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

In November 2023, electricity available for the inland market amounted to 1 511 GWh. Compared to October 2023, the availability of electricity for domestic consumption increased by 6.4%, while compared to November 2022 it increased by 5.1%.

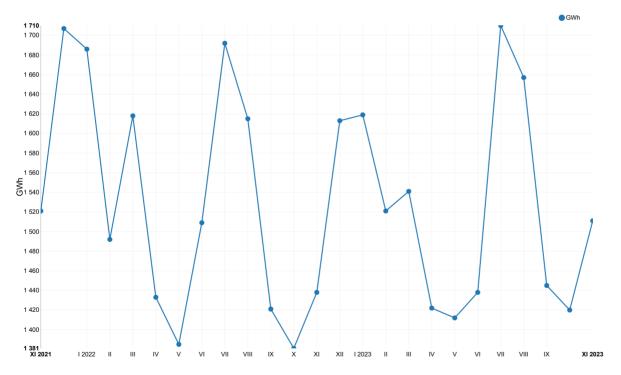
The amount of natural gas available for consumption in November 2023 was 11 011 TJ, while the stocks decreased by 2 741 TJ. The amount of natural gas available for domestic consumption in November 2023 increased by 31.4% compared to October 2023, while compared to November 2022 it increased by 18.6%.

The amount of petroleum products available for consumption in November 2023 was 283 thousand tonnes, while the stocks increased by 55 thousand tonnes. The amount of petroleum products available for domestic consumption in November 2023 decreased by 5.4% compared to October 2023, while compared to November 2022 it increased by 14.6%.

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, NOVEMBER 2021 - NOVEMBER 2023



### 1 ELECTRICTY

				Elect	ricity			
Supply		202	22			202	23	
	VIII	IX	Х	XI	VIII	IX	Х	XI
Total gross production	1 086	966	1 087	1 305	1 344	1 168	1 249	1 629
Hydro power plants	252	256	342	549	561	336	464	870
Thermal power plants and CHP on fossil fuels	524	416	524	416	477	492	476	408
Thermal power plants and CHP on renewable fuels	87	90	87	99	76	79	80	79
Wind power plants	210	191	122	234	188	227	205	256
Solar power plants	8	8	7	3	41	35	25	16
Geothermal power plants	6	6	5	5	-	-	-	-
Total net production	1 047	937	1 052	1 272	1 310	1 132	1 214	1 596
Hydro power plants	251	254	338	546	560	334	462	868
Thermal power plants and CHP on fossil fuels	497	397	499	395	452	466	450	387
Thermal power plants and CHP on renewable fuels	79	83	83	91	70	72	73	72
Wind power plants	208	190	121	233	187	226	204	254
Solar power plants	8	8	7	3	41	35	25	16
Geothermal power plants	5	5	4	4	-	-	-	-
Import	989	1 004	1 002	900	830	808	883	729
Export	413	515	644	717	483	476	653	803
Energy absorbed by storage pumping	8	5	29	17	-	19	24	11
Available for inland market	1 615	1 421	1 381	1 438	1 657	1 445	1 420	1 511

# 2 NATURAL GAS

					Natur	al gas			
Supply	Unit of measure		2022	2		2023			
		VIII	IX	Х	XI	VIII	IX	Х	XI
Production	mln m <sup>3</sup>	65	61	62	60	60	37	60	57
	TJ (GCV)	2 576	2 439	2 477	2 380	2 399	1 482	2 373	2 269
Import	mln m <sup>3</sup>	387	171	312	268	279	258	188	197
	TJ (GCV)	15 406	6 843	12 244	10 468	11 510	10 150	7 347	7 685
Export	mln m <sup>3</sup>	136	107	114	97	120	94	64	44
	TJ (GCV)	5 271	4 173	4 428	3 738	4 668	3 710	2 488	1 683
Variation of stocks	mln m <sup>3</sup>	173	-12	57	-4	48	27	-25	-69
	TJ (GCV)	7 035	-518	2 231	-174	1 535	1 224	-1 148	-2 741
Available for inland market	mln m <sup>3</sup>	143	138	203	235	172	174	208	279
	TJ (GCV)	5 676	5 626	8 062	9 283	7 705	6 698	8 380	11 011

### 3 HYDROCARBONS

## 3.1 CRUDE OIL

	Crude oil									
Supply		202	22		2023					
	VIII	IX	Х	XI	VIII	IX	Х	XI		
Production	47	45	47	45	44	40	43	41		
Import	339	90	97	-	377	103	209	-		
Export	-	25	-	55	-	-	44	22		
Variation of stocks	105	-105	-87	-29	136	-78	1	-165		
Refinery input	281	215	231	19	285	221	207	184		

GWh

'000 tonnes

### 3.2 PETROLEUM PRODUCTS - TOTAL

'000 tonnes

		Petroleum products									
Supply		20	22		2023						
	VIII	IX	Х	XI	VIII	IX	Х	XI			
Production	350	289	299	30	354	291	293	285			
Import	199	154	259	279	190	228	186	203			
Export	182	151	135	87	202	197	185	150			
Variation of stocks	15	-50	82	-25	-26	-13	-6	55			
Available for inland market	352	342	341	247	368	335	299	283			

# 3.2.1 MOTOR GASOLINE

'000 tonnes

'000 tonnes

		Motor gasoline									
Supply		20	22		2023						
	VIII	IX	Х	XI	VIII	IX	Х	XI			
Production	79	65	80	7	84	70	77	69			
Import	10	7	7	5	11	16	13	14			
Export	13	37	21	6	20	52	45	20			
Variation of stocks	12	-9	16	-26	7	-18	12	28			
Available for inland market	64	44	50	32	68	52	33	35			

# 3.2.2 GAS/DIESEL OIL

Gas/diesel oil 2023

Supply		20	22		2023			
	VIII	IX	Х	XI	VIII	IX	Х	XI
Production	151	129	125	14	137	116	123	116
Import	167	125	207	224	154	153	149	165
Export	106	85	78	67	101	80	82	99
Variation of stocks	6	-32	55	-4	-18	-15	-9	13
Available for inland market	206	201	199	175	208	204	199	169

### 3.2.3 FUEL OIL

'000 tonnes

				Fue	el oil			
Supply		20	22			20	23	
	VIII	IX	Х	XI	VIII	IX	Х	XI
Production	25	37	19	2	37	33	24	9
Import	-	-	-	1	-	1	1	1
Export	21	12	3	2	31	31	27	2
Variation of stocks	-1	-	-5	-1	6	3	-3	7
Available for inland market	5	25	21	2	-	-	1	1

#### 3.2.4 OTHER PETROLEUM PRODUCTS

'000 tonnes

		Other petroleum products										
Supply		20	022		2023							
	VIII	IX	Х	XI	VIII	IX	Х	XI				
Production	95	58	75	7	96	72	69	91				
Import	22	22	45	49	25	58	23	23				
Export	45	17	33	12	50	34	31	29				
Variation of stocks	-2	-9	16	6	-21	17	-6	7				
Available for inland market	77	72	71	38	92	79	66	78				

#### **4 CRUDE FUELS**

### 4.1 HARD COAL

'000 tonnes

		Hard coal										
Supply		20	22		2023							
	VIII	IX	Х	XI	VIII	IX	Х	XI				
Production	-	-	-	-	-	-	-	-				
Import	6	67	68	77	7	75	-	67				
Export	-	-	-	-	-	-	-	-				
Variation of stocks	-55	14	6	31	-56	15	-63	16				
Available for inland market	61	53	62	46	63	60	63	51				

### 4.2 COKE

'000 tonnes

		Coke									
Supply		20	22		2023						
	VIII	IX	Х	XI	VIII	IX	Х	XI			
Production	-	-	-	-	-	-	-	-			
Import	3	2	2	4	2	3	2	-			
Export	-	-	-	-	-	-	-	-			
Variation of stocks	-	-	-	-	-	-	-	-			
Available for inland market	3	2	2	4	2	3	2	-			

#### 4.3 BROWN COAL

'000 tonnes

		Brown coal									
Supply		20	22		2023						
	VIII	IX	Х	XI	VIII	IX	Х	XI			
Production	-	-	-	-	-	-	-	-			
Import	-	1	2	1	1	1	1	3			
Export	-	-	-	-	-	-	-	-			
Variation of stocks	-		-	-	-	-	-	-			
Available for inland market	-	1	2	1	1	1	1	3			

### 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.
m <sup>3</sup>	cubic metre
mln	million
NGL	natural gas liquids
TJ	terajoule
'000	thousand

#### Symbols

no occurrence

Published by the Croatian Bureau of Statistics, Zagreb, Ilica 3, P. O. B. 80

Phone: (+385 1) 48 06 111 Press corner: press@dzs.hr

Persons responsible: Edita Omerzo, Director of Spatial Statistics Directorate Lidija Brković, Director General

Prepared by: Darko Jukić, Ana Grabić, Mirjana Petanjek and Željka Oršanić Kelebuh

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Customer Relations and Data Protection Department

Information and user requests Phone: (+385 1) 48 06 138, 48 06 154, 48 06 115 E-mail: stat.info@dzs.hr

> Subscription Phone: (+385 1) 21 00 455 E-mail: prodaja@dzs.hr