

# ELECTRIC POWER INDUSTRY OF SERBIA



TECHNICAL REPORT

2013

# EPS 2013

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

## GENERATION CAPACITIES

Net output capacity **7,124** MW

## ELECTRICITY GENERATION

**37,433** GWh

## COAL PRODUCTION

**39,513,474** t

## OVERBURDEN REMOVAL

**110,485,172** bcm

## FULL SUPPLY

Domestic market **34,009** GWh

## SALE

Out of EPS system **4,641** GWh

## TOTAL SALE

**38,650** GWh

## PURCHASE

Out of EPS system **2,207** GWh

## NUMBER OF CUSTOMERS

Total **3,628,028**

At high and middle voltage **4,757**

At low voltage **3,623,271**

## GENERATION CAPACITIES

POWER PLANT	Net output capacity MW
TPP Nikola Tesla A	1,502
TPP Nikola Tesla B	1,160
TPP Kolubara	245
TPP Morava	108
TPP Kostolac A	281
TPP Kostolac B	640
<b>THERMAL Power Plants</b>	<b>3,936</b>
CHP Novi Sad	208
CHP Zrenjanin	100
CHP Sremska Mitrovica	45
<b>COMBINED Heat and Power Plants</b>	<b>353</b>
HPP Đerdap 1	1,058
HPP Đerdap 2	270
Vlasinske HPPs	129
HPP Pirot	80
HPP Bajina Bašta	364
PSHPP Bajina Bašta	614
HPP Zvornik	96
HPP Elektromorava	13
HPP Potpeć	51
HPP Bistrica and HPP Kokin Brod	124
HPP Uvac	36
<b>HYDRO Power Plants</b>	<b>2,835</b>
<b>EPS POWER PLANTS</b>	<b>7,124</b>

## EPS ELECTRICITY GENERATION

POWER PLANT	GWh
TPP Nikola Tesla A	10,120
TPP Nikola Tesla B	8,658
TPP Kolubara	753
TPP Morava	533
TPP Kostolac A	1,983
TPP Kostolac B	4,489
<b>THERMAL Power Plants</b>	<b>26,537</b>
<small>Minor deviations in total amount are the result of rounding, since original data are in MWh and in tables they are shown in GWh</small>	
CHP Novi Sad	167
CHP Zrenjanin	0
CHP Sremska Mitrovica	0
<b>COMBINED Heat and Power Plants</b>	<b>167</b>
HPP Đerdap 1	5,512
HPP Đerdap 2	1,476
Vlasinske HPPs	129
HPP Pirot	80
HPP Bajina Bašta	1,685
PSHPP Bajina Bašta	650
HPP Zvornik	523
HPP Elektromorava	50
HPP Potpeć	241
HPP Bistrica and HPP Kokin Brod	322
HPP Uvac	61
<b>HYDRO Power Plants</b>	<b>10,729</b>
<b>TOTAL</b>	<b>37,433</b>

Electricity generation in 2013 is the highest achieved generation in the last 23 years (since 1990)

### MAXIMUM ANNUAL OUTPUT

	GWh
EPS	<b>37,433</b>
Coal-fired TTPs (TENT and TPPs-OCMs Kostolac)	<b>26,537</b>
TPP Nikola Tesla A and TPP Nikola Tesla B	<b>18,778</b>
TTPs in TPPs-OCMs Kostolac	<b>6,472</b>
TPP Kostolac B	<b>4,489</b>

### MAXIMUM MONTHLY OUTPUT

	GWh
Coal-fired TTPs December	<b>2,705</b>
TENT December	<b>2,095</b>
TTTPs in TPPs-OCMs Kostolac October	<b>649</b>

## ELECTRICITY TRADE

### PURCHASE

GWh

From Elektroprivreda Crne Gore  
Long-term contract 1,294

From Elektroprivreda Republike Srpske  
Long-term contract 62

PE Elektromreže Srbije  
System services 156

Free market 630

From privileged producers 65

**TOTAL**

**2,207**

### PUMPUNG

PSP Lisina 63

PSHPP Bajina Bašta 944

**TOTAL** 1,007

### SALE

GWh

Public supply and DSO losses 30,245

Last resort supply 95

Company for electricity and coal production 1,040

Eligible customers 1,431

PE EMS – transmission losses and  
own consumption 1,019

PE Elektrokosmet 179

**FULL SUPPLY** 34,009

Elektroprivreda Crne Gore  
Long-term contract 1,235

Elektroprivreda Republike Srpske  
Long-term contract 62

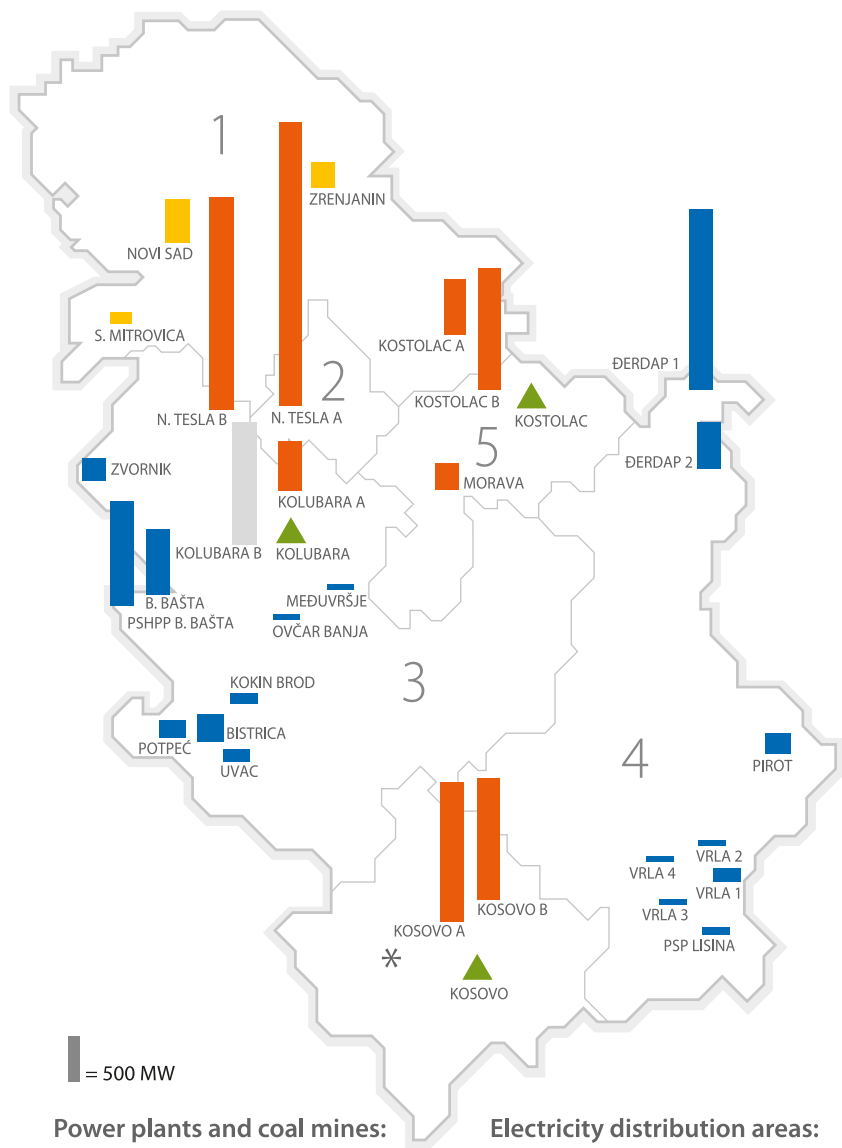
PE Elektromreže Srbije  
System services 38

Free market 3,306

**CONTRACTS** 4,641

**TOTAL** 38,650

# EPS INSTALLED CAPACITIES



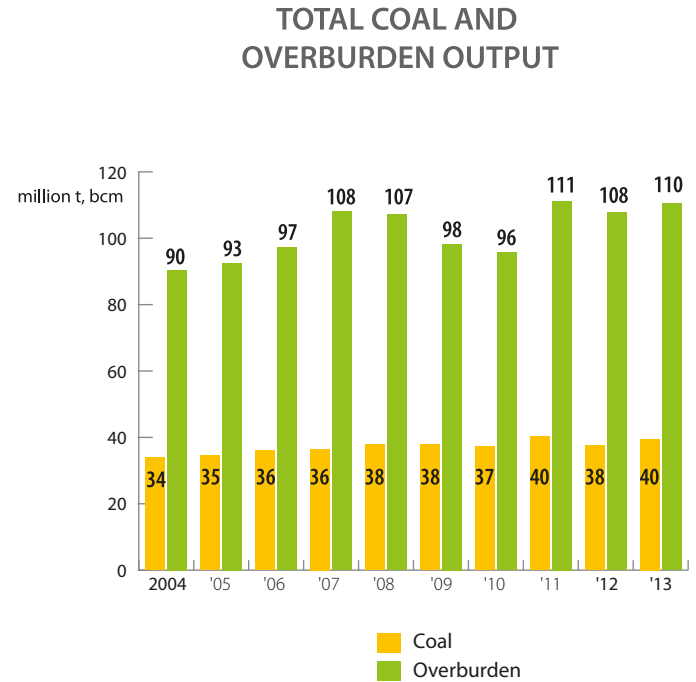
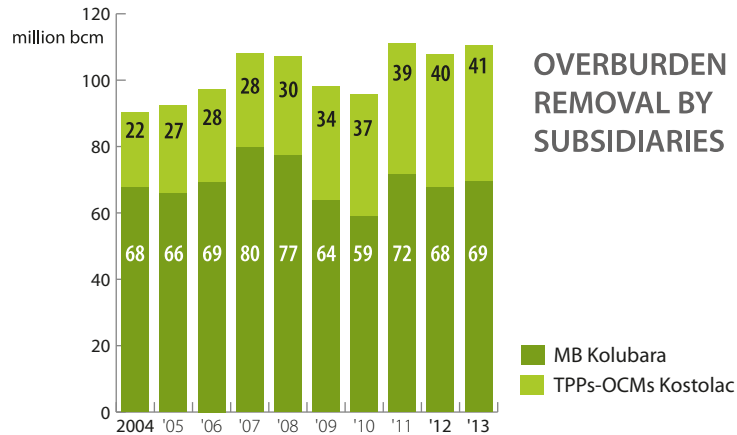
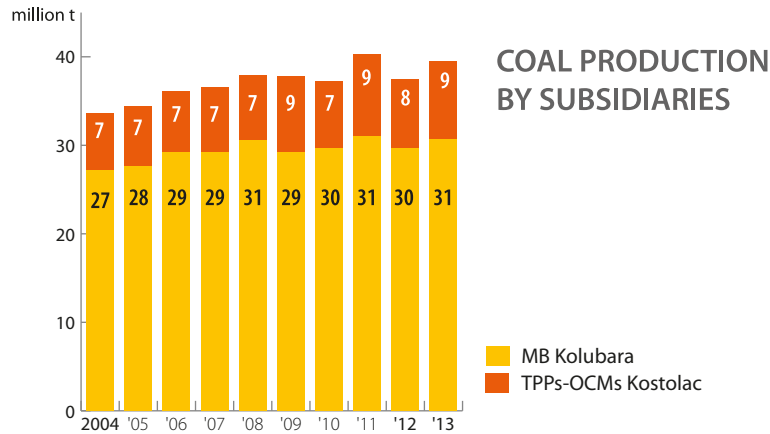
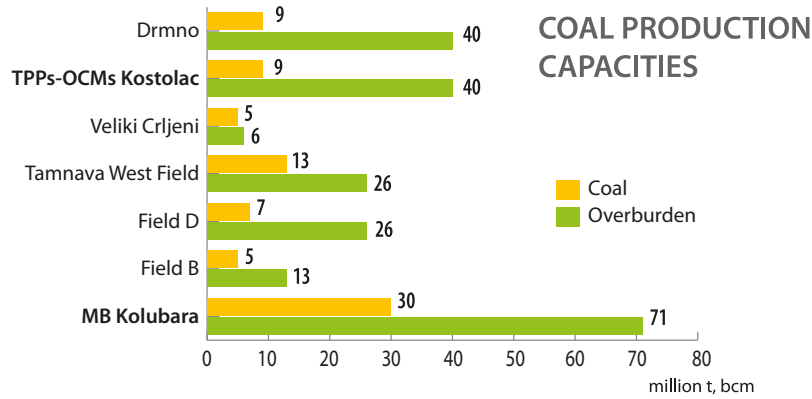
## Power plants and coal mines:

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

## Electricity distribution areas:

- 1\_Elektrovjvodina, Novi Sad
- 2\_Elektrodistribucija Beograd, Beograd
- 3\_Elektrosrbija, Kraljevo
- 4\_Jugoistok, Niš
- 5\_Centar, Kragujevac
- \*\_PE Elektrokosmet, Priština

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



### STRUCTURE OF SUPPLY OF THE PRODUCED COAL

(t)	MB Kolubara	TPPs-OCMs Kostolac	EPS
For TPPs	29,152,350	8,606,211	37,758,561
For drying	981,622	/	981,622
For industry	363,451	197,548	560,999
For heating plants	212,292	/	212,292
<b>TOTAL</b>	<b>30,709,715</b>	<b>8,803,759</b>	<b>39,513,474</b>

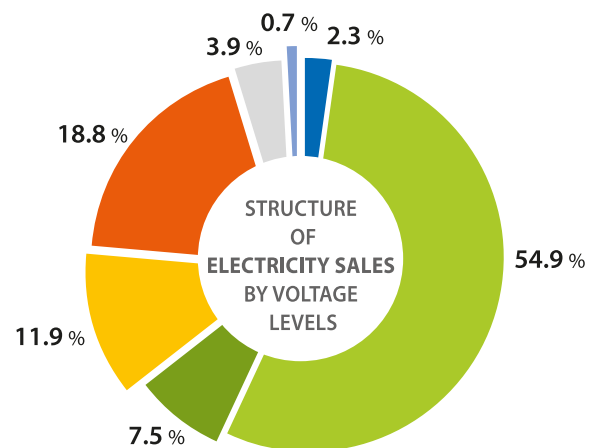
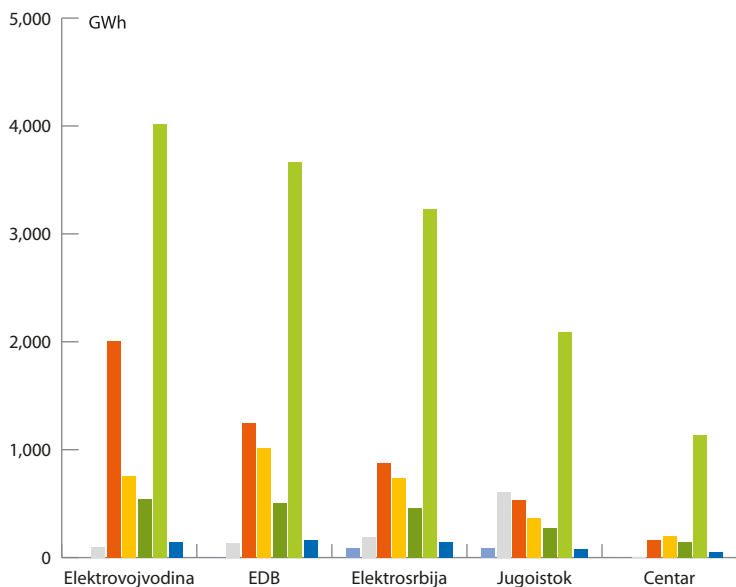
## ELECTRICITY SUPPLIED TO DISTRIBUTION SUBSIDIARIES

Distribution Subsidiary	Taken over from transmission and privileged producers	
	GWh	%
Elektrovojvodina	8,534	28.2
Elektrodistribucija Beograd	7,935	26.2
Elektrosrbija	6,774	22.4
Jugoistok	4,923	16.3
Centar	2,080	6.9
<b>TOTAL</b>	<b>30,246</b>	<b>100</b>

## STRUCTURE OF ELECTRICITY SALES BY VOLTAGE LEVELS

Voltage Level / Category of Consumption	Electricity Supplied		Number of buyers/ measuring points
	GWh	%	
High Voltage - 110 kV	177	0.7	2
Middle Voltage - 35 kV	1,026	3.9	177
Middle Voltage - 10 (20) kV	4,830	18.8	4,578
Low Voltage (0.4 kV I Level)	3,070	11.9	46,337
Consumer Spending (0.4 kV II Level)	1,927	7.5	310,990
Consumer Spending – Households	14,146	54.9	3,241,567
Public Lighting	583	2.3	24,377
<b>TOTAL</b>	<b>25,759</b>	<b>100</b>	<b>3,628,028</b>

## STRUCTURE OF ELECTRICITY SALES BY SUBSIDIARIES AND VOLTAGE LEVELS



- High Voltage - 110 kV
- Middle Voltage - 35 kV
- Middle Voltage - 10 (20) kV
- Low Voltage (0.4 kV I Level)
- Consumer Spending (0.4 kV II Level)
- Consumer Spending – Households
- Public Lighting