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# SHORT-TERM INDICATORS OF ENERGY STATISTICS, SEPTEMBER 2023, FIRST RESULTS

In September 2023, electricity available for the inland market amounted to 1 445 GWh. Compared to August 2023, the availability of electricity for domestic consumption decreased by 12.8%, while compared to September 2022 it increased by 1.7%.

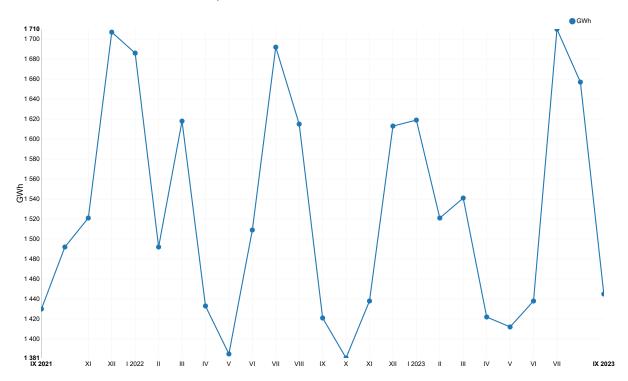
In September 2023, the amount of natural gas available for consumption was 6 698 TJ and the stocks increased by 1 224 TJ. The amount of natural gas available for domestic consumption decreased by 13.1% in September 2023 compared to August 2023, while compared to September 2022 it increased by 19.1%.

In September 2023, the amount of petroleum products available for consumption was 335 thousand tonnes and stocks decreased by 13 thousand tonnes. The amount of petroleum products available for domestic consumption decreased by 9.0% in September 2023 compared to August 2023, while compared to September 2022 it decreased by 2.0%.

The amount of electricity available for consumption also includes losses in the electricity network.

As for other energy products, the quantity available for the inland market also contains the quantities of energy products that may end up in warehouses, either in those of final consumers or in retail trade.

#### G-1 ELECTRICITY AVAILABLE FOR INLAND MARKET, SEPTEMBER 2021 - SEPTEMBER 2023



				Elect	ricity			
Supply		202	.2			202	23	
	VI	VII	VIII	IX	VI	VII	VIII	IX
Total gross production	1 036	1 157	1 086	966	1 319	1 280	1 344	1 168
Hydro power plants	376	338	252	256	658	562	561	336
Thermal power plants and CHP on fossil fuels	425	530	524	416	388	489	477	492
Thermal power plants and CHP on renewable fuels	81	81	87	90	80	70	76	79
Wind power plants	139	192	210	191	156	116	188	227
Solar power plants	10	10	8	8	37	43	41	35
Geothermal power plants	6	6	6	6	-	-	-	-
Total net production	1 003	1 119	1 047	937	1 285	1 250	1 310	1 132
Hydro power plants	374	336	251	254	657	560	560	334
Thermal power plants and CHP on fossil fuels	401	504	497	397	365	466	452	466
Thermal power plants and CHP on renewable fuels	76	74	79	83	71	66	70	72
Wind power plants	137	190	208	190	155	115	187	226
Solar power plants	10	10	8	8	37	43	41	35
Geothermal power plants	5	5	5	5	-	-	-	-
Import	1 007	1 167	989	1 004	838	947	830	808
Export	488	582	413	515	679	487	483	476
Energy absorbed by storage pumping	13	12	8	5	6	-	-	19
Available for inland market	1 509	1 692	1 615	1 421	1 438	1 710	1 657	1 445

# 2 NATURAL GAS

		Natural gas										
Supply	Unit of measure		20	22		2023						
		VI	VII	VIII	IX	VI	VII	VIII	IX			
Production	mln m <sup>3</sup>	63	65	65	61	57	62	60	37			
	TJ (GCV)	2 521	2 588	2 576	2 439	2 278	2 468	2 399	1 482			
Import	mln m <sup>3</sup>	201	254	387	171	282	204	279	258			
	TJ (GCV)	8 006	10 133	15 406	6 843	11 384	8 045	11 510	10 150			
Export	mln m <sup>3</sup>	121	72	136	107	127	121	120	94			
	TJ (GCV)	4 705	2 796	5 271	4 173	5 014	4 738	4 668	3 710			
Variation of stocks	mln m <sup>3</sup>	16	96	173	-12	85	-28	48	27			
	TJ (GCV)	569	3 653	7 035	-518	3 326	-829	1 535	1 224			
Available for inland market	mln m <sup>3</sup>	127	151	143	138	127	174	172	174			
	TJ (GCV)	5 253	6 271	5 676	5 626	5 322	6 604	7 705	6 698			

# 3 HYDROCARBONS

# 3.1 CRUDE OIL

'000 tonnes

	Crude oil									
Supply		22		2023						
	VI	VII	VIII	IX	VI	VII	VIII	IX		
Production	44	45	47	45	43	44	44	40		
Import	176	265	339	90	180	187	377	103		
Export	-	-	-	25	-		-	-		
Variation of stocks	-49	49	105	-105	-3	-28	136	-78		
Refinery input	270	261	281	215	226	259	285	221		

# 3.2 PETROLEUM PRODUCTS - TOTAL

'000 tonnes

	Petroleum products									
Supply		20	22		2023					
	VI	VII	VIII	IX	VI	VII	VIII	IX		
Production	336	349	350	289	299	324	354	291		
Import	154	185	199	154	169	222	190	228		
Export	205	145	182	151	160	169	202	197		
Variation of stocks	-35	27	15	-50	10	34	-26	-13		
Available for inland market	319	362	352	342	298	343	368	335		

# 3.2.1 MOTOR GASOLINE

'000 tonnes

	Motor gasoline									
Supply		20	22		2023					
	VI	VII	VIII	IX	VI	VII	VIII	IX		
Production	85	80	79	65	70	77	84	70		
Import	6	8	10	7	7	10	11	16		
Export	72	9	13	37	41	11	20	52		
Variation of stocks	-27	21	12	-9	-14	23	7	-18		
Available for inland market	46	58	64	44	50	54	68	52		

## 3.2.2 GAS/DIESEL OIL

'000 tonnes

	Gas/diesel oil									
Supply		20	22		2023					
	VI	VII	VIII	IX	VI	VII	VIII	IX		
Production	146	164	151	129	133	127	137	116		
Import	99	112	167	125	132	181	154	153		
Export	71	72	106	85	65	93	101	80		
Variation of stocks	-12	2	6	-32	16	10	-18	-15		
Available for inland market	185	202	206	201	184	204	208	204		

## 3.2.3 FUEL OIL

'000 tonnes

	Fuel oil									
Supply		20	22		2023					
	VI	VII	VIII	IX	VI	VII	VIII	IX		
Production	36	26	25	37	31	31	37	33		
Import	-	-	-	-	-	1	-	1		
Export	32	32	21	12	16	31	31	31		
Variation of stocks	-3	-7	-1	-	9	-	6	3		
Available for inland market	7	1	5	25	6	1	-	-		

# 3.2.4 OTHER PETROLEUM PRODUCTS

'000 tonnes

	Other petroleum products									
Supply		20	22		2023					
	VI	VII	VIII	IX	VI	VII	VIII	IX		
Production	69	79	95	58	65	89	96	72		
Import	49	65	22	22	30	30	25	58		
Export	30	32	45	17	38	34	50	34		
Variation of stocks	7	11	-2	-9	-1	1	-21	17		
Available for inland market	81	101	77	72	58	84	92	79		

# 4 CRUDE FUELS

# 4.1 HARD COAL

'000 tonnes

	Hard coal									
Supply		20	22		2023					
	VI	VII	VIII	IX	VI	VII	VIII	IX		
Production	-	-	-	-	-	-	-	-		
Import	92	94	6	67	10	146	7	75		
Export	-	-	-	-	-	-	-	-		
Variation of stocks	32	22	-55	14	-47	93	-56	15		
Available for inland market	60	72	61	53	57	53	63	60		

## 4.2 COKE

'000 tonnes

	Coke									
Supply		20:	22		2023					
	VI	VII	VIII	IX	VI	VII	VIII	IX		
Production	-	-	-	-	-	-	-	-		
Import	2	2	3	2	2	2	2	3		
Export	-	=	-	-	-	-	-	-		
Variation of stocks	-	-	-	-	-	-	-	-		
Available for inland market	2	2	3	2	2	2	2	3		

# 4.3 BROWN COAL

'000 tonnes

		Brown coal									
Supply		20	22		2023						
	VI	VII	VIII	IX	VI	VII	VIII	IX			
Production	-	-	-	-	-	-	-	-			
Import	-	-	-	1	-	-	1	1			
Export	-	-	-	-	-	-	-	-			
Variation of stocks	-	-	-	-	-	-	-	-			
Available for inland market	-	-	-	1	-	-	1	1			

# **NOTES ON METHODOLOGY**

Data are based on several statistical surveys as follows: the Monthly Survey on Industrial Production and Persons Employed (IND-1/KPS/M form), the Monthly Survey on Oil Refineries (ERG-1/N form), the Monthly Survey on Import, Export and Stocks of Petroleum and Petroleum Products (ERG-2/N form), the Monthly Survey on Import, Export, Stocks and Deliveries of Natural Gas (ERG-1/P form), the Monthly Survey on Import, Export, Stocks, Deliveries and Consumption of Coal and Coke (ERG-1/U form), and the Monthly Survey on Electricity Power Plants (ERG-1/EL form) as well as on the data on foreign trade in goods of the Republic of Croatia and administrative data sources (part of the data on net electricity production was taken from HERA and HROTE).

The monthly data are used for monitoring the changes in energy products according to the mentioned characteristics. Their sum for 12 months does not represent the annual balance data, due to the fast output of monthly data or to the fact that some deliveries are cancelled, which may lead to slight deviations from the monthly data. For that reason, the following sources of annual data are recommended: the annual Statistical Report entitled "Energy Statistics" published by the Croatian Bureau of Statistics and the annual energy review entitled "Energy in Croatia" published by the Ministry of Economy and Sustainable Development.

**Gross electricity production** is the sum of the total electrical energy production by all the generating sets concerned (hydro power plants, thermal power plants and CHP on fossil fuels, thermal power plants and CHP on renewable fuels, wind power plants and solar power plants).

**Net electricity production** is the electrical energy supplied from a power station to a power-supply grid and it represents the difference between the electrical energy produced in a generator and own supply.

**Geothermal power plants** produce energy available as heat emitted from within the Earth's crust, usually in the form of hot water or steam; excluding the surrounding heat collected by the heat pumps from the ground. This energy production is the difference between the enthalpy of the fluid produced in the production borehole and that of the fluid eventually disposed of.

**Energy available for consumption** is the quantity of energy products available for final consumption on the inland market, including losses and stocks at final consumers' and in retail trade.

**Crude oil** is a mineral oil of natural origin that includes a mixture of hydrocarbons and associated impurities, such as sulphur. It exists in the liquid phase under normal surface temperature and pressure and its physical characteristics (density, viscosity, etc.) are highly variable. This category includes field or lease condensates recovered from associated and non-associated gases where it is commingled with the commercial crude oil stream.

**Natural gas** is comprised of gases, occurring naturally in underground deposits, whether liquefied or gaseous, consisting mainly of methane. It includes both "non-associated" gas originating from fields producing hydrocarbons only in gaseous form, and "associated" gas produced in association with crude oil as well as methane recovered from coal mines (colliery gas). Manufactured gas (produced from municipal or industrial waste or sewage) is also included, while vented or flared quantities of natural gas are excluded.

**Petroleum products** are all products produced in petroleum refineries: refinery gas, liquefied petroleum gas, motor gasoline, kerosene, jet fuel, diesel oil, light fuel oil, fuel oil, naphtha, white spirit, lubricating oils, bitumen, paraffin waxes, petroleum coke and other refinery products.

Other petroleum products encompass liquefied petroleum gas in NGL plants.

**Import** includes the quantities of energy products that crossed the state border of the Republic of Croatia, regardless of whether or not they were cleared through the customs. The quantities of petroleum and petroleum products and liquid gas that are under contracts on production realised abroad are also to be presented in this table as import. Energy products in transit through the Republic of Croatia are not presented in this survey form either as import or as export.

**Export** includes the quantities that crossed the state border of the Republic of Croatia, regardless of whether or not they were cleared through the customs and whether or not they are owned by a Croatian resident.

For import and export of electricity, a Eurostat definition is used which includes transit: amounts of electricity are considered imported or exported when they have crossed the political boundaries of a country, regardless of whether customs clearance has taken place or not. If electricity transits through a country, the amount should be reported as both import and export.

**Variation of stocks** includes stock changes at the beginning and at the end of a month in enterprises engaged in the production, transformation, import and export of energy. The difference is calculated by subtracting the state of stocks at the beginning of the first working day in a month from the state of stocks at the end of the last day in the same month.

Minor deviations may occur in the summary presentation of data due to the rounding of figures.

#### **Abbreviations**

CHP combined heat and power generation
Eurostat Statistical Office of the European Union

GCV gross calorific value GWh gigawatt hour

HERA Croatian Energy Regulatory Agency
HROTE Croatian Energy Market Operator Ltd.

m³ cubic metre
mln million
NGL natural gas liquids

TJ terajoule '000 thousand

#### Symbols

no occurrence

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