



# Security of Supply CG- 6<sup>th</sup> Meeting of Sub-Group for Electricity

## Summer Outlook Report 2019

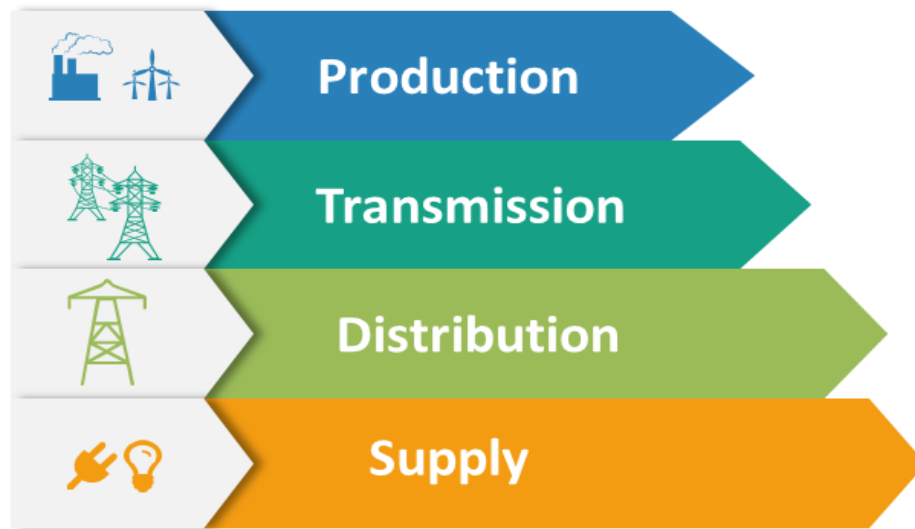
---

KOSOVO

Vienna, 2<sup>nd</sup> July 2019

# Content

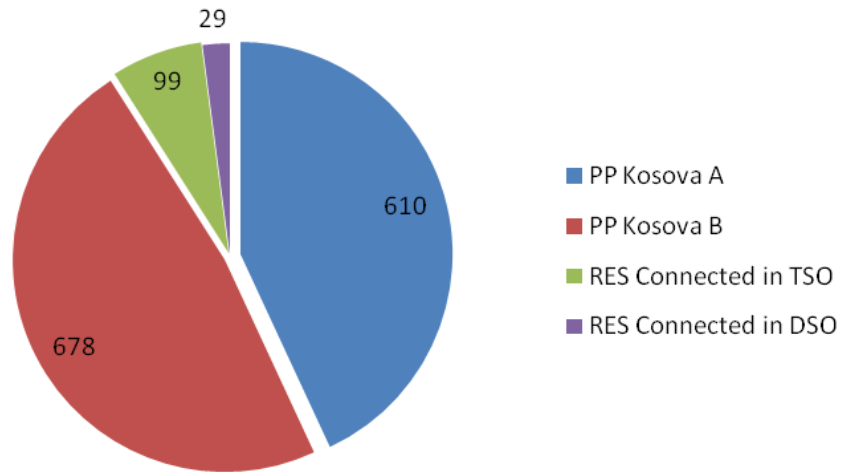
---



General note: *During the period were not occurred any unusual issue in terms of SoS.*

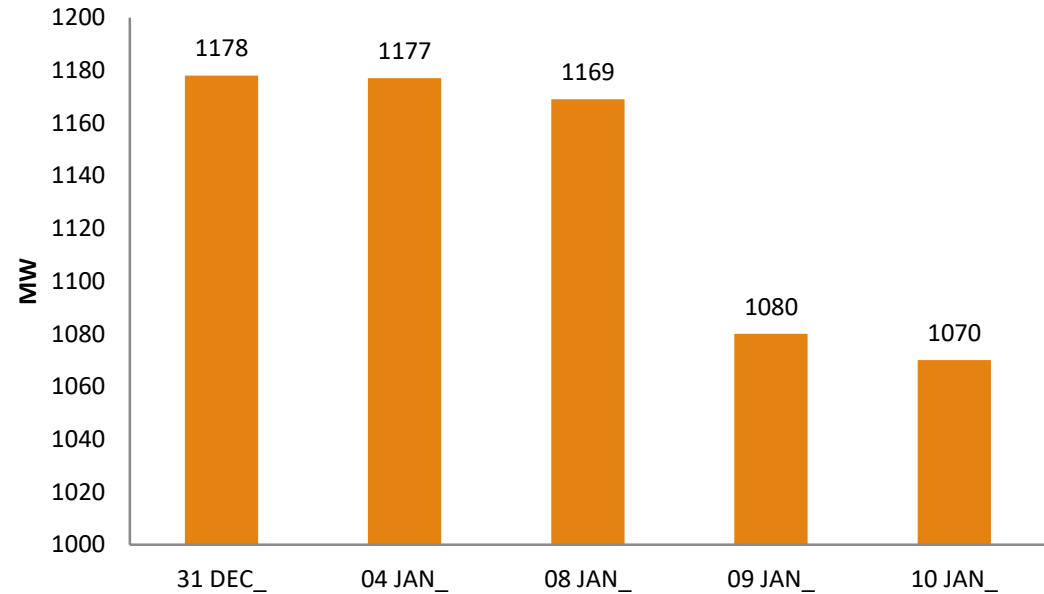
# Installed Capacity vs Peak demand

Instaled Capacity - MW

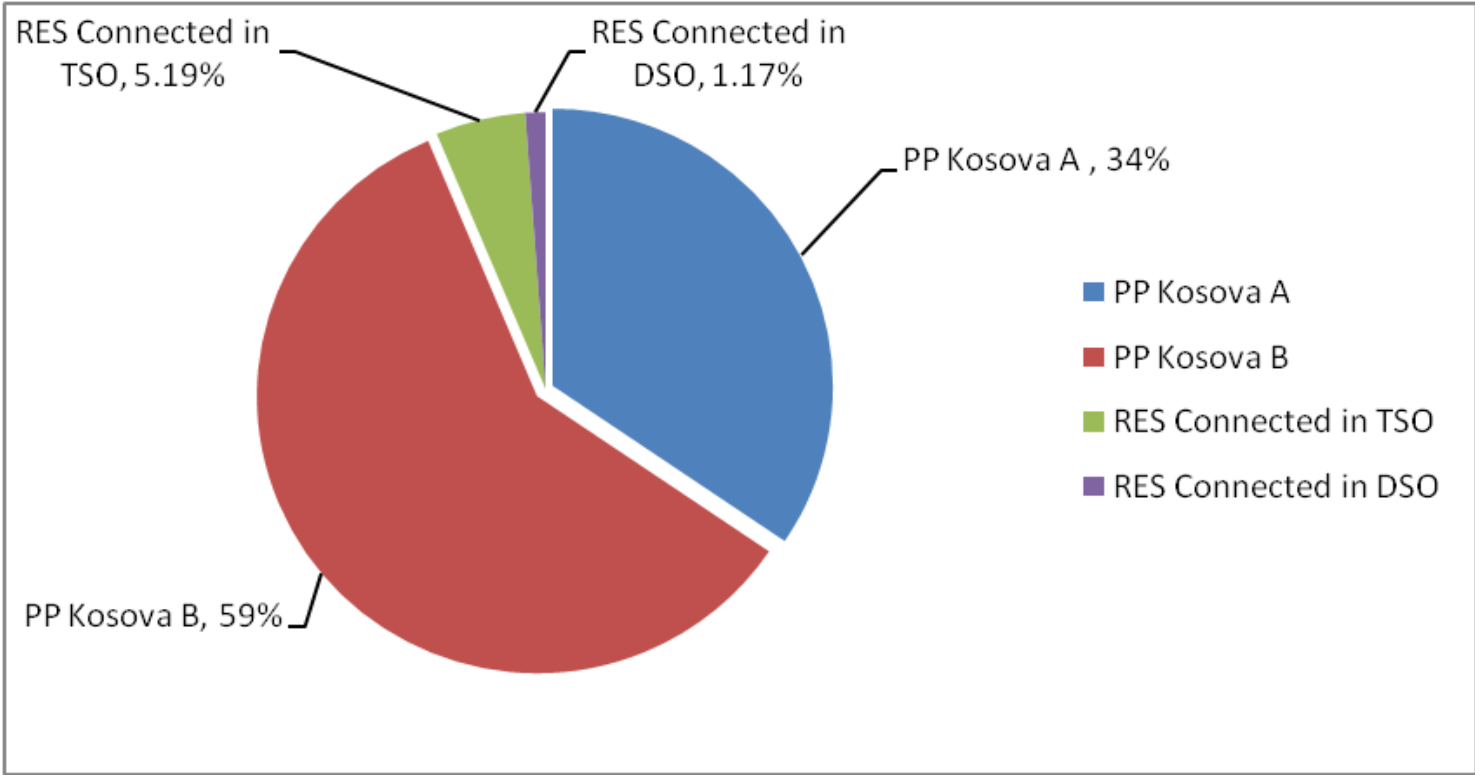


Actual installed capacity 1,416MW

Five maximal System Peaks 2019



# Generation capacity resources by types



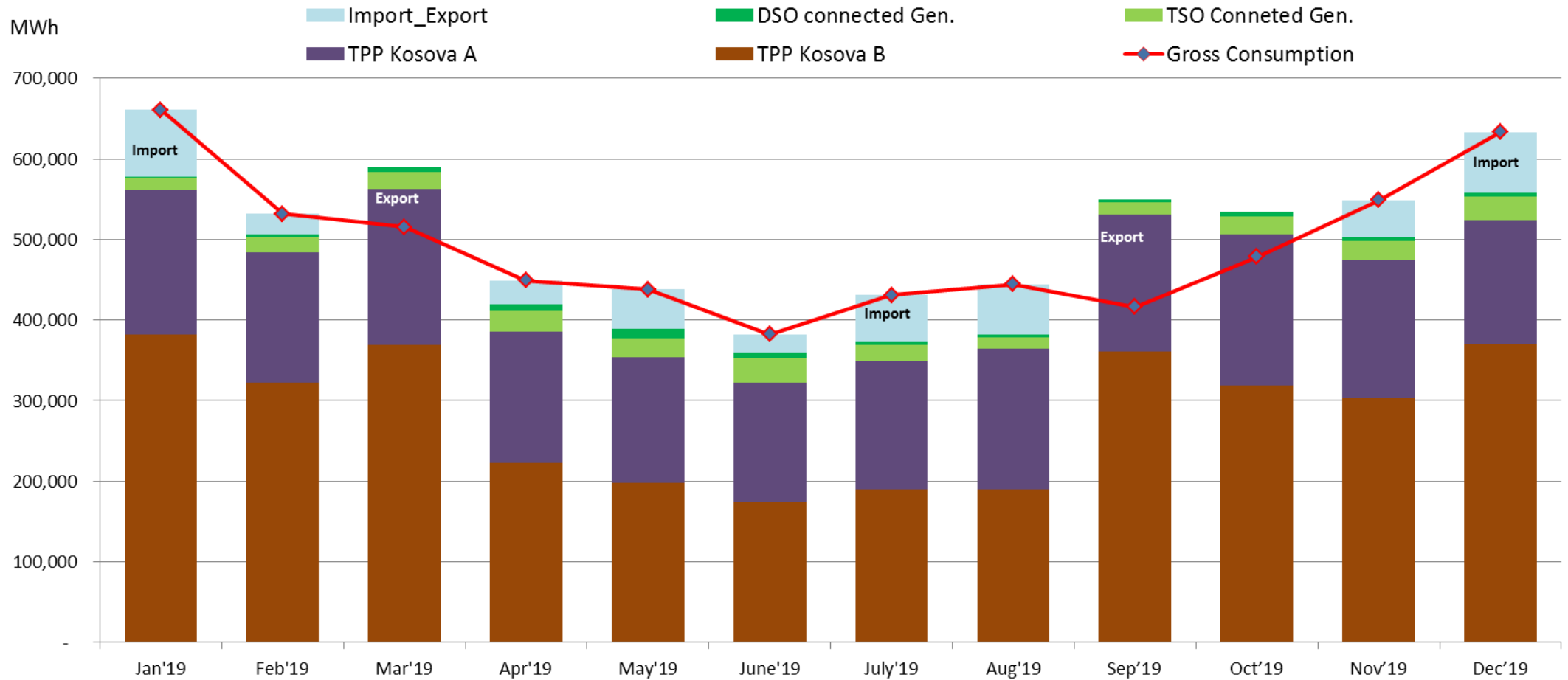
~94% of generation capacity is from Thermal Power Plants (PP Kosova A and PP Kosova B)

# Supply and Consumption 2019 (1)

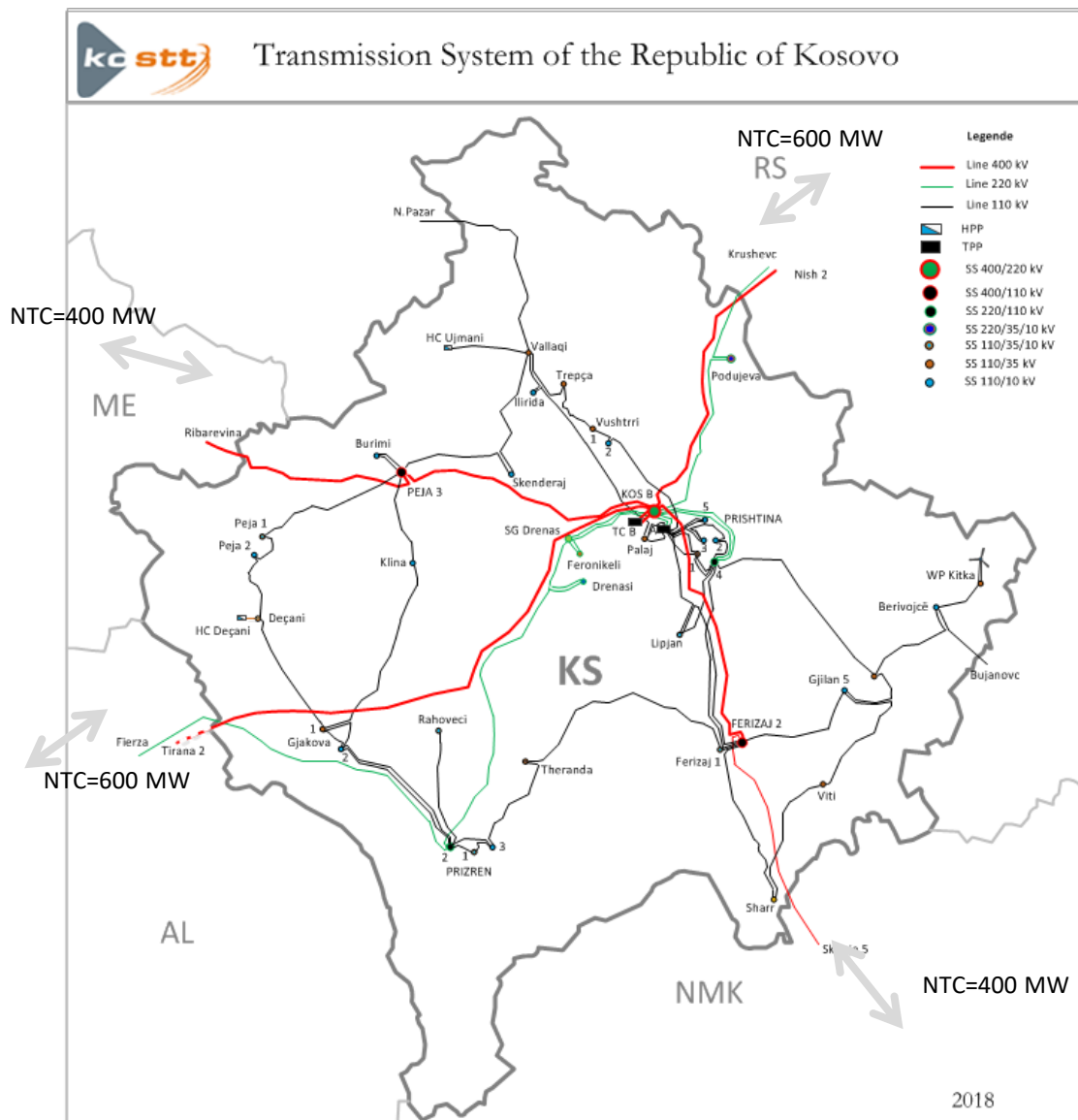
Description MWh	Total	Jan'19	Feb'19	Mar'19	Apr'19	May'19	June'19	July'19	Aug'19	Sep'19	Oct'19	Nov'19	Dec'19
TPP Kosova A	2,015,612	178,755	162,344	193,323	162,358	155,944	147,946	159,330	174,002	170,146	187,998	170,228	153,238
TPP Kosova B	3,402,203	382,358	322,109	369,011	222,650	197,540	174,147	189,817	190,027	361,203	318,619	303,943	370,778
TSO Conneted Gen.	236,518	15,657	18,842	21,596	25,954	24	30,872	19,681	14,506	14,511	21,613	24,020	29,242
DSO connected Gen.	65,454	1,540	3,430	5,774	8,759	12,388	6,849	4,019	3,039	4,265	5,670	5,086	4,637
Import	952,925	110,407	67,644	47,474	82,430	99,826	46,300	64,257	75,358	70,977	68,351	107,090	112,811
Total	6,672,712	688,716	574,369	637,178	502,152	465,721	406,114	437,104	456,932	621,102	602,251	610,367	670,706
<b>Gross Consumption</b>	<b>5,929,513</b>	<b>660,721</b>	<b>531,886</b>	<b>515,611</b>	<b>449,219</b>	<b>437,921</b>	<b>382,061</b>	<b>430,801</b>	<b>444,736</b>	<b>416,298</b>	<b>478,539</b>	<b>548,747</b>	<b>632,973</b>
Export	743,200	27,995	42,483	121,567	52,933	27,801	24,053	6,303	12,196	204,804	123,712	61,620	37,733

- Actual generation is higher 4.5% than forecast
- Steady coal exploration and level of reserves is according to the plan
- Around 14% of the energy is secured from import, whereas export is around 11%
- Capital overhaul of B2 unit of the TPP Kosova B has been started in April and it is expected to be completed in August

# Supply and Consumption 2019 (2)



# KOSTT main infrastructure and system data (actual)



## Transmission lines

HV Lines in KOSTT	Line length [km]
400 kV	279.7
220 kV	231.8
110 kV	841.8

**Total line length =1353.4 km**

## Power Transformers and Substations

<b>Autotransformers</b>	<b>3750 MVA</b>
<b>Transformers</b>	<b>2240 MVA</b>
<b>Main HV Substations</b>	<b>6</b>
<b>Load Substations</b>	<b>30</b>

## Peak load last three years and for 2019

Y-2016	Y-2017	Y-2018	Y-2019
<b>1160 MW</b>	<b>1161 MW</b>	<b>1201 MW</b>	<b>1178</b>

## Electricity demand last three years and for 2019

Y-2016	Y-2017	Y-2018	Y-2019
<b>5.43 TWh</b>	<b>5.78 TWh</b>	<b>5.78 TWh</b>	<b>6.073</b>

# Transmission operations facts (1)

---

## ➤ **Interconnection 400kV line with Albania**

- Non-operation of in reducing the possibility of exporting or importing electricity to Albania
- The Agreement signed for secondary regulating frequency/power remains unimplemented

## ➤ **Political obstacles:**

- Non implementation of Connection Agreement with ENTSO-E
- Financial impact (loss of revenues)
- Constrains for Market Integration



# Transmission operations facts (2)

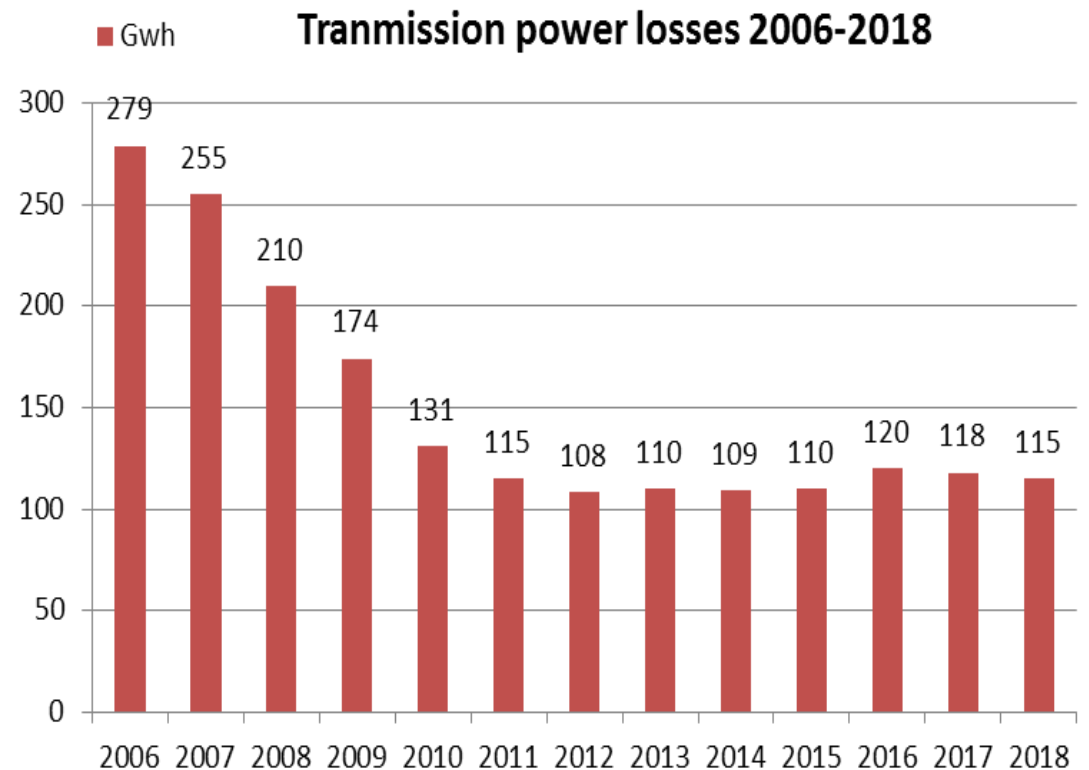
## Network

- Strong interconnection Capacity/Peak= 4.82
- Well Interconnected with neighbouring TSO-s (four 400 kV and two 220 kV lines)
- N-1 criterion is fulfilled for entire HV network
- Significantly reduction of ENS caused by transmission system
- Supporting industrial load growth and RES integration
- Transmission losses 1.98 % in 2018

## TSO Developments 2019

Three new substations:

- 220/10(20)kV; 2x40MVA (Commissioned)
- 110/10 (20)kV; 2x40MVA (Commissioned)
- 110/10 (20)kV; 2x40MVA (expected Oct. 2019)



# Distribution (1)

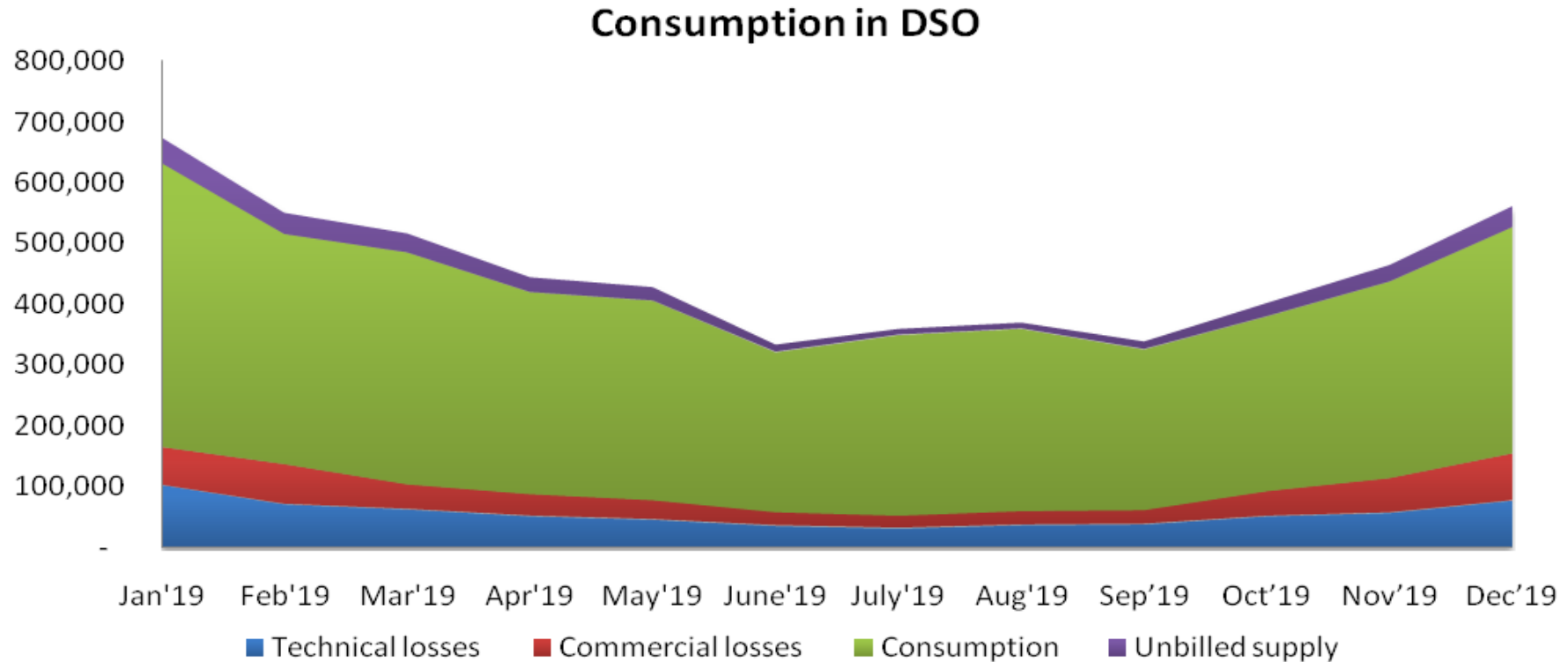
Total EED is expected to be increased by 3.4%, whereas billed energy is increased around 4.5%

MWh	Total	Jan'19	Feb'19	Mar'19	Apr'19	May'19	June'19	July'19	Aug'19	Sep'19	Oct'19	Nov'19	Dec'19
EED (without UE)	5,162,994	633,129	515,867	485,515	420,106	406,102	321,410	349,599	360,011	326,088	380,232	437,573	527,362
Technical losses	669,114	103,560	71,823	63,438	52,167	46,374	36,242	31,952	37,425	38,744	51,953	57,531	77,905
Commercial losses	508,248	62,886	66,228	41,428	36,553	32,414	22,929	21,404	23,545	23,843	41,583	57,531	77,905
Consumption	3,985,632	466,683	377,816	380,649	331,385	327,314	262,240	296,243	299,041	263,501	286,696	322,512	371,551
Technical losses %	13.0%	16.4%	13.9%	13.1%	12.4%	11.4%	11.3%	9.1%	10.4%	11.9%	13.7%	13.1%	14.8%
Commercial losses %	9.8%	9.9%	12.8%	8.5%	8.7%	8.0%	7.1%	6.1%	6.5%	7.3%	10.9%	13.1%	14.8%
Unbilled supply	279,785	42,128	34,916	31,249	24,176	21,815	11,589	9,276	9,391	12,085	21,590	27,094	34,475
EED including Unbilled	5,442,779	675,257	550,783	516,764	444,281	427,918	332,999	358,875	369,402	338,173	401,822	464,667	561,837
Unbilled supply %	5.1%	6.2%	6.3%	6.0%	5.4%	5.1%	3.5%	2.6%	2.5%	3.6%	5.4%	5.8%	6.1%

*Unbilled supplies (political losses ~ 5 %)*

# Distribution (2)

---



*Expected demand in DSO is 5.2 TWh*

# Supply - Consumption by categories

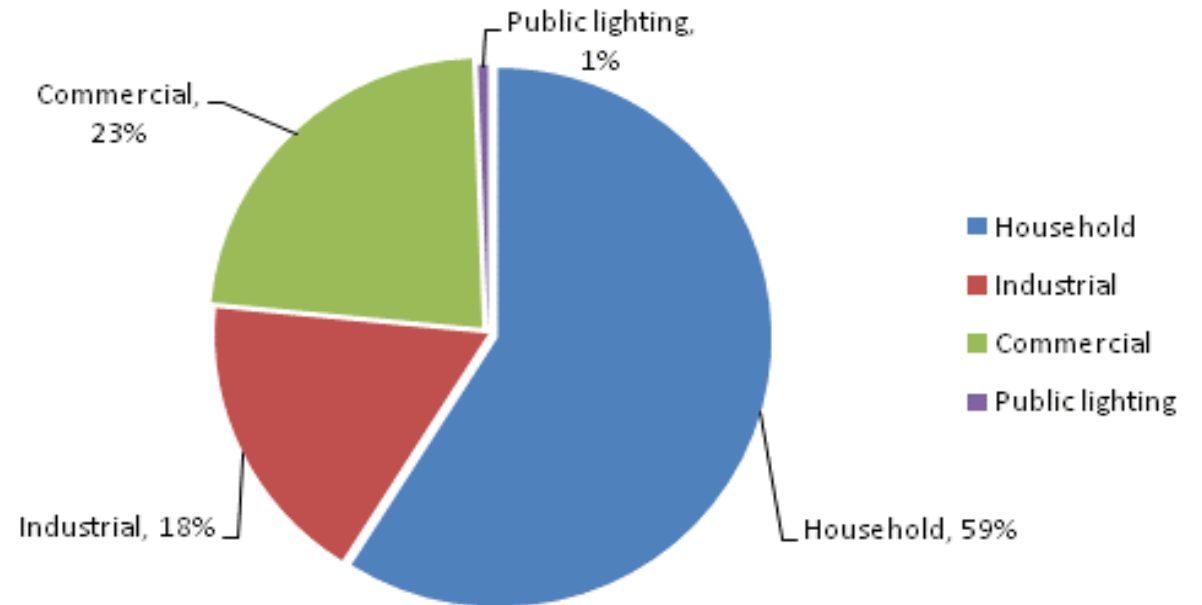
---

❑ 8 licensed suppliers, among which are SLR (Supplier of Last Resort) and USS (Universal Service Supplier)

❑ Licensed suppliers:

1. KESCO
2. HEP Energia KS
3. GSA Energji
4. Future energy trading
5. Jaha Company
6. KEK
7. Sharr Cem
8. Energo LLC

**Consumption by categories**



---

Thank you for your attention!

