

Table 1: Preliminary Energy Balance in 2006

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 2005 and 2006 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 1996 and 2006

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. m³ - gaseous fuels)

b – data unit - TJ (1TJ=1000 GJ)

c – n.c.v. (GJ/t - solid and liquid fuels, GJ/thous.m³ - gaseous fuels)

Table 4: Production of some Kinds of Fuels between 1996 and 2006

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: 2006

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
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

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 Other Liquid Fuels
Total Output (Production)	
Losses and Balance Differencies	
Working consumption:	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

Charge/Input:	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)
 Light Fuel Oil (Low Sulphur)
 Fuel Oil (High Sulphur)
 Other Liquid Fuels
 Liquified Petroleum Gases (LPG)
 Petroleum Coke
 Rafinery 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
 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
 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 1996 and 2006

Solid Fuels
Liquid Fuels
Gaseous Fuels
Heat and Electricity

Chart 2 Balance of Energy Processes between 1996 and 2006

Charge/Input
Output/Production
Working Consumption

Chart 3 Trend of Coal Extraction between 1996 and 2006

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

Chart 4 Trend of Crude Oil and Natural Gas Extraction between 1996 and 2006

in 1000 tonnes, in mill. m³
Crude Oil
Natural (associated) Gas
Natural (non-associated) Gas

Chart 5 Trend of BKB and Coke Production between 1996 and 2006

in 1000 tonnes
Coke
BKB

Chart 6 Trend of Liquid Fuels Production between 1996 and 2006

in 1000 tonnes
Diesel Oil
Motor Gasolines
Fuel Oils

Chart 7 Trend of Gaseous Fuels Production between 1996 and 2006

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

Chart 8 Brown (sub-bituminous) Coal Briquetting in 2006

Working Consumption (9%)
Losses (6%)
Production (Output) (85%)

BKB (80%)
Other Solid Fuels (5%)

Chart 9 Coke Production in 2006

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

Coke (67%)
Coke Oven Gas (16%)
Others (4%)

Chart 10 Gasification under Pressure of Coal in 2006

Working Consumption (15%)
Losses (1%)
Production (Output) (84%)

 Energogas (60%)
 Low-temperature Tars (15%)
 Others (9%)

Chart 11 Liquid Fuels Production from Crude Oil and Tars in 2006

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

 Motor Gasolines (19%)
 Diesel Oils (35%)
 Fuel Oils (5%)
 Kerosene (2%)
 Liquified Petroleum Gases (3%)
 Others (28%)

Chart 12 Input into Transformation and Fuels Upgrading Processes in 2006

Electricity Production (51%)
Heat production (15%)
Fuels Upgrading Processes (34%)

 Brown Coal (Sub-bituminous Coal) Briquetting (0,6%)
 High-Temperature Carbonization in Coking Plants (8%)
 Gasification under Pressure of Coal (including Carburation) (1%)
 Liquid Fuels Production from Crude Oil (22%)
 Blast-furnace Gas Production in Blast Furnaces (2%)
 Gasification in Industrial Generating Stations (0,006%)

Chart 13 Production in Transformation and Fuels Upgrading Processes in 2006

Electricity Production (29%)
Heat production (20%)
Fuels Upgrading Processes (51%)

 Brown Coal (Sub-bituminous Coal) Briquetting (1%)
 High-Temperature Carbonization in Coking Plants (12%)
 Gasification under Pressure of Coal (including Carburation) (2%)
 Liquid Fuels Production from Crude Oil (33%)
 Blast-furnace Gas Production in Blast Furnaces (3%)
 Gasification in Industrial Generating Stations (0,01%)

Chart 14 Gasification in Industrial Generating Stations in 2006

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

Chart 15 Fuels Input into Fuels Upgrading Processes in 2006

Coking Coal (24%)
Brown Coal (Sub-bituminous Coal) (6%)
Coke (6%)
Other Liquid Fuels (2%)
Crude Oil (62%)