



# ORLEN Group consolidated financial results 1Q22

28 April 2022



#ORLEN1Q22@PKN\_ORLEN



Summary 1Q22



Market environment



Financial and operating results



Financial strength



Outlook

# Summary 1Q22



## Financial and operating results

- EBITDA LIFO: PLN 2,8 bn\*; increase by PLN 0,4 bn (y/y)
- Crude oil throughput: 8,2 mt; increase by 31% (y/y) / 94% utilization ratio
- Sales volumes: 9,6 mt; increase by 15% (y/y)
- Record-high share of RES in electricity production; 20%

### Macro:

- Model refining margin: 6,0 USD/bbl; increase by 5,5 USD/bbl (y/y)
- Petrochemical margin: 1166 EUR/t, increase by 122 EUR/t (y/y)
- Electricity: 625 PLN/MWh; increase by 361 PLN/MWh (y/y)
- Natural gas: 477 PLN/MWh; increase by 379 PLN/MWh (y/y)
- CO2 emission rights: 83 EUR/t; increase by 45 EUR/t (y/y)

## Financial situation

- Cash flow from operations: PLN 1,8 bn
- CAPEX: PLN 3,0 bn
- Net debt: PLN 15,6 bn
- Net debt/EBITDA: 0,73
- Investment rating: BBB- positive outlook (Fitch), Baa2 positive outlook (Moody's).
- Recommendation of the Management Board regarding dividend payment for the year 2021 at the level of PLN 3,5 per share.



## Key facts

### M&A's:

- LOTOS Group – selection of 4 partners for remedies and submission of documentation to the European Commission. We are waiting for the approval of the European Commission.
- PGNiG – we received conditional approval from President of Antimonopoly Office for the merger.

### Investments:

- Together with the National Center for Research and Development, we support the development of innovative projects. We have launched a new NEON grant program.
- ORLEN Południe and PGNiG have established a company that will invest in the development of modern bio-methane plants.
- We invest in hydrogen. By the end of the decade, 10 low- and zero-emission hydrogen hubs will be built.
- Further dynamic development of offshore wind energy. Applications for 7 new concessions have been submitted.
- A contract signed with the ORLEN Projekt for the construction of an installation in Plock, which will enable the reduction of sulfur related emissions.
- ORLEN Południe invests in a modern installation for the production of new-generation bioethanol in Jedlicze.
- ORLEN Unipetrol obtained a certificate enabling the processing of Hydrotreated Vegetable Oils (HVO) in Litvinov.

### Others:

- Increasing oil supplies from alternative directions: Saudi Arabia, USA, West Africa and Norway.
- The first Polish import of "green" gas - certified biomethane.
- Establishment of Synthos Green Energy regarding the development and implementation of MMR and SMR zero-emission nuclear technologies.
- Launch of the largest in Poland corporate Venture Capital fund - ORLEN VC.
- ORLEN Group is actively involved in humanitarian aid for Ukraine.

\* of which: PLN (-) 1,2 bn hedging, PLN (-) 1,7 bn valuation of CO2 contracts and PLN 1,1 bn usage of historical inventory layers – details on slide #30



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# Macro environment in 1Q22



	1Q21	4Q21	1Q22	Δ (q/q)	Δ (y/y)
Brent crude oil (USD/bbl)	61	80	102	28%	67%
Model refining margin (USD/bbl) <sup>1</sup>	0,5	4,5	6,0	33%	1100%
Model petrochemical margin (EUR/t) <sup>2</sup>	1 044	1 253	1 166	-7%	12%
Electricity (PLN/MWh)	264	616	625	1%	137%
Natural gas (PLN/MWh)	98	453	477	5%	387%
CO2 emission rights (EUR/t)	38	69	83	20%	120%
<b>Refining products (USD/t) <sup>3</sup> - crack margins from quotations</b>					
Diesel	32	84	148	76%	363%
Gasoline	104	178	187	5%	80%
HSFO	-122	-180	-247	37%	102%
<b>Petrochemical products (EUR/t) <sup>3</sup> - crack margins from quotations</b>					
Polyethylene <sup>4</sup>	532	493	466	-5%	-12%
Polypropylene <sup>4</sup>	594	698	655	-6%	10%
Ethylene	559	715	664	-7%	19%
Propylene	515	730	679	-7%	32%
Paraxylene	243	344	262	-24%	8%
<b>Average exchange rates</b>					
USD/PLN	3,78	4,04	4,13	2%	9%
EUR/PLN	4,55	4,62	4,63	0%	2%

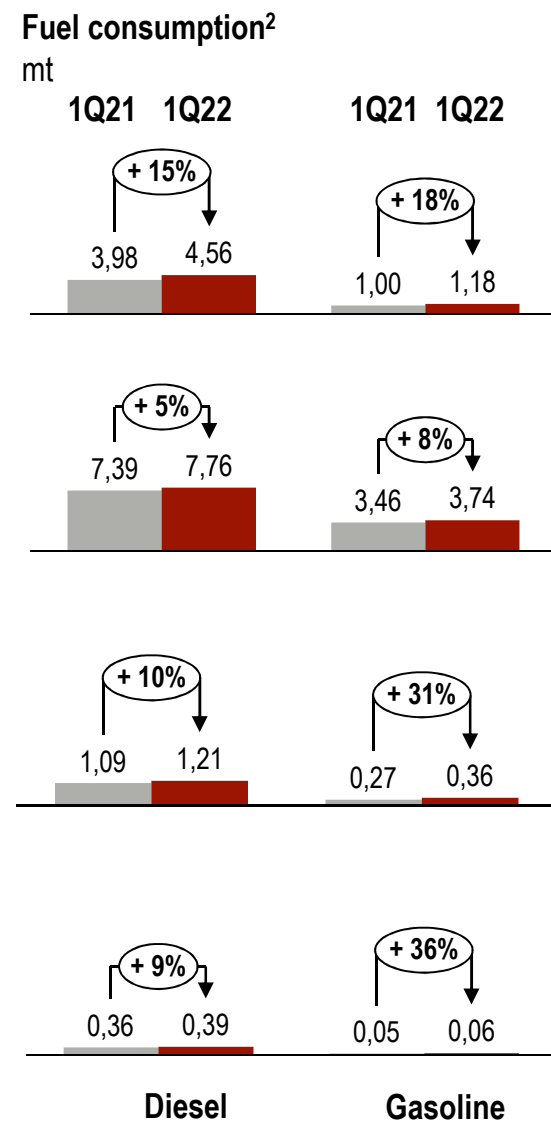
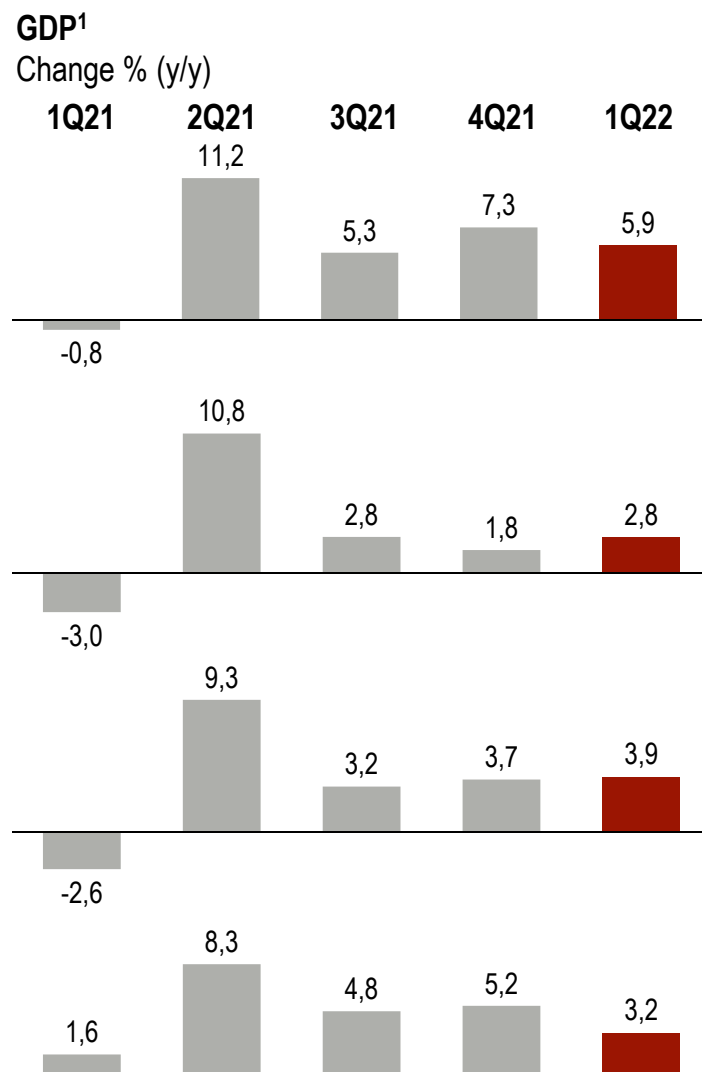
1) Model refining margin = revenues (93,5% Products = 36% Gasoline + 43% Diesel + 14,5% HHO) - costs (100% input: crude oil and other raw materials). Total input calculated acc. to Brent Crude quotations. Spot market quotations.

2) Model petrochemical margin = revenues (98% Products = 44% HDPE + 7% LDPE + 35% PP Homo + 12% PP Copo) - costs (100% input = 75% Naphtha + 25% LS VGO). Contract market quotations.

3) 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.

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

# Fuel consumption increase as a result of economic recovery



<sup>1</sup> 1Q22 – estimates: Poland and Czech Rep. (Morgan Stanley), Germany (Continuum Economics), Lithuania (KE)

<sup>2</sup> 1Q22 – own estimates based on available data from ARE, Lithuanian Statistical Office, Czech Statistical Office and German Association of Petroleum Industry



Summary 1Q22



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Financial and operating results

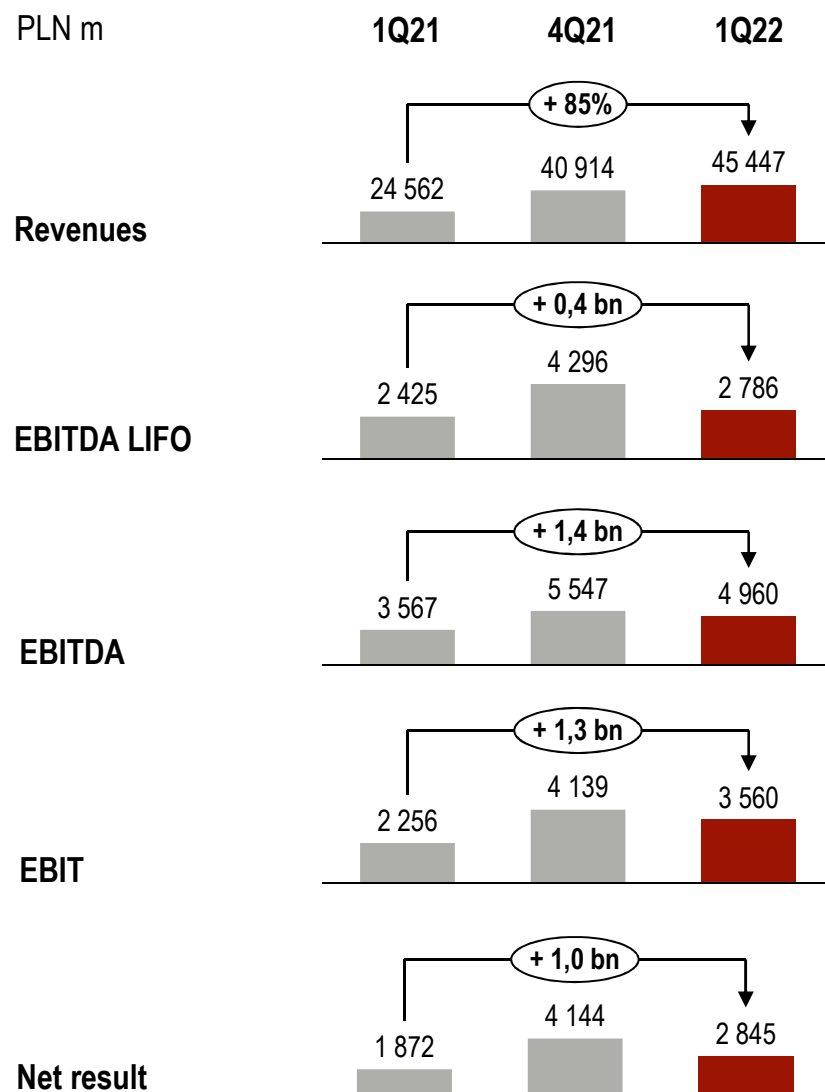


Financial strength



Outlook

# Financial results



**Revenues:** increase by 85% (y/y) due to higher quotations of refining and petrochemical products resulting from crude oil prices increase by 41 USD/bbl (y/y) and higher sales volumes by 15% (y/y).

**EBITDA LIFO:** increase by PLN 0,4 bn (y/y) as a result of positive impact of higher margins, higher B/U differential, weakening of PLN against USD, higher sales volumes, higher trade margins in wholesale and usage of historical inventory layers. Abovementioned positive effects were partially limited by negative impact of hedging and valuation of CO2 contracts, higher costs of internal usage, higher fixed, variable and headcount costs, inventory revaluation (NRV) and lack of positive effect from Baltic Power consolidation method change from 1Q21.

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

**Financial result:** PLN (-) 0,1 bn as a result of the surplus of negative FX differences and interest costs at positive net impact of settlement and valuation of derivative financial instruments.

**Net result:** increase by PLN 1,0 bn (y/y), of which: higher EBITDA LIFO by PLN 0,4 bn, neutral impact of impairments, higher LIFO effect by PLN 1,0 bn, higher depreciation by PLN (-) 0,1 bn, neutral effect of net financials and higher income tax by PLN (-) 0,3 bn.

Operational results before impairments of assets: 1Q21 PLN (-) 4 m / 4Q21 PLN 903 m / 1Q22 PLN (-) 27 m  
 NRV: 1Q21 PLN 193 m / 4Q21 PLN 1 m / 1Q22 PLN (-) 4 m

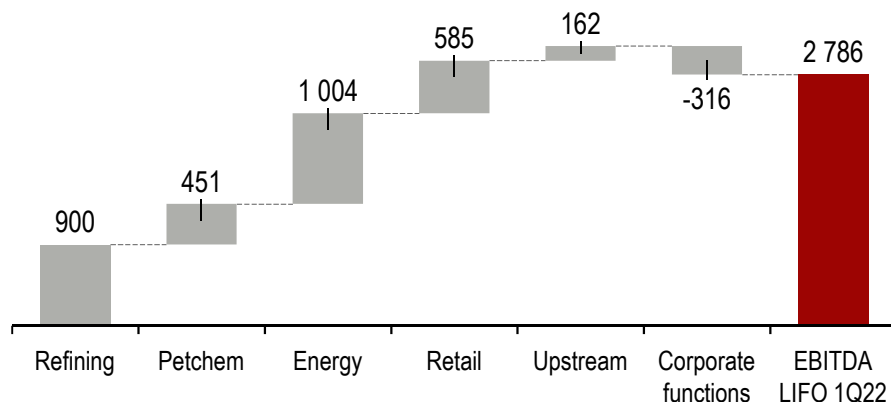


# EBITDA LIFO



## Segments' results

PLN m



**Refining:** increase by PLN 878 m (y/y) due to positive impact of higher sales volumes, higher trade margins and usage of historical inventory layers at negative macro impact resulting from hedging and valuation of CO2 contracts, inventory revaluation (NRV) and higher fixed and labour costs.

**Petchem:** decrease by PLN (-) 421 m (y/y) due to negative macro impact resulting from valuation of CO2 contracts at positive impact of higher sales volumes and higher trade margins.

**Energy:** decrease by PLN (-) 255 m (y/y) due to negative macro impact resulting from valuation of CO2 contracts, lack of positive effect from change in consolidation method of Baltic Power from 1Q21 as well as higher fixed and labour costs at positive impact of higher sales volumes.

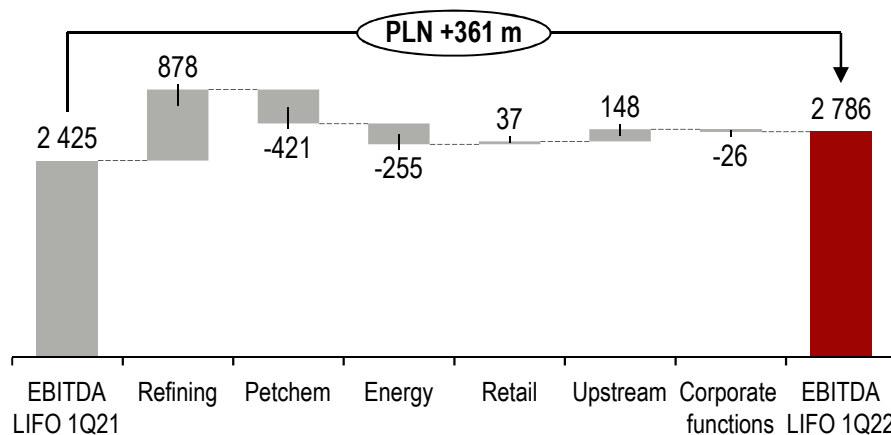
**Retail:** increase by PLN 37 m (y/y) due to positive effect of higher sales volumes and higher non-fuel margins at negative impact of lower fuel margins and higher variable costs.

**Upstream:** increase by PLN 148 m (y/y) due to positive macro impact and higher sales volumes at negative impact of hedging.

**Corporate functions:** higher costs by PLN 26 m (y/y) mainly due to donations directed in 1Q22 to help Ukraine.

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

PLN m



Operational results before impairments of assets: 1Q21 PLN (-) 4 m / 4Q21 PLN 903 m / 1Q22 PLN (-) 27 m  
 NRV: 1Q21 PLN 193 m / 4Q21 PLN 1 m / 1Q22 PLN (-) 4 m

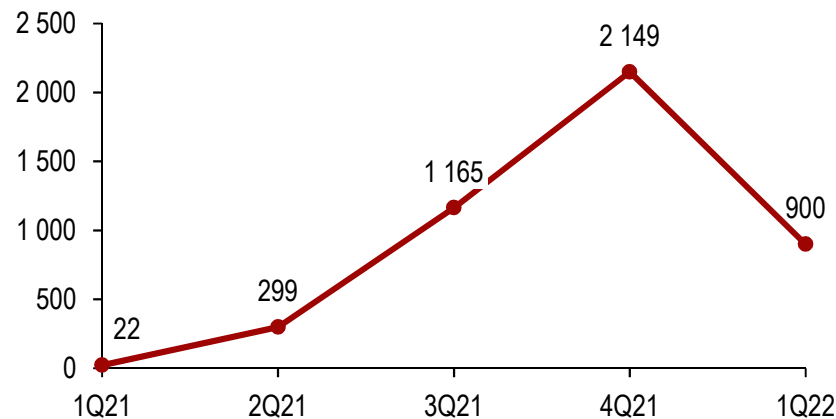
# Refining – EBITDA LIFO

## Increase of refining margin, B/U diff, volumes and trade margins



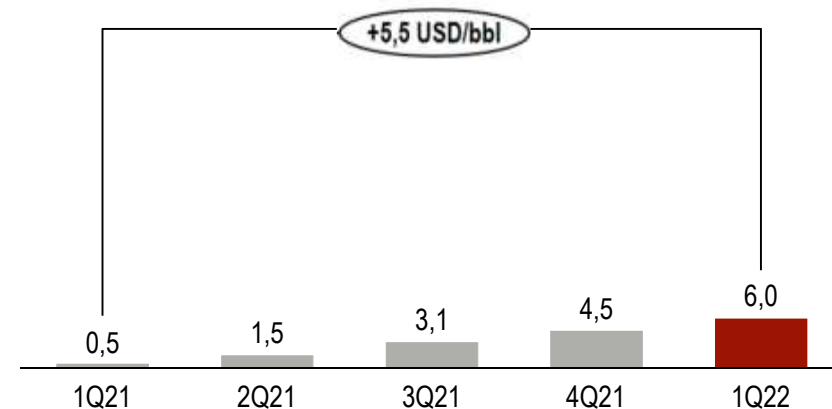
### EBITDA LIFO

PLN m



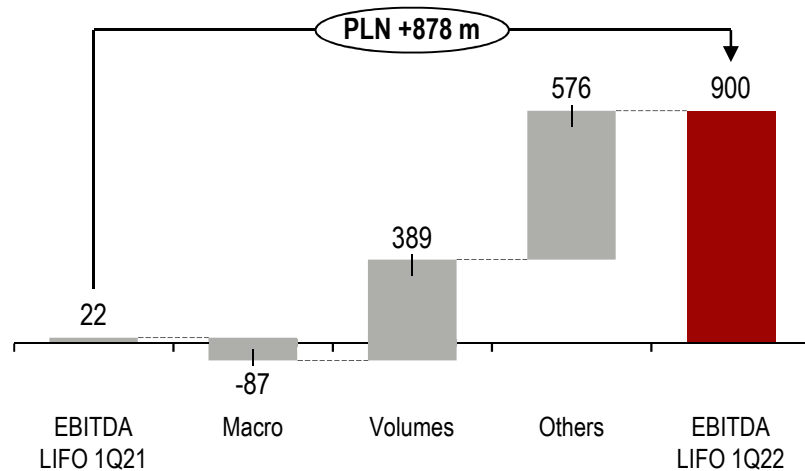
### Model refining margin

USD/bbl



### EBITDA LIFO – impact of factors

PLN m



- Negative macro impact (y/y) due to hedging and valuation of CO<sub>2</sub> contracts, lower cracks on HSFO and higher costs of internal usage following crude oil price increases. Abovementioned effects were partially limited by positive impact of higher Brent/Ural differential, higher cracks on light and middle distillates and weakening of PLN against USD.
- Sales volumes increase by 17% (y/y), of which: gasoline by 33%, diesel by 21%, LPG by 31%, JET by 153% and HSFO by 35%.
- Others include mainly PLN 0,4 bn (y/y) higher trade margins, PLN 0,4 bn (y/y) usage of historical inventory layers, PLN (-) 0,2 bn (y/y) NRV and PLN (-) 0,1 bn (y/y) higher fixed and overhead costs.

Operational results before impairments of assets: 1Q21 PLN (-) 2 m / 4Q21 PLN 14 m / 1Q22 PLN (-) 25 m

NRV: 1Q21 PLN 157 m / 4Q21 PLN 0 m / 1Q22 PLN (-) 4 m

Macro: margins PLN 246 m, B/U diff PLN 1755 m, exchange rate PLN 343 m, hedging PLN (-) 901 m, valuation of CO<sub>2</sub> contracts PLN (-) 761 m, CO<sub>2</sub> provision PLN 46 m

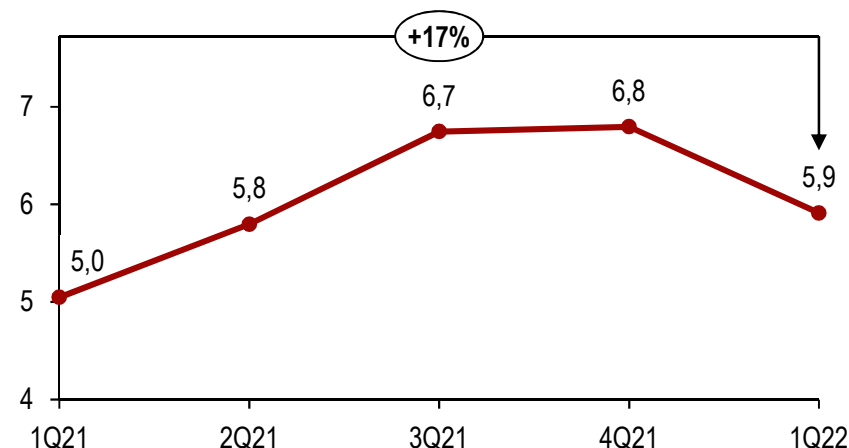
# Refining – operational data

## Higher throughput and sales due to better macro and demand increase



### Sales volumes

mt



### Crude oil throughput and utilization ratio

mt, %

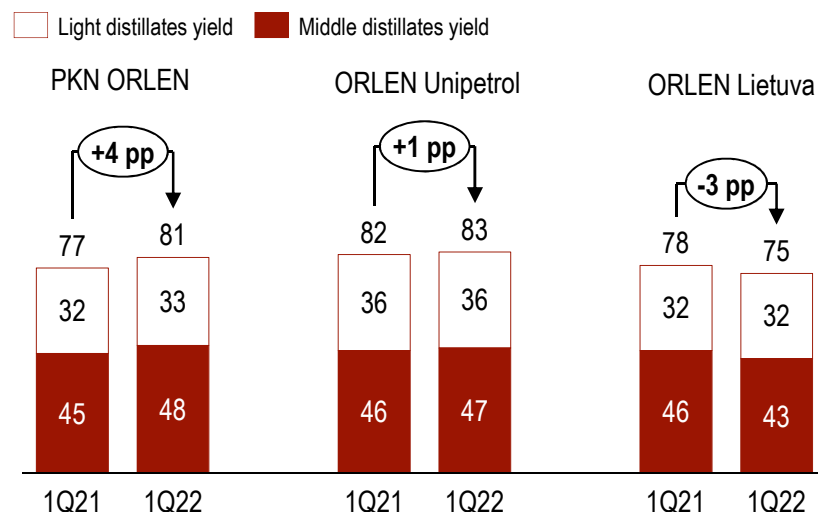
Throughput (mt)	1Q21	4Q21	1Q22	Δ (y/y)
PKN ORLEN	3,0	4,1	4,1	1,1
ORLEN Unipetrol	1,6	1,9	1,7	0,1
ORLEN Lietuva	1,5	2,5	2,3	0,8
<b>TOTAL</b>	<b>6,2</b>	<b>8,6</b>	<b>8,2</b>	<b>1,9</b>

Utilization (%)	1Q21	4Q21	1Q22	Δ (y/y)
PKN ORLEN	76%	99%	102%	26 pp
ORLEN Unipetrol	76%	88%	79%	3 pp
ORLEN Lietuva	59%	96%	90%	31 pp
<b>TOTAL</b>	<b>72%</b>	<b>96%</b>	<b>94%</b>	<b>22 pp</b>

### Fuel yield

%



- 8,2 mt of crude oil throughput, i.e. increase by 1,9 mt (y/y), of which:
  - PKN ORLEN – higher throughput by 1,1 mt (y/y) and fuel yield by 4 pp (y/y) due to low base from 1Q21 resulting from maintenance shutdowns of Hydrocracking, Hydrogen Unit, CDU and HDS as well as technical issues with Olefins and works related with preparation to planned shutdown in 2Q21.
  - ORLEN Unipetrol – increase by 0,1 mt (y/y) due to improvement of macroeconomic and market situation despite start of a cyclical maintenance shutdown of Kralupy refinery.
  - ORLEN Lietuva – increase by 0,8 mt (y/y) due to improvement of macroeconomic and market situation. Lower fuel yield by (-) 3 pp (y/y) resulting from lower share of sweet crude oils in throughput structure.
- Sales volumes amounted to 5,9 mt i.e. increase by 17% (y/y), of which: in Poland by 8%, in Lithuania by 30% and in the Czech Rep. by 28% due to market and macroeconomic situation improvement.

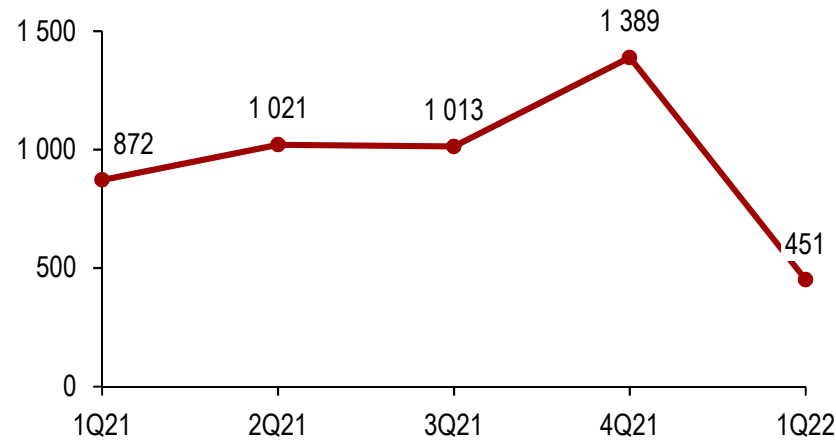
# Petchem – EBITDA LIFO

## Higher petchem margin, sales and trade margins



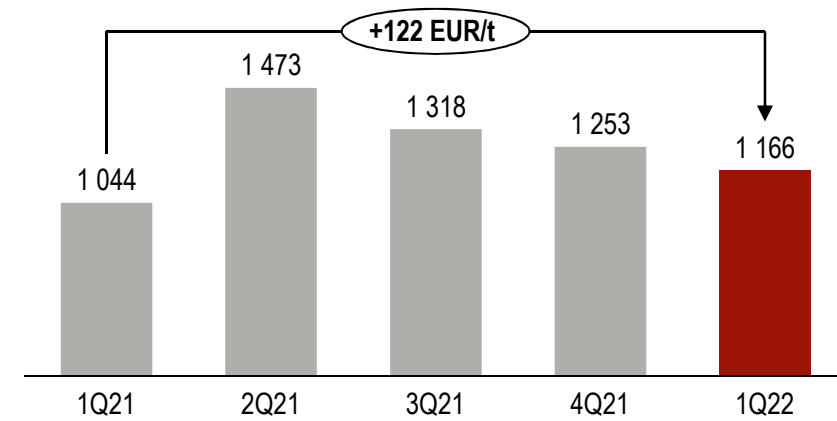
### EBITDA LIFO

PLN m



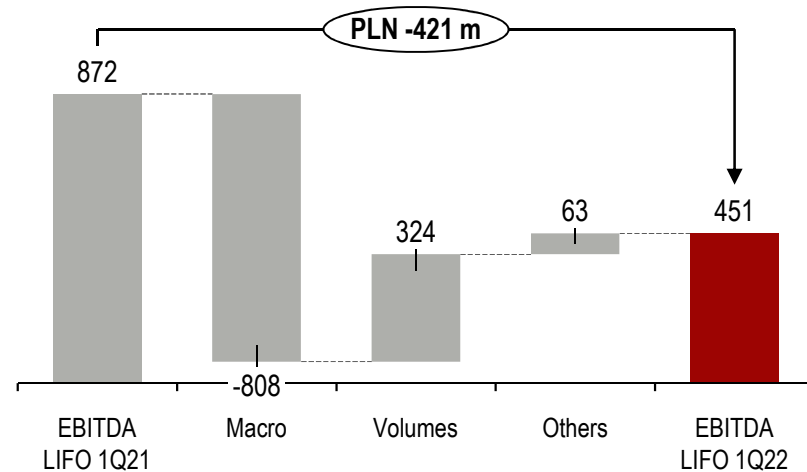
### Model petrochemical margin

EUR/t



### EBITDA LIFO – impact of factors

PLN m



Operational results before impairments of assets : 1Q21 PLN 0 m / 4Q21 PLN 30 m / 1Q22 PLN 0 m

NRV: 1Q21 PLN 36 m / 4Q21 PLN 1 m / 1Q22 PLN 0 m

Macro: margins PLN 69 m, exchange rate PLN (-) 75 m, hedging PLN 19 m, valuation of CO2 contracts PLN (-) 827 m, CO2 provisions PLN 37 m

- Negative macro impact (y/y) due to valuation of CO2 contracts partially limited by positive impact of margins on olefins, PTA, PVC and fertilizers.
- Sales volumes increased by 10% (y/y), of which: higher sales of olefins by 16%, polyolefins by 16%, PVC by 49% and PTA by 20% at lower fertilizers sales by (-) 18%.
- Others include mainly PLN 0,1 bn (y/y) of higher trade margins.
- EBITDA LIFO includes:
  - PLN 392 m Anwil result; i.e. increase by PLN 299 m (y/y).
  - PLN 2 m PTA result; i.e. decrease by PLN (-) 54 m (y/y).

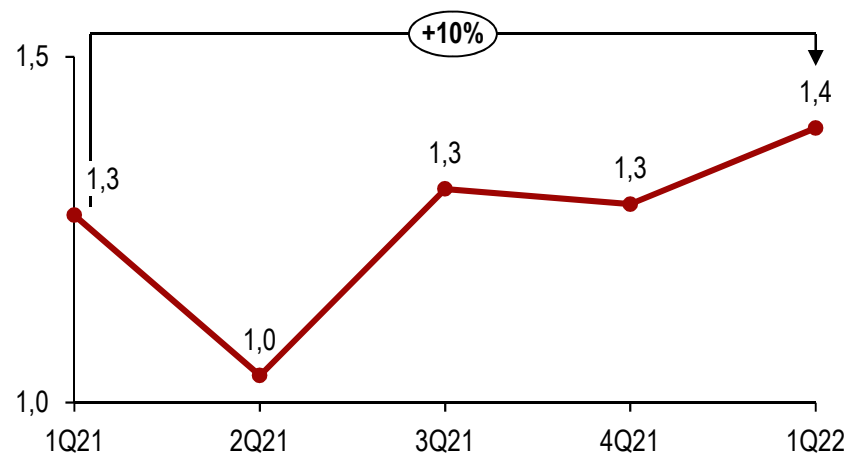
# Petchem – operational data

## Higher utilization ratio and sales volumes increase



### Sales volumes

mt



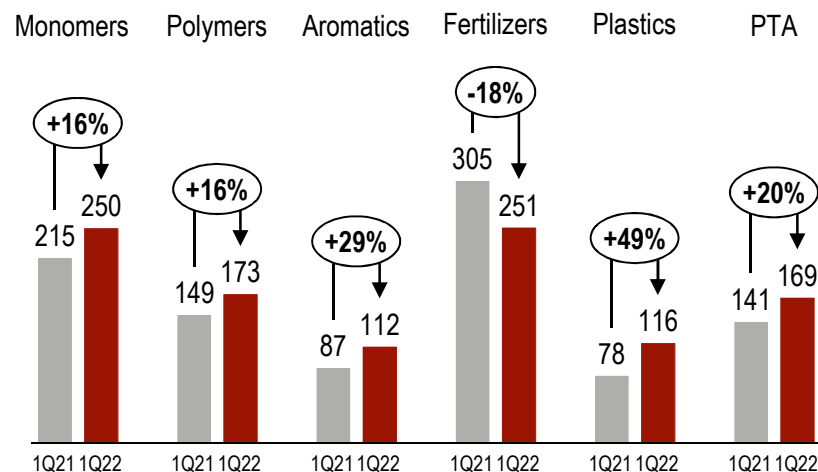
### Utilization ratio

%

Petchem installations	1Q21	4Q21	1Q22	Δ (y/y)
Olefins (Płock)	72%	93%	89%	17 pp
BOP (Płock)	67%	80%	74%	7 pp
Metathesis (Płock)	72%	70%	69%	-3 pp
Fertilizers (Włocławek)	84%	64%	64%	-20 pp
PVC (Włocławek)	74%	82%	88%	14 pp
PTA (Włocławek)	84%	52%	100%	16 pp
Olefins (ORLEN Unipetrol)	73%	92%	94%	21 pp
PPF Splitter (ORLEN Lietuva)	92%	96%	92%	0 pp

### Sales volumes – split by product

kt



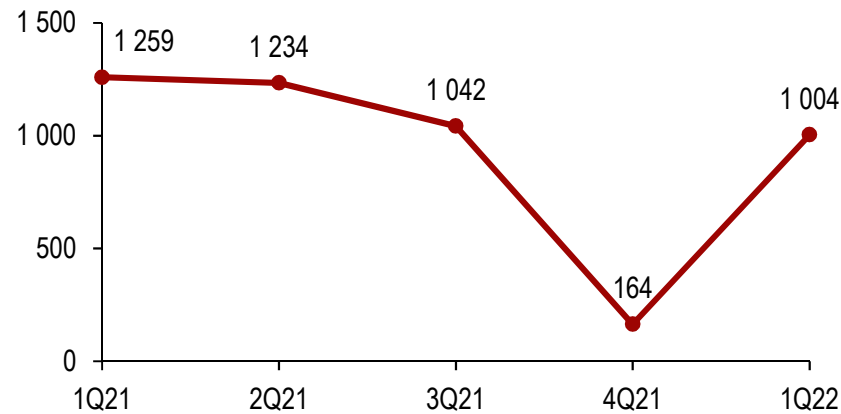
- Utilization ratio of petrochemical installations:
  - Olefins (Płock) – increase resulted from processing limitations in 1Q21 and preparations for cyclical maintenance shutdown in 2Q21.
  - BOP (Płock) – lack of shutdown from 1Q21 and production limitations resulted from Olefins installation shutdown in PKN ORLEN.
  - Metathesis (Płock) – utilization adjusted to the demand for propylene.
  - Fertilizers (Włocławek) – shutdown in 1Q22.
  - PTA (Włocławek) – full utilization ratio.
  - Olefins (Unipetrol) – stable work of installation in 1Q22 at work disruptions of PE3 in 1Q21.
- Sales increased by 1,4 mt i.e. increase by 10% (y/y), of which: higher sales in Poland by 12% mainly PTA, PVC and soda lye (production limitations in 1Q21 and stock optimization before maintenance shutdown in 2Q21), in Lithuania by 18% as a result of higher product availability and in the Czech Rep. by 6% improving operational parameters of PE3 installation (y/y).

# Energy – EBITDA

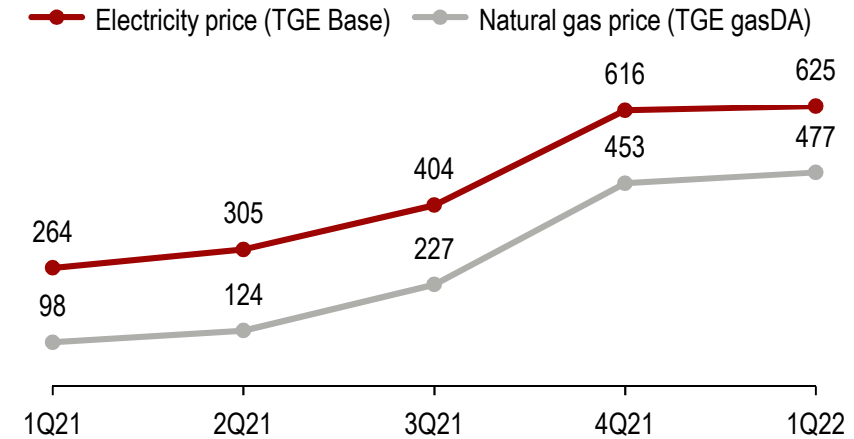
## Increase of volumes and margin on electricity



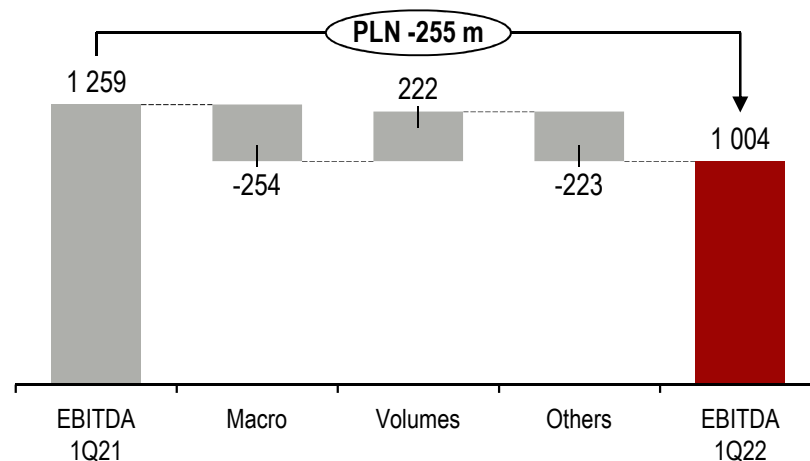
**EBITDA**  
PLN m



**Electricity and natural gas prices (market quotations)**  
PLN/MWh



**EBITDA – impact of factors**  
PLN m



- Negative macro impact (y/y) as a result of settlement of CO2 contracts partially compensated by increase of margin on electricity sales and distribution service as a result of lower level of power grid losses in ENERGA Group and higher prices of green certificates.
- Increase of production and distribution of electricity mainly in Energa Group at lower electricity sales by CCGT Płock and CCGT Włocławek due to lower load as a result of high quotations of gas and CO2.
- Others include mainly PLN (-) 0,2 bn (y/y) due to lack of positive effect connected with change of the ownership structure of Baltic Power in 1Q21.
- EBITDA includes:
  - PLN 1107 m of ENERGA Group result; increase by PLN 317 m (y/y).

Operational results before impairments of assets: 1Q21 PLN 0 m / 4Q21 PLN (-) 17 m / 1Q22 PLN 0 m

Macro: margins PLN 356 m, exchange rate PLN 24 m, hedging PLN 50 m, valuation of CO2 contracts PLN (-) 705 m, CO2 provision PLN (-) 115 m

# Energy – operational data

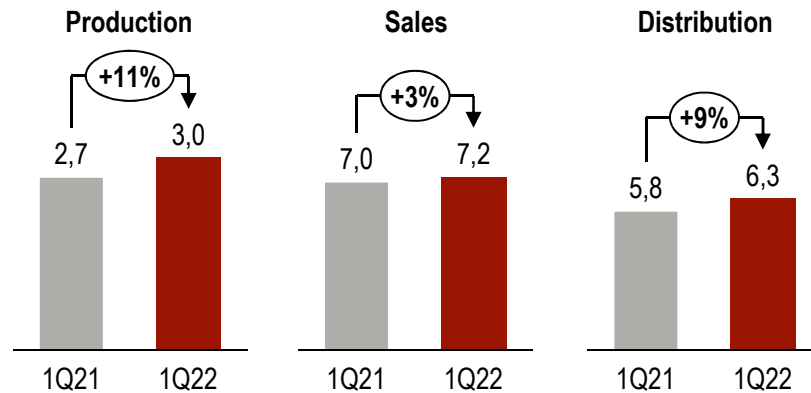
60% of electricity production comes from zero and low emission sources



E.ON

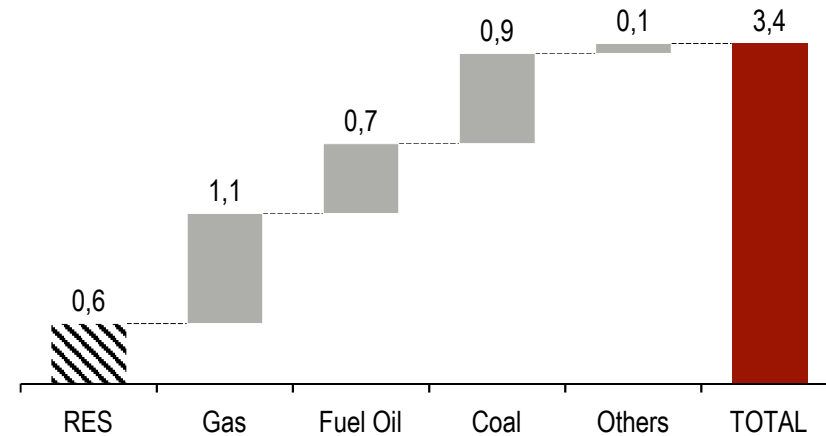
## Electricity volumes

TWh



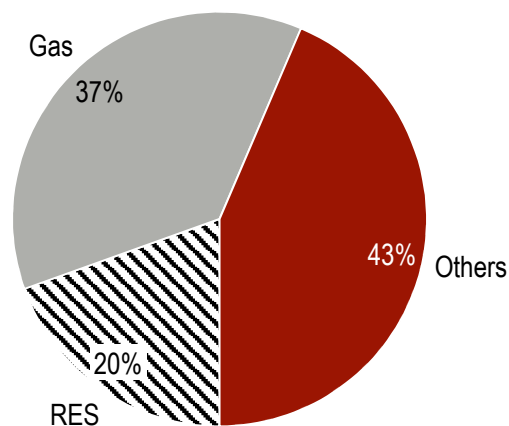
## Installed capacity

GWe



## Electricity production by type of sources

%



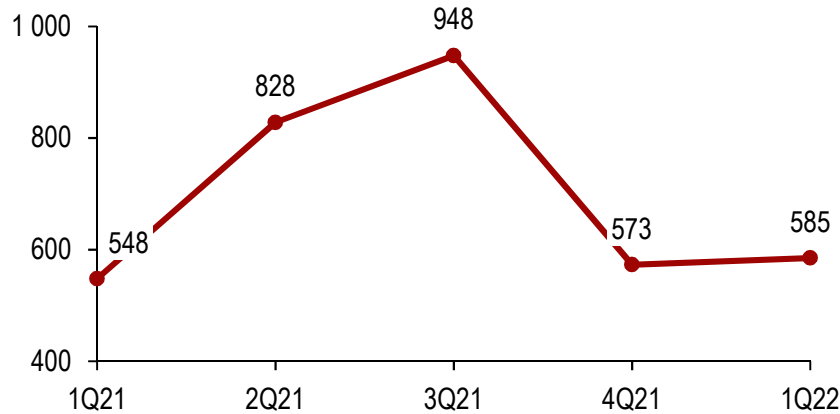
- Installed capacity: 3,4 GWe (electricity) / 6,1 GWt (heat).
- Production: 3,0 TWh (electricity) / 12,3 PJ (heat).
- Electricity production increased by 11% (y/y) as a result of higher demand from PSE and concluded contracts. Good atmospheric conditions and higher capacity of wind farms (y/y) resulted in increased production from water and wind.
- Higher electricity sales volumes by 3% (y/y) as a result of higher sales on the wholesale market, including sale of electricity surplus from wind farms from the local market.
- Electricity distribution increased by 9% (y/y) as a result of higher economic activity on the distribution grid network of Energa Group and higher number of Energy Connection Points by 1%.
- CO2 emission amounted to 2,5 mt.

# Retail – EBITDA

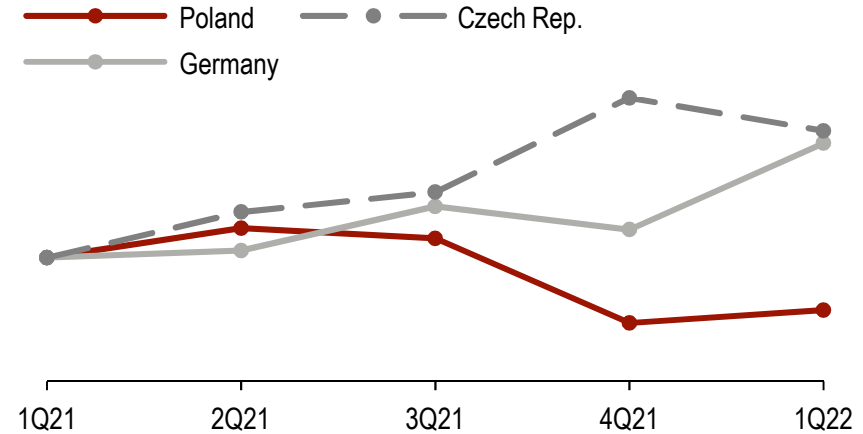
## Sales increase at lower margins and higher costs



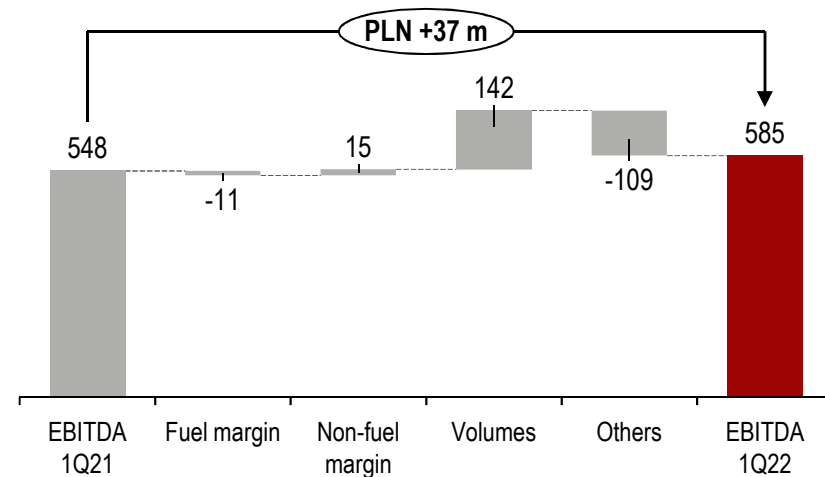
**EBITDA**  
PLN m



**Fuel margin**  
%



**EBITDA – impact of factors**  
PLN m



- Higher sales volumes by 13% (y/y), of which: higher sales of gasoline by 16%, diesel by 12% and LPG by 8%.
- Lower fuel margins in Poland at higher fuel margins in Germany, the Czech Rep. and in Lithuania (y/y).
- Higher non-fuel margins in Poland at comparable margins in the Czech Rep., Germany and Lithuania (y/y).
- Non-fuel locations Stop Cafe/Star Connect/ORLEN w ruchu increased by 70 (y/y).
- Increase in alternative fuel points by 291 (y/y). Currently, we have 516 alternative fuel points, including: 470 EV chargers, 2 hydrogen stations and 44 CNG stations.
- Others include mainly PLN (-) 0,1 bn (y/y) of higher costs of fuel stations operations.



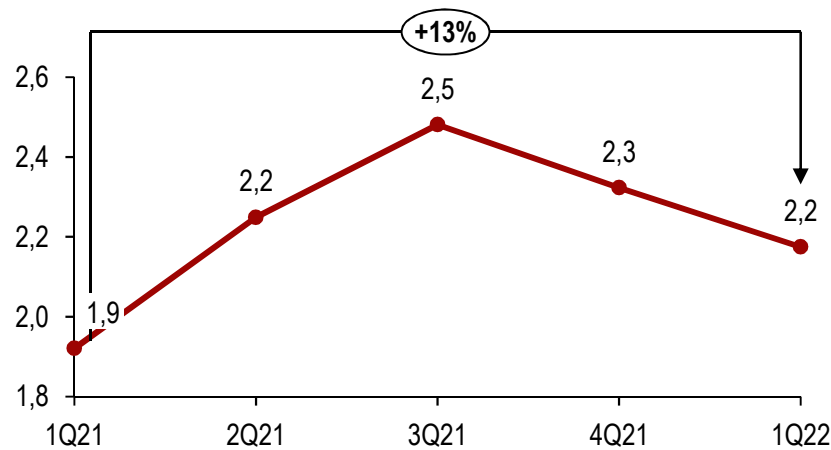
# Retail – operational data

## Over 500 alternative fuel points



### Sales volumes

mt



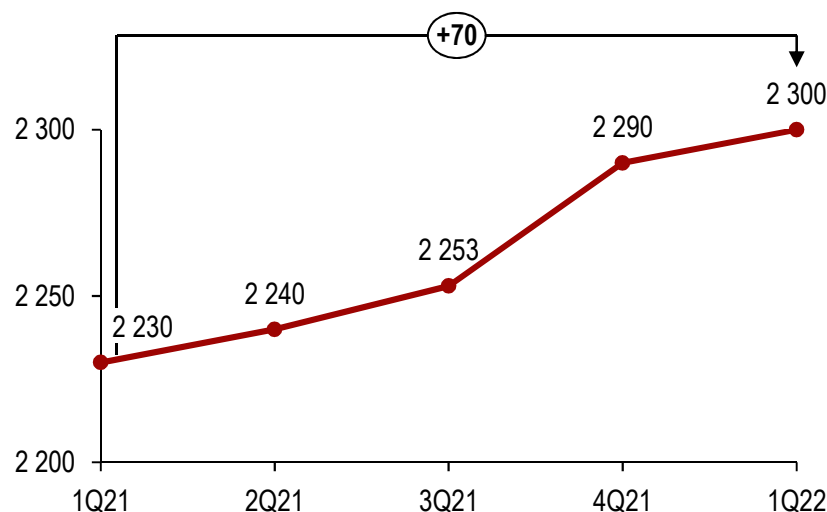
### Number of petrol stations and market shares (by volume)

#, %

	#stations	Δ (y/y)	% market	Δ (y/y)
Poland	1 814	6	31,1	-1,5 pp
Germany	586	1	6,1	-0,3 pp
Czech Rep.	426	6	24,3	-0,7 pp
Lithuania	29	0	4,1	-0,3 pp
Slovakia	23	9	1,1	0,4 pp

### Non-fuel locations

#



- Sales volumes increase by 13% (y/y), of which: higher sales in Poland by 22% at lower sales in the Czech Rep. by (-) 2% and in Lithuania by (-) 4% at comparable sales in Germany\*.
- 2878 fuel stations, i.e. increase by 22 (y/y), of which: in Poland by 6, in Germany by 1, in the Czech Rep. by 6 and in Slovakia by 9 at comparable number of fuel stations in Lithuania.
- Market share increase (y/y) in Slovakia at decrease in other markets.
- 2300 non-fuel locations, of which: 1758 in Poland (incl. 14 ORLEN w ruchu), 327 in the Czech Rep., 170 in Germany, 29 in Lithuania and 16 in Slovakia. Increase by 70 (y/y), of which: in Poland by 29, in the Czech Rep. by 13, in Germany by 24, in Lithuania by 1 and in Slovakia by 3.
- 516 alternative fuel points, of which: 414 in Poland, 89 in the Czech Rep. and 13 in Germany. Increase by 291 (y/y), of which: in Poland by 270, in the Czech Rep by 17 and in Germany by 4.

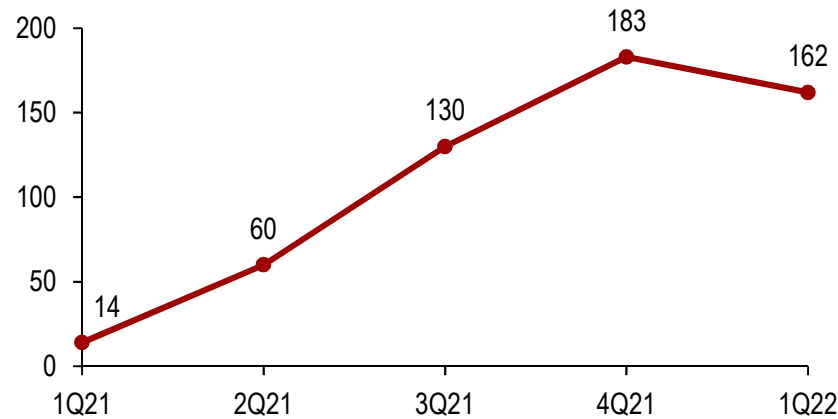
\* Includes also fuel sales beyond own petrol stations. Sales volumes on ORLEN Deutschland fuel stations increased by 12 % (y/y).

# Upstream – EBITDA

## Positive impact of macro, higher sales volumes

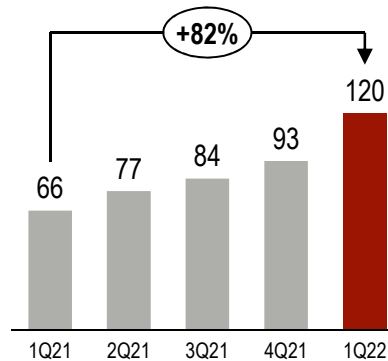


**EBITDA**  
PLN m

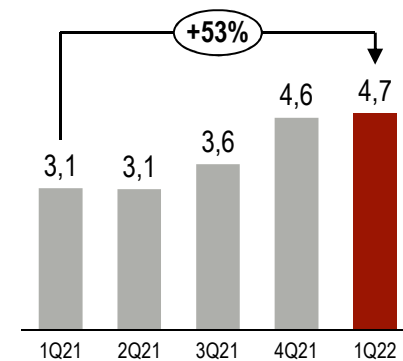


**Canadian Light Sweet crude oil (CLS) and AECO gas prices**  
CAD/bbl, CAD/mcf

CLS crude oil price

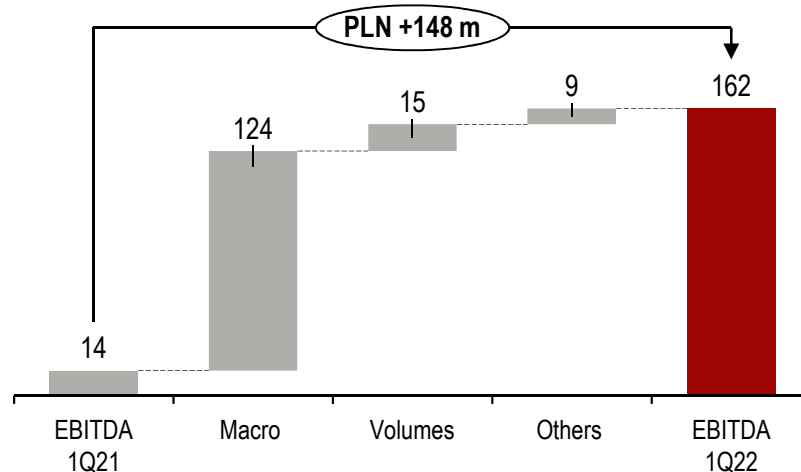


AECO gas price



### EBITDA – impact of factors

PLN m



- Positive macro impact (y/y) due to an increase in crude oil, gas and NGL's quotations limited by the negative impact of hedging.
- Higher sales volumes by 3% including: higher crude oil sales by 77% and NGL's sales by 5% at lower gas sales by (-) 8%.
- Average production at comparable level (y/y), including: increase by 0,6 th. boe/d (y/y) in Canada at decreasing volumes in Poland by (-) 0,6 th. boe/d.
- Others include mainly lack of settlement cost related with liquidation of FX Energy in 1Q21 at higher costs due to the start of electricity production in Poland in 2022.

Operational results before impairments of assets: : 1Q21 PLN 0 m / 4Q21 PLN 918 m / 1Q22 PLN 0 m  
Macro: margins PLN 142 m, hedging PLN (-) 18 m

# Upstream – operational data

## 16,2 th. boe/d – average production on the comparable level (y/y)



### Poland

#### Total reserves of crude oil and gas (2P)

8,6 m boe\* (4% liquid hydrocarbons, 96% gas)

#### 1Q22

Average production\*\*: 0,8 th. boe/d (99,8% gas, 0,2% liquid hydrocarbons)

Electricity production: 263 MWh/d

EBITDA: PLN 61 m\*\*\* / CAPEX: PLN 27 m

#### Development of existing assets:

- Edge – the development works, based on the generation of electricity from nitrogen-rich natural gas of the Tuchola and Bajerze deposits, were finalized. Permanent sale of electricity to the grid was started.
- Plotki – together with PGNiG, works to develop Chwałęcín and Grodzewo discoveries were realized as well as works related to equipping production fields with gas compression installations.
- Sieraków – together with PGNiG, as part of the development of the Sieraków-2H well, the design documentation was updated prior to the selection of the Contractor for the investment documentation.

#### Drilling works:

- Miocen – the planned measurements of the pressure distribution in the Pruchnik-OU1 well were carried out in order to finally evaluate the resource potential of the gas-bearing horizon provided.
- Plotki – together with PGNiG, the Miłosław-7H well was drilled, after which the hole was refitted and the testing process started.

#### Seismic works :

- Edge – works on the interpretation of the Koczala-Miastko 3D seismic image obtained through field work carried out in 3Q20 were completed and summarized.

\* Data as of 31.12.2021

\*\* Volumes do not include gas converted into electricity in the amount of 0,4 th. boe/d

\*\*\* Operational results before impairments of assets: 1Q22 PLN 0 m

### Canada

#### Total reserves of crude oil and gas (2P)

162,8 m boe\* (59% liquid hydrocarbons, 41% gas)

#### 1Q22

Average production : 15,4 th. boe/d (49% liquid hydrocarbons)

EBITDA: PLN 101 m\*\*\* CAPEX: PLN 156 m

#### Development of existing assets:

- Ferrier – drilling and fracking of 2 wells (100% share), production started in one of the locations. As part of cooperation with partners, ORLEN decided to participate in drilling 4 more wells (50% share), where the operator is Yangarra - including 2 wells from 2021, ORLEN participated in 6 wells (50% share), which were fractured and added to production
- Lochend – 2 wells were fractured (100% share) and added to production.
- Kakwa – 2 wells were fractured (75% share).

Works related to the modernization of the deposit infrastructure in the Ferrier/Strachan project are being continued. The activities are aimed at increasing the capacity of the installation and intensifying the depletion of hydrocarbon resources, which will enable the reduction of unit operating costs.

The annual contract renewal and corporate pricing process for the fractionation and sale of liquid hydrocarbons, like NGL's, has been completed. The renewed contracts will be valid as standard from April 2022 to March 2023.



Summary 1Q22



Market environment



Financial and operating results



Financial strength



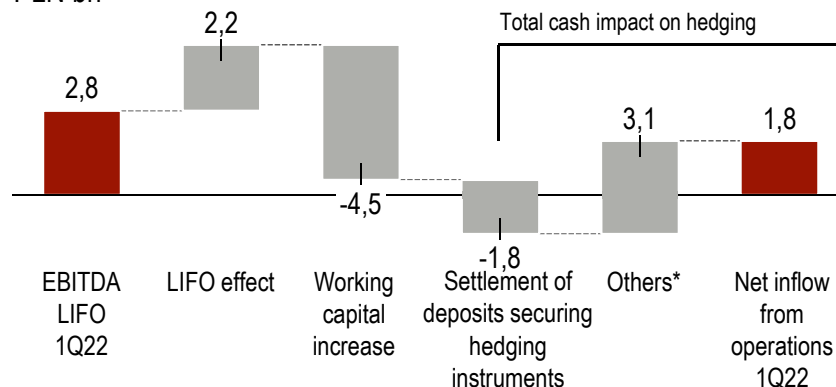
Outlook

# Cash flow



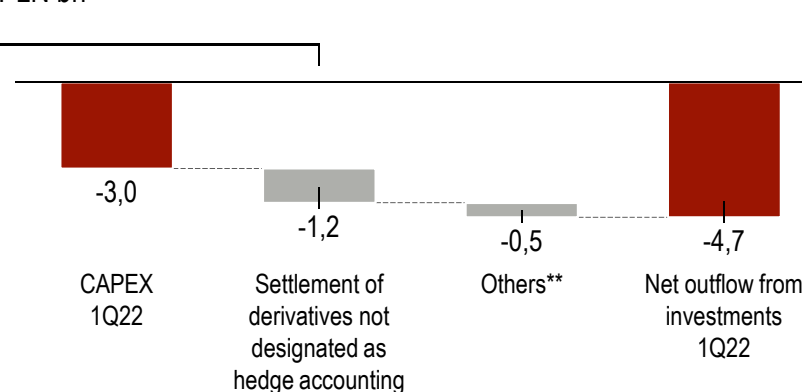
## Cash flow from operations

PLN bn



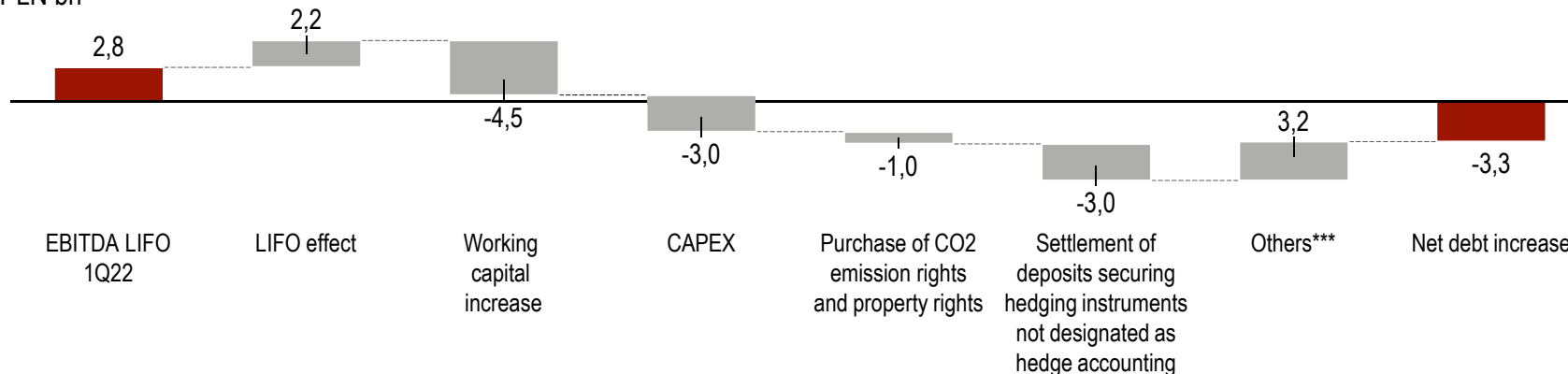
## Cash flow from investments

PLN bn



## Free cash flow 3M22

PLN bn



\*Includes mainly: income tax paid PLN (-) 0,9 bn, capital adjustments PLN (-) 0,1 bn, adjustment for changes in the balance of reserves PLN 1,7 bn, settlement and valuation of derivatives PLN 2,8 bn, settlement of property rights subsidies PLN (-) 0,8 bn.

\*\*Includes mainly: recognition of the right to use assets PLN 0,4 bn, purchase of CO2 emission rights and property rights PLN (-) 1,0 bn and change in advances and investment liabilities PLN 0,1 bn.

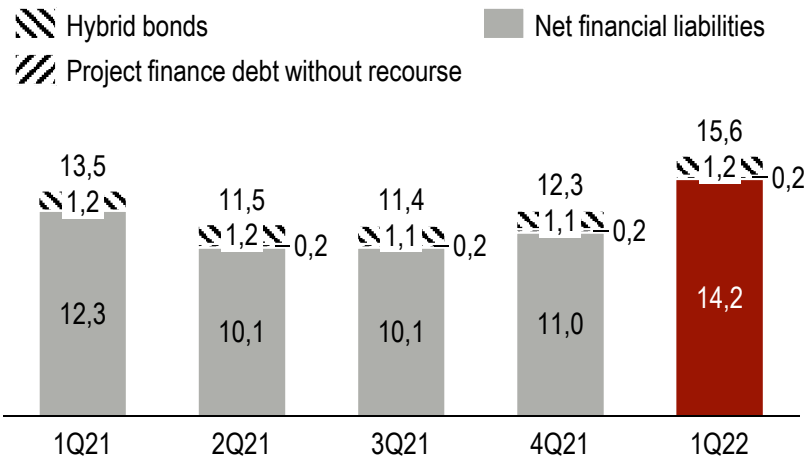
\*\*\*Includes mainly: income tax paid PLN (-) 0,9 bn, lease payments PLN (-) 0,2 bn, interest paid PLN (-) 0,1 bn, settlement and valuation of derivatives PLN 2,8 bn, recognition of the right to use assets PLN 0,4 bn, capital adjustments PLN (-) 0,1 bn, adjustment for changes in the balance of reserves PLN 1,7 bn as well as valuation and revaluation of debt due to net FX differences PLN (-) 0,1 bn.

# Debt

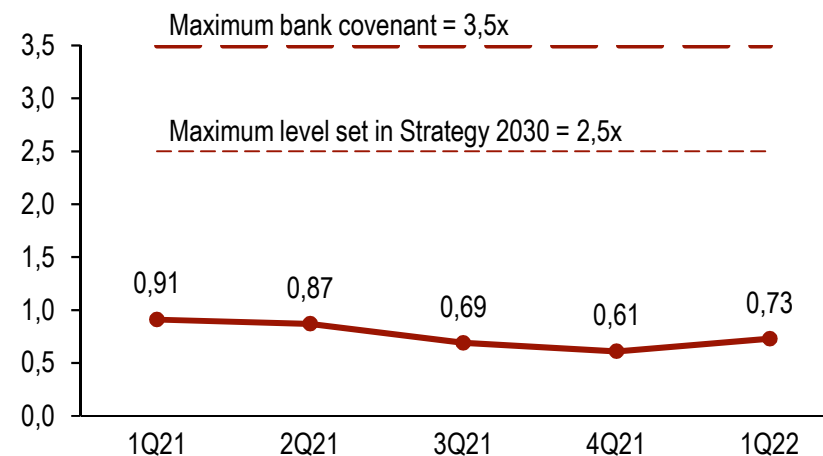


## Net debt

PLN bn

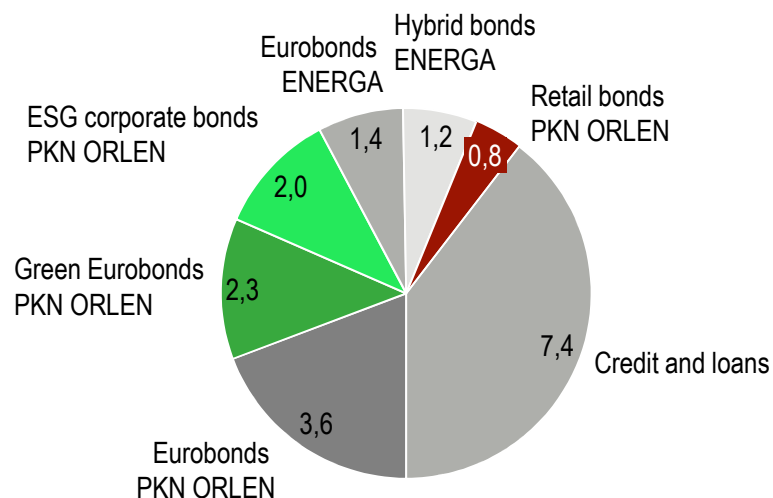


## Net debt/EBITDA\*



## Gross debt – sources of financing

PLN bn



- Gross debt currency structure: EUR 57%, PLN 28%, USD 13%, CZK 2%
- Weighted average debt maturity: 2025
- Investment grade: BBB- positive outlook (Fitch), Baa2 positive outlook (Moody's).
- Net debt increase by PLN (-) 3,3 bn (q/q) as a result of cash outflow from investments of PLN (-) 4,7 bn, cash flow from operations of PLN 1,8 bn and payments of lease liabilities of PLN (-) 0,2 bn, paid interest of PLN (-) 0,1 bn and net FX differences from debt valuation of PLN 0,1 bn.
- Obligatory reserves in the balance sheet at the end of 1Q22 amounted to PLN 7,2 bn (vs PLN 6,4 bn at the end of 4Q21), of which PLN 6,0 bn in PKN ORLEN and PLN 1,2 bn in ORLEN Lietuva.

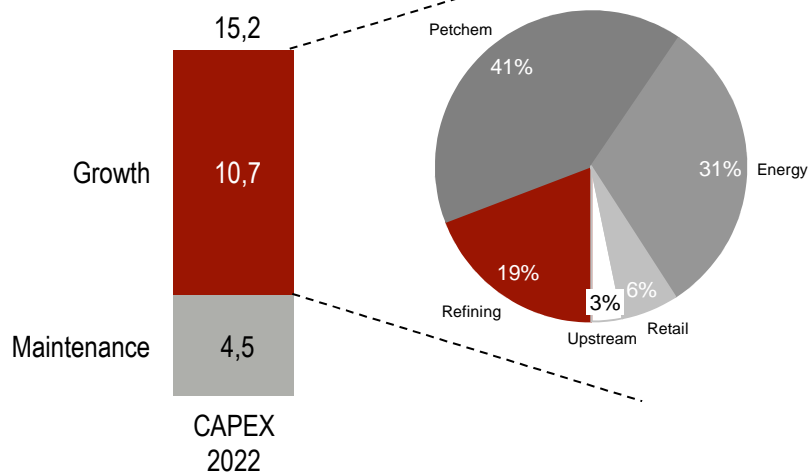
\* The level of net debt adopted for the calculation of the ratio does not take into account project finance debt without recourse and hybrid bond issue

# CAPEX



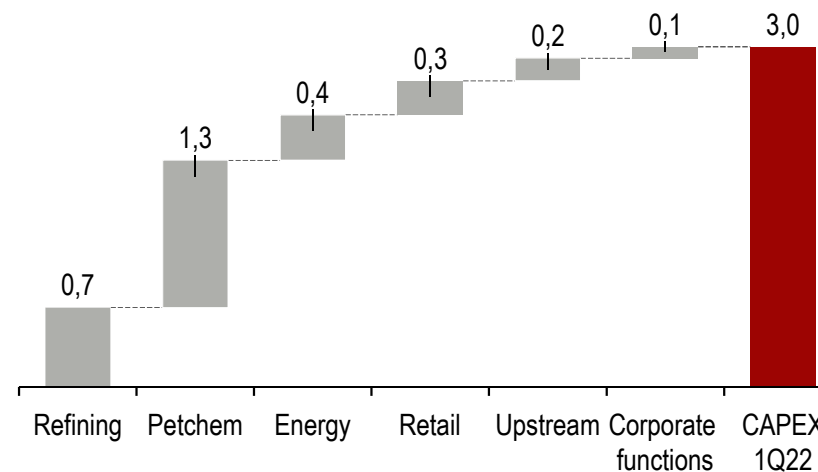
## Planned CAPEX

PLN bn, %



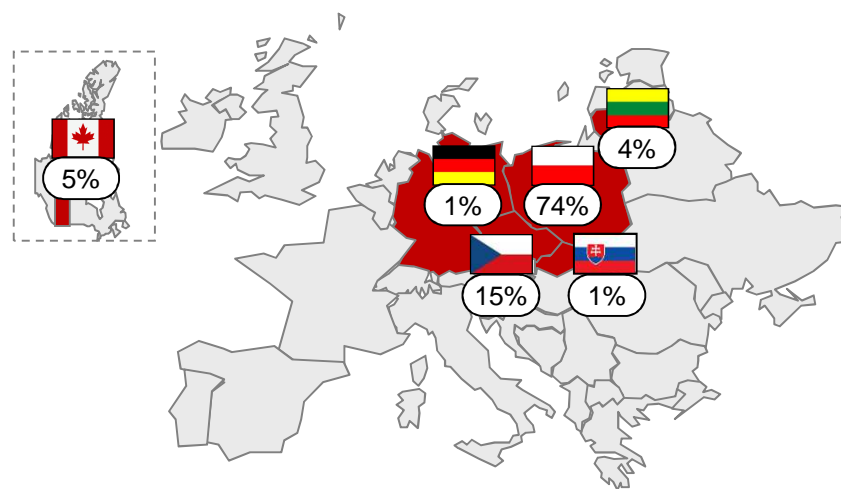
## Realized CAPEX 1Q22 – split by segment

PLN bn



## Realized CAPEX 1Q22 – split by country

%



## Main growth projects realized in 1Q22

### Refining

- Construction of Visbreaking unit – Płock
- Construction of Hydrocracking unit – ORLEN Lietuva
- Construction of HVO (Hydrotreated Vegetable Oils) – Płock

### Petchem

- Extension of Olefin capacities – Płock
- Construction of Steam Cracker furnace in Litvinov - Unipetrol
- Extension of fertilizers production – Anwil

### Energy

- Modernization of current assets and connection of new clients – ENERGA Group
- Development of transformer station in Power Plant – Płock

### Retail

- Fuel stations – 5 stations opened, 8 closed
- Non-fuel sales – 10 points opened
- Alternative fuel points – 8 opened

### Upstream

- Focus on the most perspective projects in Poland and Canada



Summary 1Q22



Market environment



Financial and operating results



Financial strength



Outlook



# Current macro environment



	2Q21	1Q22	2Q22	Δ (q/q)	Δ (y/y)
Brent crude oil (USD/bbl)	69	102	105	3%	52%
Model refining margin (USD/bbl) <sup>1</sup>	1,5	6,0	18,7	212%	1147%
Model petrochemical margin (EUR/t) <sup>2</sup>	1 473	1 166	1 459	25%	-1%
Electricity (PLN/MWh)	305	625	553	-12%	81%
Natural gas (PLN/MWh)	124	477	493	3%	298%
CO2 emission rights (EUR/t)	50	83	80	-3%	60%
<b>Refining products (USD/t) <sup>3</sup> - crack margins from quotations</b>					
Diesel	37	148	296	100%	700%
Gasoline	144	187	271	45%	88%
HSFO	-152	-247	-222	-10%	46%
<b>Petrochemical products (EUR/t) <sup>3</sup> - crack margins from quotations</b>					
Polyethylene <sup>4</sup>	532	466	540	16%	2%
Polypropylene <sup>4</sup>	594	655	650	-1%	9%
Ethylene	627	664	923	39%	47%
Propylene	603	679	933	37%	55%
Paraxylene	334	262	423	61%	27%
<b>Average exchange rates</b>					
USD/PLN	3,76	4,13	4,26	3%	13%
EUR/PLN	4,53	4,63	4,64	0%	2%

\* Data as of 22.04.2022

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

Total input calculated acc. to Brent Crude quotations. Spot market quotations.

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

Contract market quotations.

3) 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.

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



## Macro

- Brent crude oil – assuming release of strategic oil reserves by the US and lower demand in China, the average Brent crude oil price in 2022 will amount ca. 120 USD/bbl.
- Refining margin – we expect that imbalance on fuels markets in Europe connected with elimination of fuels imports from Russia will increase demand for fuels produced by the European refineries, improve refining capacities utilization and will contribute to refining margins improvement.
- Brent/Ural differential – we expect maintaining high Brent/Ural differential due to lack of demand for Ural oil on the SPOT market in Europe.
- Petrochemical margin – supporting factor for margins is demand correlated with GDP growth and lower import resulting from the increase in freight costs. On the other hand, high crude oil and gas prices reduce margins growth.
- Gas – we expect gas prices to double (y/y) due to Russian invasion on Ukraine, changes in regulations forcing to fill gas storage in Europe to the appointed level and Gazprom's demands for gas payments in rubles.
- Electricity – we expect increase in electricity prices (y/y) to the level of ca. 730 PLN/MWh (increase by ca. 85% y/y) as a result of gas and coal prices remaining at very high levels mainly due to geopolitical situation and high prices of CO2 emission rights.



## Economy

- GDP\* – we expect growth: Poland 4,4%, the Czech Rep. 2,7%, Lithuania 2,7%, Germany 2,7%.
- Fuel consumption – we expect increase in fuel demand and petrochemical products as a result of economic recovery.



## Regulations

- National Index Target – base level increase from 8,7 to 8,8% (reduced ratio for PKN ORLEN is 5,773%).
- Capacity market – we expect comparable (y/y) support for energy units.
- Government Anti-Inflation Package – reduction of excise tax on fuels (1 January 2022 – 31 May 2022), exemption from retail sales tax (20 December 2021 – 31 May 2022) and reduction of VAT on fuels from 23% to 8% (1 January 2022 – 31 July 2022)

\* Poland (NBP, March 2022); Germany (CE, March 2022); Czech Republic (Morgan Stanley, April 2022); Lithuania (LB, March 2022)

# Thank you for your attention



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[www.orlen.pl](http://www.orlen.pl)



Supporting slides

## Results – split by quarter



PLN m	1Q21	2Q21	3Q21	4Q21	12M21	1Q22
Revenues	24 562	29 423	36 442	40 914	131 341	45 447
EBITDA LIFO	2 425	3 167	4 266	4 296	14 154	2 786
LIFO effect	1 142	963	890	1 251	4 246	2 174
EBITDA	3 567	4 130	5 156	5 547	18 400	4 960
Depreciation	-1 311	-1 294	-1 328	-1 408	-5 341	-1 400
EBIT LIFO	1 114	1 873	2 938	2 888	8 813	1 386
EBIT	2 256	2 836	3 828	4 139	13 059	3 560
Net result	1 872	2 244	2 928	4 144	11 188	2 845

Operational results before impairments of assets:

1Q21 PLN (-) 4 m / 2Q21 PLN (-) 85 m / 3Q21 PLN (-) 3 m / 4Q21 PLN 903 m / 12M21 PLN 811 m / 1Q22 PLN (-) 27 m

# EBITDA LIFO – split by segment



PLN m	1Q21	2Q21	3Q21	4Q21	12M21	1Q22	Δ (y/y)
<b>Refining, incl:</b>	<b>22</b>	<b>278</b>	<b>1 165</b>	<b>2 149</b>	<b>3 614</b>	<b>900</b>	<b>878</b>
NRV	157	15	1	0	173	-4	-161
hedging	-318	-327	-245	-25	-915	-1 219	-901
valuation of CO2 contracts	193	260	159	567	1 179	-568	-761
<b>Petchem, incl:</b>	<b>872</b>	<b>1 021</b>	<b>1 013</b>	<b>1 389</b>	<b>4 295</b>	<b>451</b>	<b>-421</b>
NRV	36	-1	2	1	38	0	-36
hedging	65	75	73	70	283	84	19
valuation of CO2 contracts	213	287	135	593	1 228	-614	-827
<b>Energy, incl:</b>	<b>1 259</b>	<b>1 215</b>	<b>1 042</b>	<b>164</b>	<b>3 680</b>	<b>1 004</b>	<b>-255</b>
hedging	0	0	0	-99	-99	50	50
valuation of CO2 contracts	162	217	197	524	1 100	-543	-705
<b>Retail</b>	<b>548</b>	<b>828</b>	<b>948</b>	<b>573</b>	<b>2 897</b>	<b>585</b>	<b>37</b>
<b>Upstream, incl:</b>	<b>14</b>	<b>60</b>	<b>130</b>	<b>183</b>	<b>387</b>	<b>162</b>	<b>148</b>
hedging	-63	-60	-11	-7	-141	-81	-18
<b>Corporate functions</b>	<b>-290</b>	<b>-235</b>	<b>-32</b>	<b>-162</b>	<b>-719</b>	<b>-316</b>	<b>-26</b>
<b>EBITDA LIFO, incl:</b>	<b>2 425</b>	<b>3 167</b>	<b>4 266</b>	<b>4 296</b>	<b>14 154</b>	<b>2 786</b>	<b>361</b>
NRV	193	14	3	1	211	-4	-197
hedging	-316	-312	-183	-61	-872	-1 166	-850
valuation of CO2 contracts	568	764	491	1 684	3 507	-1 725	-2 293

Operational results before impairments of assets:

1Q21 PLN (-) 4 m / 2Q21 PLN (-) 85 m / 3Q21 PLN (-) 3 m / 4Q21 PLN 903 m / 12M21 PLN 811 m / 1Q22 PLN (-) 27 m

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



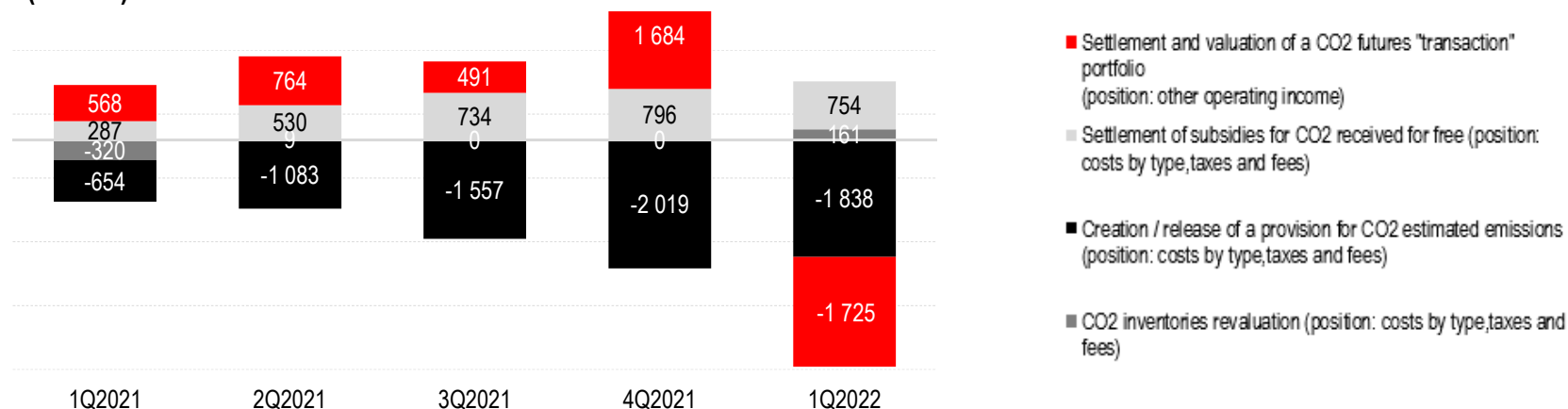
## Contracts portfolio for purchase of CO<sub>2</sub> emission rights in PKN ORLEN and EUA balance on ORLEN Group accounts (mt)

Portfolios	Approach to valuation	31.03.2021	30.06.2021	30.09.2021	31.12.2021	31.03.2022
Own contracts portfolio for purchase of emission rights	<u>Is not subject to fair value valuation at the balance sheet date</u>	0,46	1,49	2,14	2,30	1,52
Transaction portfolio for purchase of emission rights*	<u>It is subject to fair value valuation at the balance sheet date</u>	12,41	12,79	17,58	20,72	0,00
EUA portfolio on ORLEN Group accounts (intangible assets)**	<u>Is not subject to fair value valuation at the balance sheet date**</u>	18,79	2,14	3,05	9,63	16,05

\* Transaction portfolio has been spun off in 4Q2020 in connection to part of CO<sub>2</sub> emission rights contracts rolled for the next term (according to MSSF9)

\*\* EUA 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 PKN ORLEN consolidated financial result (PLN m)



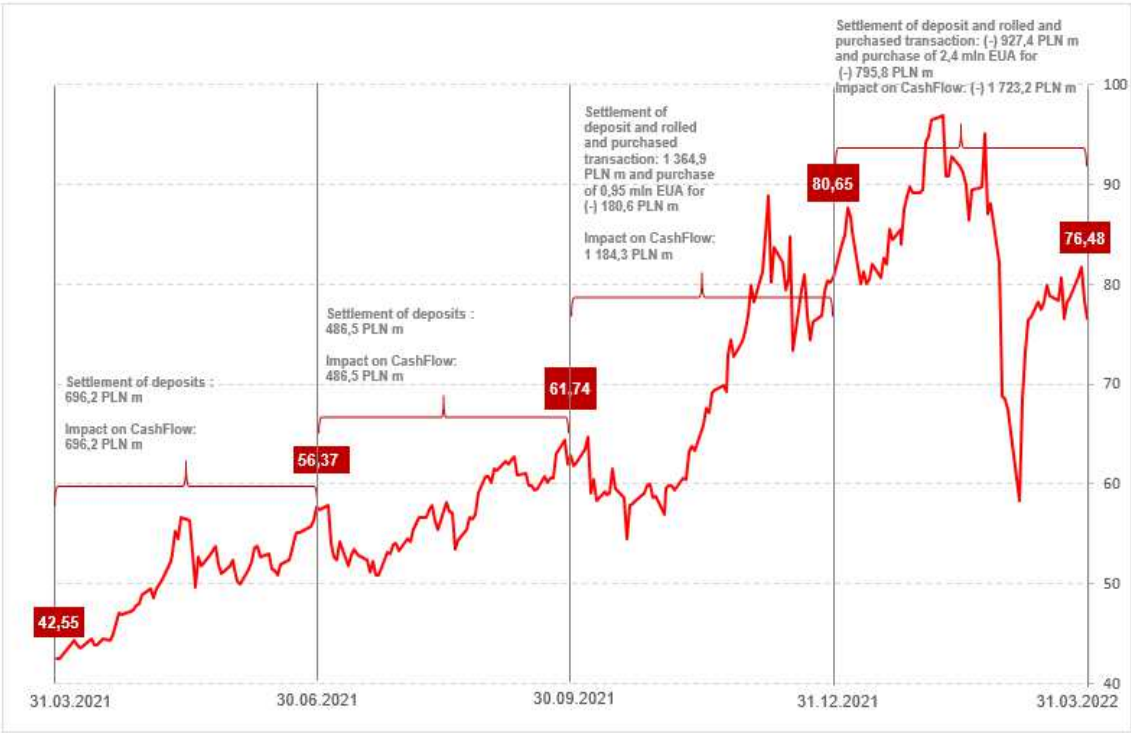
# Settlement of securing deposit and realization of CO<sub>2</sub> contracts on cash flow – (illustrative value)



Impact on cash flow (PLN m)



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



- Contract performance (acquiring rights)
- Settlement of margin deposit and transaction



# Results – split by company



1Q22 PLN m	PKN ORLEN	ORLEN Unipetrol <sup>2</sup>	ORLEN Lietuva <sup>2</sup>	ENERGA Group <sup>2</sup>	Others and consolidation corrections	TOTAL
Revenues	33 474	8 004	7 575	4 939	-8 515	45 477
EBITDA LIFO	-590	209	589	1 107	1 471	2 786
LIFO effect <sup>1</sup>	1 647	445	46	-	36	2 174
EBITDA	1 057	654	635	1 107	1 507	4 960
Depreciation	540	261	54	279	266	1 400
EBIT	517	393	581	828	1 241	3 560
EBIT LIFO	-1 130	-52	535	828	1 205	1 386
Financial income	944	55	17	53	-624	445
Financial costs	-985	-67	-17	-90	620	-539
Net result	387	312	514	626	1 006	2 845

<sup>1</sup> Calculated as a difference between operating profit acc. to LIFO and operating profit based on weighted average

<sup>2</sup> ORLEN Unipetrol, ORLEN Lietuva and ENERGA Group results acc. to IFRS before taking into account adjustments made for ORLEN Group consolidation

PLN m	1Q21	4Q21	1Q22	Δ (y/y)	3M21	3M22	Δ
Revenues	2 848	6 825	7 575	166%	2 848	7 575	166%
EBITDA LIFO	66	179	589	792%	66	589	792%
EBITDA	130	246	635	388%	130	635	388%
EBIT	94	195	581	518%	94	581	518%
Net result	89	187	514	478%	89	514	478%

- Higher revenues resulting from increase in refining products quotations and sales volumes.
- Higher utilization of refining capacity by 31 pp (y/y) mainly due to favorable macroeconomic situation. Lower fuel yield by (-) 3 pp (y/y) resulting from higher share of high-sulphur crude oils in throughput.
- EBITDA LIFO higher by PLN 523 m (y/y) due to positive macro impact (y/y), including mainly B/U diff, cracks on light and middle distillates, higher refining sales volumes and positive impact of historical inventory layers usage. Abovementioned positive effects were partially limited by negative impact of inventories revaluation (NRV) in the amount of PLN (-) 127 m (y/y), lower (y/y) trade margins and negative impact (y/y) of hedging transactions.
- CAPEX 1Q22: PLN 132 m.

PLN m	1Q21	4Q21	1Q22	Δ (y/y)	3M21	3M22	Δ
Revenues	4 347	7 417	8 004	84%	4 347	8 004	84%
EBITDA LIFO	147	303	209	42%	147	209	42%
EBITDA	382	487	654	71%	382	654	71%
EBIT	143	219	393	175%	143	393	175%
Net result	115	140	312	171%	115	312	171%

- Increase in revenues as a result of higher quotations of refining and petrochemical products and higher sales volumes in refining and petrochemical segments due to market situation improvement.
- Increase of crude oil throughput (y/y) and utilization of refining capacity by 3 pp despite planned maintenance shutdown of Kralupy refinery.
- EBITDA LIFO higher by PLN 62 m (y/y) due to positive macro impact (y/y), including mainly B/U diff and cracks on light and middle distillates, olefins, polyolefins as well as PVC and fertilizers. Additionally, positive impact of usage of historical inventory layers, increase in trade and retail margins at negative impact of inventory revaluation (NRV) in the amount of PLN (-) 70 m (y/y) and negative impact (y/y) of hedging transactions.
- CAPEX 1Q22: PLN 458 m.

PLN m	1Q21	4Q21	1Q22	Δ (y/y)	3M21	3M22	Δ
Revenues	3 460	3 706	4 939	43%	3 460	4 939	43%
EBITDA	758	340	1 077	42%	758	1 077	42%
EBIT	484	41	805	66%	484	805	66%
Net result	384	-26	611	59%	384	611	59%

- Increase in revenues (y/y) as a result of higher revenues in Sales Business Line (higher energy sales prices on the wholesale market) and Generation Business Line (higher Energy sales prices and generation volumes).
- EBITDA higher by PLN 319 m (y/y) due to higher results in Distribution Business Line (increase in margin on distribution services resulting from lower level of network losses and higher volumes of energy distributed) and Generation Business Line (higher margins on energy sales and higher generation volumes).
- CAPEX 1Q22: PLN 316 m.

# Production data



<b>ORLEN Group</b>	<b>1Q21</b>	<b>4Q21</b>	<b>1Q22</b>	<b>Δ (y/y)</b>	<b>Δ (q/q)</b>	<b>3M21</b>	<b>3M22</b>	<b>Δ</b>
Crude oil throughput (kt)	6 237	8 553	8 162	31%	-5%	6 237	8 162	31%
Utilization	72%	96%	94%	22 pp	-2 pp	72%	94%	22 pp
<b>PKN ORLEN <sup>1</sup></b>								
Crude oil throughput (kt)	3 040	4 064	4 106	35%	1%	3 040	4 106	35%
Utilization	76%	99%	102%	26 pp	3 pp	76%	102%	26 pp
Fuel yield <sup>4</sup>	77%	82%	81%	4 pp	-1 pp	77%	81%	4 pp
Light distillates yield <sup>5</sup>	32%	32%	33%	1 pp	1 pp	32%	33%	1 pp
Middle distillates yield <sup>6</sup>	45%	50%	48%	3 pp	-2 pp	45%	48%	3 pp
<b>ORLEN Unipetrol <sup>2</sup></b>								
Crude oil throughput (kt)	1 640	1 933	1 703	4%	-12%	1 640	1 703	4%
Utilization	76%	88%	79%	3 pp	-9 pp	76%	79%	3 pp
Fuel yield <sup>4</sup>	82%	82%	83%	1 pp	1 pp	82%	83%	1 pp
Light distillates yield <sup>5</sup>	36%	37%	36%	0 pp	-1 pp	36%	36%	0 pp
Middle distillates yield <sup>6</sup>	46%	45%	47%	1 pp	2 pp	46%	47%	1 pp
<b>ORLEN Lietuva <sup>3</sup></b>								
Crude oil throughput (kt)	1 472	2 470	2 263	54%	-8%	1 472	2 263	54%
Utilization	59%	96%	90%	31 pp	-6 pp	59%	90%	31 pp
Fuel yield <sup>4</sup>	78%	77%	75%	-3 pp	-2 pp	78%	75%	-3 pp
Light distillates yield <sup>5</sup>	32%	33%	32%	0 pp	-1 pp	32%	32%	0 pp
Middle distillates yield <sup>6</sup>	46%	44%	43%	-3 pp	-1 pp	46%	43%	-3 pp

<sup>1</sup> Throughput capacity for Plock refinery is 16,3 mt/y

<sup>2</sup> Throughput capacity for Unipetrol is 8,7 mt/y [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. Differences may occur from rounding

<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

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

Total input calculated acc. to Brent Crude quotations. Spot market quotations.

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

Contract market quotations.

**Fuel yield** = middle distillates yield + gasoline yield (yields 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

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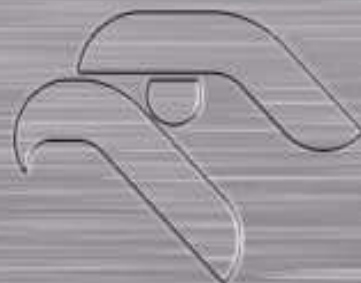
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