


The background of the slide is a photograph showing two workers in high-visibility yellow jackets and white hard hats standing on the nacelle of a large white wind turbine. They are looking out over a landscape with other wind turbines in the distance under a cloudy sky.

# ORLEN Group consolidated financial results

1Q23

25 May 2023

 #ORLEN1Q23@PKN\_ORLEN

**01**  
KEY FACTS

**02**  
MARKET  
ENVIRONMENT

**03**  
FINANCIAL AND  
OPERATING RESULTS

**04**  
FINANCIAL  
SITUATION

**05**  
OUTLOOK



# 01

## Key facts

# Key facts 1Q23



## Revenues

**110,3** PLN bn

## EBITDA LIFO

**17,2** PLN bn

## Recommended dividend

**6,4** PLN bn  
**5,5** PLN / share

### NEW ENERGY



- SMR: research and selection of 7 potential locations, agreement for investment financing and design
- OFFSHORE: start of construction of onshore substation, selection of contractor for the O&M supporting base, new competences in ORLEN Group
- PV: launching of 2 farms with capacity of 62 MW and 25 MW, set of consents for farm construction of 65 MW
- H2: subsidy for a construction of 5 stations in Poland, first station in the Czech Republic, personnel training
- PLN 120 bn for green investments till 2030



### GAS

- Start of construction of CCGT Grudziądz
- Norway: 4 new concessions (almost 100 in total) and integration of upstream assets
- Poland: new resources in Lublin region
- The first gas supply to Poland with our own LNG fleet (8 vessels till the end of 2025)
- Long-term contract for purchasing natural gas from USA

### RETAIL



- Over 2500 locations with non-fuel sales in Europe and 650 alternative fuel points
- Rebranding of 100 fuel stations in Hungary and Slovakia
- Purchasing of 17 fuel stations in Germany



### COOPERATION WITH SAUDI ARAMCO

- Record-high crude oil deliveries from Saudi Arabia
- Potential petrochemical project in Gdańsk



### LOGISTICS

- Logistic assets in Gdańsk
- Launching of fuel pipeline Boronów-Trzebinia

**01**  
KEY FACTS

**02**  
MARKET  
ENVIRONMENT

**03**  
FINANCIAL AND  
OPERATING RESULTS

**04**  
FINANCIAL  
SITUATION

**05**  
OUTLOOK



# 02

## Market environment

# Macroeconomic environment 1Q23



		1Q22	4Q22	1Q23
Brent crude oil	USD/bbl	102	89	81
Model refining margin <sup>1</sup>	USD/bbl	6,0	22,0	18,3
Differential <sup>2</sup>	USD/bbl	7,8	6,4	5,1
Model petrochemical margin <sup>3</sup>	EUR/t	1 166	1 056	1 018
Natural gas price TTF month-ahead	PLN/MWh	465	580	249
Natural gas price TGEgasDA	PLN/MWh	477	474	275
Electricity price TGeBase	PLN/MWh	625	750	619
<b>Refining products<sup>4</sup> - crack margins from quotations</b>				
Diesel	USD/t	148	383	245
Gasoline	USD/t	187	251	300
HSFO	USD/t	-247	-311	-239
<b>Petrochemical products<sup>4</sup> - crack margins from quotations</b>				
Polyethylene <sup>5</sup>	EUR/t	466	487	464
Polypropylene <sup>5</sup>	EUR/t	655	438	432
Ethylene	EUR/t	664	606	668
Propylene	EUR/t	679	514	564
PX	EUR/t	262	593	544
<b>Average exchange rates<sup>6</sup></b>				
USD/PLN	USD/PLN	4,13	4,64	4,39
EUR/PLN	EUR/PLN	4,63	4,73	4,71

(1) Model refining margin = revenues (93,5% Products = 36% Gasoline + 43% Diesel + 14,5% HHO) - costs (100% input: Brent crude oil and other raw materials). Spot quotations. (valid till 31.07.2022)

Model refining margin = revenues (93,6% Products = 33% Gasoline + 48% Diesel + 13% HHO) - costs (100% input: 98% Brent crude oil + 2% natural gas). Spot quotations. (valid from 01.08.2022)

(2) Differential calculated on the real share of processed crude oils. Spot quotations.

(3) Model petrochemical margin = revenues (98% Products = 44% HDPE + 7% LDPE + 35% PP Homo + 12% PP Copo) - costs (100% input = 75% Naphtha + 25% LS VGO). Revenues contract quotations; costs spot quotations.

(4) Margin (crack) for refining and petrochemical products (excluding polymers) calculated as difference between a quotation of given product and a quotation of Brent DTD crude oil.

(5) Margin (crack) for polymers calculated as difference between quotations of polymers and monomers

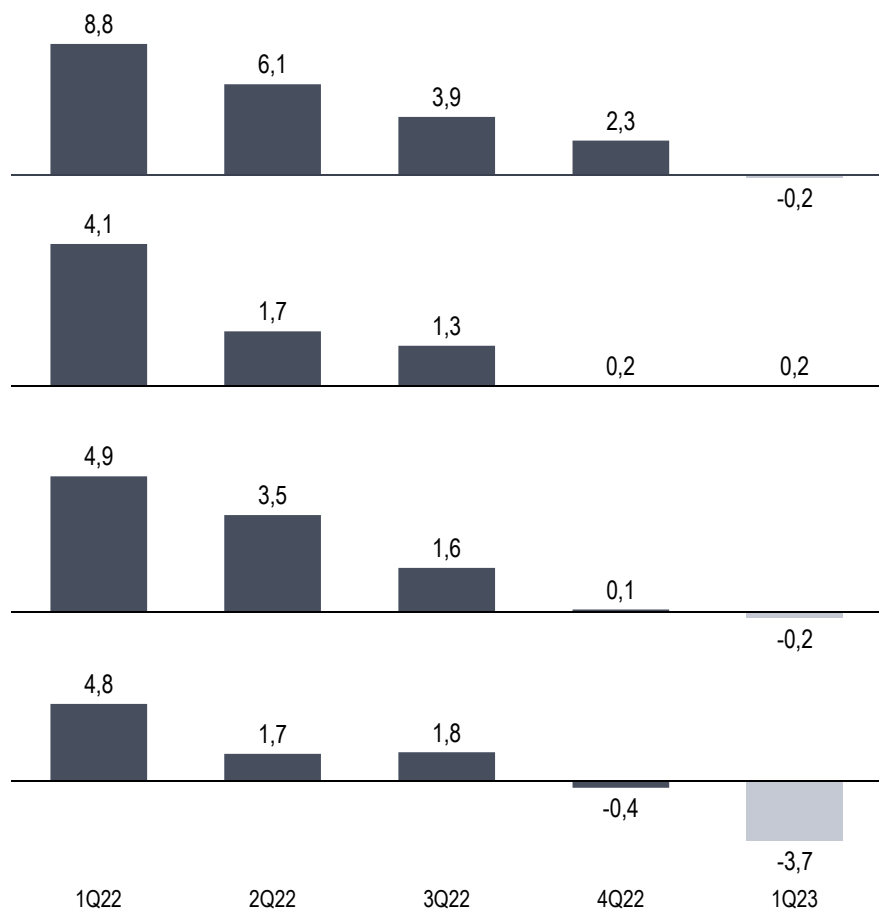
(6) Average exchange rates according to the data of the National Bank of Poland.

# Fuel consumption decrease as a result of economic slowdown



## GDP<sup>1</sup>

Change % (y/y)

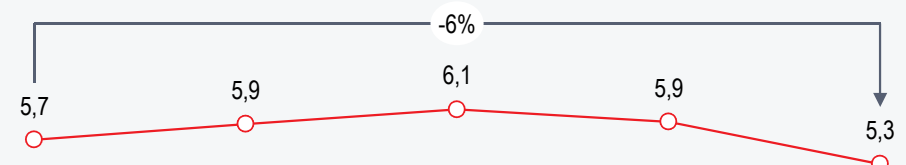


## Fuel consumption<sup>2</sup>

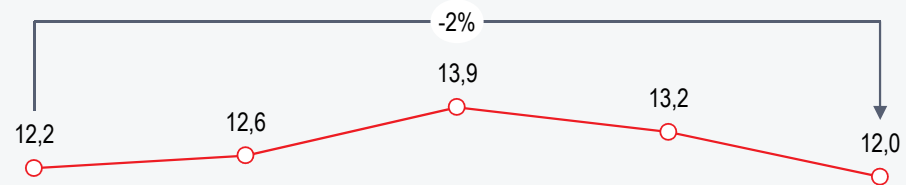
mt



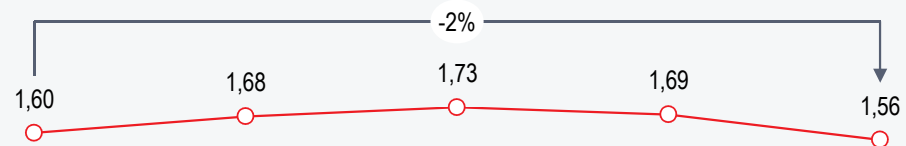
Poland



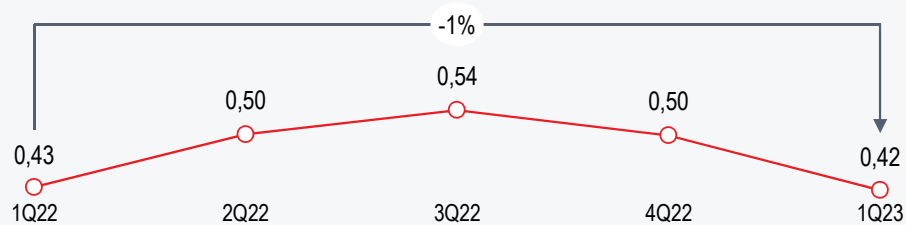
Germany



Czech Rep.



Lithuania



<sup>1</sup> 1Q23 – estimates: Poland (NBP) / Czech Rep., Germany, Lithuania (European Commission)  
<sup>2</sup> 1Q23 – estimates: Poland (ARE), Lithuania (Statistical Office), Czech Rep. (Statistical Office), Germany (Association of Petroleum Industry)



**01**  
KEY FACTS

**02**  
MARKET  
ENVIRONMENT

**03**  
FINANCIAL AND  
OPERATING RESULTS

**04**  
FINANCIAL  
SITUATION

**05**  
OUTLOOK

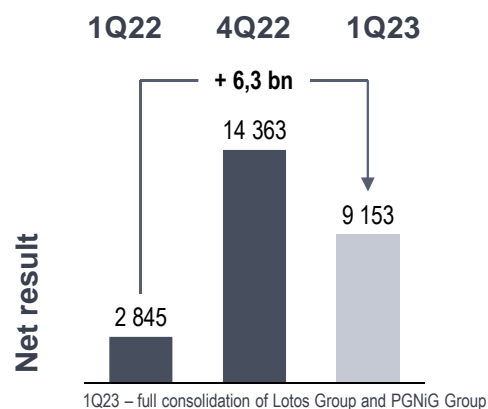
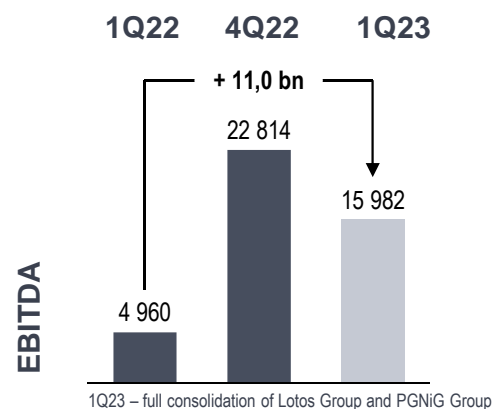
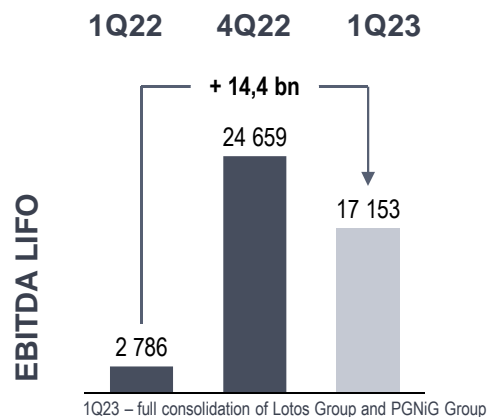
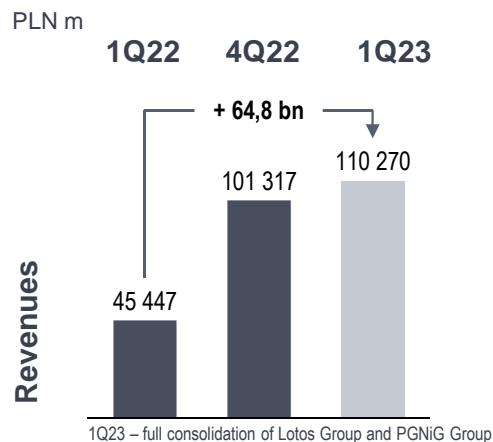


# 03

## Financial and operating results

# Financial results

PLN ~ 110 bn of revenues due to full consolidation of Lotos Group and PGNiG Group



**Revenues:** over twofold increase (y/y) due to higher sales volumes resulting from consolidation of acquired Lotos Group and PGNiG Group as well as higher quotations of refining products at lower quotations of petrochemical products and lower hydrocarbon quotations.

**EBITDA LIFO:** increase by PLN 14,4 bn (y/y) due to consolidation of acquired Lotos Group and PGNiG Group in the amount of PLN 9,8 bn, higher refining margins, weakening PLN/USD, higher non-fuel margins in retail and positive impact of hedging and valuation of CO<sub>2</sub> contracts. Abovementioned effects were limited by negative impact of lower petrochemical margins, lower fuel margins in retail, usage of historical inventory layers, higher reserves for CO<sub>2</sub> and higher overheads and labor costs.

**LIFO effect:** PLN (-) 1,2 bn impact of changes in crude oil prices on inventory valuation.

**Financial result:** PLN 0,8 bn as a result of positive impact of net FX differences and interests at negative impact of settlement and valuation of net derivative financial instruments.

**Net result:** PLN 9,2 bn of net profit.



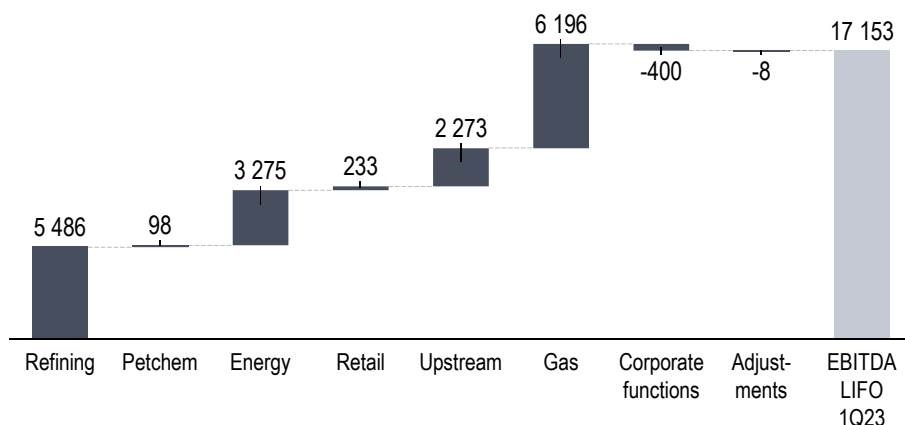
# EBITDA LIFO

PLN 9,8 bn of positive impact from consolidation of Lotos Group and PGNiG Group results



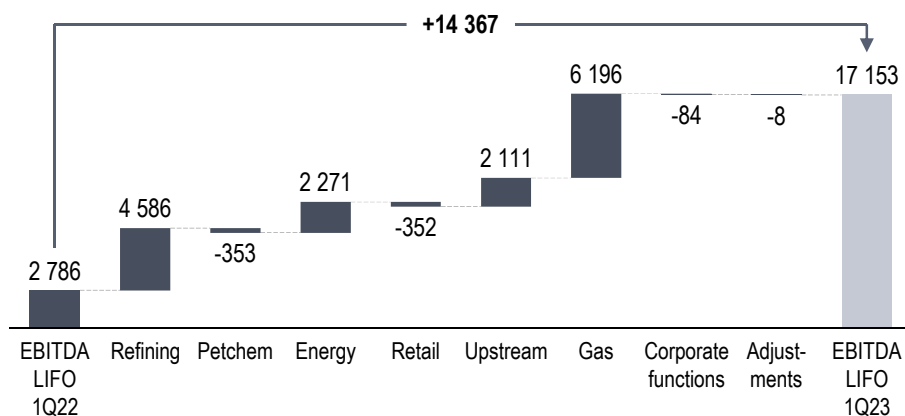
## Segments' results

PLN m



## Change in segments' results (y/y)

PLN m



**Refining:** higher by PLN 4,6 bn (y/y) due to positive macro impact and consolidation of Lotos Group results in the amount of PLN 0,9 bn at negative impact of usage of historical inventory layers and higher overheads and labor costs.

**Petchem:** lower by PLN (-) 0,4 bn (y/y) due to negative impact of lower sales volumes, usage of historical inventory layers and higher overheads and labor costs at positive macro impact.

**Energy:** higher by PLN 2,3 bn (y/y) as a result of positive macro impact, higher sales volumes and consolidation of PGNiG Group in the amount of PLN 0,6 bn. Abovementioned effects were limited by negative impact of higher overheads and labor costs.

**Retail:** lower by PLN (-) 0,4 bn (y/y) as a result of negative impact of lower fuel margins and higher costs of running fuel stations at positive impact of higher non-fuel margins.

**Upstream:** higher by PLN 2,1 bn (y/y) due to consolidation of results of Lotos Group and PGNiG Group in the amount of PLN 2,2 bn at negative impact of higher overheads and labor costs.

**Gas:** higher by PLN 6,2 bn (y/y) as a result of positive impact of consolidation of PGNiG Group.

**Corporate functions:** higher costs by PLN 0,1 bn (y/y) due to increase in the scale of ORLEN Group's operations.

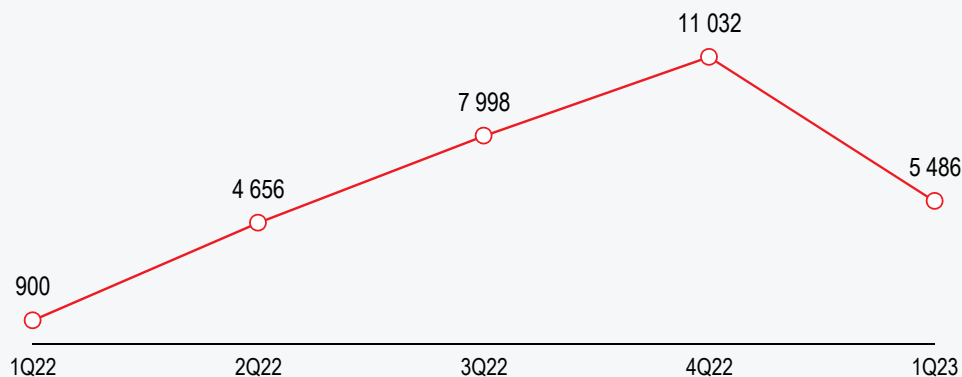
# Refining – EBITDA LIFO

Positive impact of macro and consolidation of Lotos Group results



## EBITDA LIFO

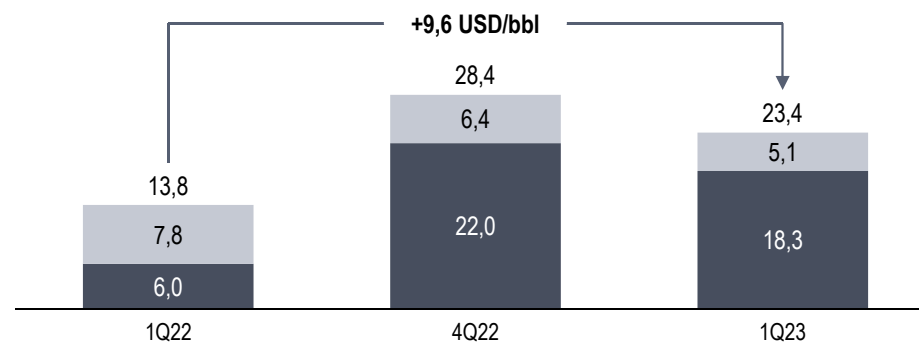
PLN m



## Model refining margin and differential

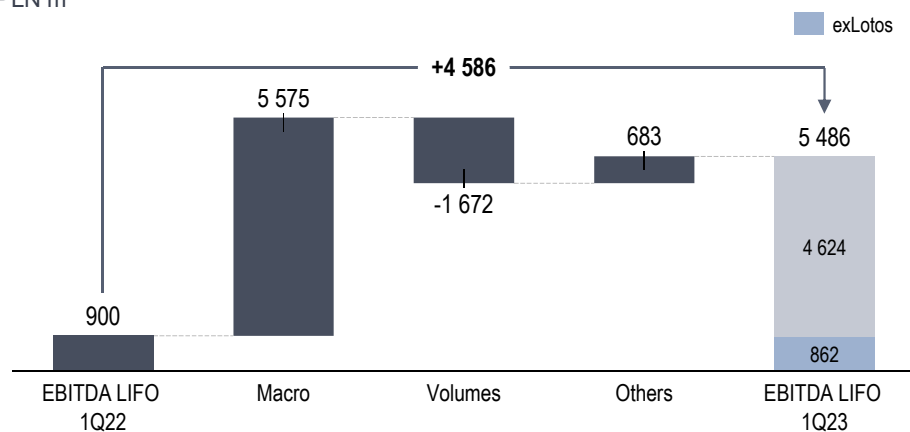
USD/bbl

■ differential ■ margin



## EBITDA LIFO – impact of factors

PLN m



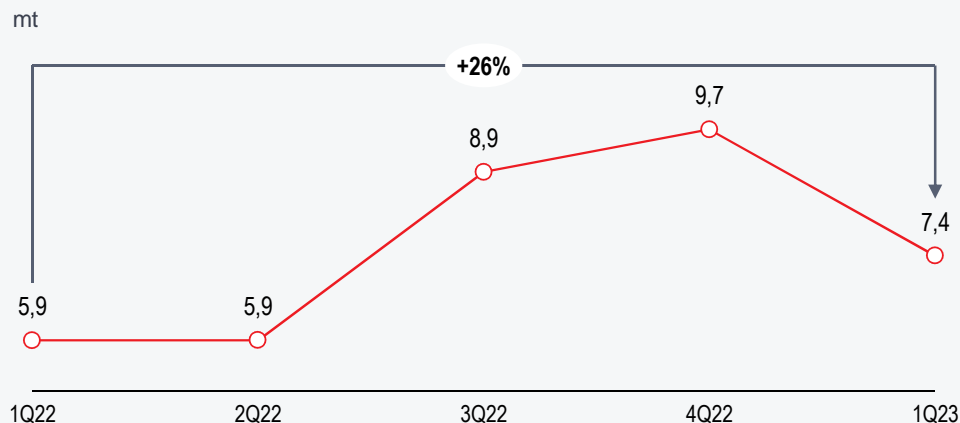
- Positive macro impact (y/y) as a result of higher margins on light and middle distillates, weakening of PLN/USD, positive impact of hedging and valuation of CO2 contracts as well as lower internal costs as a result of lower oil prices with negative impact of the CO2 provision.
- Higher sales volumes by 26% (y/y), of which:
  - higher sales volumes of gasoline by 21%, diesel by 25%, LPG by 34%, JET fuel by 36% and HSFO by 20%.
  - higher sales volumes in Poland by 54% at lower sales volumes in the Czech Rep. by (-) 8% and in Lithuania by (-) 7%.
  - Volumes effect negatively impacted by changes in the structure of processed crude oil, i.e. reduction of REBCO and replacement with more expensive types of crude oil.
- Others include: positive impact of consolidation of Lotos Group results and higher trade margins with negative impact of usage of historical inventory layers and higher overheads and labor costs.

# Refining – operational data

Higher throughput and sales volumes as a result of Lotos Group consolidation



## Sales volumes



## Crude oil throughput and utilization ratio

mt, %

Throughput (mt)	1Q22	4Q22	1Q23	(y/y)
PKN ORLEN	4,1	6,6	5,5	1,4
ORLEN Unipetrol	1,7	2,1	1,8	0,1
ORLEN Lietuva	2,3	2,5	2,1	-0,1
<b>ORLEN Group</b>	<b>8,2</b>	<b>11,2</b>	<b>9,5</b>	<b>1,3</b>

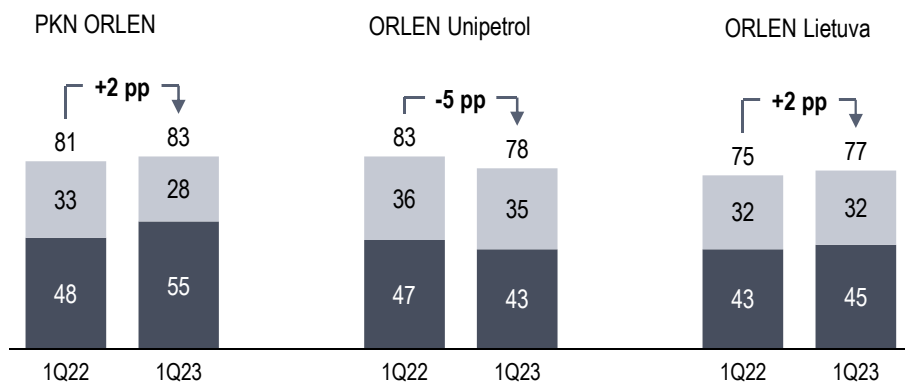
  

Utilization (%)	1Q22	4Q22	1Q23	(y/y)
PKN ORLEN	102%	98%	93%	-9 pp
ORLEN Unipetrol	79%	94%	83%	4 pp
ORLEN Lietuva	90%	96%	85%	-5 pp
<b>ORLEN Group</b>	<b>94%</b>	<b>98%</b>	<b>90%</b>	<b>-4 pp</b>

## Fuel yield

%

light distillates middle distillates



- Crude oil throughput amounted to 9,5 mt, i.e. increased by 1,3 mt (y/y), of which:
  - PKN ORLEN – higher throughput by 1,4 mt (y/y) as a result of including throughput of Gdańsk refinery in the amount of 1,8 mt at a lower throughput of Płock refinery by (-) 0,4 mt (y/y) due to maintenance shutdowns: CDU II and VI, FCC II, HDS VII, Hydrogen Unit II, PTA, Metathesis and H-Oil. Higher fuel yield by 2 pp (y/y) as a result of lower share of high sulphur crude oils in the throughput structure despite the shutdown of H-Oil unit.
  - ORLEN Unipetrol – higher throughput by 0,1 mt (y/y) as a result of favorable macro environment. Lower fuel yield by (-) 5 pp (y/y) due to higher share of high sulphur crude oils in the throughput structure.
  - ORLEN Lietuva – lower throughput by (-) 0,1 mt (y/y) as a result of maintenance shutdown of Visbreaking unit. Higher fuel yield by 2 pp (y/y) due to improved structure of processed crude oils.

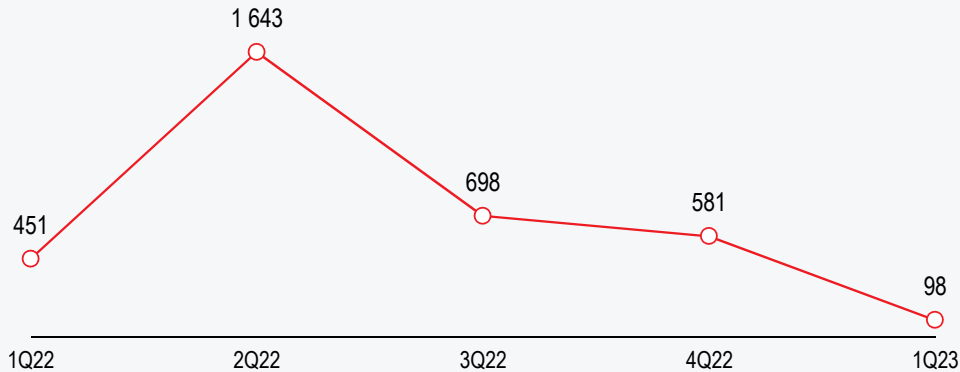


# Petrochemicals – EBITDA LIFO

Negative impact of lower sales volumes mitigated by positive macro impact

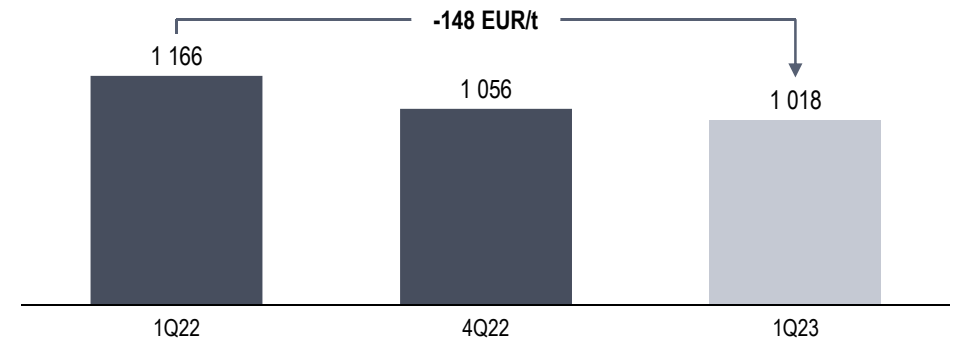
## EBITDA LIFO

PLN m



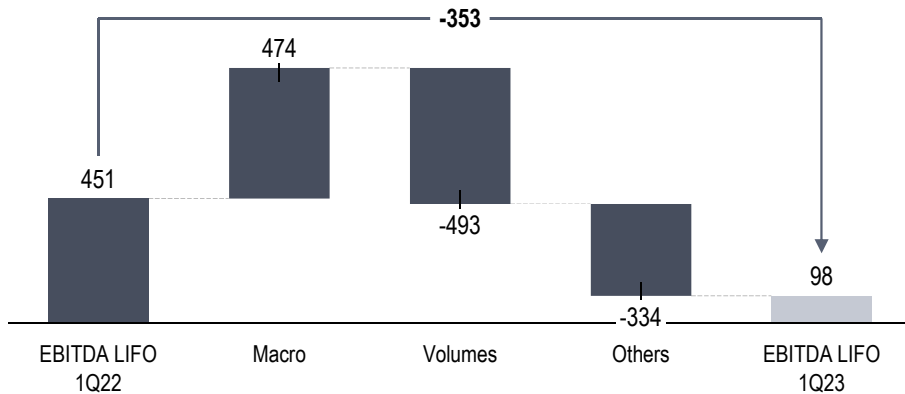
## Model petrochemical margin

EUR/t



## EBITDA LIFO – impact of factors

PLN m



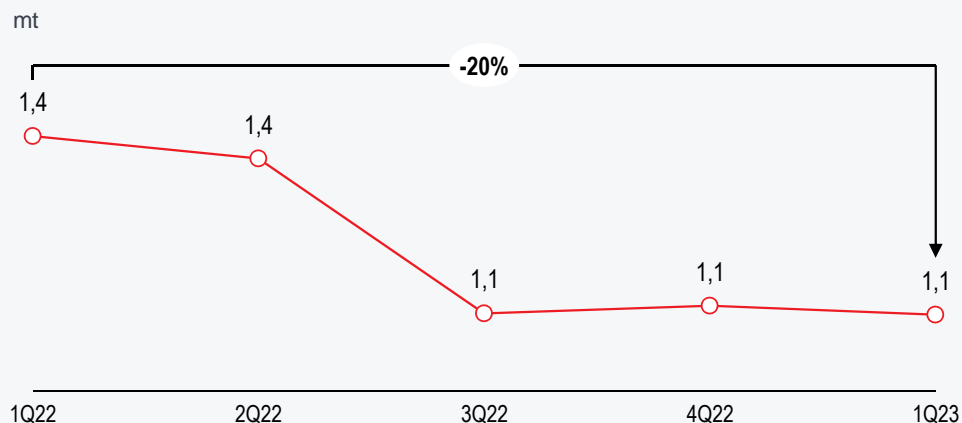
- Positive macro impact (y/y) as a result of positive impact of valuation of CO2 contracts and hedging at negative impact of lower margins on olefins, polyolefins, fertilizers, PVC and PTA, weakening of EUR/USD and CO2 provision.
- Lower sales volumes by (-) 20% (y/y), including:
  - decrease in sales of olefins by (-) 26%, fertilizers by (-) 20%, PVC by (-) 28% and PTA by (-) 42% at increase in sales of polyolefins by 3%.
  - lower sales on all markets, including: in Poland by (-) 19%, in the Czech Rep. by (-) 20% and in Lithuania by (-) 70%.
- Others include: negative impact of usage of historical inventory layers, lower trade margins and higher overheads and labor costs.
- EBITDA LIFO includes:
  - PLN 182 m of Anwil result; i.e. decrease of PLN (-) 210 m (y/y).
  - PLN (-) 128 m of PTA result; i.e. decrease of PLN (-) 130 m (y/y).

# Petrochemicals – operational data

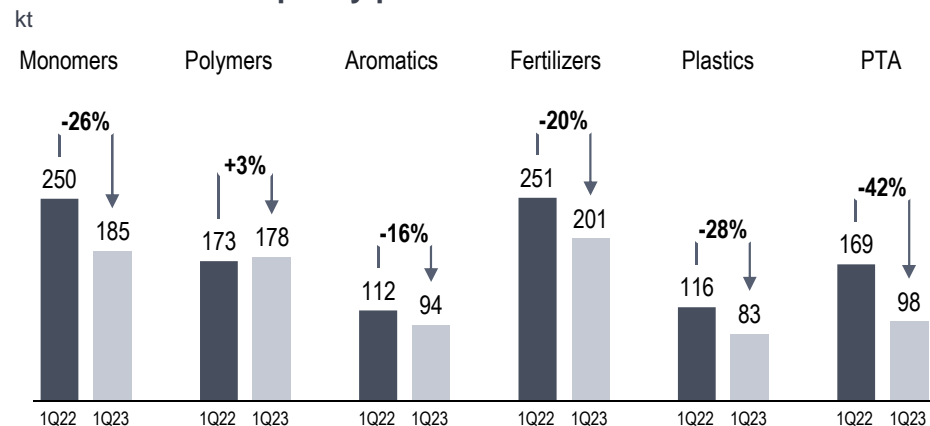
Lower utilization due to market challenges and shutdowns of installations



## Sales volumes



## Sales volumes – split by product



## Utilization ratio

%

Petchem installations	1Q22	4Q22	1Q23	(y/y)
Olefins (Płock)	89%	78%	78%	-11 pp
BOP (Płock)	74%	67%	70%	-4 pp
Metathesis (Płock)	69%	14%	51%	-18 pp
Fertilizers (Włocławek)	64%	47%	81%	17 pp
PVC (Włocławek)	88%	65%	64%	-24 pp
PTA (Włocławek)	100%	70%	66%	-34 pp
Olefins (ORLEN Unipetrol)	94%	77%	85%	-9 pp
PPF Splitter (ORLEN Lietuva)	92%	89%	81%	-11 pp

- Utilization ratio of petrochemical installations:

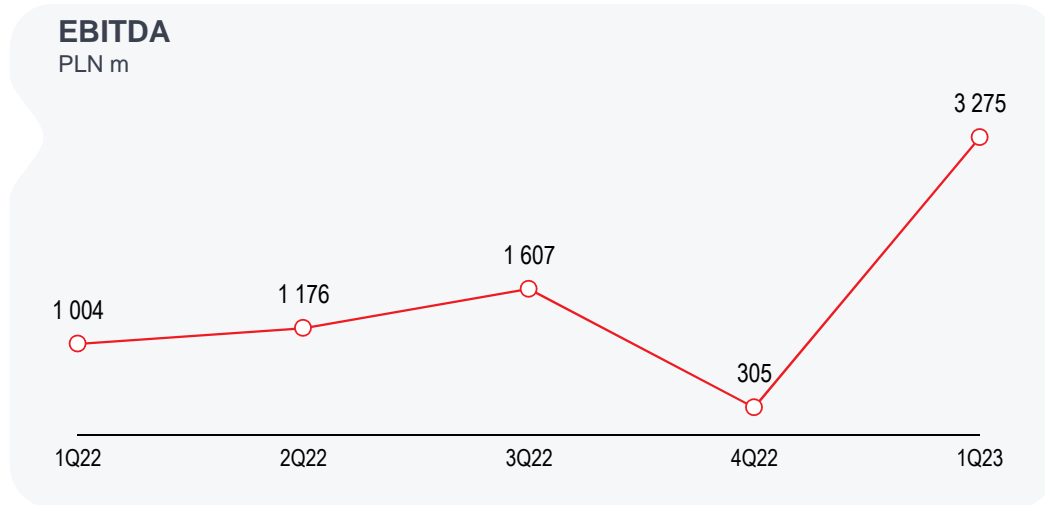
- Olefins (Płock) – lower utilization (y/y) due to decrease in demand and production problems of PVC unit in Anwil.
- BOP (Płock) – lower utilization (y/y) as a result of shutdown.
- Metathesis (Płock) – lower utilization (y/y) due to planned shutdown.
- Fertilizers – higher utilization (y/y) due to the lack of installation shutdown, which took place last year.
- PVC (Włocławek) – lower utilization (y/y) as a result of failure and adjusting to the market situation.
- PTA (Włocławek) – lower utilization (y/y) due to decrease in demand and planned shutdown.
- Olefins (ORLEN Unipetrol) – operation adjusted to the availability of PE2/PE3 installations.
- PPF Splitter (Orlen Lietuva) – lower utilization (y/y) as a result of lower demand.





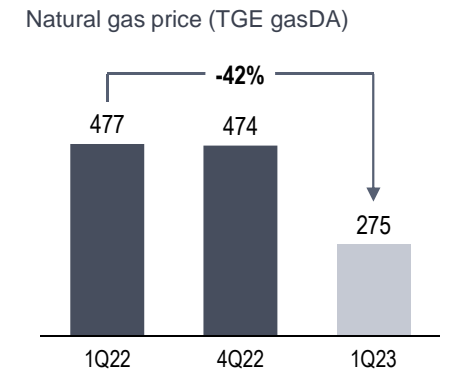
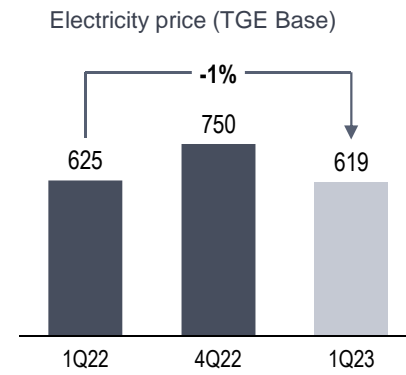
# Energy – EBITDA

Increase in margins on electricity sales

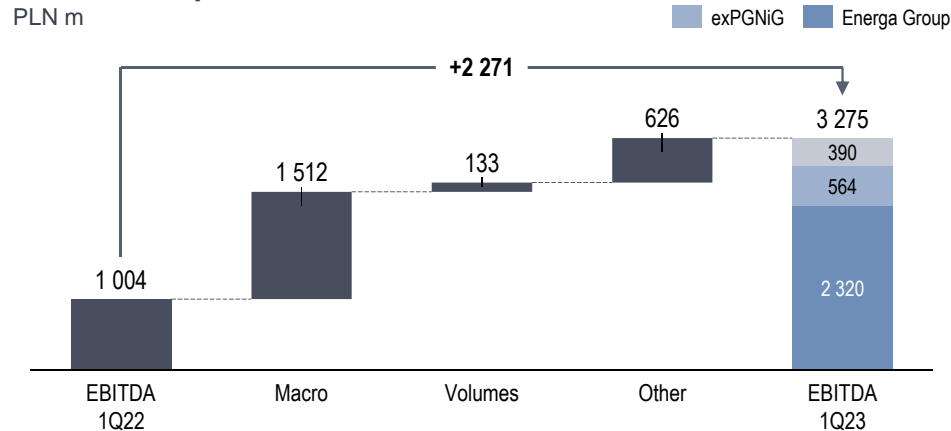


## Electricity and natural gas prices

PLN/MWh



## EBITDA – impact of factors



- Positive macro impact (y/y) as a result of a favorable price ratio of energy sales / energy purchases on the PPX in the Energa Group. Additionally, the positive impact of the valuation of CO<sub>2</sub> futures contracts and the gradual utilization of the provision from December 2022 for onerous contracts (regulation impact) with the negative impact of the provisions on CO<sub>2</sub> emissions.
- Increase in production and sales of electricity (y/y) in CCGT Włocławek and CCGT Płock due to a decrease in natural gas prices and a favorable energy / gas spread.
- Others include: positive impact of the consolidation of the PGNiG Group's results with higher fixed and labor costs.
- Heating (exPGNiG):
  - Increase of PGNiG TERMIKA's average heat selling prices by 96% (y/y) as a result of tariff changes. Tariff correction from 1 January 2023, i.e. increase of 26% compared to the previous one.
  - CO<sub>2</sub> allowances classified as a cost (excluded from EBITDA).

# Energy – operational data

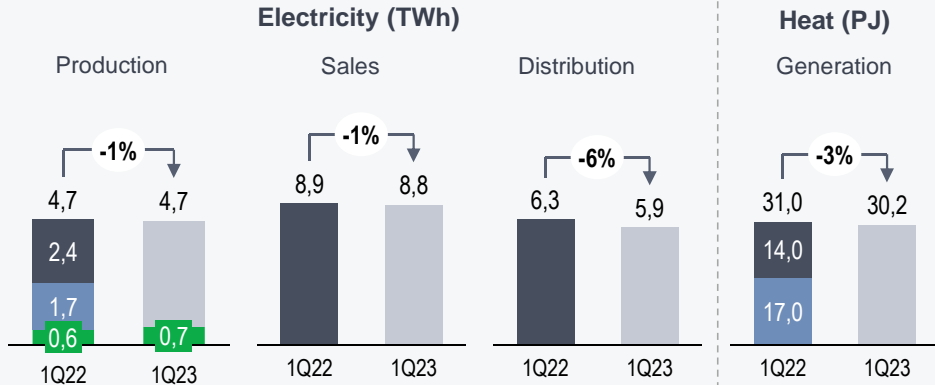
~ 60% of electricity from zero and low emission sources



## Electricity and heat volumes

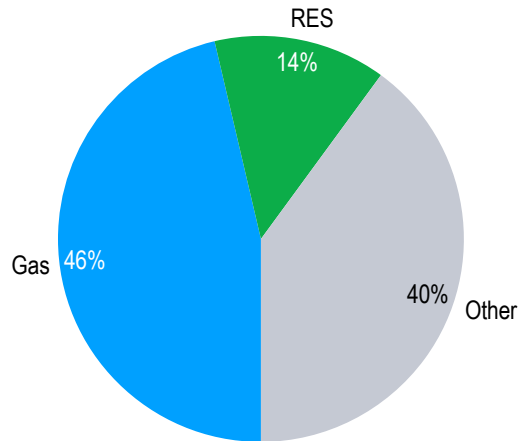
TWh, PJ

exPGNiG RES



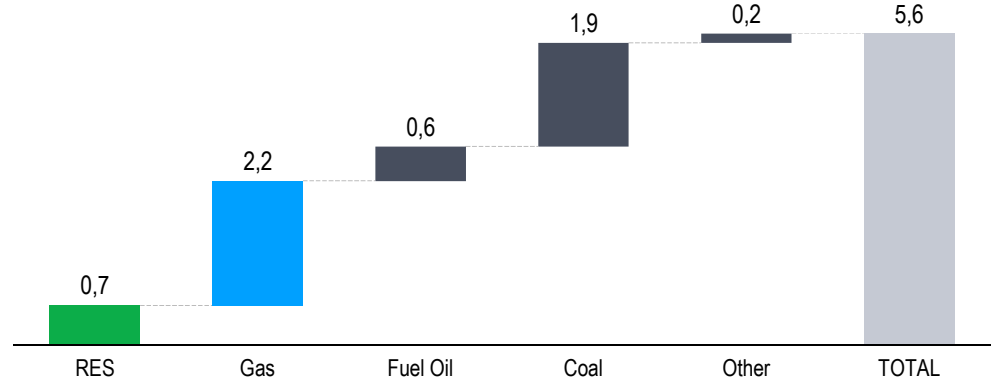
## Electricity production by type of sources

%



## Installed capacity

GWe



- Installed capacity: 5,6 GWe (electricity) / 13,6 GWt (heat).
- Production: 4,7 TWh (electricity) / 30,2 PJ (heat).

### Electricity:

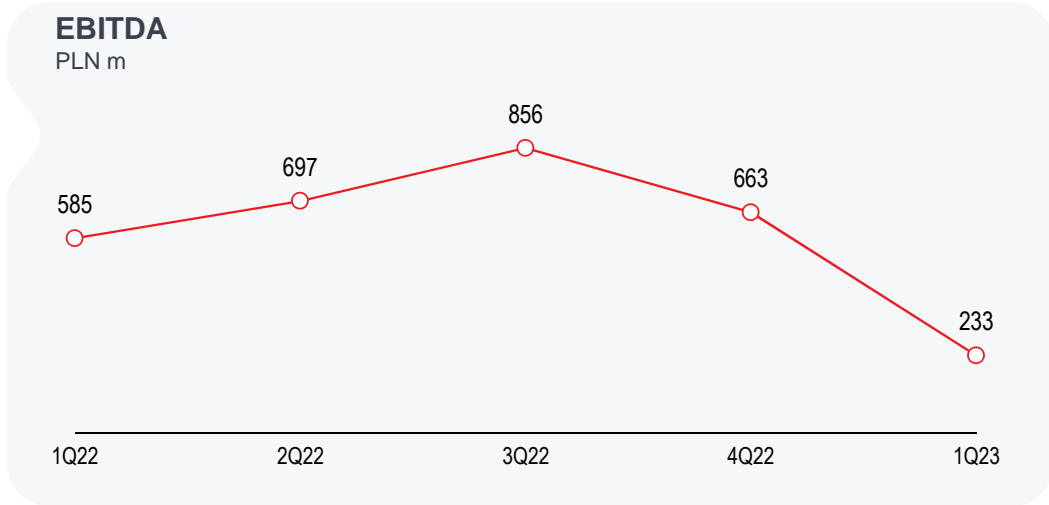
- Production and sales of electricity (including ex PGNiG and ex LOTOS) at a comparable level (y/y).
- Electricity distribution decreased by (-) 6% (y/y) as a result of limiting consumption by business customers.

### Heat:

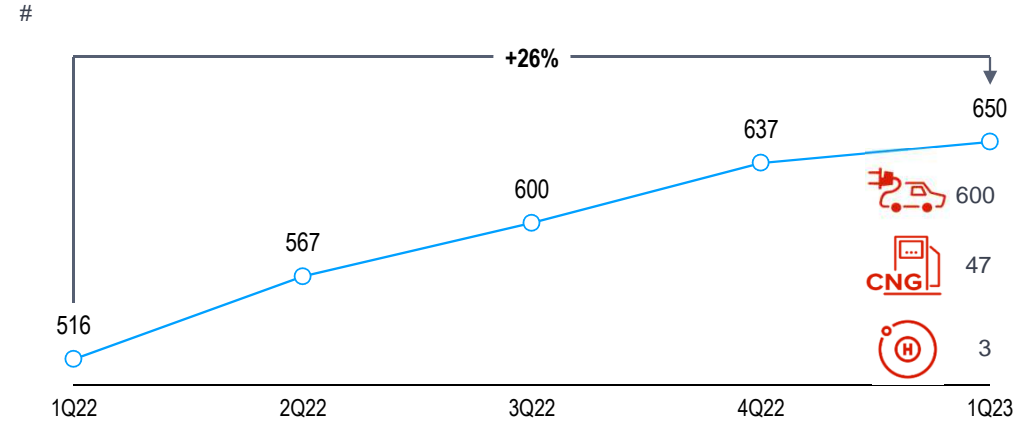
- Heat sales lower by 3% (y/y) with temperature higher by 1,3°C in the quarter.

# Retail – EBITDA

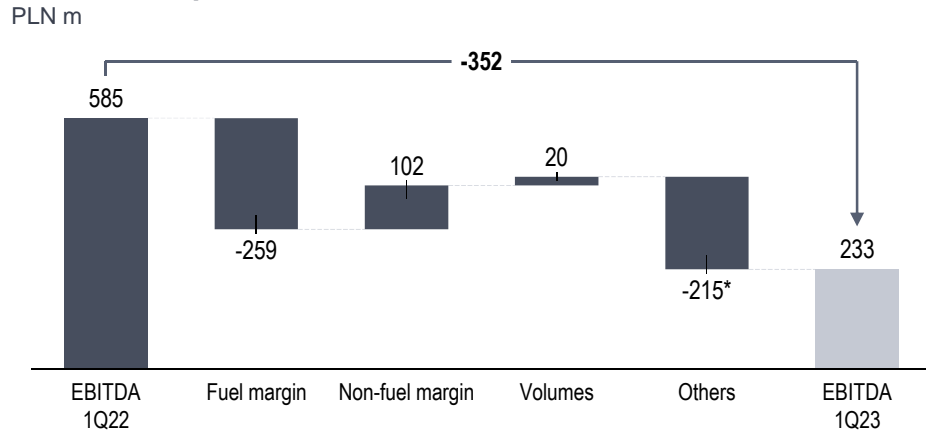
Decrease in fuel margins and higher operating costs of fuel stations



## Alternative fuel points



## EBITDA – impact of factors



- Comparable sales volumes (y/y), of which: higher sales of gasoline by 4% and LPG by 3% with lower sales of diesel by (-) 3%.
- Decrease in fuel margin on all markets (y/y).
- Increase in non-fuel margin on the Polish and Czech markets with comparable margins on the German and Lithuanian markets (y/y).
- 2530 non-fuel locations; increase by 230 (y/y).
- 650 alternative fuel points; increase by 134 (y/y).
- 9109 „ORLEN Paczka” locations in Poland; increase by 2438 (y/y).
- Others include: higher operating costs of fuel stations (y/y).

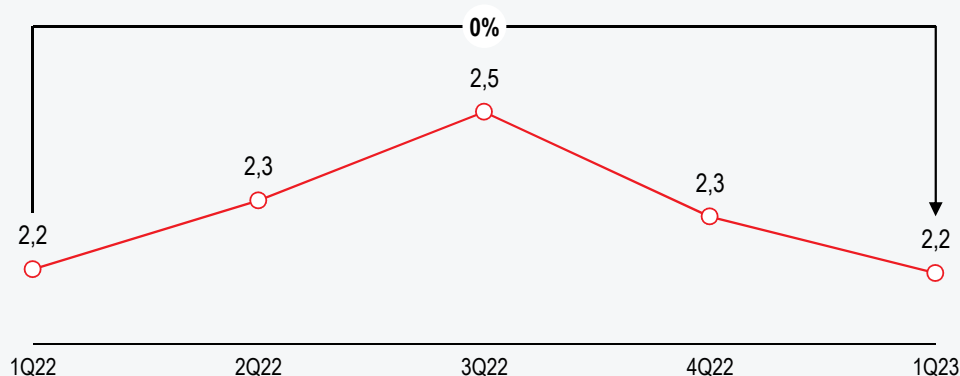
# Retail – operational data

Increase in the number of fuel stations, non-fuel locations and alternative fuel points



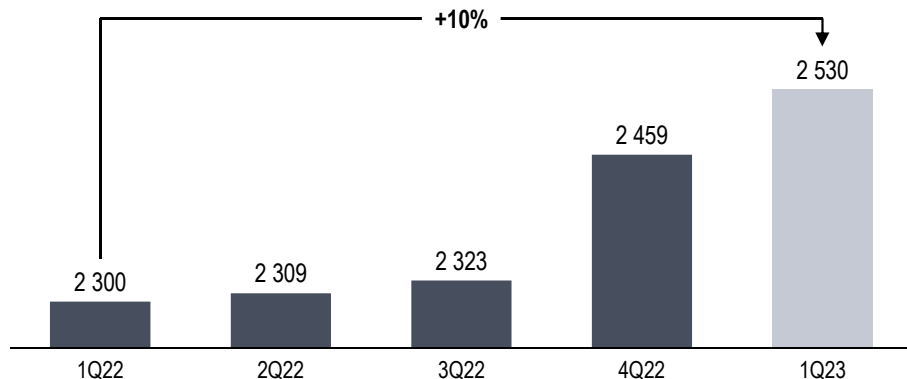
## Sales volumes

mt



## Non-fuel locations

#



## Number of fuel stations and market shares

#, %

	# stations	(y/y)	% market	(y/y)
Poland	1 919	105	34,1	2,7 pp
Germany	587	1	6,0	0,0 pp
Czech Rep.	436	10	22,7	-0,8 pp
Lithuania	29	0	4,1	0,1 pp
Slovakia	72	49	2,1	1,0 pp
Hungary*	79	79	2,4	2,4 pp

- Sales amounted to 2,2 mt, i.e. a comparable level (r/r), of which: lower sales in Poland by (-) 5% and in Germany by (-) 3% at higher sales in the Czech Rep. by 44% and in Lithuania by 14%.
- 3122 fuel stations, i.e. an increase by 244 (y/y), of which mainly in Poland and Hungary as a result of the implementation of remedies related to the merger with LOTOS Group and in Slovakia due to launch and rebranding of self-service fuel stations acquired from the local network.
- Market share increase in Poland, Hungary and Slovakia with lower market share in the Czech Rep. (y/y).
- 2530 non-fuel locations, of which: 1888 in Poland (incl. 27 ORLEN w ruchu), 336 in the Czech Rep., 181 in Germany, 29 in Lithuania, 34 in Slovakia and 62 in Hungary.
- 650 alternative fuel points, including: 503 in Poland, 128 in the Czech Rep. and 19 in Germany.
- 9109 „ORLEN Paczka” locations in Poland, of which: 1062 ORLEN stations, 741 RUCH kiosks, 4920 partner points, 2386 parcel machines.

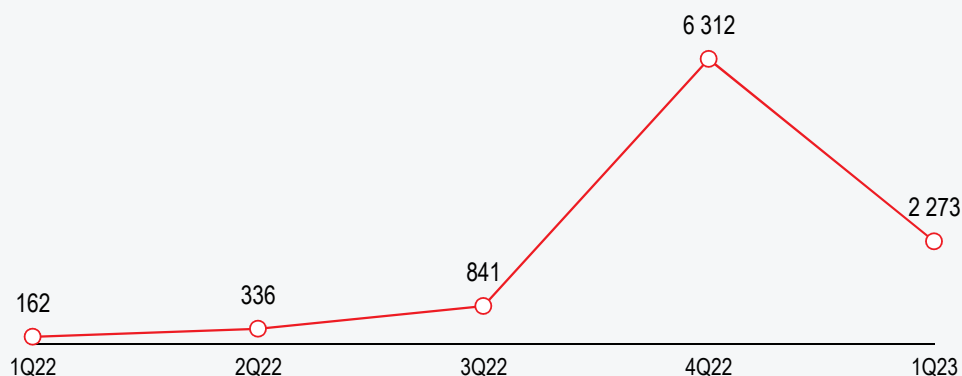
# Upstream – EBITDA

Positive impact of consolidation of Lotos Group and PGNiG Group results



## EBITDA

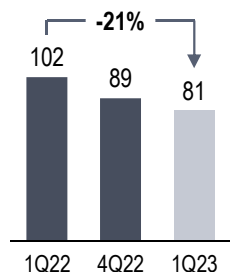
PLN m



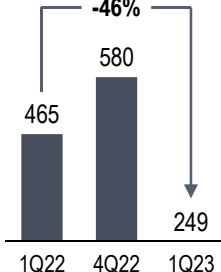
## Oil & natural gas prices

USD/bbl, PLN/MWh

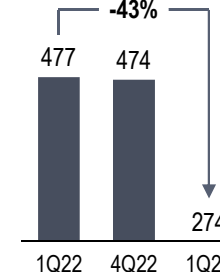
Brent crude oil price (USD/bbl)



TTF natural gas month-ahead price (PLN/MWh)



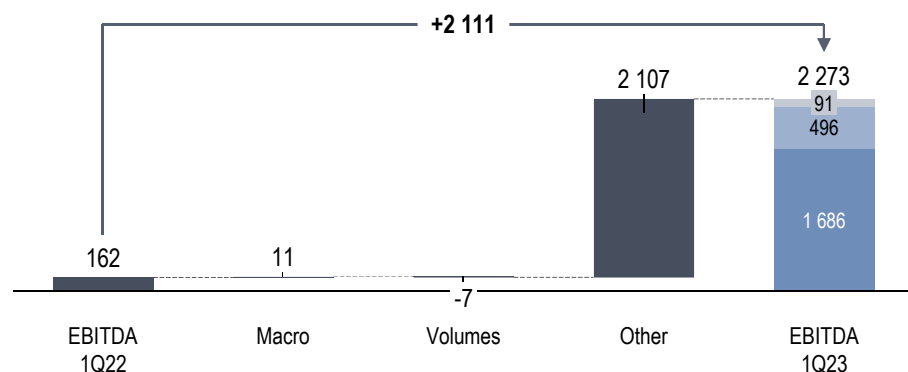
PPX natural gas day-ahead price (PLN/MWh)



## EBITDA – impact of factors

PLN m

exLotos exPGNiG



- Decrease in oil and gas prices (y/y).
- The average price of gas transferred to the Gas segment was PLN 274/MWh.
- Increase in average gas production by 130,8 kboe/d (y/y).
- Increase in average crude oil and NGL production by 42,5 kboe/d (y/y).
- An increase in average production by a total of 173,3 kboe/d (y/y), i.e. 12x, including:
  - increase in production in Poland by 82,2 kboe/d, in Norway by 86,8 kboe/d, in Pakistan by 5,4 kboe/d and in Lithuania by 0,4 kboe/d with a decrease in production in Canada by (-) 1,6 kboe/d.
- Others include:
  - positive impact of consolidation of the financial results of Lotos Group and PGNiG Group in the amount of PLN 2,2 bn with negative impact of higher fixed costs and labor costs.
  - negative impact of the gas write-down on the Price Difference Payment Fund on the segment's results in the amount of PLN (-) 3,4 bn.



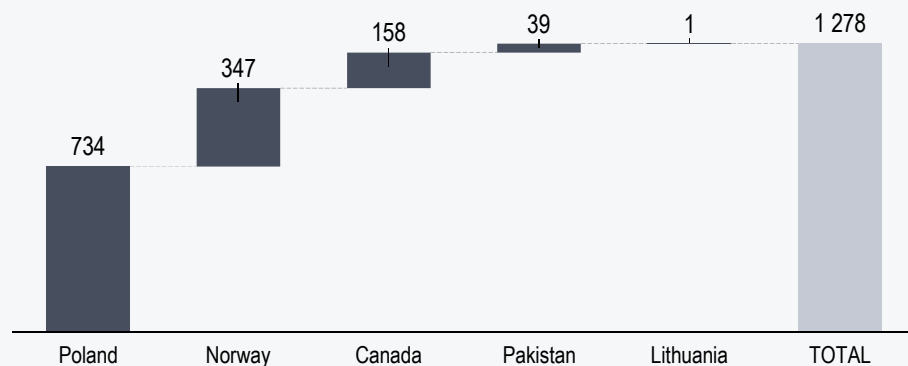
# Upstream – operational data

Upstream segment scale-up as a result of acquisition of Lotos Group and PGNiG Group



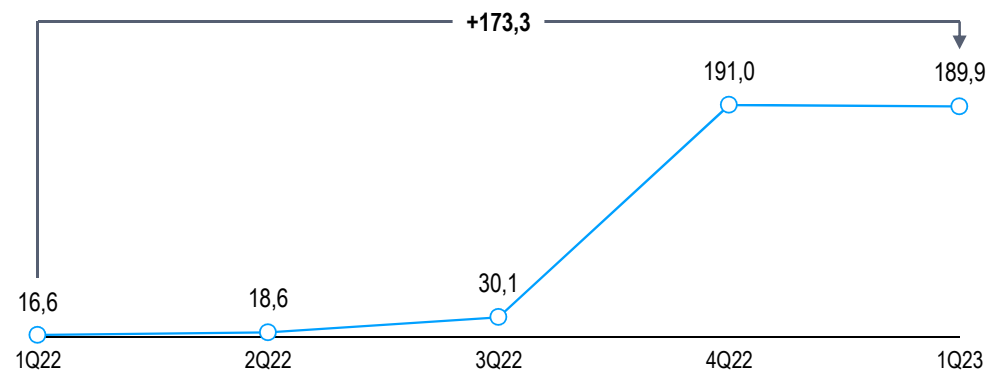
## Crude oil and natural gas reserves (2P)\*

m boe



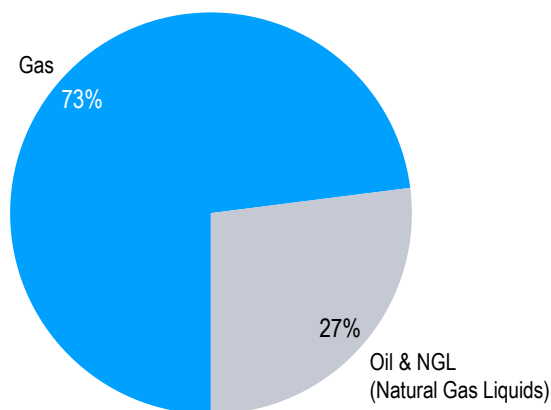
## Average production

kboe/d



## Average production – share of hydrocarbons

%



### Poland

2P reserves: 733,6 m boe (19% oil / 81% gas)  
Average production: 83,5 kboe/d (24% oil / 76% gas)

### Norway

2P reserves: 346,6 m boe (30% oil / 70% gas)  
Average production: 86,8 kboe/d (27% oil / 73% gas)

### Canada

2P reserves: 158,0 m boe (58% oil + NGL / 42% gas)  
Average production: 13,8 kboe/d (51% oil + NGL / 49% gas)

### Pakistan

2P reserves: 38,7 m boe (100% gas)  
Average production: 5,4 kboe/d (100% gas)

### Lithuania

2P reserves: 1,3 m boe (100% oil)  
Average production: 0,4 k boe/d (100% oil)

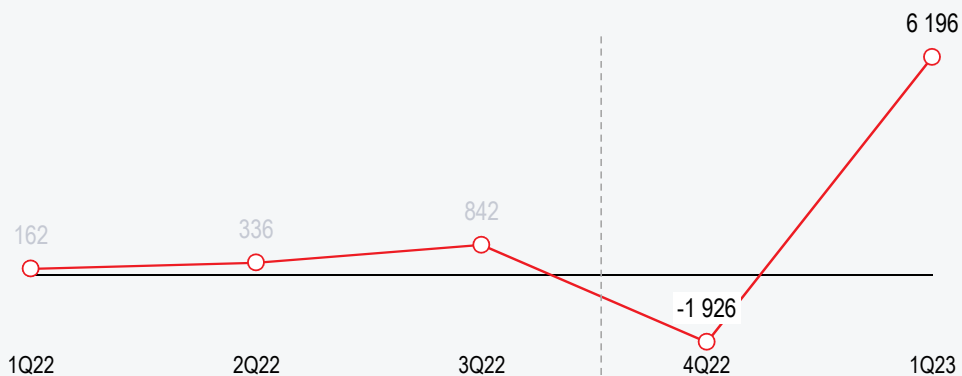
# Gas (distribution with trade & storage) – EBITDA

## Positive impact of results consolidation of acquired PGNiG Group



### EBITDA

PLN m

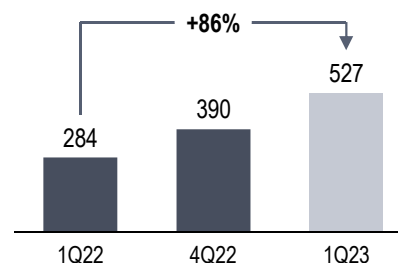


Creation of Gas segment due to results consolidation of acquired PGNiG Group from in November 2022

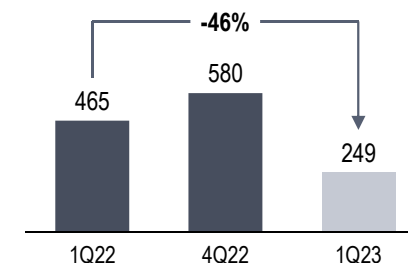
### Natural gas prices

PLN/MWh

Average volume-weighted price on PPX

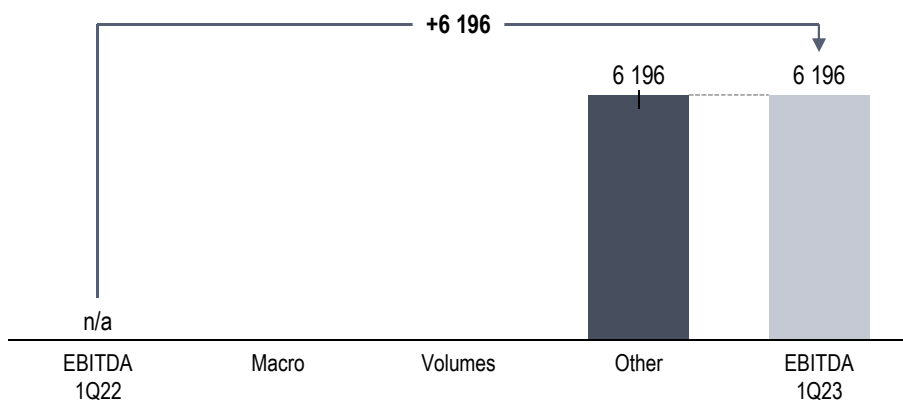


Natural gas price (TTF gasMA)



### EBITDA – impact of factors

PLN m



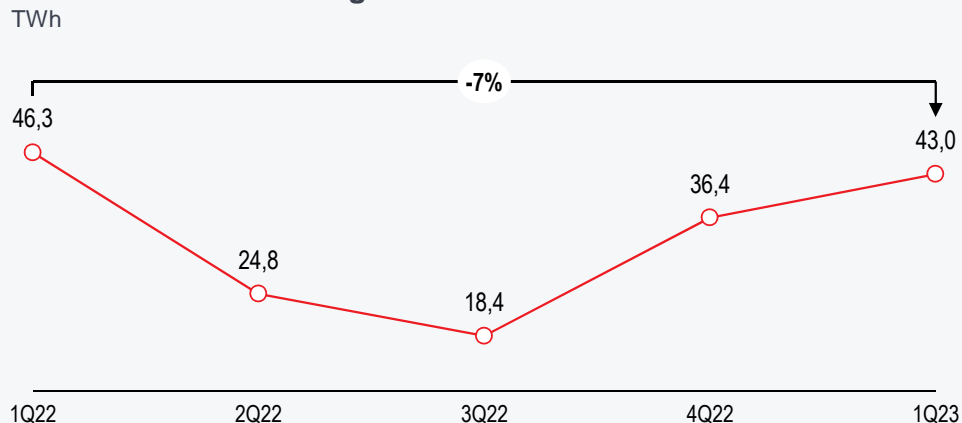
- EBITDA (trade and storage) of PLN 5,1 bn, i.e. an increase of PLN 5,3 bn (y/y).
- EBITDA (distribution) of PLN 1,1 bn, i.e. an increase of PLN 0,1 bn (y/y).
- An increase in the average price of volume-weighted contracts on the PPX by 86% (y/y).
- Lower costs of gas in the segment as a result of falling prices on the spot market and in monthly contracts.
- Price reductions for households and protected customers:
  - from 1 January 2023 - average rates of PLN 649.92/MWh.
  - from 17 January 2023 - reduction of average rates by (-) 21% to PLN 516.73/MWh.
- Price reductions for business in the quarter by 55%: from PLN 793/MWh to PLN 643/MWh (from 18.01 to 14.03) and 353.56 PLN/MWh (from 15.03 to 31.03).
- Other, including:
  - positive impact of the consolidation of the PGNiG Group's results of PLN 6.2 billion.
  - positive impact of compensation received by PGNiG Obrót Detaliczny from the Price Difference Payment Fund in the amount of PLN 7,4 bn.

# Gas (distribution with trade & storage) – operational data

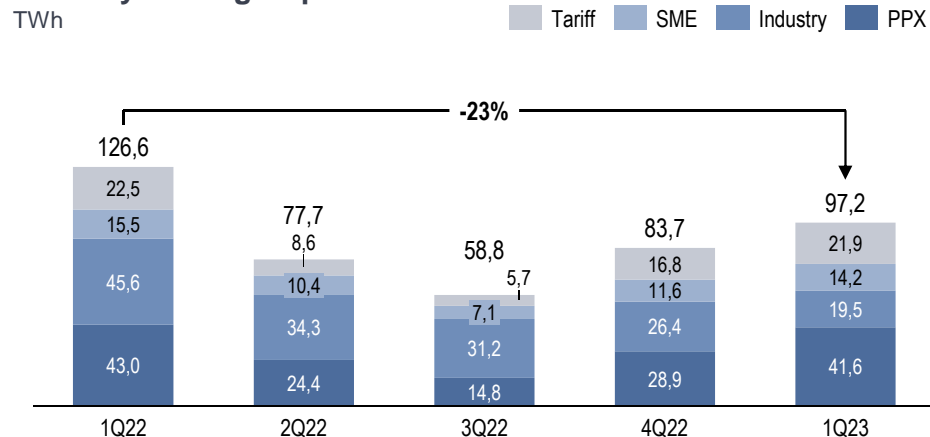
Decrease in sales and distribution volumes (y/y) as a result of lower demand due to high prices



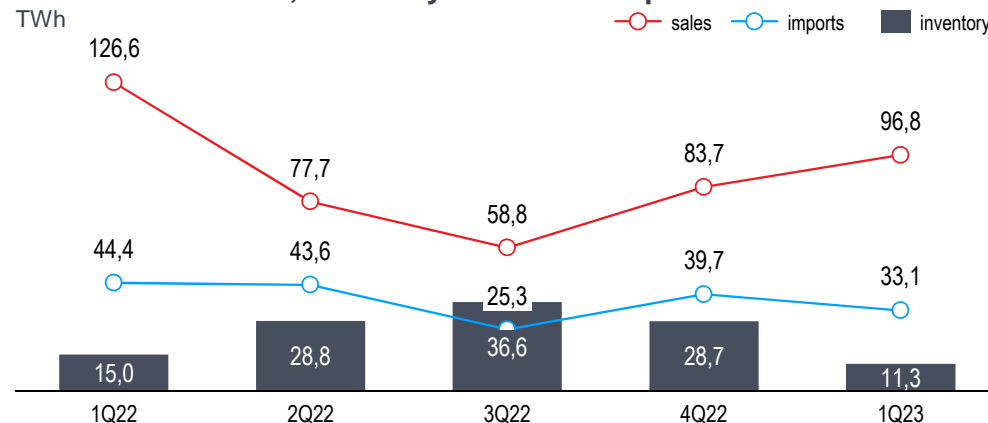
## Volumes of distributed gas



## Sales by client groups



## Gas sales volumes, inventory levels and imports



## Trade & storage

- Gas imports to Poland in 1Q23: 33,1 TWh, of which 51% was LNG. 14 ships were unloaded at the LNG terminal in Świnoujście under contracts: Qatargas (4), Cheniere (4), spot deliveries (7).
- The volume of gas stored by the ORLEN Group (Poland and abroad) at the end of 1Q23: 11,3 TWh. The overall level of stored gas in the country amounted to 55%.
- Total gas sales outside the ORLEN Group: 97,2 TWh, decrease by (-) 23% y/y as a result of consolidation of companies (intra-group sales) and decrease in demand. Internal sales in the ORLEN Group: 29 TWh.

## Distribution

- Decrease in volumes of distributed gas by (-) 7% (y/y) to 43,0 TWh as a result of lower gas consumption and higher average temperature by 1,3°C.
- An increase in average tariff distribution rates from 1 January 2023 by 21% compared to the previous tariff.

01  
KEY FACTS

02  
MARKET  
ENVIRONMENT

03  
FINANCIAL AND  
OPERATING RESULTS

04  
FINANCIAL  
SITUATION

05  
OUTLOOK



# 04

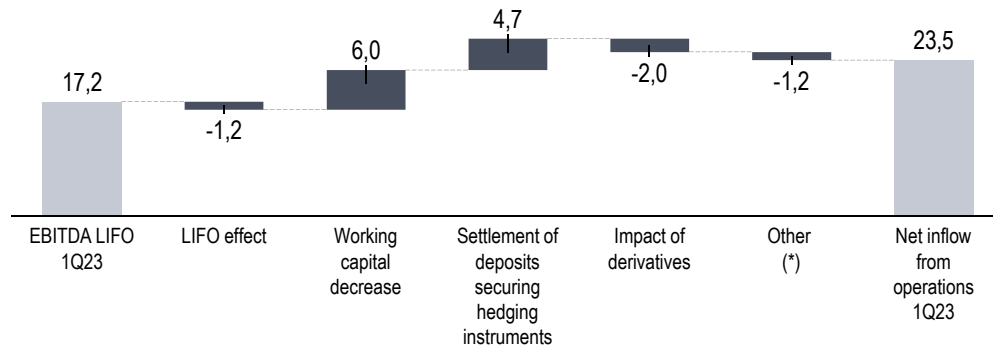
## Financial situation



# Cash flow

## Cash flow from operations

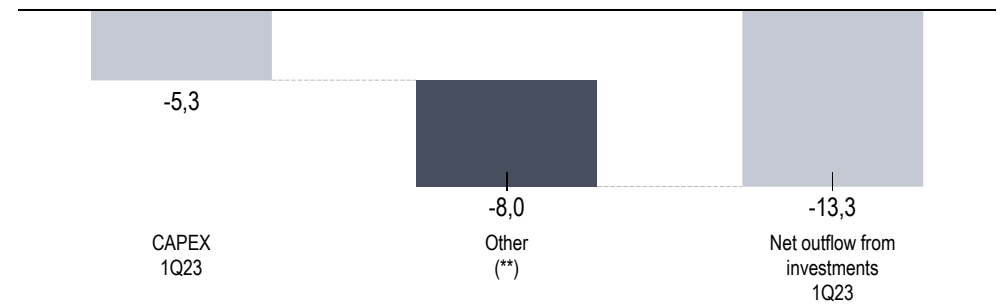
PLN bn



\* mainly: income tax paid PLN (-) 4,0 bn, change in provisions PLN 3,2 bn, settlement of grants for property rights PLN (-) 1,0 bn

## Cash flow from investments

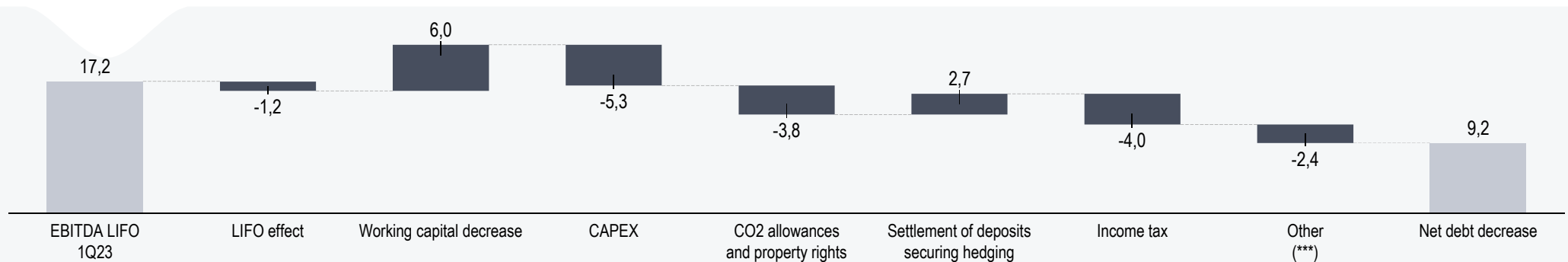
PLN bn



\*\* mainly: purchase of CO<sub>2</sub> allowances and property rights PLN (-) 3,8 bn, changes in advance payments and investment commitments PLN (-) 1,7 bn, increase in rights-of-use assets PLN 0,8 bn and purchase of Treasury bonds PLN (-) 3,1 bn.

## Free cash flow 3M23

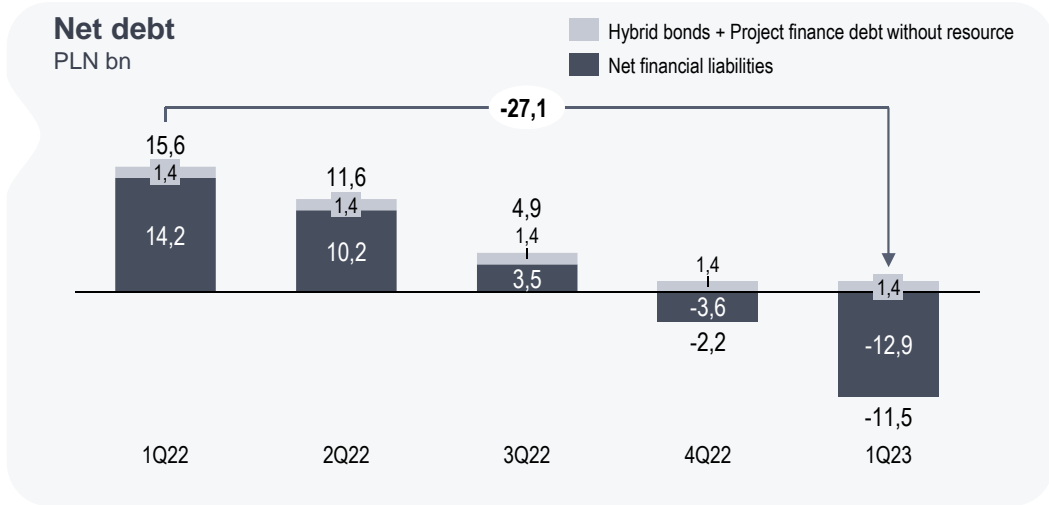
PLN bn



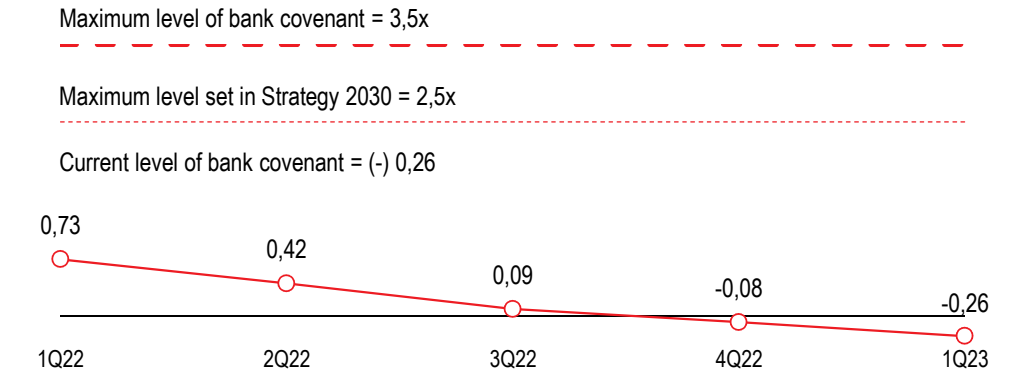
23 \*\*\* mainly: increases due to right-of-use assets PLN 0,8 bn, change in provisions PLN 3,2 bn, change in advances and investment liabilities PLN (-) 1,7 bn, settlement of grants for property rights (-) PLN 1,0 bn, purchase of Treasury bonds PLN (-) 3,1 bn



# Debt

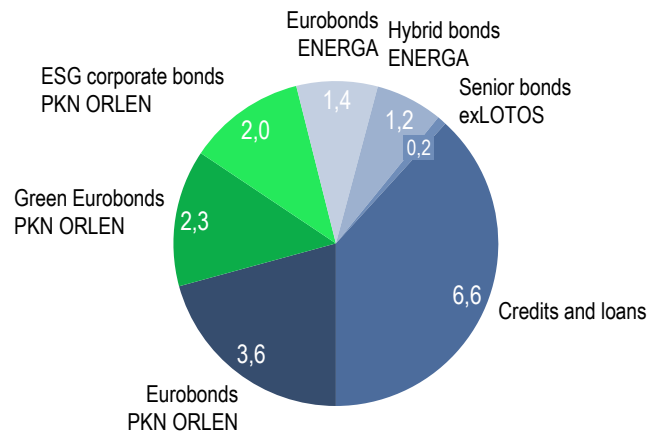


### Net debt/EBITDA\*



### Gross debt – sources of financing

PLN bn



- Net debt decrease by PLN (-) 27,1 bn (y/y) to the level of PLN (-) 11,5 bn at the end of 1Q23. Compared to the previous quarter, net debt is lower by PLN (-) 9,2 bn as a result of net inflows from operations of PLN 23,5 bn with net expenses from investments of PLN (-) 13,3 bn.
- Gross debt currency structure: EUR 58%, PLN 38%, USD 4%.
- Weighted average debt maturity: 2025.
- Investment grade: A3 stable outlook (Moody's), BBB+ stable outlook (Fitch). Moody's and Fitch Rating at the highest level in the Concern's history due to effective realization of merger processes and strong financials of ORLEN Group.

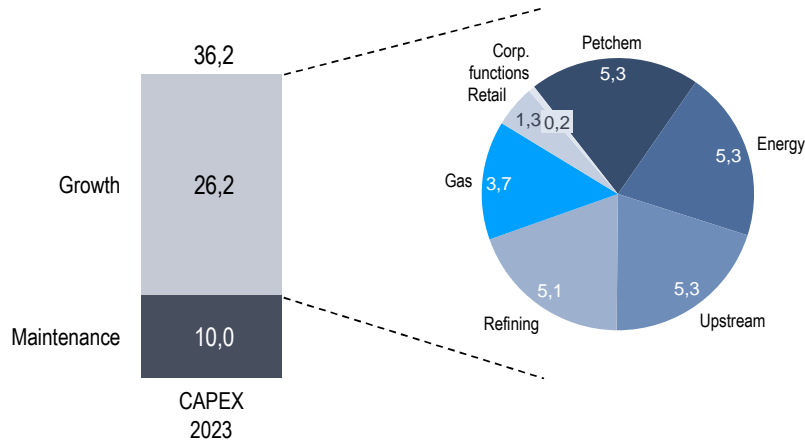
\* The level of net debt adopted for the calculation of the ratio does not take into account project finance debt without recourse and hybrid bond issue

# CAPEX



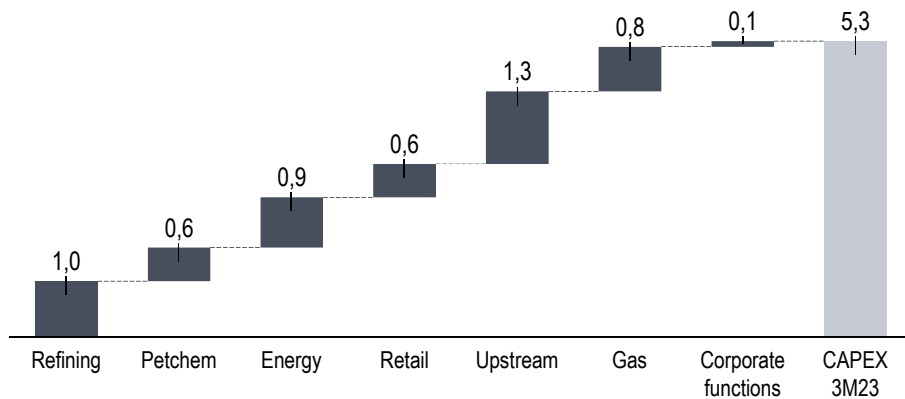
## Planned CAPEX in 2023

PLN bn



## Realized CAPEX 3M23 – split by segment

PLN bn



## Main growth projects in 2023

### Refining

- Construction of Hydrocracking unit – Lithuania
- Construction of Bioethanol 2 Gen. unit – ORLEN Południe
- Construction of Visbreaking unit – Płock
- Construction of HVO (Hydrotreated Vegetable Oils) – Płock
- Construction of the Hydrocracking Oil Block installation – Gdańsk
- Construction of a sea terminal for transshipment of petroleum products on Martwa Wiśła - Gdańsk

### Petchem

- Expansion of olefins capacities – Płock
- Expansion of fertilizers production – Anwil

### Energy

- Modernization of current assets and connection of new clients – ENERGA Group
- Construction of CCGT Ostrołęka and CCGT Grudziądz
- Construction of solar farms
- Construction project of a wind farm in the Baltic Sea

### Retail

- Growth of fuel and non-fuel stations network
- Growth of alternative fuel stations network
- Automated Parcel Machines

### Upstream

- PGNiG Upstream Norway and Lotos Norge projects
- ORLEN Upstream projects in Poland and Canada

### Gas

- Construction and modernization of customer connections to the grid - PSG

**01**  
KEY FACTS

**02**  
MARKET  
ENVIRONMENT

**03**  
FINANCIAL AND  
OPERATING RESULTS

**04**  
FINANCIAL  
SITUATION

**05**  
OUTLOOK



# 05

## Outlook

# Macroeconomic environment 2Q23\*



		2Q22	1Q23	2Q23	Δ (q/q)	Δ (y/y)
Brent crude oil	USD/bbl	114	81	81	0%	-29%
Model refining margin <sup>1</sup>	USD/bbl	26,5	18,3	11,7	-36%	-56%
Differential <sup>2</sup>	USD/bbl	12,3	5,1	2,7	-47%	-78%
Model petrochemical margin <sup>3</sup>	EUR/t	1 405	1 018	1 072	5%	-24%
Natural gas price TTF month-ahead	PLN/MWh	468	249	177	-29%	-62%
Natural gas price TGEgasDA	PLN/MWh	471	275	196	-29%	-58%
Electricity price TGeBase	PLN/MWh	702	619	533	-14%	-24%
<b>Refining products<sup>4</sup> - crack margins from quotations</b>						
Diesel	USD/t	338	245	118	-52%	-65%
Gasoline	USD/t	432	300	298	-1%	-31%
HSFO	USD/t	-279	-239	-190	21%	32%
<b>Petrochemical products<sup>4</sup> - crack margins from quotations</b>						
Polyethylene <sup>5</sup>	EUR/t	551	464	452	-3%	-18%
Polypropylene <sup>5</sup>	EUR/t	638	432	445	3%	-30%
Ethylene	EUR/t	810	668	680	2%	-16%
Propylene	EUR/t	820	564	573	2%	-30%
PX	EUR/t	393	544	498	-8%	27%
<b>Average exchange rates<sup>6</sup></b>						
USD/PLN	USD/PLN	4,36	4,39	4,20	-4%	-4%
EUR/PLN	EUR/PLN	4,65	4,71	4,60	-2%	-1%

\* Data as of 19.05.2023

(1) Model refining margin = revenues (93,5% Products = 36% Gasoline + 43% Diesel + 14,5% HHO) - costs (100% input: Brent crude oil and other raw materials). Spot quotations. (valid till 31.07.2022)

Model refining margin = revenues (93,6% Products = 33% Gasoline + 48% Diesel + 13% HHO) - costs (100% input: 98% Brent crude oil + 2% natural gas). Spot quotations. (valid from 01.08.2022)

(2) Differential calculated on the real share of processed crude oils. Spot quotations.

(3) Model petrochemical margin = revenues (98% Products = 44% HDPE + 7% LDPE + 35% PP Homo + 12% PP Copo) - costs (100% input = 75% Naphtha + 25% LS VGO). Revenues contract quotations; costs spot quotations.

(4) Margin (crack) for refining and petrochemical products (excluding polymers) calculated as difference between a quotation of given product and a quotation of Brent DTD crude oil.

(5) Margin (crack) for polymers calculated as difference between quotations of polymers and monomers

(6) Average exchange rates according to the data of the National Bank of Poland.

# Market outlook for 2023



## Macro

- Brent crude oil – in 2023 we expect oil prices to drop (y/y) to 85-95 USD/bbl. The baseline scenario assumes OPEC+ is managing supply to support prices above 80 USD/bbl and mainland China is back on a growth path. S&P estimates that global oil demand growth will be 1,9 mbd in 2023, of which mainland China accounting for 1,1 mbd.
- Refining margin – in 2023 we expect refining margins to decline (y/y) to ca. 11 USD/bbl. In the coming quarters fuel markets will return to equilibrium, which will be driven by a slowdown in economic activity on a global scale and gradual increase in supply of fuels from new refineries coming on stream in the USA, Africa, the Middle East and Asia. The excess of refining capacity over demand will restore the refineries' flexibility to react to changes in refining margins.
- Differential – in 2023 we expect the differential to fall (y/y) to ca. 5 USD/bbl as a result of reducing share of REBCO in the throughput of ORLEN Group.
- Petrochemical margin – in 2023 we expect a decrease in petrochemical margins (y/y) to ca. 1100 EUR/t as a result of a drop in demand for petrochemical products due to economic slowdown and maintained inflation.
- Natural gas – in 2023 we expect a drop in natural gas prices (y/y) to ca. 200 PLN/MWh. Gas prices in the coming quarters will depend on weather conditions and geopolitical risks.
- Electricity – in 2023 we expect a decrease in electricity prices (y/y) to ca. 500 PLN/MWh.

## Economy

- GDP\* – Poland 0,7% (according to the latest data from EC), Czech Rep. 0,2%, Lithuania 1,4%, Germany 0,2%.
- Decrease in demand for fuels and petrochemical products (r/r) as a result of economic slowdown.
- Lower gas consumption (r/r) as a result of energy crisis, high feedstock prices and reductions.
- Comparable consumption of electricity (y/y).

## Regulations

- EU embargo on fuel imports from Russia from 5 February 2023.
- Act on special protection of certain customers consuming gas - gas write-down for the Price Difference Payment Fund in upstream of natural gas production in Poland (negative impact on the result of the Upstream segment in the amount of PLN 14 bn) and inflows from compensation in gas sales and distribution in Poland resulting from setting the maximum price below tariffs (positive impact on the result of the Gas segment).
- National Index Target – base level increase from 8,8 to 8,9% (reduced ratio for ORLEN Group is 5,8%).
- E10 – we maintain declaration of technical readiness for implementation of gasoline with increased bioethanol content on ORLEN stations from beginning of 2024.



Powering the future.  
Sustainably.





# 06

Supporting  
slides



## Results – split by quarter



PLN m	1Q22	2Q22	3Q22	4Q22	12M22	1Q23	(y/y)
Revenues	45 447	57 804	72 996	101 317	277 564	110 270	64 823
EBITDA LIFO	2 786	8 204	17 593	24 659	53 242	17 153	14 367
LIFO effect	2 174	1 321	-553	-1 845	1 097	-1 171	-3 345
EBITDA	4 960	9 525	17 040	22 814	54 339	15 982	11 022
Depreciation	-1 400	-1 447	-1 524	-2 545	-6 916	-2 878	-1 478
EBIT LIFO	1 386	6 757	16 069	22 114	46 326	14 275	12 889
EBIT	3 560	8 078	15 516	20 269	47 423	13 104	9 544
Net result	2 845	3 683	12 739	14 363	33 630	9 153	6 308



## EBITDA LIFO – split by segment

PLN m	1Q22	2Q22	3Q22	4Q22	12M22	1Q23	(y/y)
<b>Refining, incl:</b>	<b>900</b>	<b>4 656</b>	<b>7 998</b>	<b>11 032</b>	<b>24 586</b>	<b>5 486</b>	<b>4 586</b>
NRV	-4	3	-30	14	-17	8	12
hedging	-1 913	-2 558	726	-59	-3 804	365	2 278
valuation of CO2 contracts	-568	21	-175	125	-597	52	620
<b>Petchem, incl:</b>	<b>451</b>	<b>1 643</b>	<b>698</b>	<b>581</b>	<b>3 373</b>	<b>98</b>	<b>-353</b>
NRV	0	0	0	0	0	0	0
hedging	48	58	63	57	226	86	38
valuation of CO2 contracts	-614	23	-84	84	-591	0	614
<b>Energy, incl:</b>	<b>1 004</b>	<b>1 176</b>	<b>1 607</b>	<b>305</b>	<b>4 092</b>	<b>3 275</b>	<b>2 271</b>
hedging	50	-62	134	126	248	38	-12
valuation of CO2 contracts	-543	21	128	68	-326	11	554
<b>Retail</b>	<b>585</b>	<b>697</b>	<b>856</b>	<b>663</b>	<b>2 801</b>	<b>233</b>	<b>-352</b>
<b>Upstream, incl:</b>	<b>162</b>	<b>336</b>	<b>841</b>	<b>6 312</b>	<b>7 651</b>	<b>2 273</b>	<b>2 111</b>
hedging	-80	-24	15	2	-87	0	80
<b>Gas, incl:</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>-1 926</b>	<b>-1 926</b>	<b>6 196</b>	<b>6 196</b>
hedging	n/a	n/a	n/a	141	141	134	134
valuation of CO2 contracts	n/a	n/a	n/a	116	116	85	85
<b>Corporate functions</b>	<b>-316</b>	<b>-304</b>	<b>5 598</b>	<b>7 698</b>	<b>12 676</b>	<b>-400</b>	<b>-84</b>
<b>Adjustments</b>	<b>n/a</b>	<b>n/a</b>	<b>-5</b>	<b>-6</b>	<b>-11</b>	<b>-8</b>	<b>-8</b>
<b>EBITDA LIFO, incl:</b>	<b>2 786</b>	<b>8 204</b>	<b>17 593</b>	<b>24 659</b>	<b>53 242</b>	<b>17 153</b>	<b>14 367</b>
NRV	-4	3	-30	14	-17	8	12
hedging	-1 895	-2 586	938	267	-3 276	623	2 518
valuation of CO2 contracts	-1 725	65	-131	393	-1 398	148	1 873



## 1Q23 results – split by company

PLN m	PKN ORLEN	ORLEN Lietuva	ORLEN Unipetrol	ENERGA Group	Others	ORLEN Group
Revenues	72 300	6 967	7 784	7 423	15 796	110 270
EBITDA LIFO	10 543	574	1 330	2 320	2 386	17 153
LIFO effect	-816	-49	-276	-	-30	-1 171
EBITDA	9 727	525	1 054	2 320	2 356	15 982
Depreciation	792	26	262	292	1 506	2 878
EBIT	8 935	499	792	2 028	850	13 104
EBIT LIFO	9 751	548	1 068	2 028	880	14 275
Net result	7 624	405	289	1 556	-721	9 153

- **ORLEN Lietuva** – EBITDA LIFO decreased by PLN (-) 15 m (y/y) as a result of reducing REBCO processing by 77 pp (y/y) and replacing it with more expensive crude oil grades, negative impact of the use of historical inventory layers, lower (y/y) volumes sales as well as an increase (y/y) in overheads, labor and CO2 reserves. Positive impact (y/y) of higher margins on light and medium distillates, higher trade margins and hedging transactions (y/y).
- **ORLEN Unipetrol** – EBITDA LIFO increased by PLN 1121 m (y/y) as a result of an increase in margins on light and middle distillates, higher trade margins and hedging transactions partially limited by the negative impact (y/y) of the use of historical inventory layers, an increase in overheads, work and CO2 reserves. In addition, a negative volume impact as a result of a decrease in sales volumes in the petrochemical segment.
- **ENERGA Group** – EBITDA increased by PLN 1213 m (y/y) thanks to a favorable price relation between the sale of electricity and its purchase on the exchange market and a higher margin on the distribution service. Additionally, the positive impact of lower costs of CO2 reserves, gradual use of the reserve created in December 2022 for onerous contracts (regulation impact) and higher electricity sales and distribution volumes with lower electricity production..
- **PGNiG Group** – no possibility to calculate business effects due to the incomparability of consolidation periods – consolidation of PGNiG Group in ORLEN Group results amounted PLN 8475 m.

# Production data



<b>ORLEN Group</b>	<b>1Q22</b>	<b>4Q22</b>	<b>1Q23</b>	<b>(y/y)</b>	<b>q/q)</b>
Crude oil throughput (kt)	8 162	11 234	9 474	16%	-16%
Utilization	94%	98%	90%	-4 pp	-8 pp
<b>PKN ORLEN <sup>1</sup></b>					
Crude oil throughput (kt)	4 106	6 629	5 476	33%	-17%
Utilization	102%	98%	93%	-9 pp	-5 pp
Fuel yield <sup>4</sup>	81%	85%	83%	2 pp	-2 pp
Light distillates yield <sup>5</sup>	33%	28%	28%	-5 pp	0 pp
Middle distillates yield <sup>6</sup>	48%	57%	55%	7 pp	-2 pp
<b>ORLEN Unipetrol <sup>2</sup></b>					
Crude oil throughput (kt)	1 703	2 054	1 782	5%	-13%
Utilization	79%	94%	83%	4 pp	-11 pp
Fuel yield <sup>4</sup>	83%	81%	78%	-5 pp	-3 pp
Light distillates yield <sup>5</sup>	36%	36%	35%	-1 pp	-1 pp
Middle distillates yield <sup>6</sup>	47%	45%	43%	-4 pp	-2 pp
<b>ORLEN Lietuva <sup>3</sup></b>					
Crude oil throughput (kt)	2 263	2 465	2 131	-6%	-14%
Utilization	90%	96%	85%	-5 pp	-11 pp
Fuel yield <sup>4</sup>	75%	78%	77%	2 pp	-1 pp
Light distillates yield <sup>5</sup>	32%	33%	32%	0 pp	-1 pp
Middle distillates yield <sup>6</sup>	43%	45%	45%	2 pp	0 pp

<sup>1</sup> Throughput capacity for PKN ORLEN is 23,7 mt/y; including Plock 16,3 mt/y and Gdańsk 7,4 mt/y.

<sup>2</sup> Throughput capacity for Unipetrol is 8,7 mt/y; including Litvinov 5,4 mt/y and Kralupy 3,3 mt/y

<sup>3</sup> Throughput capacity for ORLEN Lietuva is 10,2 mt/y.

<sup>4</sup> Fuel yield equals middle distillates yield plus light distillates yield.

<sup>5</sup> Light distillates yield is a ratio of gasoline, naphtha, LPG production excluding BIO and internal transfers to crude oil throughput.

<sup>6</sup> Middle distillates yield is a ratio of diesel, light heating oil (LHO) and JET production excluding BIO and internal transfers to crude oil throughput.

# Effect of the operations related to reserve on CO<sub>2</sub> and valuation of CO<sub>2</sub> contracts on ORLEN Group consolidated financial results



## Contracts portfolio for purchase of CO<sub>2</sub> emission rights in ORLEN Group and EUA balance on ORLEN Group accounts

(mt)

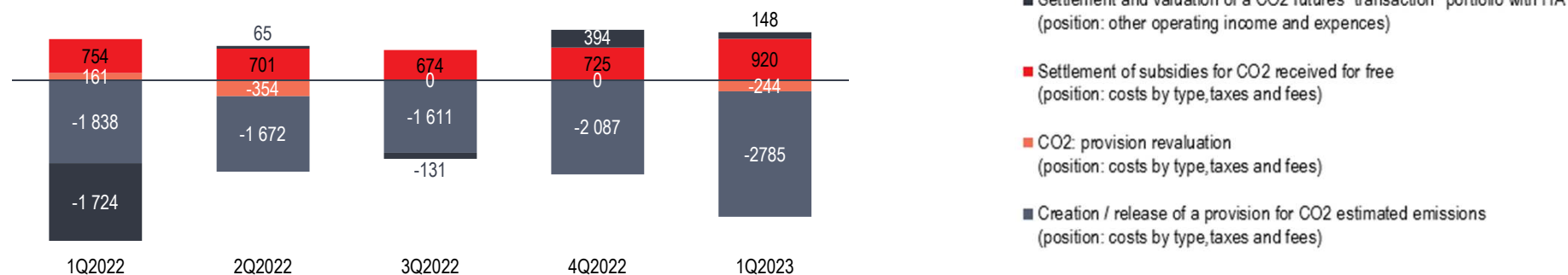
Portfolio	Approach to valuation	31.03.2022	30.06.2022	30.09.2022	31.12.2022	31.03.2023
Own contracts portfolio for purchase of emission rights*	<u>Is not subject to fair value valuation at the balance sheet date</u>	1,52	2,04	0,14	3,74	0,00
Transaction portfolio for purchase of emission rights**	<u>It is subject to fair value valuation at the balance sheet date</u> with Hedge Accounting (HA)	0,00	2,33	3,07	2,37	1,34
	without Hedge Accounting (noHA)			3,91	1,66	-0,10
EUA portfolio on ORLEN Group accounts (intangible assets)***	<u>Is not subject to fair value valuation at the balance sheet date</u>	16,05	5,24	9,37	22,56	29,46

\* Own use contracts portfolio with physical delivery, not subject to fair value valuation.

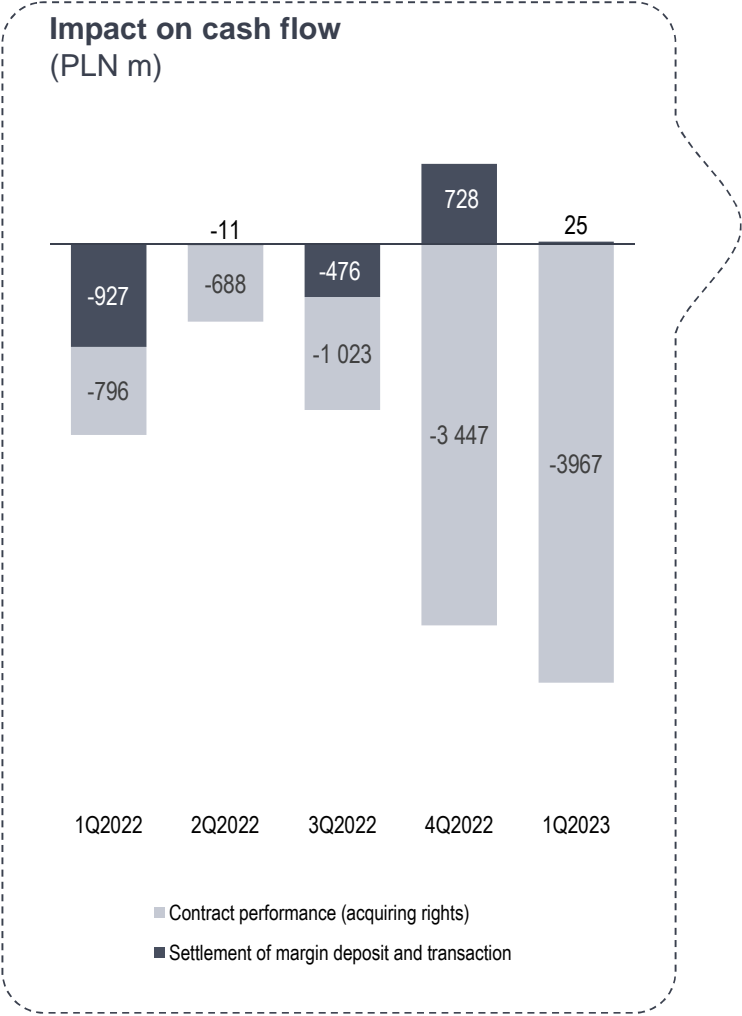
\*\* Transaction portfolio is valued in accordance with the IFRS9 requirements. From 1st of July 2022, the Group started to apply hedge accounting (HA) regarding the EUA transactions, therefore Transaction portfolio was divided into instruments without HA, whose valuation and settlement is recognized in other operating profit and lost and instruments with HA, whose valuation is recognized in capital and the financial effect of settlement adjusts the purchase price of EUA contracts. (according to IFRS9)

\*\*\* Recognized as intangible assets, which are not amortized and analyzed for impairment. Purchased rights valued according to the purchase price, received for free in fair value fixed for registration on the account day less any write-offs for impairment.

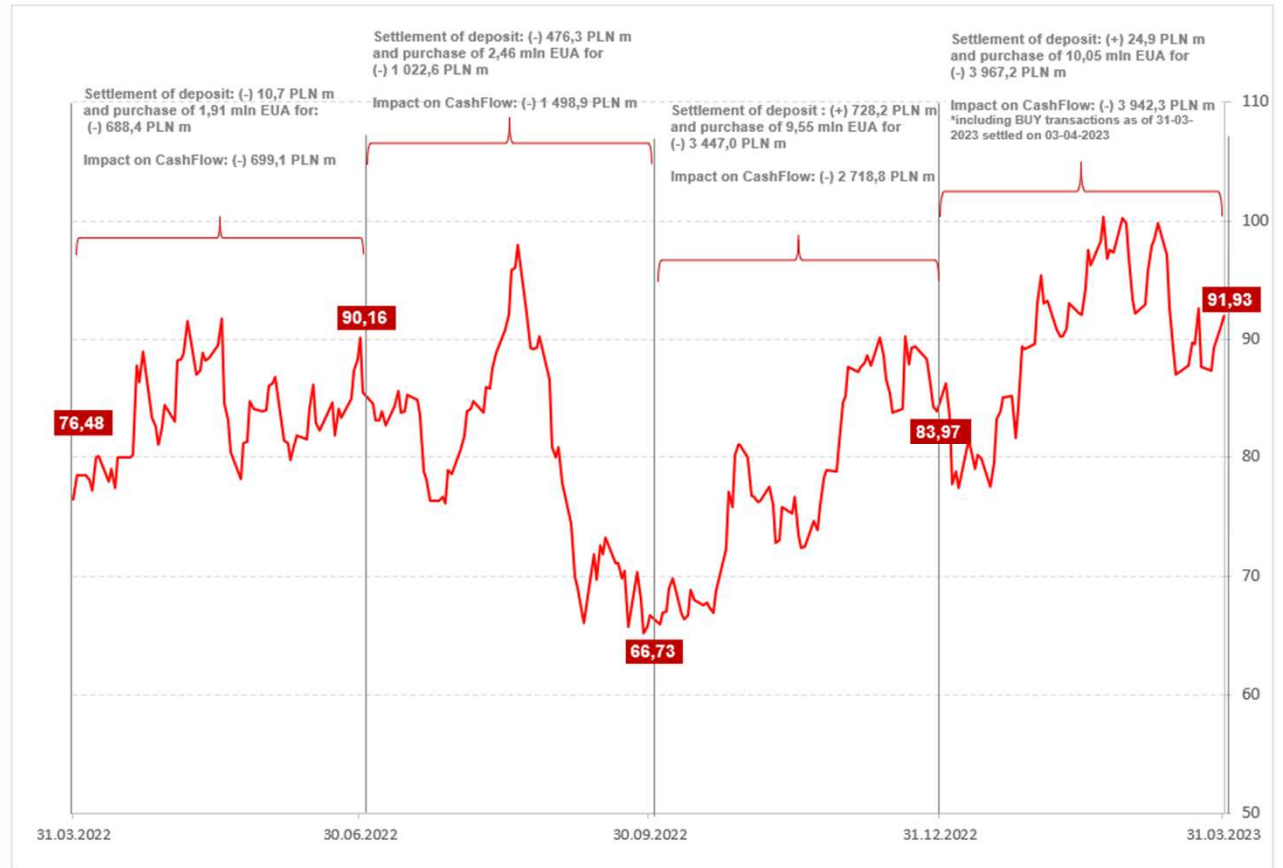
## Impact of activities related to CO<sub>2</sub> on ORLEN Group consolidated financial result (PLN m)



# Settlement of securing deposit and realization of CO<sub>2</sub> contracts on cash flow



## Impact on cash flow from settlement of securing deposit and settlement of transactions vs CO<sub>2</sub> contracts quotations





## Dictionary



**Model refining margin** = revenues (93,6% Products = 33% Gasoline + 48% Diesel + 13% HHO) - costs (100% input: 98% Brent crude oil + 2% natural gas). Spot quotations. (valid from 01.08.2022)

*Model refining margin = revenues (93,5% Products = 36% Gasoline + 43% Diesel + 14,5% HHO) - costs (100% input: Brent crude oil and other raw materials). Spot quotations. (valid till 31.07.2022)*

**Differential** calculated on the real share of processed crude oils. Spot quotations.

**Model petrochemical margin** = revenues (98% Products = 44% HDPE + 7% LDPE + 35% PP Homo + 12% PP Copo) - costs (100% input = 75% Naptha + 25% LS VGO). Revenues contract quotations; costs spot quotations.

**Fuel yield** = middle distillates yield + gasoline yield. Yields are calculated in relation to crude oil.

**Working capital (in balance sheet)** = inventories + trading receivables and other receivables – trading liabilities and other liabilities

**Working capital change (in cash flow)** = changes in receivables + changes in inventories + changes in liabilities

**Net debt** = (short-term + long-term loans, borrowings and bonds) – cash



# Disclaimer



This presentation ("Presentation") has been prepared by PKN ORLEN S.A. ("PKN ORLEN" or "Company"). Neither the Presentation nor any copy hereof may be copied, distributed or delivered directly or indirectly to any person for any purpose without PKN ORLEN's knowledge and consent. Copying, mailing, distribution or delivery of this Presentation to any person in some jurisdictions may be subject to certain legal restrictions, and persons who may or have received this Presentation should familiarize themselves with any such restrictions and abide by them. Failure to observe such restrictions may be deemed an infringement of applicable laws.

This Presentation contains neither a complete nor a comprehensive financial or commercial analysis of PKN ORLEN and of the ORLEN Group, nor does it present its position or prospects in a complete or comprehensive manner. PKN ORLEN has prepared the Presentation with due care, however certain inconsistencies or omissions might have appeared in it. Therefore it is recommended that any person who intends to undertake any investment decision regarding any security issued by PKN ORLEN or its subsidiaries shall only rely on information released as an official communication by PKN ORLEN in accordance with the legal and regulatory provisions that are binding for PKN ORLEN.

The Presentation, as well as the attached slides and descriptions thereof may and do contain forward-looking statements. However, such statements must not be understood as PKN ORLEN's assurances or projections concerning future expected results of PKN ORLEN or companies of the ORLEN Group. The Presentation is not and shall not be understood as a forecast of future results of PKN ORLEN as well as of the ORLEN Group.

It should be also noted that forward-looking statements, including statements relating to expectations regarding the future financial results give no guarantee or assurance that such results will be achieved. The Management Board's expectations are based on present knowledge, awareness and/or views of PKN ORLEN's Management Board's members and are dependent on a number of factors, which may cause that the actual results that will be achieved by PKN ORLEN may differ materially from those discussed in the document. Many such factors are beyond the present knowledge, awareness and/or control of the Company, or cannot be predicted by it.

No warranties or representations can be made as to the comprehensiveness or reliability of the information contained in this Presentation. Neither PKN ORLEN nor its directors, managers, advisers or representatives of such persons shall bear any liability that might arise in connection with any use of this Presentation. Furthermore, no information contained herein constitutes an obligation or representation of PKN ORLEN, its managers or directors, its Shareholders, subsidiary undertakings, advisers or representatives of such persons.

This Presentation was prepared for information purposes only and is neither a purchase or sale offer, nor a solicitation of an offer to purchase or sell any securities or financial instruments or an invitation to participate in any commercial venture. This Presentation is neither an offer nor an invitation to purchase or subscribe for any securities in any jurisdiction and no statements contained herein may serve as a basis for any agreement, commitment or investment decision, or may be relied upon in connection with any agreement, commitment or investment decision.



Powering the future.  
Sustainably.