

# FACT BOOK 2001

1999-2001 in figures



**FACT BOOK 2001**

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PKN ORLEN is one of the largest companies in Central & Eastern Europe, with listings on the Warsaw and London Stock Exchanges. PKN ORLEN 's depository receipts are also traded on the OTC market in the USA. PKN ORLEN is Poland's largest refiner and marketer of world-class petroleum and related products. It owns and operates a substantial wholesale and retail distribution system that includes the largest network of service stations in Poland. It also has significant financial investments in the telecommunications sector in Poland.



**Strengths**

- the biggest retail network covering the whole country
- very close to meeting forthcoming EU standards
- high complexity, well located refining assets (inland premium, discounted crude supply in comparison to peers)

**Weaknesses**

- 95% of sales generated in a single market
- low share of non-fuel products in retail sales revenues
- lack of E&P segment

**Opportunities**

- possible consolidation of refining assets
- active player in regional consolidation
- possible JV with a global market player for Petrochemicals expansion
- further planned cost-reduction
- low-cost and efficient logistics

**Threats**

- increasing competition in retail market
- surplus of refining capacity in the region
- unknown future of motorway development plan

	1999	2000	2001
Revenue (PLN million)	13 279	18 602	17 038
EBITDA (PLN million)	1 886	2 335	1 706
Net profit (PLN million)	944	902	376
Net cash provided by operating activities (PLN million)	1 270	1 073	2 112
Capital expenditures <sup>(1)</sup> (PLN million)	1 742	1 423	1 482
Total assets (PLN million)	12 059	14 087	14 383
Shareholders' equity (PLN million)	6 715	7 596	7 958
Gearing <sup>(2)</sup> (PLN million)	27.4%	33.5%	32.0%
ROACE <sup>(3)</sup> (PLN million)	10.7%	11.0%	4.6%
Number of employees <sup>(4)</sup> (No)	14 169	13 342	17 582 <sup>(5)</sup>
EBITDA per share (PLN)	4.60	5.56	4.06
EPS (PLN)	2.30	2.15	0.89
Net cash provided by operating activities per share (PLN)	3.10	2.55	5.03

<sup>(1)</sup> Acquisition of property, plant and equipment

<sup>(2)</sup> Gearing = Net debt / Shareholders' equity

<sup>(3)</sup> ROACE = EBIT after taxation / average (Shareholders' equity + Net debt)

<sup>(4)</sup> Capital group – the Company and its consolidated subsidiaries

<sup>(5)</sup> Including Anwil (2 637 employees) – first consolidated in 2001

The table below is a summary of operating data with respect to the PKN ORLEN Group's refining, marketing and petrochemicals operations.

	1999	2000	2001
	thousand tonnes <sup>(1)</sup>	thousand tonnes <sup>(1)</sup>	thousand tonnes <sup>(1)</sup>
<b>Refining and Petrochemicals</b>	<b>12 506</b>	<b>13 064</b>	<b>12 878</b>
<b>Plock refinery</b>			
Annual nameplate crude distillation capacity <sup>(2)</sup>	13 500	13 500	13 500
Throughput of crude oil	12 002	12 537	12 319
Throughput of other feedstocks	750	967	859
Capacity utilisation	89.0%	92.9%	91.2%
Production of refined products	10 048	10 327	9 995
Production of petrochemicals	781	983	899
<b>Trzebinia refinery</b>			
Annual nameplate crude distillation capacity <sup>(2)</sup>	400	400	500
Throughput of crude oil	372	400	443
Throughput of other feedstocks	335	330	182

## Summary of operating data



	1999	2000	2001
	thousand tonnes <sup>(1)</sup>	thousand tonnes <sup>(1)</sup>	thousand tonnes <sup>(1)</sup>
<b>Jedlicze refinery</b>			
Annual nameplate crude distillation capacity <sup>(2)</sup>	140	140	135
Throughput of crude oil	132	127	116
Throughput of other feedstocks	305	318	391
<b>Sales volumes – gasoline:</b>			
• Retail	1 591	1 343	1 318
• Wholesale	2 250	1 879	1 828
<b>Sales volumes – diesel:</b>			
• Retail	829	783	800
• Wholesale	3 057	2 467	2 204

## Summary of operating data



	1999	2000	2001
<b>Number of retail stations<sup>(2)</sup>:</b>			
• PKN ORLEN Group owned and operated <sup>(3)</sup>	23	0	0
• PKN ORLEN Group owned, dealer operated <sup>(3)</sup>	1 424	1 446	1 409
• Dealer owned and operated (franchised)	571	631	632
<b>Employees<sup>(2)</sup>:</b>			
• PKN ORLEN Group employees <sup>(3)</sup>	14 169	13 342	17 582 <sup>(4)</sup>
• Parent company employees	10 699	7 646	7 333

<sup>(1)</sup> Except where indicated.

<sup>(2)</sup> At the end of the period.

<sup>(3)</sup> In this context, "PKN ORLEN Group" means the Company and its consolidated subsidiaries and does not include associate companies.

<sup>(4)</sup> Including Anwil (2 637 employees) – first consolidated in 2001

Fuel companies

ORLEN PetroCentrum Sp. z o.o. 100.0%
ORLEN PetroProfit Sp. z o.o. 85.0%
ORLEN PetroTank Sp. z o.o. 60.0%
ORLEN PetroZachód Sp. z o.o. 51.8%
Petromor Sp. z o.o. 51.3%
Petrotel Sp. z o.o. 51.0%
ORLEN Morena Sp. z o.o. 50.5%

Gas distribution companies

ORLEN Petrogaz Plock Sp. z o.o. 100.0%
Petrogaz Łapy Sp. z o.o. 90.4%
ORLEN Petrogaz N.Brzeź Sp. z o.o. w likw. – 52.0%
ORLEN Petrogaz Wrocław Sp. z o.o. 51.6%

Sector companies

Rafineria Trzebinia S.A. 77.1%
Petro-Oil Sp. z o.o. 76.0%
Zakłady Azotowe "Anwil" S.A. 75.0%
Rafineria Nafty Jedlicze S.A. 75.0%
IKS SOLINO S.A. 70.5%
Naftoport Sp. z o.o. 48.7%
Chemiepetrol Sp. z o.o. 20.0%

Other

ORLEN Budonafit Sp. z o.o. 100.0%
ORLEN Medica Sp. z o.o. 100.0%
ORLEN Ochrona Sp. z o.o. 100.0%
ORLEN Polimer Sp. z o.o. 100.0%
ORLEN Powiernik Sp. z o.o. 100.0%
ORLEN S.S.A. 100.0%
Z.W. MAZOWSZE Sp. z o.o. 100.0%
ZAWITAJ Świnoujście Sp. z o.o. 100.0%
SAMRELAKS Mąchocice Sp. z o.o. 100.0%
Petromot Sp. z o.o. 97.6%
Zakład Budowy Aparatury S.A. 96.6%
Petrotel Sp. z o.o. 92.5%
D.W. Mazowsze Sp. z o.o. 86.0%
BHT Dromech S.A. w upadłości 81.14%
CPN Marine Service Sp. z o.o. 70.0%
Centrum Edukacji Sp. z o.o. 69.4%
ORLEN Projekt S.A. 51.0%
Flexpol Sp. z o.o. 40.0%
Motell Sp. z o.o. 35.0%

Core business companies

Non-core business companies

Maintenance and support

ORLEN WodKan Sp. z o.o. 82.3%
ORLEN Mechanika Sp. z o.o. 68.2%
ORLEN Automatyka Sp. z o.o. 52.6%
ORLEN Remont Sp. z o.o. 51.2%
ORLEN Eltech Sp. z o.o. 51.0%
ORLEN EnergoRem Sp. z o.o. 51.0%
ORLEN Wir Sp. z o.o. 51.0%

Service companies

CPN Serwis Gdańsk Sp. z o.o. 100.0%
CPN Serwis Kielce Sp. z o.o. 100.0%
ZUD Sp. z o.o. 99.9%
Serwis Słupsk Sp. z o.o. 99.8%
CPN Serwis N.Wieś Wlk. Sp. z o.o. 99.3%
CPN Serwis Łódź Sp. z o.o. 97.3%
CPN Serwis Rzeszów Sp. z o.o. 96.2%
CPN Serwis Podlasie Sp. z o.o. 89.7%
CPN Serwis Mazowsze Sp. zo.o. 88.5%
CPN Serwis Kraków Sp. z o.o. 83.4%
CPN Serwis Wrocław Sp. z o.o. 83.3%
CPN Serwis Kędz.Koźle Sp. z o.o. 80.0%
CPN Serwis Szczecin Sp. z o.o. 78.1%
CPN Serwis Zachód Sp. z o.o. 74.3%
CPN Serwis Katowice Sp. z o.o. 55.0%
CPN Serwis Sp. z o.o. Poznań 51.0%

Transportation companies

ORLEN KolTrans Sp. z o.o. 99.9%
ORLEN Transport Szczecin Sp. z o.o. 99.6%
ORLEN Transport Kraków Sp. z o.o. 98.2%
ORLEN Transport Plock Sp. z o.o. 97.6%
ORLEN Transport Lublin Sp. z o.o. 97.5%
ORLEN Transport Nowa Sól Sp. z o.o. 96.7%
ORLEN Transport Poznań Sp. z o.o. 96.4%
ORLEN Transport Słupsk Sp. z o.o. 96.2%
ORLEN Transport Warszawa Sp. z o.o. 94.5%
ORLEN Transport Olsztyn Sp. z o.o. 92.0%
ORLEN Transport Kędz.Koźle Sp. z o.o. 87.9%

Equity investments

NOM Sp. z o.o. 35.0%
LG Petro Bank S.A. 19.9%
Polkomtel S.A. 19.6%
Telewizja Familijna S.A. 12.0%
<b>&lt; 20%</b>
42 companies < 20%

Shareholders as at 31 December 2001



	number of shares	%
Nafta Polska SA	74 068 050	17.63%
Polish State Treasury	43 633 897	10.38%
The Bank of New York (as DR depository)	107 549 600	25.60%
Others	194 925 590	46.39%
<b>Total</b>	<b>420 177 137</b>	<b>100.00%</b>
Free float	302 475 190	71.99%

# Financial data 1999-2001

(IAS basis) Year ending 31 December

## Balance sheet

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	1999	2000	2001
	PLN million	PLN million	PLN million
Non-current assets, of which:	8 390	9 125	9 951
Total current assets	3 669	4 962	4 432
• Short-term investments	2	14	11
• Cash and cash equivalents	177	176	203
<b>Total assets</b>	<b>12 059</b>	<b>14 087</b>	<b>14 383</b>
Shareholders' equity	6 715	7 596	7 958
Minority interests	147	170	395
Non-current liabilities, of which:	1 848	2 232	2 227
• Interest bearing borrowings	925	1 236	1 261
Current liabilities, of which:	3 349	4 089	3 803
• Interest bearing borrowings	1 091	1 496	1 502
<b>Total liabilities</b>	<b>12 059</b>	<b>14 087</b>	<b>14 383</b>
Total assets per share (PLN)	28.70	33.53	34.23
Book value per share (PLN)	15.98	18.08	18.94

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## Profits

	1999	2000	2001
	PLN million	PLN million	PLN million
<b>Operating profit</b>	<b>1 226</b>	<b>1 425</b>	<b>617</b>
Net finance income / (expense)	(17)	(186)	(98)
Net equity income	36	48	25
<b>Profit before tax</b>	<b>1 245</b>	<b>1 287</b>	<b>544</b>
Income tax	(263)	(362)	(153)
<b>Profit after tax</b>	<b>982</b>	<b>925</b>	<b>391</b>
Minority interest	(38)	(23)	(15)
<b>Net profit</b>	<b>944</b>	<b>902</b>	<b>376</b>
Operating profit per share (PLN)	2.99	3.39	1.47
Net profit per share (PLN)	2.30	2.15	0.89

	1999	2000	2001
	PLN million	PLN million	PLN million
<b>Net cash provided by operating activities, of which:</b>	<b>1 270</b>	<b>1 073</b>	<b>2 112</b>
• Funds generated from operations	1 636	2 001	1 734
• Total change in working capital of which:	(366)	(928)	378
– Decrease / (increase) in receivables	(522)	(520)	209
– Decrease / (increase) in inventories	(760)	(663)	651
– (Decrease) / increase in accrued expenses and payables	824	264	(366)
– Increase in provisions	86	(1)	(121)
– (Decrease) / increase in deferred income	6	(8)	5
<b>Net cash used in investing activities</b>	<b>(1 843)</b>	<b>(1 606)</b>	<b>(1 750)</b>
<b>Net cash provided by financing activities</b>	<b>510</b>	<b>532</b>	<b>(335)</b>
Effect of exchange rate changes on cash and cash equivalents	(1)	–	–
<b>Net increase / (decrease) in cash and cash equivalents</b>	<b>(64)</b>	<b>(1)</b>	<b>27</b>
Net cash provided by operating activities per share (PLN)	3.10	2.55	5.03

## Operating data 1999-2001



## Fuel sales revenues

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The table below sets out the PKN ORLEN Group's sales revenues calculated according to PAS by fuel type and the percentage contribution of each fuel type.

	1999		2000		2001	
	PLN million	% of total sales <sup>(1)</sup>	PLN million	% of total sales <sup>(1)</sup>	PLN million	% of total sales <sup>(1)</sup>
Unleaded gasoline	7 074.9	34.6%	9 168.2	34.1%	9 901.6	43.5%
Leaded gasoline	2 008.6	9.8%	1 198.9	4.5%	24.0	0.1%
Diesel oil	6 403.9	31.3%	7 628.7	28.4%	6 802.8	29.9%
JET A-1 aviation fuel	305.9	1.5%	582.9	2.2%	575.2	2.5%
LPG	194.7	0.9%	385.8	1.4%	208.8	0.9%
Light heating oil	961.9	4.7%	2 128.7	7.9%	2 455.8	10.8%
Heavy fuel oil	535.3	2.6%	705.0	2.6%	546.6	2.4%
Other	76.0	0.4%	147.6	0.5%	4.4	0.0%
<b>Total fuels</b>	<b>17 561</b>	<b>85.8%</b>	<b>21 945.8</b>	<b>81.7%</b>	<b>20 519.2</b>	<b>90.2%</b>

<sup>(1)</sup> Total sales revenues for PKN ORLEN Group on a PAS basis for 1999, 2000, 2001 were PLN 20 476 million, PLN 26 860 million and PLN 25 878 million respectively. PKN ORLEN Group consolidated sales revenues represent revenues of PKN ORLEN and its consolidated subsidiaries. The majority of PKN ORLEN Group companies maintain their accounts in accordance with PAS under which sales revenues are recorded inclusive of excise tax, which is charged at different rates on different products. These companies do not separately record the amount of excise taxes on each product type sold by them and accordingly sales revenue data by product type is only available on a PAS basis.

## Fuel sales volumes

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The table below sets out the sales volumes of PKN ORLEN and its consolidated subsidiaries by fuel type and the percentage contribution of each fuel type.

	1999		2000		2001	
	thousand tonnes	% of total sales <sup>(1)</sup>	thousand tonnes	% of total sales <sup>(1)</sup>	thousand tonnes	% of total sales <sup>(1)</sup>
Unleaded gasoline	2 984	23.3%	2 844	23.4%	3 138	27.6%
Leaded gasoline	857	6.7%	378	3.1%	8	0.1%
Diesel oil	3 856	30.2%	3 251	26.8%	3 004	26.4%
JET A-1 aviation fuel	215	1.7%	287	2.4%	319	2.8%
LPG	220	1.7%	242	2.0%	218	1.9%
Light heating oil	1 092	8.5%	1 529	12.6%	2 047	18.0%
Heavy fuel oil	1 778	14.0%	1 377	11.3%	1 109 <sup>(2)</sup>	9.8%
Other	50	0.4%	77	0.6%	2	0.0%
<b>Total fuels</b>	<b>11 052</b>	<b>86.5%</b>	<b>9 984</b>	<b>82.3%</b>	<b>9 845</b>	<b>86.7%</b>

<sup>(1)</sup> Total sales volumes for PKN ORLEN and its consolidated subsidiaries for 1999, 2000 and 2001 were 12 781 thousand tonnes, 12 134 thousand tonnes and 11 360 thousand tonnes, respectively.

<sup>(2)</sup> Sales of ca. 30 thousand tonnes of heavy fuel oil to Anwil have been excluded.

## Other refinery products sales revenues

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The table below sets out the PKN ORLEN Group's sales revenues of other refinery products by principal type, and the percentage contribution of each product.

	1999		2000		2001	
	PLN million	% of total sales <sup>(1)</sup>	PLN million	% of total sales <sup>(1)</sup>	PLN million	% of total sales <sup>(1)</sup>
Bitumen	190.8	0.9%	330.3	1.2%	246.0	1.1%
Lubricants	173.6	0.8%	257.0	1.0%	222.9	1.0%
Base oil	62.1	0.3%	97.1	0.4%	85.2	0.4%
Other	278.8	1.4%	422.3	1.6%	45.2	0.2%
<b>Total other refinery products</b>	<b>705.2</b>	<b>3.4%</b>	<b>1 106.7</b>	<b>4.1%</b>	<b>599.3</b>	<b>2.6%</b>

<sup>(1)</sup> Total sales revenues for the PKN ORLEN Group on a PAS basis for 1999, 2000, 2001 were PLN 20 476 million, PLN 26 860 million and PLN 25 878 million respectively. PKN ORLEN Group consolidated sales revenues represent revenues of PKN ORLEN and its consolidated subsidiaries. Excise tax is not levied on sales of these refinery products and therefore sales revenues under both PAS and IAS are the same.

## Other refinery products sales volumes

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The table below sets out the other refinery products sales volumes of PKN ORLEN SA and its consolidated subsidiaries by principal type, and the percentage contribution of each product.

	1999		2000		2001	
	thousand tonnes	% of total sales <sup>(1)</sup>	thousand tonnes	% of total sales <sup>(1)</sup>	thousand tonnes	% of total sales <sup>(1)</sup>
Bitumen	520	4.1%	639	5.3%	416	3.7%
Lubricants	50	0.4%	115	0.9%	89	0.8%
Base oil	79	0.6%	93	0.8%	75	0.7%
Other	226	1.7%	307	2.5%	131	1.2%
<b>Total other refinery products</b>	<b>875</b>	<b>6.8%</b>	<b>1 154</b>	<b>9.5%</b>	<b>710</b>	<b>6.3%</b>

<sup>(1)</sup> Total sales volumes for PKN ORLEN and its consolidated subsidiaries for 1999, 2000 and 2001 were 12 781 thousand tonnes, 12 134 thousand tonnes and 11 360 thousand tonnes, respectively.

## Petrochemical product sales revenues

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The table below sets out the PKN ORLEN Group's sales revenues by principal petrochemical product, and the percentage contribution to total PAS sales revenues of each. Excise tax is not levied on petrochemical sales and therefore sales revenues under both PAS and IAS are the same.

	1999		2000		2001	
	PLN million	% of total sales <sup>(1)</sup>	PLN million	% of total sales <sup>(1)</sup>	PLN million	% of total sales <sup>(1)</sup>
Polyethylene	292.4	1.4%	442.2	1.6%	447.6	2.0%
Polypropylene	228.7	1.1%	343.1	1.3%	309.1	1.4%
Propylene	42	0.2%	183.7	0.7%	108.8	0.5%
Ethylene	174	0.9%	355.6	1.3%	73.6	0.3%
Glycols	70.2	0.3%	235.4	0.9%	155.3	0.7%
Benzene	153.4	0.7%	83.7	0.3%	58.2	0.3%
Phenol	72.9	0.4%	125.0	0.5%	99.3	0.4%
Butadiene	30.2	0.3%	64.1	0.2%	48.8	0.2%
Solvents	36.7	0.2%	68.5	0.3%	80.3	0.4%
Other	181.3	0.9%	224.9	0.8%	255.3	1.1%
<b>Total petrochemicals</b>	<b>1 282.8</b>	<b>6.3%</b>	<b>2 126.3</b>	<b>7.9%</b>	<b>1 636.3</b>	<b>7.2%</b>

<sup>(1)</sup> Total sales revenues for PKN ORLEN Group on a PAS basis for 1999, 2000, 2001 were PLN 20 476 million, PLN 26 860 million and 25 878 million respectively. Consolidated sales revenues represent revenues of PKN ORLEN SA and its consolidated subsidiaries.

## Petrochemical products sales volumes

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The table below sets out the principal petrochemical product sales volumes of PKN ORLEN SA and its consolidated subsidiaries, and the percentage contribution of each product.

	1999		2000		2001	
	thousand tonnes	% of total sales <sup>(1)</sup>	thousand tonnes	% of total sales <sup>(1)</sup>	thousand tonnes	% of total sales <sup>(1)</sup>
Polyethylene	119	0.9%	132	1.1%	139	1.2%
Polypropylene	117	0.9%	122	1.0%	122	1.1%
Propylene	46	0.4%	87	0.7%	69	0.6%
Ethylene	104	0.8%	143	1.2%	31 <sup>(2)</sup>	0.3%
Glycols	61	0.5%	110	0.9%	91	0.8%
Benzene	100	0.8%	54	0.4%	46	0.4%
Phenol	49	0.4%	53	0.4%	51	0.5%
Butadiene	38	0.3%	46	0.4%	37	0.3%
Solvents	40	0.3%	49	0.4%	48	0.4%
Other	180	1.4%	203	1.7%	171	1.5%
<b>Total petrochemicals</b>	<b>854</b>	<b>6.7%</b>	<b>999</b>	<b>8.2%</b>	<b>806</b>	<b>7.1%</b>

<sup>(1)</sup> Total sales volumes for PKN ORLEN SA and its consolidated subsidiaries for 1999, 2000 and 2001 were 12 781 thousand tonnes and 12 134 thousand tonnes and 11 360 thousand tonnes, respectively.

<sup>(2)</sup> Sales of ca. 61 thousand tonnes of ethylene to Anwil have been excluded.

## Technical specification of Plock refinery

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The table below sets out the nominal capacities of the main units at the Plock refinery as of 31 December 1999, 2000 and 2001. In 2002 PKN ORLEN plans to increase throughput capacities of its atmospheric and vacuum distillation units to 16-17.8 mt/y depending on the crude blend.

as of 31 December	1999	2000	2001
	thousand tonnes	thousand tonnes	thousand tonnes
Technical specification of Plock refinery			
Atmospheric and vacuum distillation units	13 500	13 500	13 500
Semi regenerative reformers	1 230	1 230	1 260
CCR reformers	700	1 600	1 606
Jet kerosene hydrotreater	160	160	160
Gas oil hydrotreaters	2 660	4 260	4 260
FCC I, II	2 300	2 300	2 300
Alkylation unit	150	150	150
Furfural extraction	400	400	400
Lubricants dewaxing	266	266	215
Lube hydrofinisher	130	130	130
Bitumen	600	600	740
Hydrocracker	2 600	2 600	2 600
Isomerisation C <sub>5</sub> -C <sub>6</sub>	–	600	600
Vacuum residue hydrotreater	1 800	1 800	1 800
LPG desulphurisation	260	260	508

## Technical specification of Plock refinery

as of 31 December	1999	2000	2001
Technical specification of Plock refinery	thousand tonnes	thousand tonnes	thousand tonnes
Claus sulphur recovery (t H <sub>2</sub> S/h)	35	35	39
MTBE	120	100	120
Aromatic petrochemicals	480	480	480
Paraxylene	32	32	32
Olefins	360	360	360
Polyethylene	155	155	150
Polypropylene	110	110	116
BOPP film	10	– <sup>(1)</sup>	–
Ethylene oxide	100	100	105
Glycol	105	105	106
Phenol	45	45	45
Acetone	29	29	29
Butadiene	55	55	55
Benzene (pyrotol)	115	115	115
Pyrolytic gasoline hydrogenation	288	288	270

<sup>(1)</sup> Unit leased to an associate company.

## Throughput and production yields in the Plock refinery

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The table below sets out the Plock refinery's throughput and production yields and approximate capacity utilisation in the years ending 31 December 1999, 2000, 2001.

	1999		2000		2001	
	thousand tonnes	%	thousand tonnes	%	thousand tonnes	%
<b>Throughput</b>						
Crude oil	12 001	94.1%	12 537	92.8%	12 319	93.5%
Other feedstocks, of which:	750	5.9%	967	7.2%	859	6.5%
• Natural gas	275	2.2%	384	2.8%	368	2.8%
<b>Total throughput</b>	<b>12 752</b>	<b>100.0%</b>	<b>13 504</b>	<b>100.0%</b>	<b>13 178</b>	<b>100.0%</b>
<b>Production yields</b>						
<b>Fuels</b>						
Unleaded gasoline	2 218	20.5%	2 846	25.2%	3 176	29.2%
Leaded gasoline	763	7.0%	360	3.2%	-	-
Diesel oil	3 287	30.4%	3 147	27.8%	2 759	25.3%
JET A-1 aviation fuel	217	2.0%	263	2.3%	283	2.6%
LPG	221	2.0%	253	2.2%	217	2.0%

## Throughput and production yields in the Plock refinery

	1999		2000		2001	
	thousand tonnes	%	thousand tonnes	%	thousand tonnes	%
Light heating oil	1 039	9.6%	1 526	13.5%	1 974	18.1%
Heavy fuel oil	1 667	15.4%	1 180	10.4%	939	8.6%
<b>Total fuels</b>	<b>9 412</b>	<b>86.9%</b>	<b>9 576</b>	<b>84.7%</b>	<b>9 347</b>	<b>85.8%</b>
<b>Other petroleum products</b>						
Bitumen	446	4.1%	508	4.5%	425	3.9%
Lubricating base oils	125	1.2%	159	1.4%	126	1.2%
Other	65	0.6%	85	0.8%	97	0.9%
<b>Total other products</b>	<b>636</b>	<b>5.9%</b>	<b>751</b>	<b>6.6%</b>	<b>648</b>	<b>5.9%</b>
<b>Petrochemicals</b>						
Polyethylene	112	1.0%	129	1.1%	138	1.3%
Polypropylene	123	1.1%	124	1.1%	122	1.1%

Throughput and production yields  
in the Plock refinery



	1999		2000		2001	
	thousand tonnes	%	thousand tonnes	%	thousand tonnes	%
Propylene	60	0.6%	88	0.8%	70	0.6%
Ethylene	104	1.0%	143	1.3%	92	0.8%
Glycols	94	0.9%	111	1.0%	91	0.8%
Aromatics	105	1%	116	1.0%	112	1.0%
Other	183	1.7%	272	2.4%	273	2.5%
<b>Total petrochemicals</b>	<b>781</b>	<b>7.2%</b>	<b>983</b>	<b>8.7%</b>	<b>899</b>	<b>8.2%</b>
<b>Total production yields</b>	<b>10 829</b>	<b>100.0%</b>	<b>11 310</b>	<b>100.0%</b>	<b>10 894</b>	<b>100.0%</b>
Changes in stocks	(129)	-	28	-	(5)	-
Refinery fuel	1 758	-	1 910	-	2 030	-
<b>Utilisation</b>	<b>89.0%</b> <sup>(1)</sup>	-	<b>92.9%</b>	-	<b>91.2%</b>	-

<sup>(1)</sup> Assumes nameplate crude distillation capacity was at the 31 December 1999 level throughout 1999. The capacity of 13 500 thousand tonnes was available from 1 July 1999 when the crude oil distillation unit (CDU VI) became operational.

Throughput and production yields  
in the Trzebinia refinery



The table below sets out the Trzebinia refinery's throughput and production yields and approximate utilisation percentages in the years ending 31 December 1999, 2000, 2001.

	1999		2000		2001	
	thousand tonnes	%	thousand tonnes	%	thousand tonnes	%
<b>Throughput</b>						
Crude oil	372	52.6%	400	54.8%	443	70.9%
Other feedstocks	335	47.4%	330	45.2%	182	29.1%
<b>Total throughput</b>	<b>707</b>	<b>100.0%</b>	<b>730</b>	<b>100.0%</b>	<b>625</b>	<b>100.0%</b>
<b>Production yields</b>						
<b>Fuels</b>						
Unleaded gasoline	-	-	-	-	-	-
Leaded gasoline	46	6.6%	32	4.4%	3	0.5%
Diesel oil	362	51.4%	232	31.8%	111	17.8%
Light heating oil	61	8.7%	83	11.4%	54	8.7%
Heavy fuel oil	116	16.5%	162	22.2%	190	30.5%
<b>Total fuels</b>	<b>585</b>	<b>83.1%</b>	<b>509</b>	<b>69.8%</b>	<b>358</b>	<b>57.6%</b>

Throughput and production yields  
in the Trzebinia refinery



	1999		2000		2001	
	thousand tonnes	%	thousand tonnes	%	thousand tonnes	%
<b>Other petroleum products</b>						
Bitumen	–	–	–	–	–	–
Lubricating oils	15	2.1%	24	3.3%	13	2.1%
Paraffins	7	1.0%	–	–	–	–
Gasoline blending components	48	6.8%	83	11.4%	84	13.5%
Others	49	7.0%	113	15.5%	167	26.8%
<b>Total other products</b>	<b>119</b>	<b>16.9%</b>	<b>220</b>	<b>30.2%</b>	<b>264</b>	<b>42.4%</b>
<b>Total production yields</b>	<b>704</b>	<b>100.0%</b>	<b>729</b>	<b>100.0%</b>	<b>622</b>	<b>100.0%</b>
<b>Utilisation</b>	<b>93.0%</b>		<b>99.9%</b>		<b>88.6%</b>	

Throughput and production yields  
in the Jedlicze refinery



The table below sets out the Jedlicze refinery's throughput and production yields and approximate utilisation percentages in the three years ending 31 December 1999, 2000, 2001.

	1999		2000		2001	
	thousand tonnes	%	thousand tonnes	%	thousand tonnes	%
<b>Throughput</b>						
Crude oil	132	30.2%	127	28.7%	116	22.9%
Other feedstocks	305	69.8%	316	71.3%	391	77.1%
<b>Total throughput</b>	<b>437</b>	<b>100.0%</b>	<b>443</b>	<b>100.0%</b>	<b>507</b>	<b>100.0%</b>
<b>Production yields</b>						
<b>Fuels</b>						
Leaded gasoline	27	6.2%	13	3.0%	–	–
Diesel oil	271	62.4%	270	62.4%	350	72.0%
Light heating oil	14	3.2%	–	–	–	–
Heavy fuel oil	49	11.3%	78	18.0%	71	14.6%
<b>Total fuels</b>	<b>361</b>	<b>83.2%</b>	<b>381</b>	<b>88.0%</b>	<b>421</b>	<b>86.6%</b>

Throughput and production yields  
in the Jedlicze refinery



	1999		2000		2001	
	thousand tonnes	%	thousand tonnes	%	thousand tonnes	%
<b>Other petroleum products</b>						
Bitumen	1	0.2%	0	0.1%	–	–
Lubricating oils	57	13.1%	58	13.4%	50	10.3%
Others	15	3.5%	14	3.2%	15	3.1%
<b>Total other products</b>	<b>73</b>	<b>16.8%</b>	<b>72</b>	<b>16.6%</b>	<b>65</b>	<b>13.4%</b>
<b>Total production yields</b>	<b>434</b>	<b>100.0%</b>	<b>433</b>	<b>100.0%</b>	<b>486</b>	<b>100.0%</b>
<b>Utilisation</b>		<b>94.5%</b>		<b>94.0%</b>		<b>85.9%</b>

The table below sets out the development of the service station network of PKN ORLEN and its consolidated subsidiaries and those of other market participants.

as of 31 December	1999		2000		2001	
	No	%	No	%	No	%
<b>PKN ORLEN Capital Group of which:</b>	<b>2 018</b>	<b>31.2%</b>	<b>2 077</b>	<b>31.6%</b>	<b>2 041</b>	<b>30.8%</b>
• DODO network (franchised)	571	8.8%	631	9.6%	632	9.5%
• Rafineria Trzebinia	2	0.0%	1	0.0%	1	0.0%
• Rafineria Nafty Jedlicze	9	0.1%	6	0.1%	2	0.0%
Rafineria Gdańska <sup>(2)</sup>	265	4.1%	275	4.2%	314	4.7%
International operators <sup>(3)</sup>	594	9.2%	703	10.7%	776	11.7%
Others <sup>(1)</sup>	3 594	55.5%	3 527	53.6%	3 500	52.8%
<b>Total</b>	<b>6 471</b>	<b>100.0%</b>	<b>6 582</b>	<b>100.0%</b>	<b>6 631</b>	<b>100.0%</b>

Source:

<sup>(1)</sup> Estimates.

<sup>(2)</sup> Polish Chamber of Liquid Fuels.

<sup>(3)</sup> Polish Organisation of Petroleum Industry and Trade.



The table below shows the nameplate crude oil distillation capacity of Polish refineries.

as of 31 December	1999			2000			2001		
	crude distillation capacity (kt / y)	crude processed (kt)	utili-sation	crude distillation capacity <sup>(2)</sup> (kt / y)	crude processed (kt)	utili-sation	crude distillation capacity (kt / y)	crude processed (kt)	utili-sation
Płock Refinery <sup>(1)</sup>	13 500	12 002	88.9%	13 500	12 537	92.9%	13 500	12 319	91.2%
Trzebinia refinery	400	372	93.1%	400	400	100.0%	500	446	88.6%
Jedlicze refinery	140	132	94.5%	140	127	90.7%	135	116	85.9%
<b>Total PKN ORLEN Group capacity</b>	<b>14 040</b>	<b>12 505</b>	<b>89.1%</b>	<b>14 040</b>	<b>13 064</b>	<b>93.0%</b>	<b>14 135</b>	<b>12 878</b>	<b>91.1%</b>
Gdańsk refinery <sup>(1)</sup>	4 500	3 288	73.1%	4 500	4 245	94.3%	4 500	4 171	92.7%
Czechowice refinery	680	627	92.2%	680	648	95.4%	680	629	92.5%
Gorlice refinery	170	135	79.6%	170	131	77.0%	170	144	84.7%
Jasło refinery	150	100	66.5%	150	95	63.4%	150	90	60.0%
<b>Total capacity</b>	<b>19 540</b>	<b>16 655</b>	<b>85.2%</b>	<b>19 540</b>	<b>18 183</b>	<b>93.1%</b>	<b>19 635</b>	<b>17 912</b>	<b>91.2%</b>

<sup>(1)</sup> Assumes nameplate crude distillation capacity was at the 31 December 1999 level throughout 1999.

<sup>(2)</sup> Assumes nameplate crude distillation capacity was at the 31 December 1999 level throughout 2000.

## Market environment

Until recently, competition in the domestic automotive fuel market was restricted by import tariffs which were being gradually reduced with a view to final abolition by 1 January 2001, as part of Poland's agreements with the Europe Agreement (IMG1), CEFTA and EFTA. In fact, the import tariffs were lifted in September 2000, three months prior to the originally planned date.

	1999		2000		2001		2002
	beginning	end	beginning	end	beginning	end	beginning
<b>Excise tax<sup>(1)</sup></b>							
Leaded gasoline (E-94)	1 004	1 219	1 279	1 399	1 498	1 588	1 629
Unleaded gasoline 95 & 98	929	1 127	1 177	1 257	1 346	1 427	1 464
Diesel oil <sup>(2)</sup>	665	806	846	926	1 002	1 062	1 090
JET A-1 aviation fuel	612	742	782	862	923	978	1 003
<b>Import duties</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
Gasoline	15%	13%	10%	5%	3/0%	-	-
Diesel oil	25%	20%	15%	11%	4/0%	-	-

<sup>(1)</sup> PLN / 1000 l

<sup>(2)</sup> Sulphur content: 50 - 200ppm

Quality standards in Poland compared to the EU and other Central European Countries (Czech Republic, Hungary, Slovakia, Ukraine)

### Gasoline standards

Standard	unit	PL	EU	H, CZ, SK	UA	EU 2005
Sulphur content	ppm, max.	500	150	150	500-1 000	50*
Aromatics content	% vol. max.	-	42	42	-	35
Benzene content	% vol. max.	5	1	1	-	1
Olefins content	% vol. max.	-	18	21/18	-	11(?)

### Diesel standards

Standard	unit	PL	EU	H, CZ, SK	UA	EU 2005
Sulphur content	ppm, max.	2 000**	350	350	2 000	50*
Polyaromatics content	% vol. max.	-	11	11	-	11(?)
Cetane number	minimum	49	51	51	45	51(?)

Source: PKN ORLEN

\* - certain volume with 10 ppm

\*\* - from March 2002 - 500 ppm

(?) - not finally specified

„-“ - not regulated

	1999	2000	2001
PLN/USD – end of period	4.1483	4.1432	3.9863
PLN/USD – period average	3.9675	4.3464	4.0939
Brent crude – end of period <sup>(1)</sup>	24.54	22.77	19.01
Brent crude – period average <sup>(1)</sup>	17.90	28.54	24.44
Unleaded gasoline 95 <sup>(2)</sup>	189.2	306.5	256.7
Unleaded gasoline 98 <sup>(2)</sup>	205.2	342.5	295.0
Diesel oil <sup>(2)</sup>	164.2	277.9	236.5
JET A-1 aviation fuel <sup>(2)</sup>	176.9	296.5	245.2
Polyethylene <sup>(2)</sup>	786.1	843.4	716.5
Polypropylene <sup>(2)</sup>	595.4	715.5	650.5
Differential Ural Rtd./Brent <sup>(1)</sup>	(0.525)	(1.427)	(1.343)

<sup>(1)</sup> USD / bbl<sup>(2)</sup> USD / t

<b>POLAND</b>	1996	1997	1998	1999	2000	2001
Real GDP growth	6.0%	6.8%	4.8%	4.1%	4.0%	1.1%
Nominal GDP (USD billion)	143.9	144.0	158.5	155.2	157.6	177.7
GDP per capita (USD)	3 727	3 725	4 098	4 014	4 078	4 560
Domestic demand <sup>(1)</sup>	9.7%	9.7%	6.9%	5.3%	1.7 %	0.0%
Inflation	19.9%	14.9%	11.8%	7.3%	10.1%	5.5%

<b>EU-15</b>	1996	1997	1998	1999	2000	2001
Real GDP growth	1.6%	2.5%	2.9%	2.6%	3.3%	1.6%
Nominal GDP (USD billion)	8 776.3	8 220.1	8 541.7	8 541.6	7 853.7	7 894.5
GDP per capita (USD)	23 550	21 996	22 803	22 750	20 862	20 919
Domestic demand <sup>(1)</sup>	1.4%	2.3%	3.9%	3.2%	3.0%	1.4%
Inflation	2.4%	1.7%	1.3%	1.2%	2.1%	2.3%

<sup>(1)</sup> Change on preceding year

Source GUS, NBP, Eurostat, OECD, Estimates; (GUS – The Polish Central Statistics Office, NBP – National Bank of Poland)

The Company maintains and publishes statistical information relating to its business in metric units (tonnes) rather than US units (barrels). Metric unit amounts may be converted into barrel equivalents using the conversion factors given below.

1 barrel = 0.159 cubic metres

1 barrel of crude oil per day = 50 metric tonnes of crude oil per year

1 tonne = 1 000 kilograms

1 tonne of crude oil = 7.4 barrels of crude oil (assuming a specific gravity of 34° American Petroleum Institute – API)

1 cubic metre = 35.314 cubic feet

1 tonne of LPG = 11.0 barrels (average)

1 tonne of naphtha = 9.0 barrels

1 tonne of gasoline = 8.4 barrels

1 tonne of jet fuel = 7.9 barrels

1 tonne of diesel or heating oil = 7.4 barrels

1 tonne of fuel oil = 6.4 barrels

1 tonne of lubricants = 7.1 barrels

1 tonne of bitumen = 6.2 barrels

1 tonne of aromatics = 7.2 barrels

1 tonne of refined petroleum products = 7.94 barrels

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**Quarterly unconsolidated results of PKN ORLEN SA**

2Q 2001	14.08.2002
3Q 2001	14.11.2002

**Quarterly consolidated results of PKN ORLEN Group**

2Q 2001	14.08.2002
3Q 2001	14.11.2002

**Half-yearly 2001 results**

Consolidated results of PKN ORLEN Group (will also include unconsolidated figures as above)	18.09.2002
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