

**Table 1: Preliminary Energy Balance in 2008**

**Row description:**

Indicator

PALEN classification codebook number

Natural energy resources

Imports

Exports

Stocks draw (+), stocks build (-) of suppliers

Stocks draw (+), stocks build (-) of consumers

Other sources

Total primary energy sources

Secondary and renewable energy sources

Production from energy processes

Total sources

Charge/Input

at fuels upgrading

for heat production

for electricity production

Working consumption

at fuels upgrading

for heat production

for electricity production

at fuels extraction, treatment and transport

Losses

Total final consumption

**Column description**

Rows number

Fuels: Solid

Liquid

Gaseous

Total

Energy: Heat

Electricity

Total fuels and energy

Electricity in GWh

**Table 2: Total Balance of Energy Processes in 2007 and 2008 in TJ**

**Row description:**

Indicator

Total primary energy sources

Total charge/Input

Including: Heat generation

Electricity generation

Fuels upgrading

of which: Brown Coal briquetting

High-temperature carbonization in coking plants

Gasification under pressure of coal

Liquid fuels production from crude oil and tars

Blast-furnace gas production in blast furnaces

Gasification in industrial generating stations

Total production

of which: see above-mentioned

Total working consumption

of which: see above-mentioned

Total losses including working consumption

of which: see above-mentioned

**Table 3: Extraction of some Kinds of Fuels between 1998 and 2008**

**Row description:**

Fuel

Coking Coal

Steam Coal

Brown Coal and Lignite

Natural (associated) Gas

Natural (non-associated) Gas

Crude Oil

a – data unit ( thous. tons - solid and liquid fuels, mill. m<sup>3</sup> - gaseous fuels)

b – data unit - TJ ( 1TJ=1000 GJ)

c – n.c.v. ( GJ/t - solid and liquid fuels, GJ/thous.m<sup>3</sup> - gaseous fuels)

**Table 4: Production of some Kinds of Fuels between 1998 and 2008**

**Row description:**

Fuel Kind

BKB

Coke Oven Coke

Motor Gasoline

Gas Diesel Oil

Total Fuel Oils

Kerosene

Coke Oven Gas

Energo-gas

a- see Table 3

b- see Table 3

c- see Table 3

**Table 5-10**

Year: 2008

Fuel and Energy		Row Number	Stat. Fuel Number	Physical Unit	Amount in		GJ in %	N.c.v. kJ/kg kJ/m3
					Physical Units	GJ		
a		1	2	3	4	5	6	7
Input Fuel				t				
Total Inputs			x	x	x			x
Outputs								
Total Outputs (Production)			x	x	x			x
Losses and Balance Differencies			x	x	x			x
Working Consum- ption	Fuels							
	Total Fuels		x	x	x			x
	Heat from Other Sources				x			x
	Waste Heat				x			x
	Utilized (Gained) Waste Heat				x			x
	Total Heat				x			x
	Electricity							x
TOTAL			x	x	x			x
Total Losses ( incl. Working Consumption)			x	x	x			x
Energy Process Effectiveness		x	x	x	x	x		x

**Table 5: Brown Coal ( Sub-bituminous Coal) briquetting**

**Row description:**

Fuel and Energy

**Charge/Input:** Total Brown Coal  
Total Charge/Input

**Output:** BKB  
Others solid fuels  
Total Output (Production)  
Losses and Balance Differencies

**Working Consumption:**  
Total Fuels  
  
Heat from Other Sources  
Waste Heat  
Utilized (Gained) Waste Heat  
Total Heat  
Electricity  
TOTAL  
Total Losses (incl. Working Consumption)  
Energy Process Effectiveness

**Table 6a: High-Temperature Carbonization in Coking Plants**

**Charge/Input:** Coking Coal  
Coke Dust  
Total Charge/Input

**Output:** Coke (Foundry Coke)  
Coke (Other Metallurgical Coke)  
Coke (Heating Separated Coke)  
Coke Dust  
Other Matters  
High-temperature Crude Tar  
Benzene  
Coke Oven Gas

Total Output (Production)  
Losses and Balance Differencies

**Table 6b: Continuation of the Table 6a**

<b>Working consumption:</b>	Fuels: Coke Oven Gas Blast Furnace Gas Other Gaseous Fuels Total Fuels  Heat from Other Sources Waste Heat Utilized (Gained) Waste Heat Total Heat Electricity TOTAL
Total Losses (incl. Working Consumption)	
Energy Process Effectiveness	

**Table 7: Gasification under Pressure of Coal**

<b>Charge/Input:</b>	Brown Coal
Total Charge/Input	
<b>Output:</b>	Energo-Gas Low-temperature Tar Other Gaseous Fuels Other Liquid Fuels
Total Output (Production)	
Losses and Balance Differencies	
<b>Working consumption:</b>	Fuels: Natural (Associated) Gas Other Liquid Fuels Total Fuels  Heat from Other Sources Waste Heat Utilized (Gained) Waste Heat Total Heat Electricity TOTAL
Total Losses (incl. Working Consumption)	
Energy Process Effectiveness	

**Table 8a: Liquid Fuels Production from Crude Oil**

<b>Charge/Input:</b>	Crude Oil Other Liquid Fuels Semi-products Stock Draw
Total Charge/Input	

**Output:** Motor Gasoline  
 Aviation Gasoline  
 Diesel Oil  
 Total Kerosene  
 Heating and other Gasoil  
 Fuel Oil (Low Sulphur)  
 Fuel Oil (High Sulphur)  
 Other Liquid Fuels  
 Liquified Petroleum Gases (LPG)  
 Petroleum Coke  
 Refinery Gas  
 Other Gasoline (including Naphta)  
 Other Matters

Total Output (Production)  
 Losses and Balance Differencies

**Table 8b: Continuation of the Table 8a**

**Working consumption:** Fuels: Natural (Associated) Gas  
 Refinery Gas  
 Fuel Oil (Low Sulphur)  
 Fuel Oil (High Sulphur)  
 Petroleum Coke  
 Total Fuels  
  
 Heat from Other Sources  
 Waste Heat  
 Utilized (Gained) Waste Heat  
 Total Heat  
 Electricity  
 TOTAL  
 Total Losses (incl. Working Consumption)  
 Energy Process Effectiveness

**Table 9: Blast-furnace Gas Production in Blast Furnaces**

**Charge/Input:** Total Coke Oven Coke  
 Low-temperature Tar  
 Fuel Oil (High Sulphur)  
 Total Charge/Input

**Output:** Blast Furnace Gas  
 Total Output (Production)  
 Losses and Balance Differencies

**Working consumption:** Total Fuels  
  
 Heat from Other Sources

	Waste Heat
	Utilized (Gained) Waste Heat
	Total Heat
	Electricity
	TOTAL
Total Losses (incl. Working Consumption)	
Energy Process Effectiveness	

### **Table 10: Gasification in Industrial Generating Stations**

**Charge/Input:** Total Brown Coal  
Total Charge/Input

**Output:** Gas Works Gas (Producer Gas)  
Total Output (Production)  
Losses and Balance Differencies

**Working consumption:** Total Fuels

	Heat from Other Sources
	Waste Heat
	Utilized (Gained) Waste Heat
	Total Heat
	Electricity
	TOTAL
Total Losses (incl. Working Consumption)	
Energy Process Effectiveness	

### **Chart 1 Primary Energy Sources between 1998 and 2008**

Solid Fuels  
Liquid Fuels  
Gaseous Fuels  
Heat and Electricity

### **Chart 2 Balance of Energy Processes between 1998 and 2008**

Charge/Input  
Output/Production  
Working Consumption

### **Chart 3 Trend of Coal Extraction between 1998 and 2008**

in 1000 tonnes  
Brown Coal and Lignite



**Chart 4      Hard Coal**  
**Trend of Crude Oil and Natural Gas Extraction between 1998 and 2008**

in 1000 tonnes, in mill. m<sup>3</sup>  
Crude Oil  
Natural (associated) Gas  
Natural (non-associated) Gas

**Chart 5      Trend of BKB and Coke Production between 1998 and 2008**

in 1000 tonnes  
Coke  
BKB

**Chart 6      Trend of Liquid Fuels Production between 1998 and 2008**

in 1000 tonnes  
Diesel Oil  
Motor Gasolines  
Fuel Oils

**Chart 7      Trend of Gaseous Fuels Production between 1998 and 2008**

in Million cubic metres  
Town Gas  
Energo-gas  
Coke Oven Gas

**Chart 8      Brown (sub-bituminous) Coal Briquetting in 2008**

Working Consumption (9%)  
Losses (12%)  
Production (Output) (79%)  
  
BKB (67%)  
Other Solid Fuels (12%)

**Chart 9      Coke Production in 2008**

Working Consumption (10%)  
Losses (3%)  
Production (Output) (87%)  
  
Coke (65%)  
Coke Oven Gas (17%)  
Others (5%)

**Chart 10      Gasification under Pressure of Coal in 2008**

Working Consumption (19%)  
Losses (0%)  
Production (Output) (81%)

    Energogas (57%)  
    Low-temperature Tars (15%)  
    Others (9%)

**Chart 11      Liquid Fuels Production from Crude Oil and Tars in 2008**

Working Consumption (6%)  
Losses (2%)  
Production (Output) (92%)

    Motor Gasoline (18%)  
    Diesel Oil (39%)  
    Fuel Oils (4%)  
    Kerosine (2%)  
    Liquefied Petroleum Gas (2%)  
    Others (27%)

**Chart 12      Input into Transformation and Fuels Upgrading Processes in 2008**

Electricity Production (52%)  
Heat production (14%)  
Fuels Upgrading Processes (34%)  
    Brown Coal Briquetting (0,3%)  
    High-Temperature Carbonization in Coking Plants (8%)  
    Gasification under Pressure of Coal (including Carburation) (1%)  
    Liquid Fuels Production from Crude Oil (23%)  
    Blast-furnace Gas Production in Blast Furnaces (2%)  
    Gasification in Industrial Generating Stations (0,007%)

**Chart 13      Production in Transformation and Fuels Upgrading Processes in 2008**

Electricity Production (30%)  
Heat production (18%)  
Fuels Upgrading Processes (52%)  
    Brown Coal Briquetting (0,04%)  
    High-Temperature Carbonization in Coking Plants (12%)  
    Gasification under Pressure of Coal (including Carburation) (2%)  
    Liquid Fuels Production from Crude Oil (36%)  
    Blast-furnace Gas Production in Blast Furnaces (2%)  
    Gasification in Industrial Generating Stations (0,01%)

**Chart 14      Gasification in Industrial Generating Stations in 2008**

Working Consumption (2%)  
Losses (30%)  
Gas Works Gas (68%)

**Chart 15      Fuels Input into Fuels Upgrading Processes in 2008**

Coking Coal (23%)  
Brown Coal (5%)  
Coke (5%)  
Other Liquid Fuels (3%)  
Crude Oil (64%)