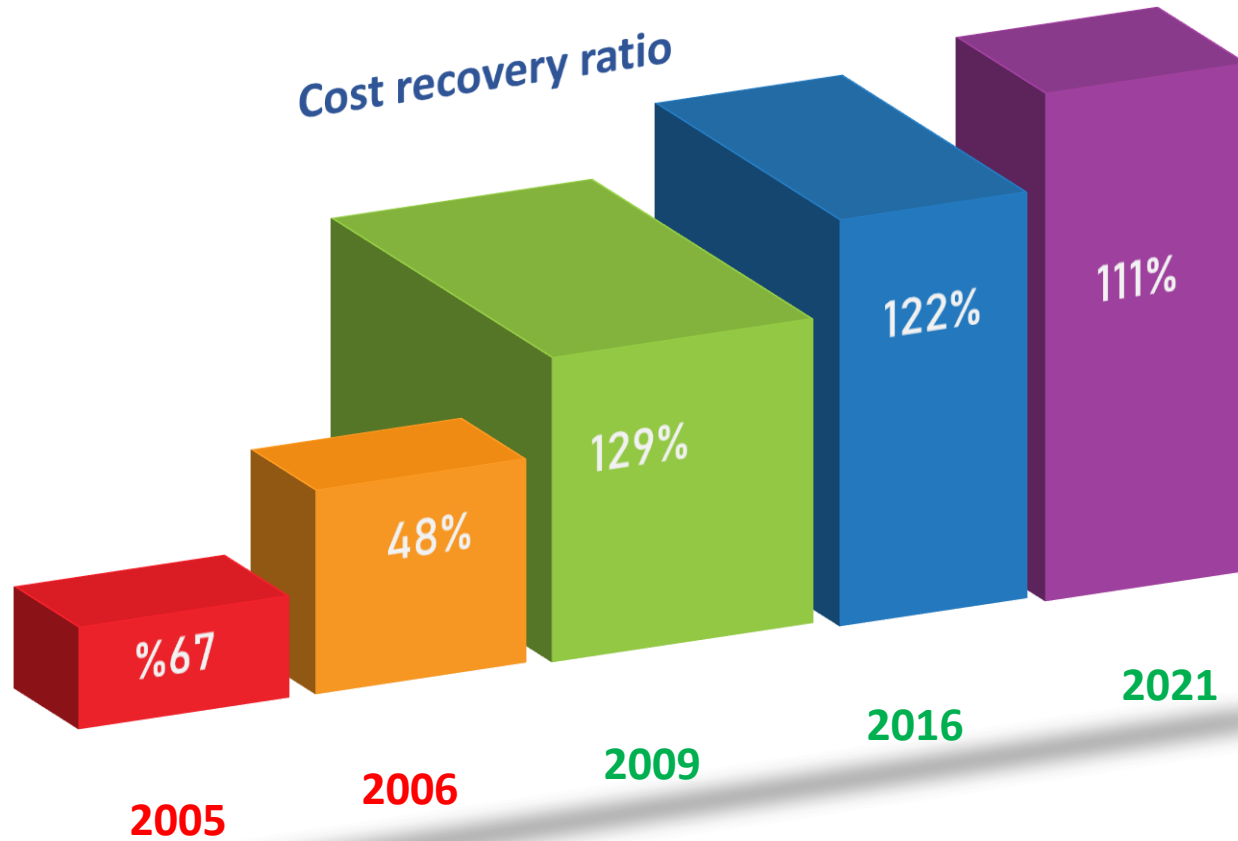
- Fuel subsidy has been stopped
- Sectors financial sustainability increased and entities have started operating with profit
- Metering process accelerated and collection rate rose up
- Significant energy saving achieved

Electricity consumption of household (mln.kWh.)



- Households respond tariff increase by cutting their energy consumption. From 2007 to 2008, electricity consumed by households decreased 11%, from 2008 to 2009 a decline was 21%;
- Tariff increase stimulates more efficient use of energy;
- Tariff increase of 2016 also leads to a decline of 12% in 2017 as well (Households increased their consumptions afterwards but they have never restored their 2016 level).

Cost recovery trajectories -Generation



- Generation company operates **with 14%** profit on average between 2009-2021 after tariff reforms.
- Natural gas and electricity distribution companies have never demanded subsidies for cost-recovery purposes. This is why, we are only analyzing **state- owned electricity generation company**.

*Based on current exchange rate.

Motivations for the second tariff reform



Generation:

- regular demand for public investment
- Price of natural gas used to produce electricity is still regulated and **lower than market level**
- cross subsidization



Transmission:

- regular demand for public investment
- Tariff and cost-covering problem
- cross subsidization



Distribution:

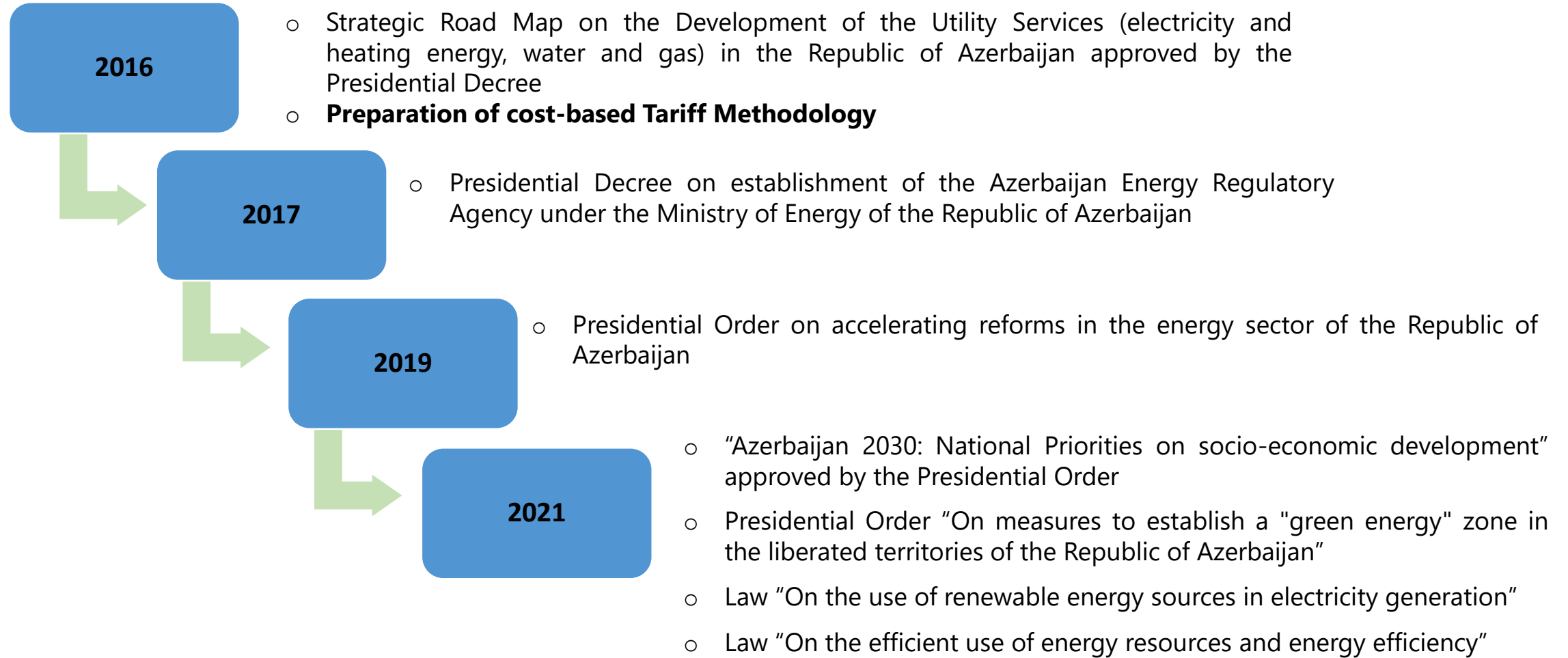
- regular demand for public investment
- cross subsidization



Gas distribution:

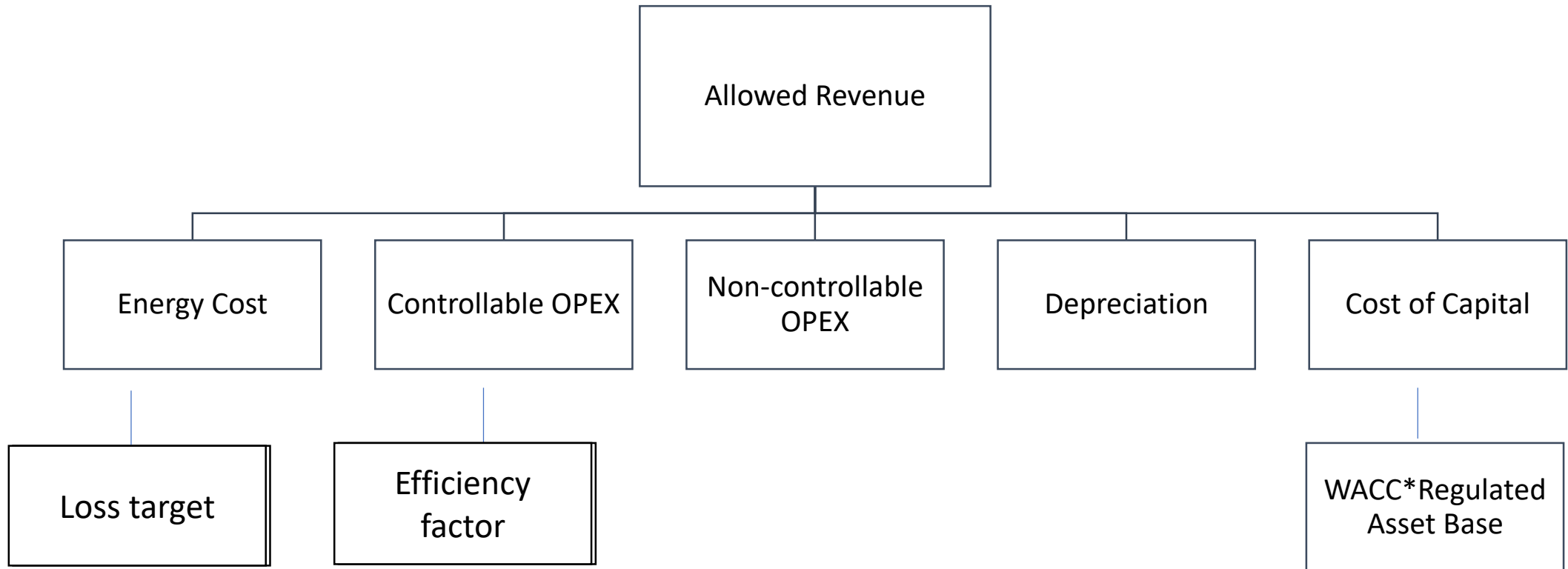
- regular demand for public investment
- cross subsidization

Tariff reform



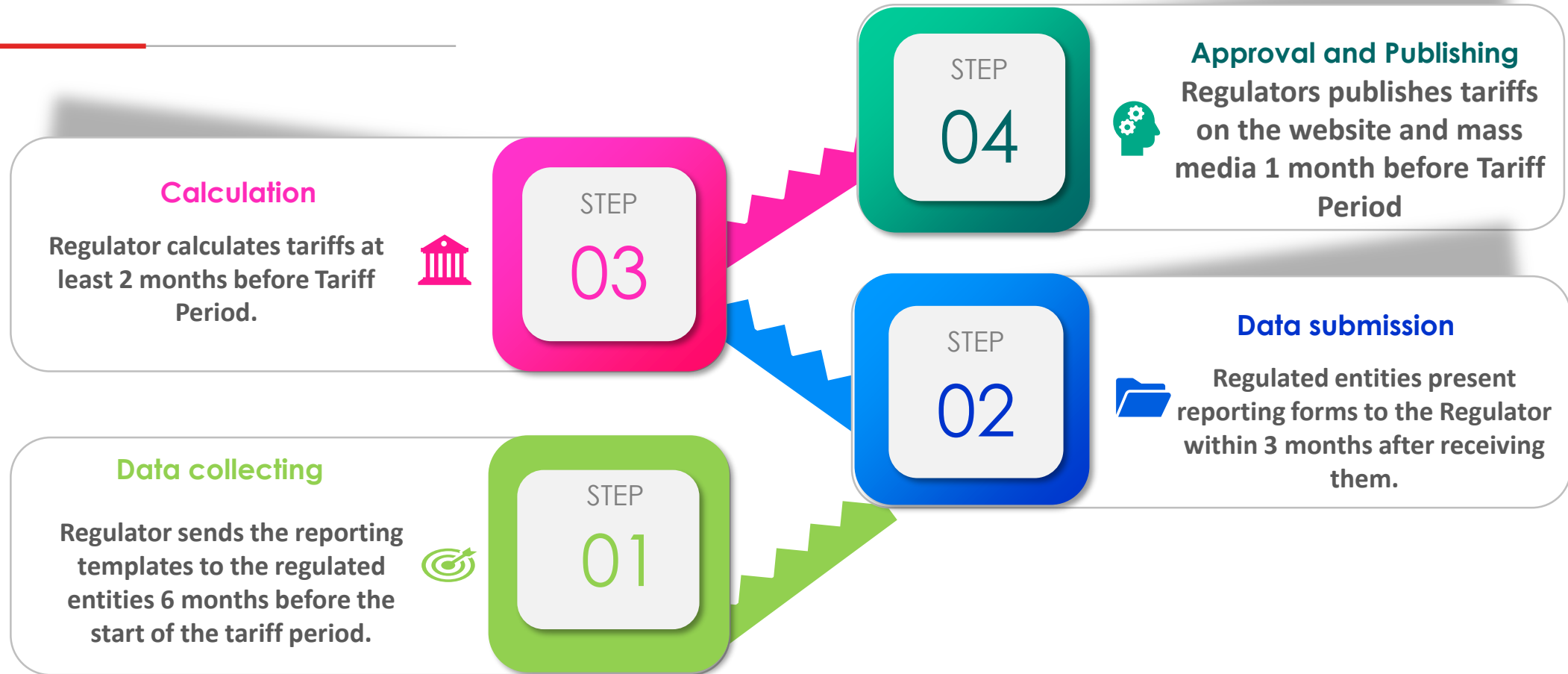
Tariff Methodology (For Gas and Electricity)

- Cost-based (rate of return) Tariff Methodology has been designed by Azerbaijan Energy Regulatory Agency



Methodology envisages the calculation of energy, capacity, fixed, time of use tariffs. Tariff Period will be one year.

Target Tariff Approval Process



- According to the new Methodology **tariffs will be reviewed annually and** adjustments during tariff period will be made only if **there is hyperinflation or the price of the fuel increases more than 10%.**

Expected results of the second tariff reform

Elimination of Investment Subsidies

1

Avoid cross-subsidization between Electricity Service and any other activities carried out by the System Operators

Increase Efficiency

2

Promote economic efficiency in particular sector through the use of cost reflective pricing.
Increase the quality of the services, reducing losses.

Promoting Transparency

3

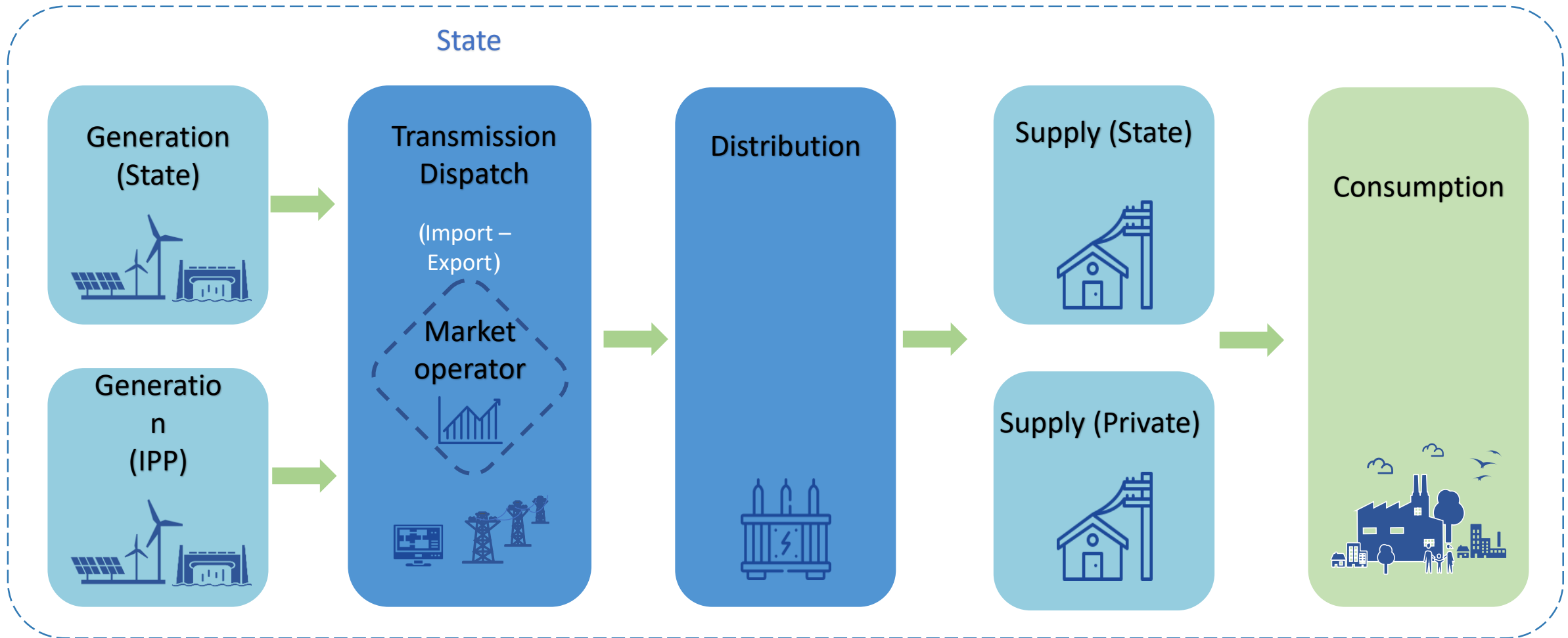
Completion of unbundling process will promote the transparency, objectiveness and simplicity of the tariff regulation.

Formulation of Energy Market

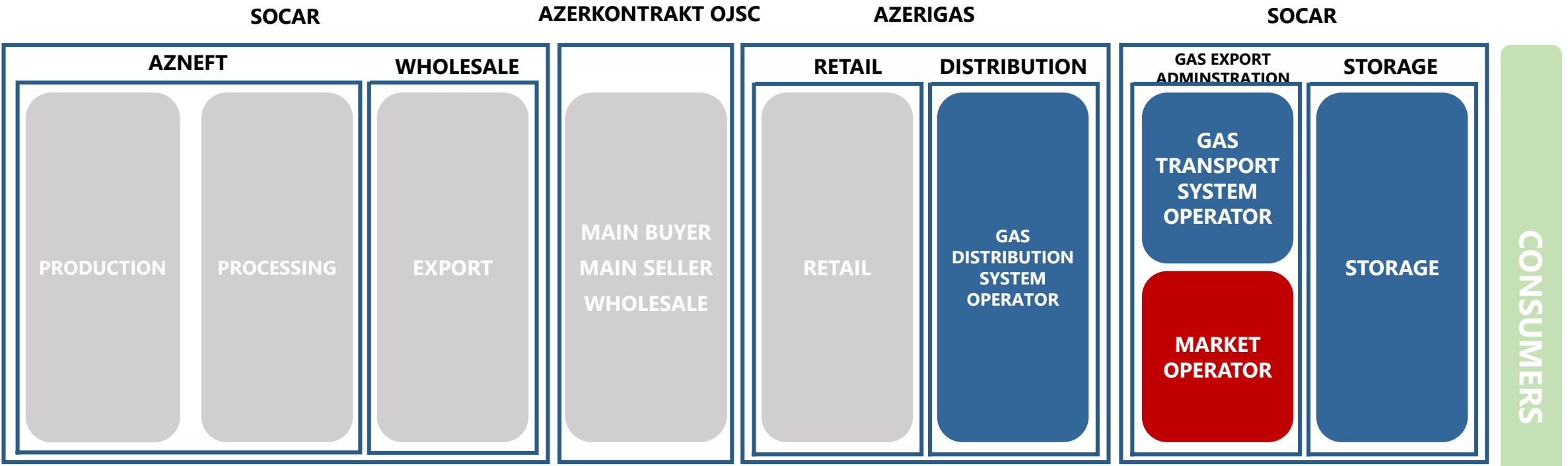
4

Successful and continuous implementation of the tariff methodology will stimulate the formulation process of energy market.

Electricity Market design of Azerbaijan – Target Model



Natural gas market design of Azerbaijan-Target Model



Separate ownership
 Infrastructure activity
 Market Activities
 Separate legal entity
 Supply activity

Social considerations and customer affordability

- **No separate** definition for low-income families, but...

- **Most part** of the households users receive electricity with preferential tariffs:

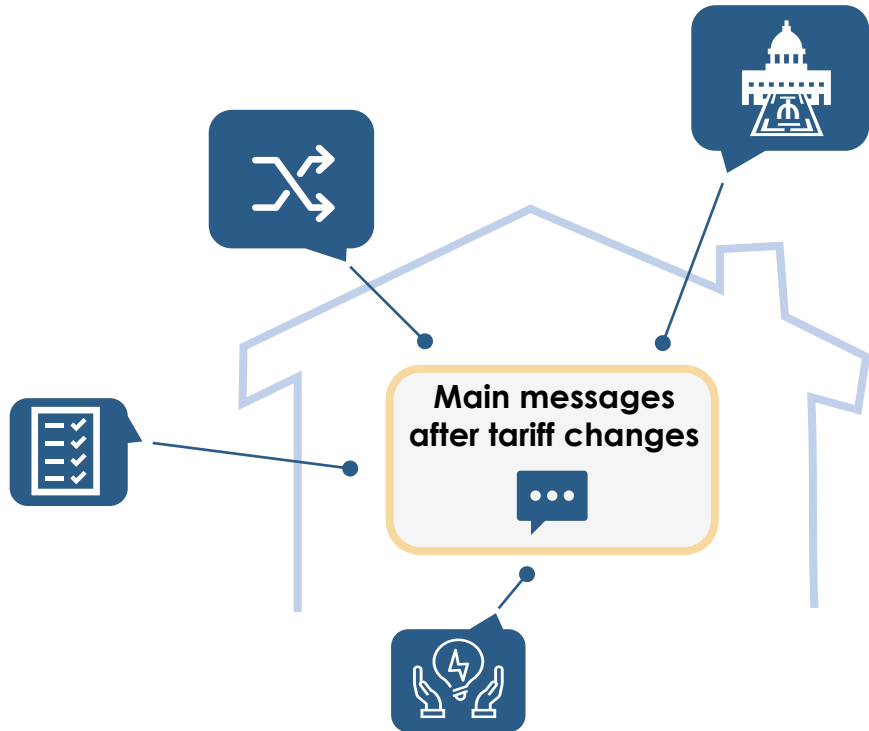


Services	Tariffs	Share
Residential, montly up to 200 kWh	4.7 usdc./kWh	≈65%
between 200-300 kWh	5,3 usdc./kWh	
more than 300 kWh	7.7 usdc./kWh	

- **Lower level of the differential** tariffs hasn't changed significantly over time to protect low-income population.
- There is also direct monthly **monetary support to the internally displaced people from first Karabakh war** for paying their utility bills.

Communication strategy

- Convey the right messages and explanations to the public during tariff changes



- **Tariffs are published on the website** of Tariff Council and Regulator and declared on mass media
- **In all tariff changes, lower level of differential tariffs nearly remained unchanged** *(tariffs for the most part of the households didn't change significantly)*
- **Quality supply is expected to rise** *(customers can feel it in their daily life after some periods)*
- **Tariff increase will trigger energy saving**
- **Burden on state budget will decrease** *(the state will direct the saved money to other important investment purposes such as renewable energy projects)*

Lessons learnt and recommendations



- Tariff reforms are not unequivocally accepted by the population. **Real incomes of the population and macroeconomic factors should be taken into account. Potential negative effects** on the economy should be minimized



- **The share of utility costs** in total consumption costs per person should be taken into account



- In the first stages of the reform, **cost-based (rate of return) Methodologies are more suitable** (it allows annual review of expenditures, stimulates investments)



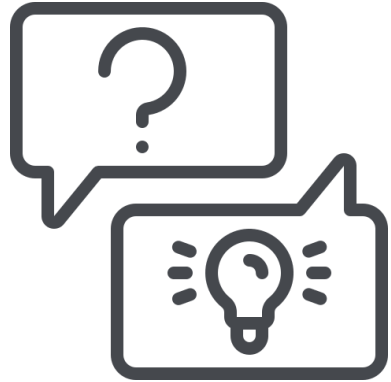
- Later, **the legislative base should be developed and monopolistic activities should be replaced** by competition (at generation level) followed by the application of revenue or price-cap methodologies



- Government can choose **the path of gradual elimination of subsidies** (as Azerbaijan did). In the earlier stages, **subsidies for fuel, OPEX can be stopped**, later investment subsidies



- The definition of the low-income population should be clearly defined in the law and the **direct subsidies can be granted to the low-income families**



**THANK YOU
FOR YOUR ATTENTION!**

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