



# Project ECO2CEE

(prev. EU CCS Interconnector)



06.06.2023

# ORLEN Group – leading multi-utility player in Central Europe



## Upstream



**~1,280 mboe**

2P crude oil and gas reserves reserves in Canada, Poland, Norway, Pakistan and Lithuania

**~191 k boe/day**

of average hydrocarbon production in Canada, Poland, Norway, Pakistan and Lithuania

## Refining



**7 refineries**

in Poland, the Czech Republic and Lithuania

**~37m tonnes**

annual crude throughput – regional leader

**~0.3m tonnes**

of biofuel output

## Petrochemicals



**40**

petrochemical products, marketed in over 60 countries

**16%**

share of advanced products in the portfolio

## Gas distribution, trading and storage



**>3.2 bcm – capacity**

of gas storage facilities

**~14 bcm of imports**

of natural gas to Poland (including LNG)

**206 LNG deliveries**

(58 in 2022; 5.8 bcm after regasification)

**>200,000 km of distribution network**

for natural gas (including connections)

**>11.3 bcm**

of natural gas distributed

## Retail



**~3,100 service stations**

in six countries

**~2,500**

non-fuel outlets

**>15m customers**

of fuel stations in the region

**>3m customers**

of electricity

**>7m customers**

of natural gas

## Energy



**~5.1 GW**

installed capacity, including ~0.7 GW in renewables and ~1.7 GW in gas-fired units

**~200,000 km**

of power lines

# ORLEN 2030 leads the Energy transition in Central Europe

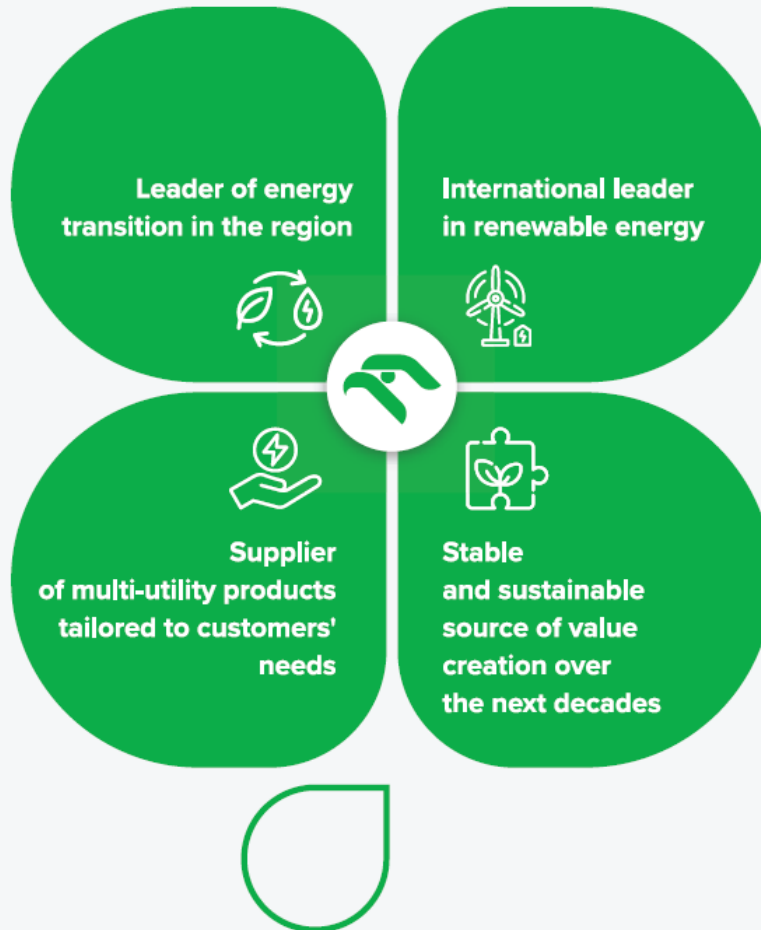


**25% absolute reduction in CO<sub>2</sub>e emissions**

from refining, petrochemicals and upstream by 2030<sup>1</sup>

**Diversified portfolio**

Fuels, gas, electricity, petrochemicals, e-mobility and renewable hydrogen



**~40%**

of capex in 2023–2030 to be spent on green projects

**~PLN 400 bn**

Realization of full cumulated EBITDA potential in 2023–2030

1. For Scope 1 and 2 emissions.

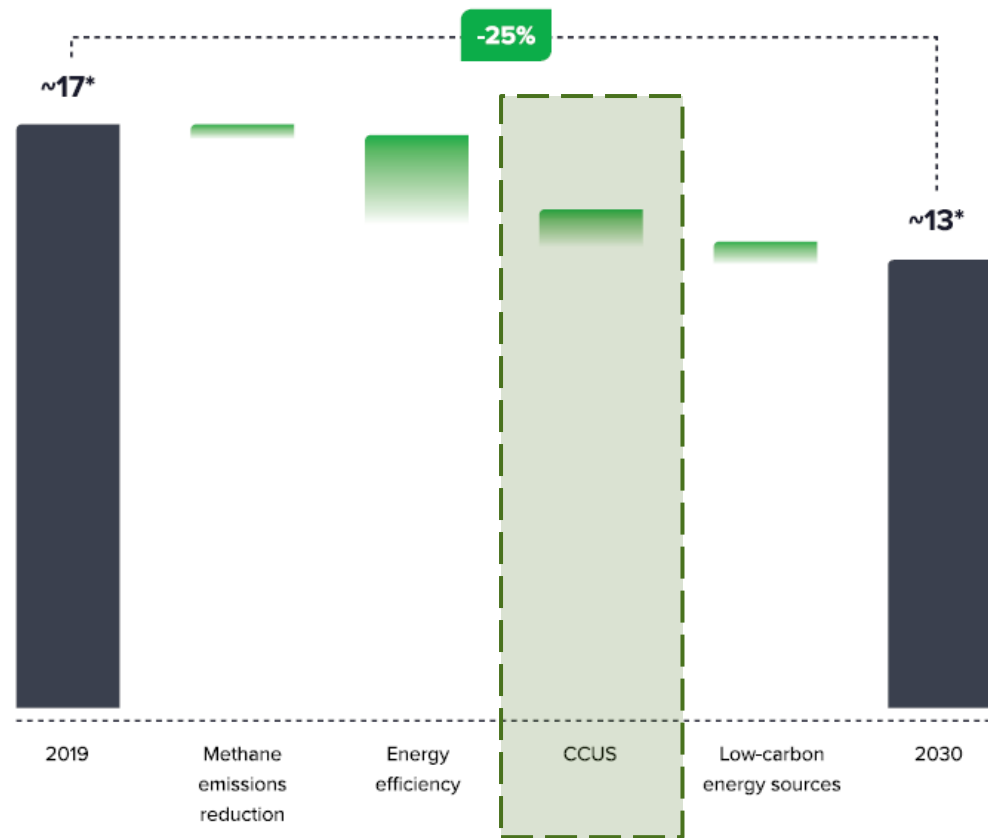
# By 2030, we will reduce 25% absolute emissions in Refining, Petrochemicals and Upstream



## The 25%<sup>1</sup> reduction target reflects:

- reduction of methane emissions and of flaring in upstream operations – Zero Routine Flaring and Zero Venting targets
- implementation of energy efficiency solutions
- deployment of carbon capture, utilization and storage technologies (CCUS)
- use of energy from low- and zero-carbon sources in the Refining, Petrochemical and Upstream facilities

GHG emissions in Refining, Petrochemicals and Upstream (MtCO<sub>2</sub>e)



<sup>1</sup> The target applies to Scope 1 and 2 greenhouse gas emissions in Refining, Petrochemicals and Upstream, calculated on an equity share basis.

\* Emissions volume in the base year will be subject to final review after the merged ORLEN Group companies are fully consolidated.

~3 m tCO<sub>2</sub>/year  
(for own needs and as service for third-party customers)

## Scheme of the project

### PARTNERS



### Scope of the Project:

- Multi-modal export-import CO<sub>2</sub> Terminal in Poland,
- CO<sub>2</sub> transport infrastructure in Poland and Lithuania

### Stages of the Project:

- Stage 1: ~ 3 Mt/y – 2027-2030,
- Stage 2: ~ 9 Mt/y – after 2030+.



### Emitters in Stage 1:

- PKN ORLEN – Plock refinery (~1 MT/y),
- LAFARGE – Kujawy Cement Plant (~1 MT/y) – **obtained funds from Innovation Fund (Project Go4ECOPlanet),**
- Other customers (~1 MT/y).

**Good location of Poland – connection to the Baltic Sea and easy connection to the North Sea.**

**Development of an open access CCS concept in the CEE region with potential to facilitate decarbonisation and address competitiveness of high emission sectors in Lithuania and Poland.**



**DONE**

- 5th list of Project of Common Interest (PCI),
- Location Study – confirmed place of CO<sub>2</sub> Terminal – Gdańsk,
- Cooperation plan between Poland and Lithuania signed.

**IN PROGRESS**

- Feasibility Study for the rail transportation of CO<sub>2</sub>,

**TO DO**

- Feasibility Study for the maritime transportation of CO<sub>2</sub> (from CO<sub>2</sub> Terminal to place of sequestration),
- Application for the CEF-Energy „Studies” funds.