

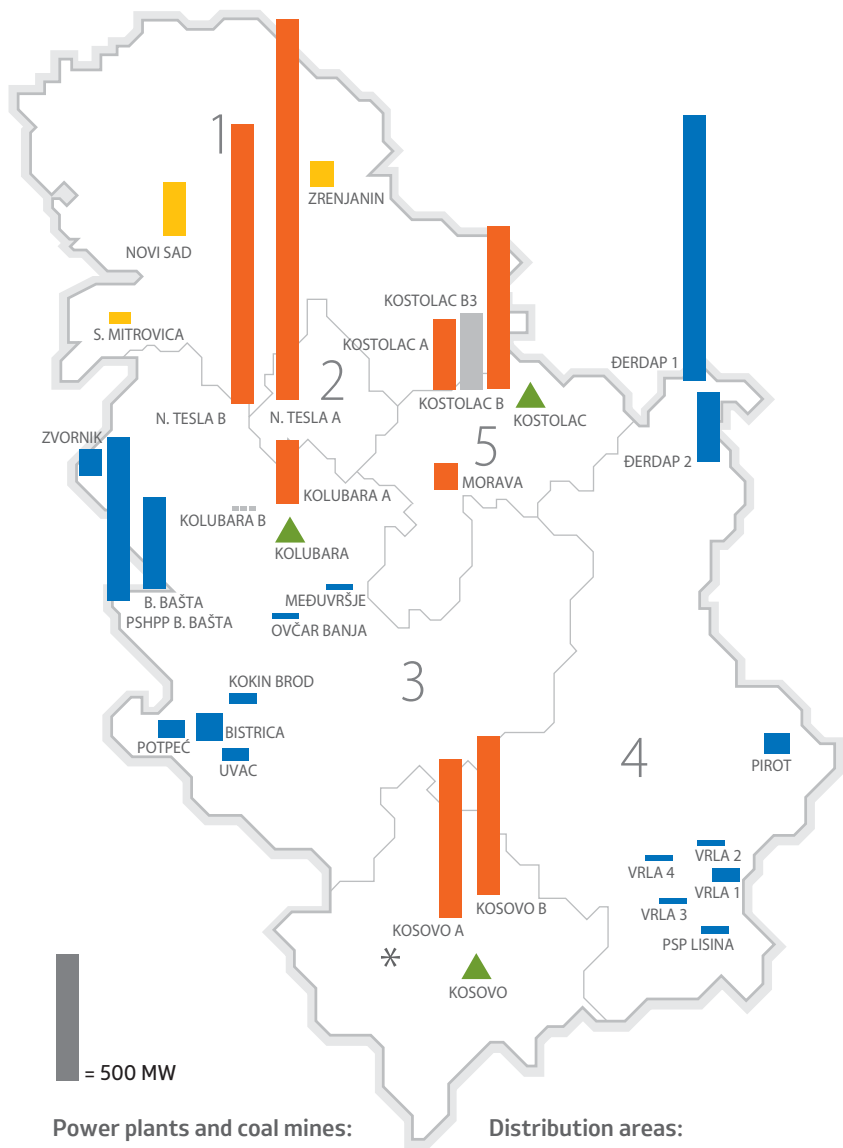
ELECTRIC POWER INDUSTRY OF SERBIA



TECHNICAL REPORT

2016

EPS INSTALLED CAPACITIES



Power plants and coal mines:

- TPP
- TPP UNDER CONSTRUCTION
- TPP potentially place
- CHP
- HPP
- COAL MINE

Distribution areas:

- 1_Novi Sad
 - 2_Beograd
 - 3_Kraljevo
 - 4_Niš
 - 5_Kragujevac
- *_PE Elektrokosmet, Priština

* As of June 1999, EPS does not operate its facilities on the territory of Kosovo and Metohija

EPS 2016

Data related to capacities managed by
Public Enterprise Electric Power Industry of Serbia

GENERATION CAPACITIES Net output capacity	<u>7,326</u>	MW
ELECTRICITY GENERATION	<u>36,461</u>	GWh
COAL PRODUCTION	<u>37,652,520</u>	t
OVERBURDEN REMOVAL	<u>98,780,877</u>	bcm
ELECTRICITY SALE	<u>37,369</u>	GWh
In EPS Group	<u>33,371</u>	GWh
Out of EPS Group	<u>3,998</u>	GWh
ELECTRICITY PURCHASE Out of EPS Group	<u>919</u>	GWh
NUMBER OF CUSTOMERS		
Total	<u>3,457,395</u>	
Guaranteed supply	<u>3,445,676</u>	
Last resort supply	<u>624</u>	
Commercial supply	<u>11,095</u>	

GENERATION CAPACITIES

POWER PLANT	Net output capacity MW
TPP Nikola Tesla A	1,597
TPP Nikola Tesla B	1,190
TPP Kolubara	216
TPP Morava	108
TPP Kostolac A	281
TPP Kostolac B	640
THERMAL Power Plants	4,032
CHP Novi Sad	208
CHP Zrenjanin	100
CHP Sremska Mitrovica	28
COMBINED Heat and Power Plants	336
HPP Đerdap 1	1,099
HPP Đerdap 2	270
Vlasina HPPs	129
HPP Piroć	80
HPP Bajina Bašta	420
PSHPP Bajina Bašta	614
HPP Zvornik	96
HPP Elektromorava	18
HPP Potpeć	51
HPP Bistrica and HPP Kokin Brod	124
HPP Uvac	36
Mini HPPs	21
HYDRO Power Plants	2,958
EPS POWER PLANTS	7,326

ELECTRICITY GENERATION

POWER PLANT	GWh
TPP Nikola Tesla A	10,845
TPP Nikola Tesla B	6,418
TPP Kolubara	706
TPP Morava	294
TPP Kostolac A	2,042
TPP Kostolac B	4,711
THERMAL Power Plants	25,016
CHP Novi Sad	90
CHP Zrenjanin	0
CHP Sremska Mitrovica	0
COMBINED Heat and Power Plants	90
HPP Đerdap 1	5,457
HPP Đerdap 2	1,615
Vlasina HPPs	340
HPP Piroć	137
HPP Bajina Bašta	1,733
PSHPP Bajina Bašta	728
HPP Zvornik	463
HPP Elektromorava	81
HPP Potpeć	222
HPP Bistrica and HPP Kokin Brod	456
HPP Uvac	76
Mini HPPs	47
HYDRO Power Plants	11,355
TOTAL	36,461

ELECTRICITY SUPPLY

SALES CHARACTERISTICS

Supply type	Number of metering points	Number of customers	Electricity (GWh)
GUARANTEED	3,521,614	3,445,676	16,130
LV I Level	22,337	20,414	829
CS	3,496,176	3,424,325	15,226
LV II Level	259,224	213,612	1,304
Households	3,236,952	3,210,713	13,922
PL	3,101	937	75
LAST RESORT	3,628	624	207
HV	1	1	4
MV	138	135	125
LV	3,489	488	78
COMMERCIAL	98,898	11,095	11,070
HV	32	29	1,880
MV	3,872	2,430	5,940
LV	78,413	8,363	2,792
PL	16,581	273	458
TOTAL	3,624,140	3,457,395	27,407

LV - Low Voltage
 MV - Middle Voltage
 HV - High Voltage

CS - Consumer Spending
 PL - Public Lighting

HOUSEHOLD CATEGORY

AVERAGE CONSUMPTION
 per month

360 kWh

**NUMBER OF
 METERING POINTS**

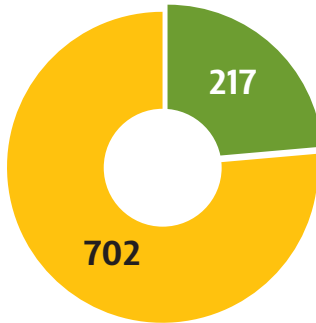
3,236,952

ELECTRICITY TRADE

Total scope of electricity trade in
free wholesale market

4,645 GWh

PURCHASE



GWh

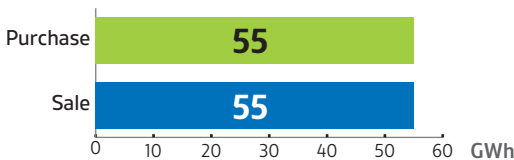
- Free market
- According to agreements on business and technical cooperation with ERS and JSC EMS* on electricity delivery for compensation programs

TOTAL

919

*ERS - Electric Power Industry of the Republic of Srpska
JSC EMS - Elektromreža Srbije Joint Stock Company

Cooperation with Electric Power Industry of the Republic of Srpska According to agreements on business and technical cooperation



Operation of electricity spot exchange SEEPEX started on February 18th 2016, where EPS actively participated in purchase and sale of electricity.



The volume of PE EPS' trading on SEEPEX amounted to 331 GWh.

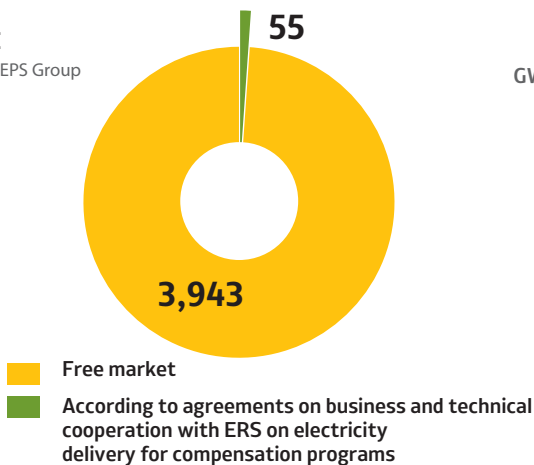




SALE

Out of EPS Group

GWh



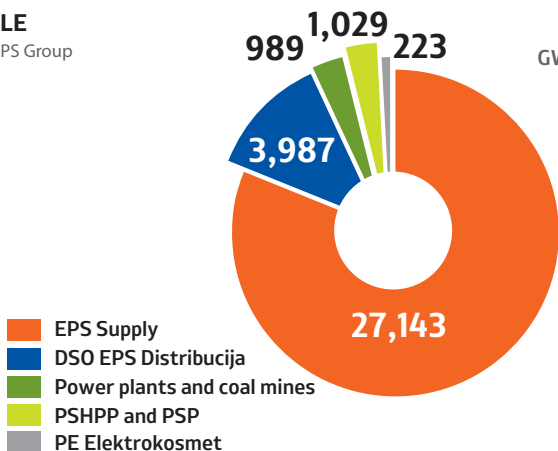
TOTAL

3,998

SALE

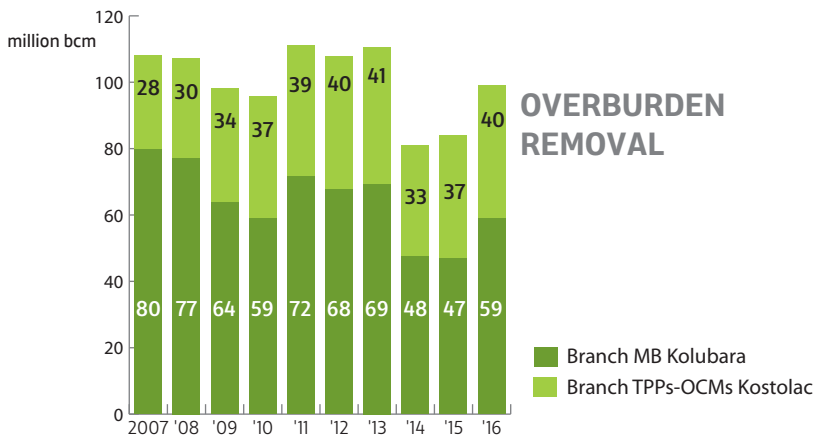
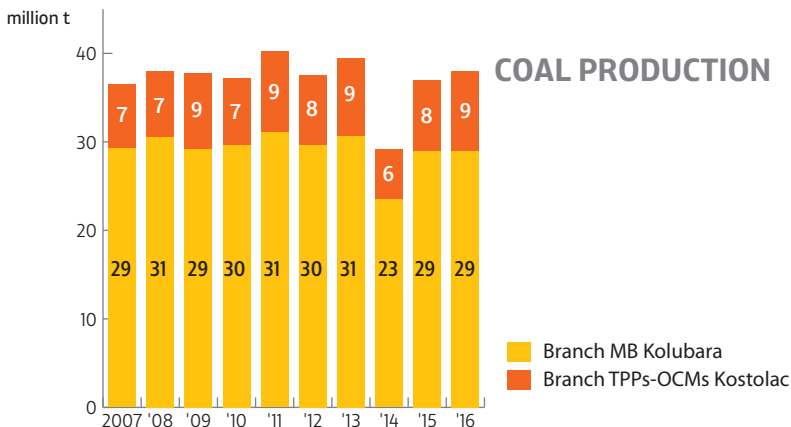
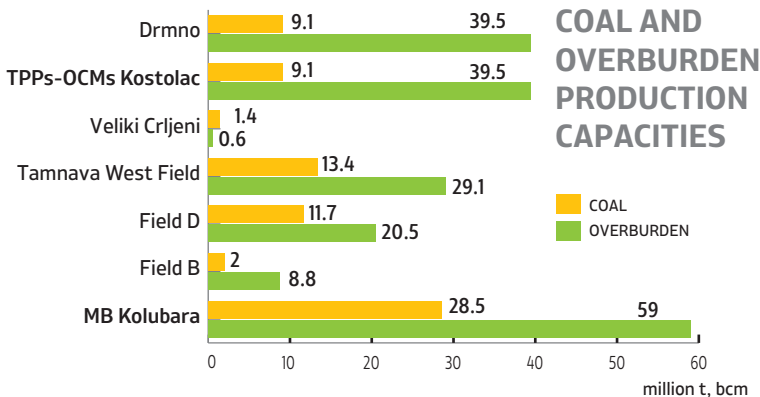
In EPS Group

GWh

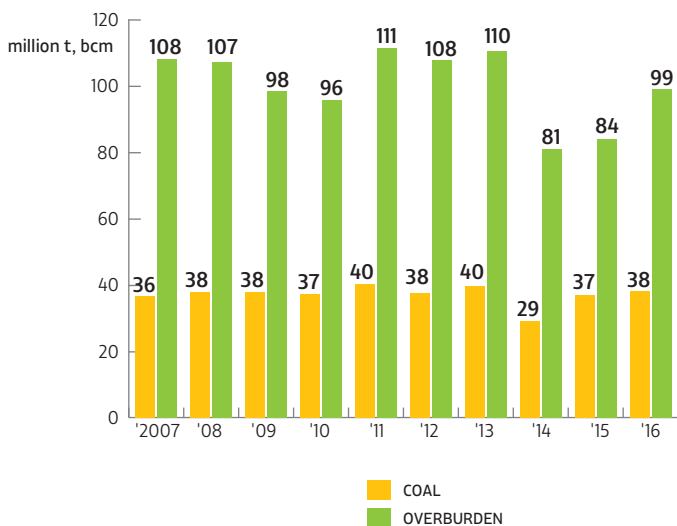


TOTAL

33,371



TOTAL COAL AND OVERBURDEN OUTPUT



STRUCTURE OF SUPPLY OF THE PRODUCED COAL

(t)	MB Kolubara	TPPs-OCMs Kostolac	EPS
For TPPs	27,363,387	8,953,509	36,316,896
For drying	757,801	/	757,801
For industry	215,179	156,557	371,736
For heating plants	206,087	/	206,087
TOTAL	28,542,454	9,110,066	37,652,520

STATISTICAL DATA ON DISTRIBUTION GRID

Distribution areas	Number of substations	Installed capacity of substations (MVA)
Novi Sad	7,821	7,050
Beograd	5,319	6,940
Kraljevo	12,279	7,832
Niš	6,621	5,355
Kragujevac	2,829	2,359
TOTAL	34,869	29,536



- THE PERCENTAGE OF REALIZED LOSSES IN DISTRIBUTION NETWORK

12.95

- CONSTRUCTION/RECONSTRUCTION/RENOVATION OF TRANSFORMER STATIONS

8 to 110/x kV

5 to 35/10 kV

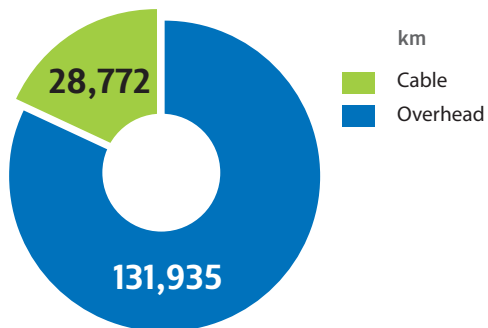
302 to 20 (10)/0,4 kV

- CONSTRUCTION OF CABLE LINES

110 kV line "Beograd 5 – Beograd 41"

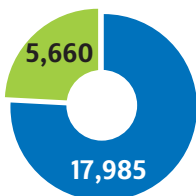
110 kV line "Beograd 41 – Beograd 40"

STRUCTURE OF DISTRIBUTION LINES (owned by DSO EPS DISTRIBUCIJA)

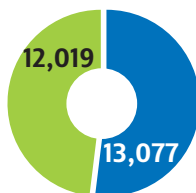


TOTAL 160,707 km

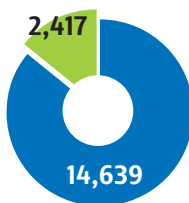
DISTRIBUTION AREAS



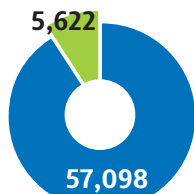
Novi Sad



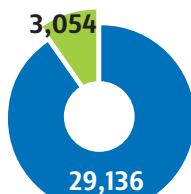
Beograd



Kragujevac



Kraljevo



Niš

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