Table 1: Preliminary Energy Balance in 2004

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 2003 and 2004 in TJ

Row description:

Indicator
Total primary energy sources
Total charge/Input
Including: Heat generation
Electricity generation
Fuels upgrading
of which: Brown Coal(Sub-bituminous 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 1994 and 2004

Row description:

Fuel

Coking Coal
Steam Coal
Brown Coal (Sub-bituminous Coal) and Lignite
Natural (associated) Gas
Natural (non-associated) Gas
Crude Oil

a – data unit (thous. tons - solid and liquid fuels, mill. m^3 - gaseous fuels)
b – data unit - TJ (1TJ=1000 GJ)
c – n.c.v. (GJ/t - solid and liquid fuels, GJ/thous.m^3 - gaseous fuels)

Table 4: Production of some Kinds of Fuels between 1994 and 2004

Row description:

Fuel Kind

BKB
Coke Oven Coke
Motor Gasoline
Gas Diesel Oil
Total Fuel Oils
Kerosene
Coke Oven Gas
Town Gas
Energo-gas

a- see Table 3
b- see Table 3
c- see Table 3

Table 5-10

Year: 2004

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 (Sub-bituminous) Coal
Total Charge/Input

Output: BKB

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

Notes: Output BKB includes coal powder (17 348 t) - even N.c.v.

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
High-temperature Crude Benzene
High-temperature Crude Tar
Other Non-energy Matters
Coke Oven Gas

Total Output (Production)
Losses and Balance Differencies

Table 6b: Continuation of the Table 6a

Working consumption: 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

Charge/Input: Brown (Sub-bituminous) Coal and Lignite
Total Charge/Input

Output: Energo-Gas
Low-temperature Tar
Other Gaseous Fuels
Total Output (Production)
Losses and Balance Differencies

Working consumption: Fuels: Natural (Associated) Gas
Low-temperature Tar
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

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

Output: Motor Gasoline
Aviation Gasoline
Diesel Oil
Total Kerosene
Extra Light Fuel Oil
Light Fuel Oil (Low Sulphur)
Light Fuel Oil (High Sulphur)
Heavy Fuel Oil (Low Sulphur)
Heavy Fuel Oil (High Sulphur)
Other Liquid Fuels
Liquified Petroleum Gases (LPG)
Other Gaseous Fuels
Other Gasoline (including Naphta)
Non-energy Products (without Naphta)

Total Output (Production)
Losses and Balance Differencies

Table 8b: Continuation of the Table 8a

Working consumption: Fuels: Natural (Associated) Gas
Other Gaseous Fuels
Heavy Fuel Oil (Low Sulphur)
Heavy Fuel Oil (High Sulphur)
Light Fuel Oil (High Sulphur)
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 9: Blast-furnace Gas Production in Blast Furnaces

Charge/Input: Total Coke Oven Coke
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 (Sub-bituminous) 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 1994 and 2004

Solid Fuels
Liquid Fuels
Gaseous Fuels
Heat and Electricity

Chart 2 Balance of Energy Processes between 1994 and 2004

Charge/Input
Output/Production
Working Consumption

Chart 3 Trend of Coal Extraction between 1994 and 2004

in 1000 tonnes
Brown (Sub-bituminous) Coal and Lignite
Hard Coal

Chart 4 Trend of Crude Oil and Natural Gas Extraction between 1994 and 2004

in 1000 tonnes, in mill. m^3
Crude Oil
Natural (associated) Gas
Natural (non-associated) Gas

Chart 5 Trend of BKB and Coke Production between 1994 and 2004

in 1000 tonnes
Coke
BKB

Chart 6 Trend of Liquid Fuels Production between 1994 and 2004

in 1000 tonnes
Diesel Oil
Motor Gasolines
Fuel Oils

Chart 7 Trend of Gaseous Fuels Production between 1994 and 2004

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

Chart 8 Brown (sub-bituminous) Coal Briquetting in 2004

Working Consumption (8%)
Losses (3%)
Production (Output) (89%)

BKB (89%)

Chart 9 Coke Production in 2004

Working Consumption (10%)
Losses (3%)
Production (Output) (87%)

Coke (66%)
Coke Oven Gas (16%)
Others (5%)

Chart 10 Gasification under Pressure of Coal in 2004

Working Consumption (17%)
Losses (7%)
Production (Output) (76%)

- Energo-gas (54%)
- Low-temperature Tars (16%)
- Others (6%)

Chart 11 Liquid Fuels Production from Crude Oil and Tars in 2004

Working Consumption (6%)
Losses (0%)
Production (Output) (94%)

- Motor Gasolines (20%)
- Diesel Oils (32%)
- Fuel Oils (12%)
- Kerosene (2%)
- Liquified Petroleum Gases (2%)
- Others (26%)

Chart 12 Input into Transformation and Fuels Upgrading Processes in 2004

Electricity Production (52%)
Heat production (17%)
Fuels Upgrading Processes (31%)

- Brown Coal (Sub-bituminous Coal) Briquetting (1%)
- High-Temperature Carbonization in Coking Plants (9%)
- Gasification under Pressure of Coal (including Carburation) (1%)
- Liquid Fuels Production from Crude Oil (18%)
- Blast-furnace Gas Production in Blast Furnaces (2%)
- Gasification in Industrial Generating Stations (0,01%)

Chart 13 Production in Transformation and Fuels Upgrading Processes in 2004

Electricity Production (30%)
Heat production (22%)
Fuels Upgrading Processes (48%)

- Brown Coal (Sub-bituminous Coal) Briquetting (1%)
- High-Temperature Carbonization in Coking Plants (13%)
- Gasification under Pressure of Coal (including Carburation) (2%)
- Liquid Fuels Production from Crude Oil (29%)
- Blast-furnace Gas Production in Blast Furnaces (3%)
- Gasification in Industrial Generating Stations (0,01%)

Chart 14 Gasification in Industrial Generating Stations in 2004

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

Chart 15 Fuels Input into Fuels Upgrading Processes in 2004

Coking Coal (28%)
Brown Coal (Sub-bituminous Coal) (6%)
Coke (6%)
Other Liquid Fuels (2%)
Crude Oil (58%)