



Naftogaz
Ukrigasvydobuvannya

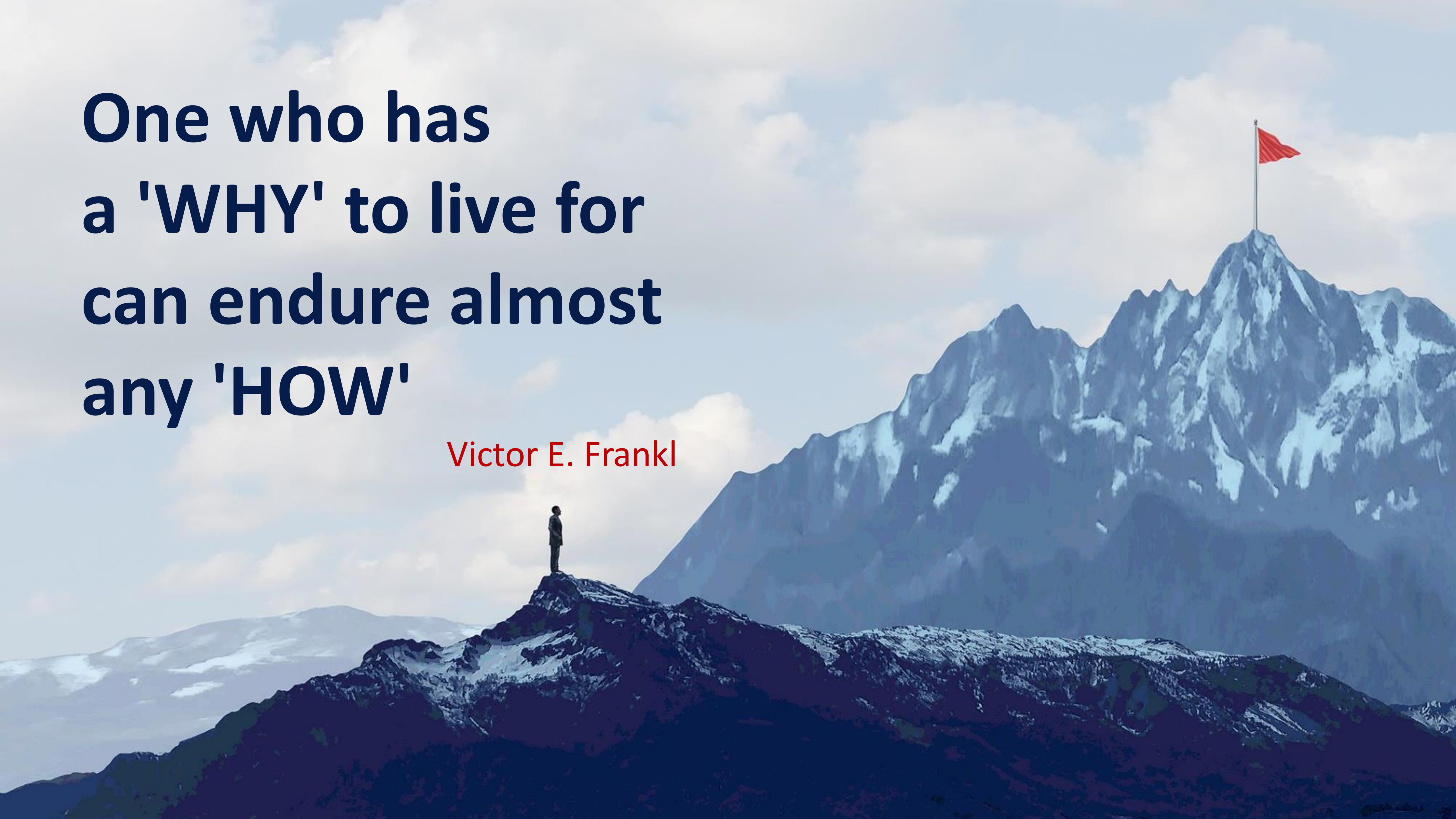


Energy Under Fire: Sustaining Gas Production in Wartime Ukraine

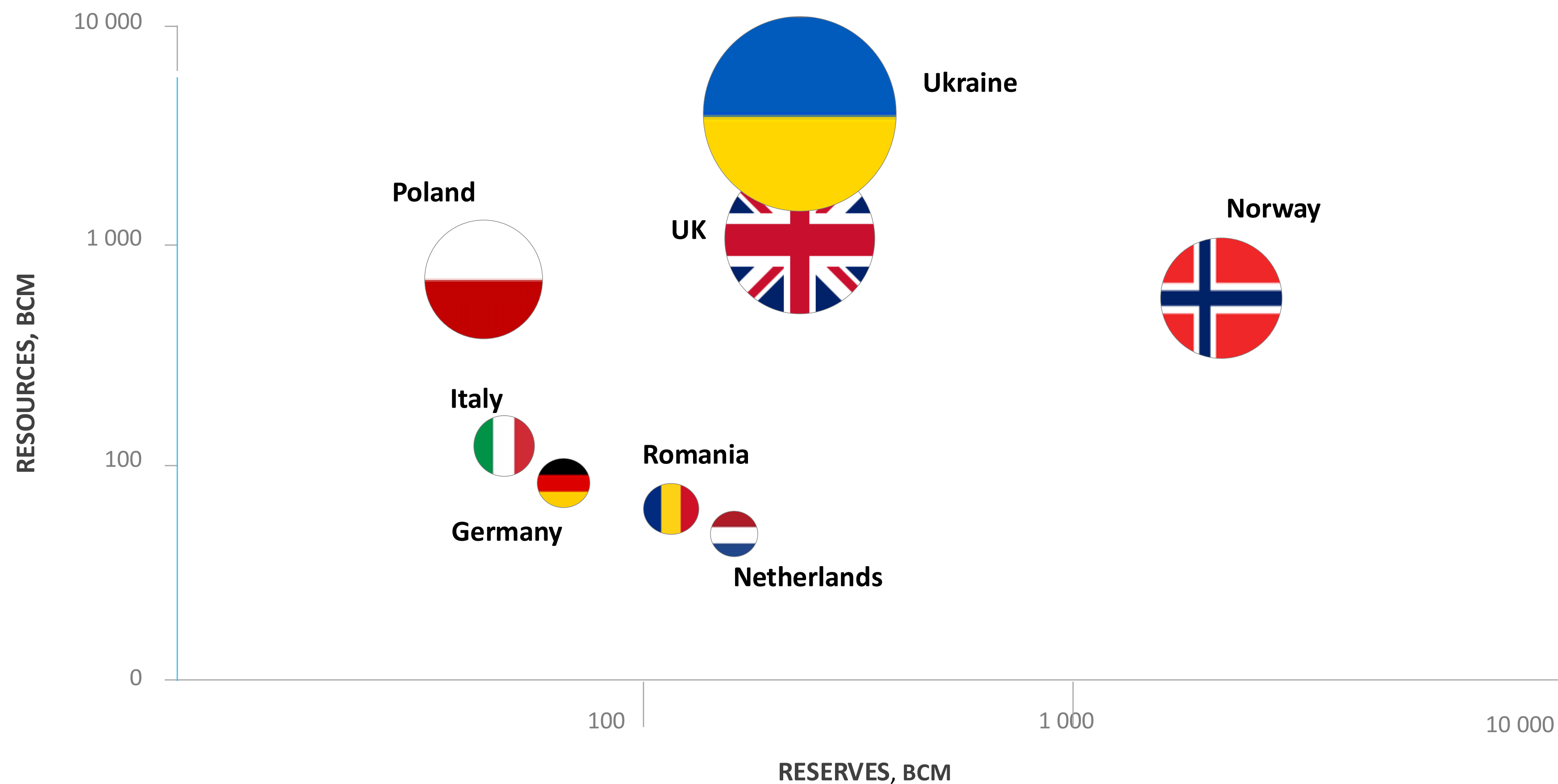
Maxim Vityk,
Ukrigasvydobuvannya JSC,
Naftogaz Group

One who has
a 'WHY' to live for
can endure almost
any 'HOW'

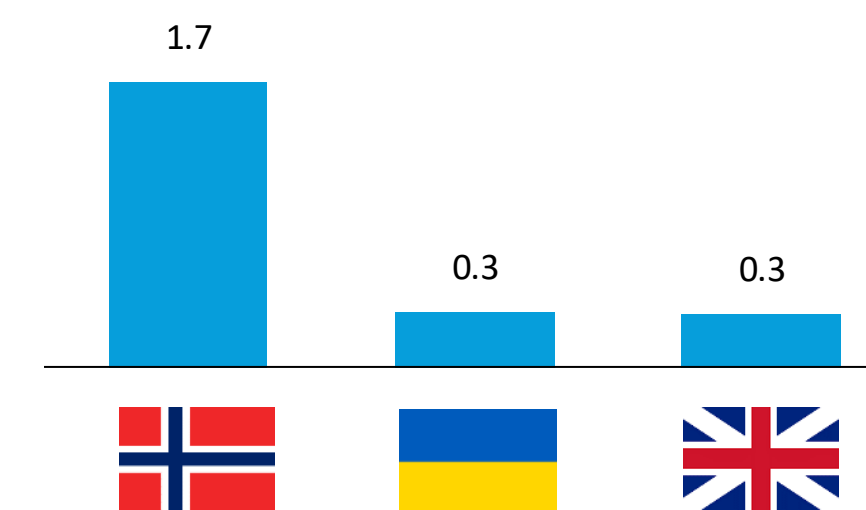
Victor E. Frankl



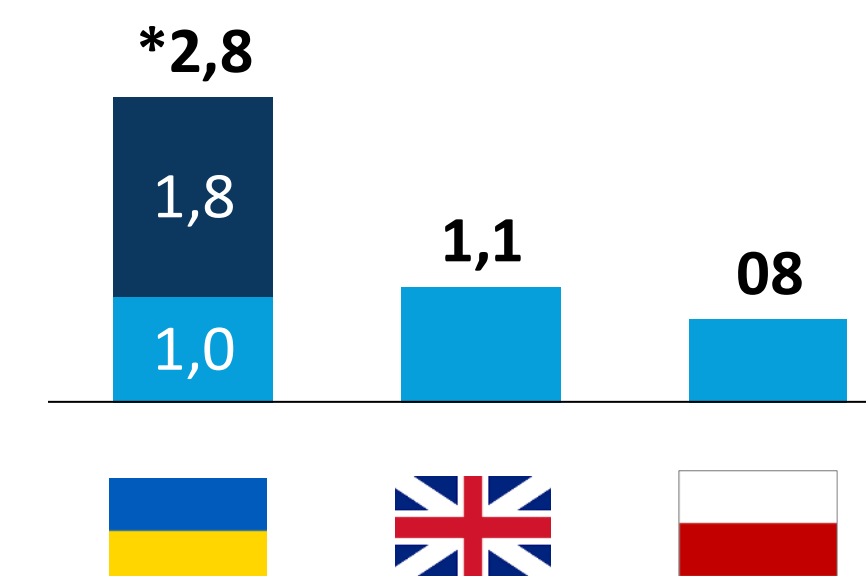
Ukraine endowed to be one of Europe's most promising gas resource geologic provinces



No 2 by reserves (2P)
(trillion cubic meters)



No 1 by resources (C+U)
(trillion cubic meters)



Unconventional (shale gas)
Conventional

Note: reserves level in Ukraine is adjusted for UGV and Ukrnafta figures to reflect PRMS 2P reserves (includes producing, behind pipe, and undrilled)

Source: RystadUcube, State service of geology and subsoil of Ukraine, Ukraine gas association, Norwegian Petroleum Directorate resources. All based on 01.01.2021

UKRGASVYDOBUVANNTYA (UGV) – Ukraine's Gas Powerhouse



236 BCM –
the largest gas
reserves base
in Ukraine



75% of domestic gas
production
in Ukraine



42 drilling rigs –
the largest operating
drilling fleet onshore
Europe



**Among TOP-3
largest taxpayers**
in Ukraine



232 social projects
implemented
in 11 regions of Ukraine
during 2021-2023



18 thousand
employees



During three years of war,
we lost 80 colleagues,
249 were injured
and 15 are missing

IMPACT ON INFRASTRUCTURE

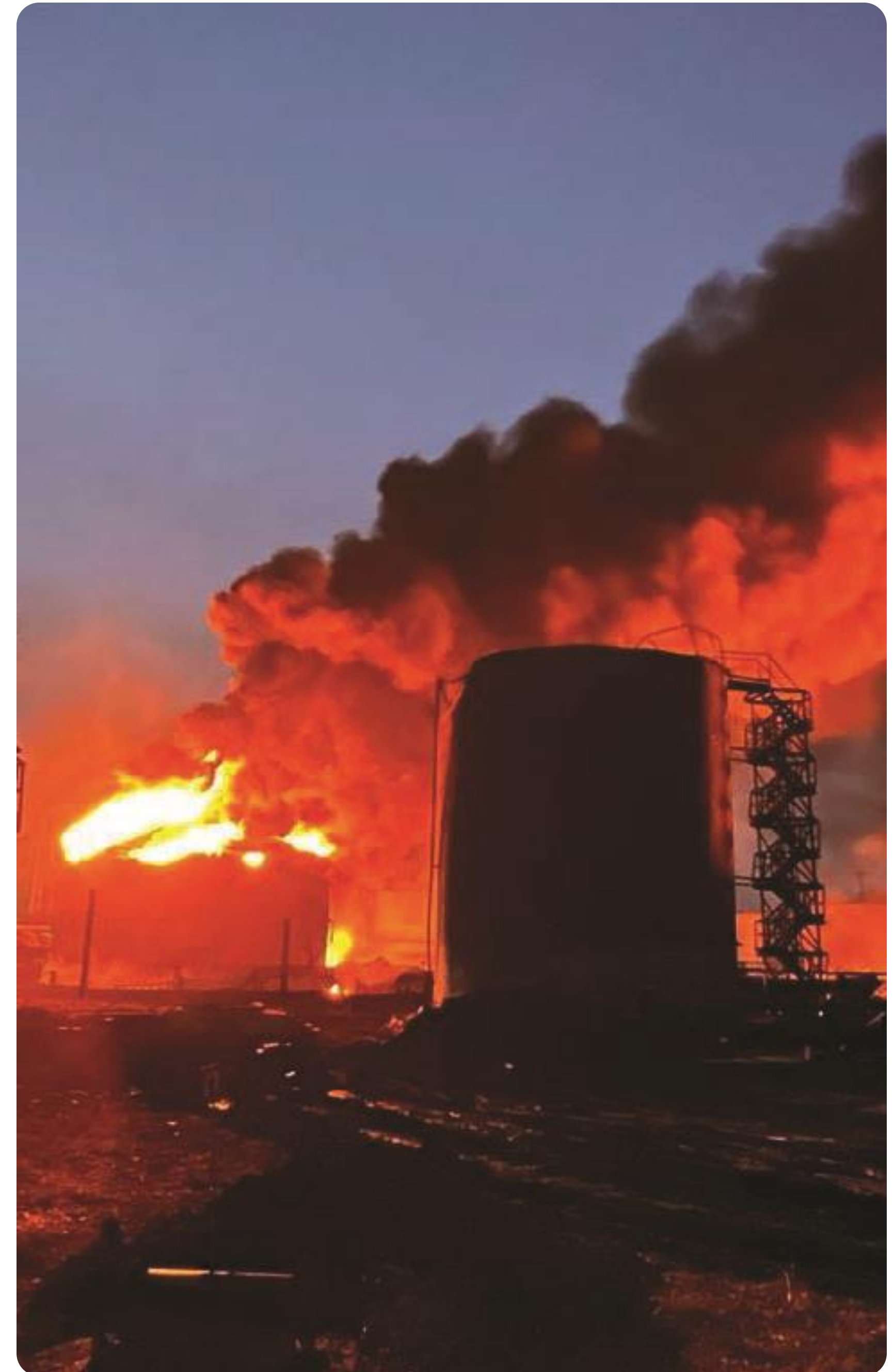
- Numerous production facilities and critical equipment was damaged or destroyed.
- A total of 20 Integrated Gas Treatment Facilities have been shut-down or are under occupation.

REFURBISHMENT

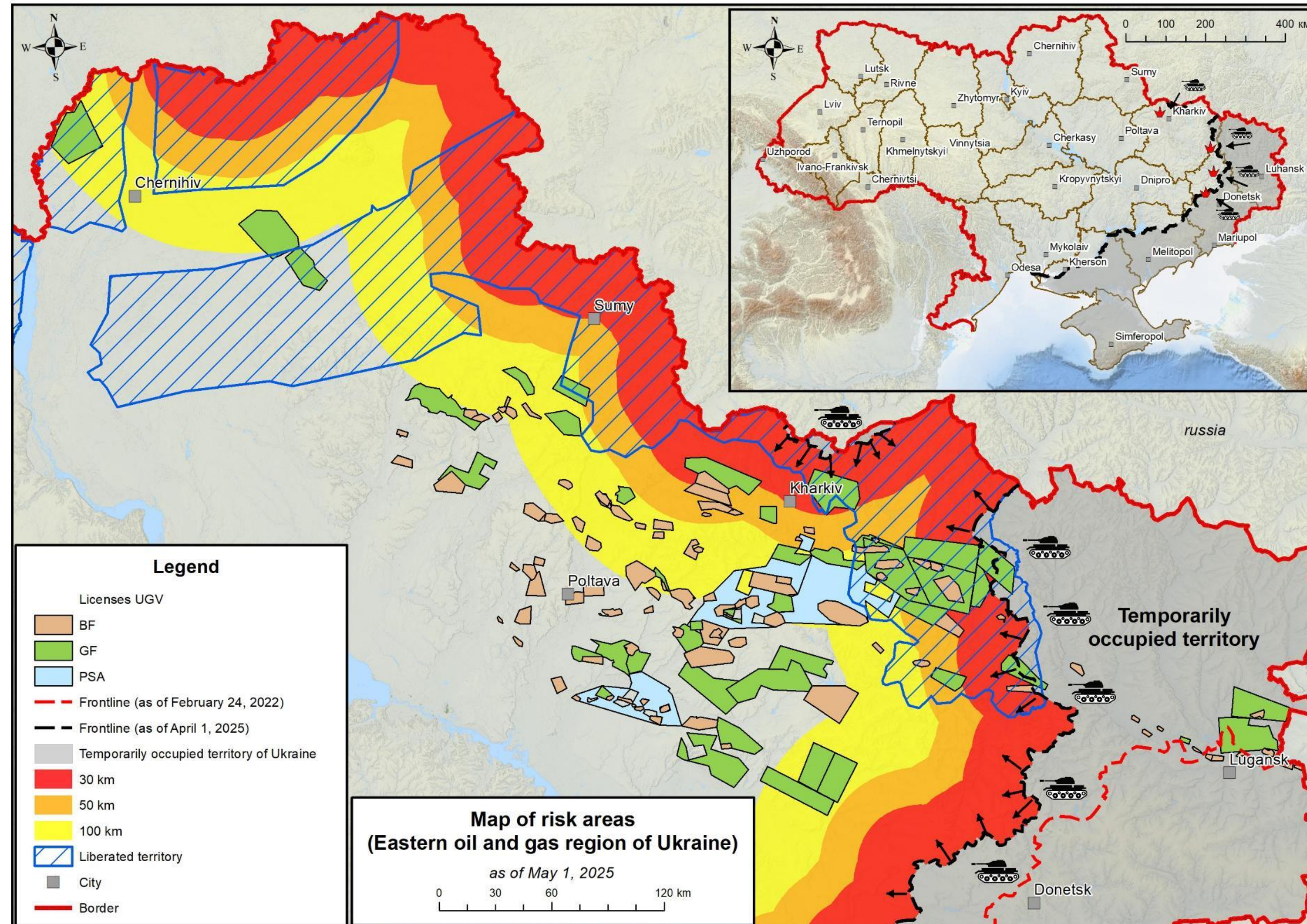
- The company is working on rebuilding and refurbishing in concise term.

IMPACT AFTER THE LAST MASSIVE ATTACK

- Lost 55% of gas production



Operating on the edge of the front line – and still growing production



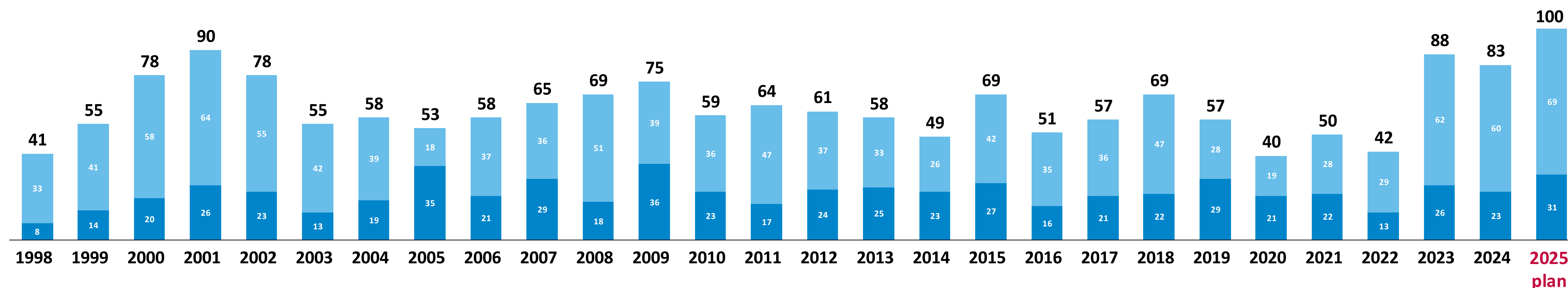
- Over 30% UGV acreage located within 50 km from the front line
- Damage to infrastructure, disruptions to operations, safety hazards to personnel
- UGV aggressive drilling and 3D seismic acquisition:
100 wells, 3,000 sq.km 3D per year

Distance from the front line



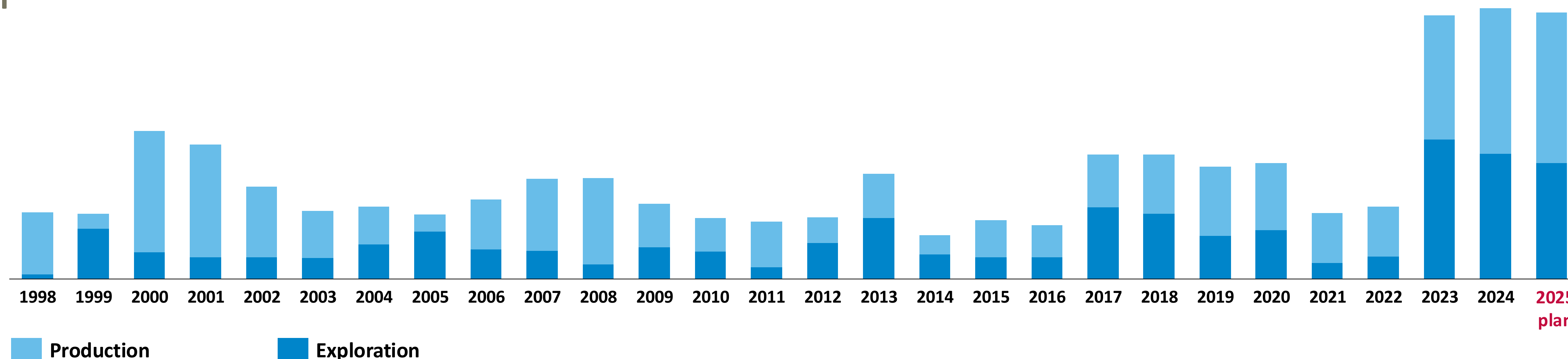
UGV gas production from wells drilled in 2023-25: the best performance in the last 25 years

Number of wells



Production

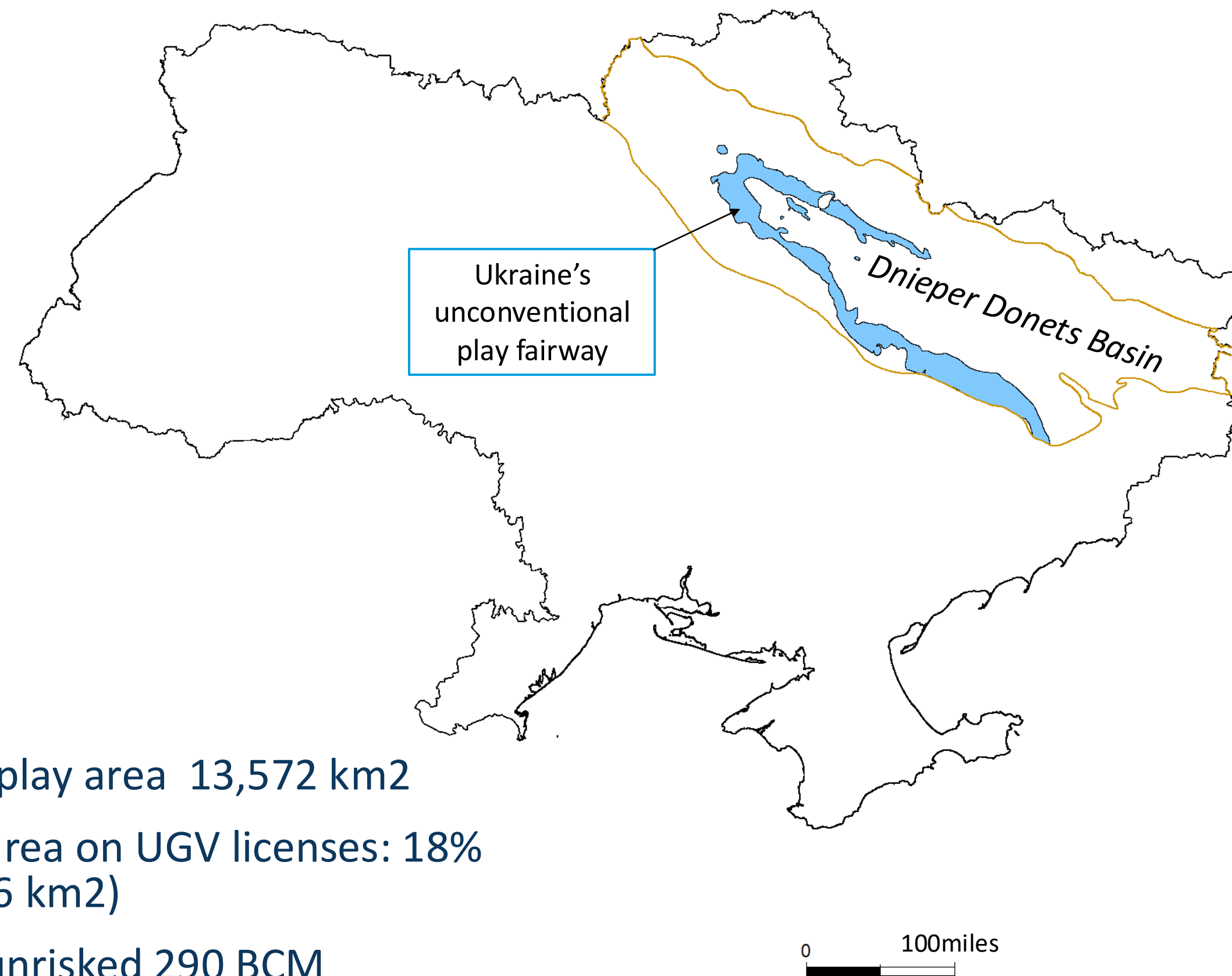
Increased 2-4 times compared to pre-war years



Exploring Europe largest unconventional play in Ukraine: comparable in scale and quality to major Texas shale plays



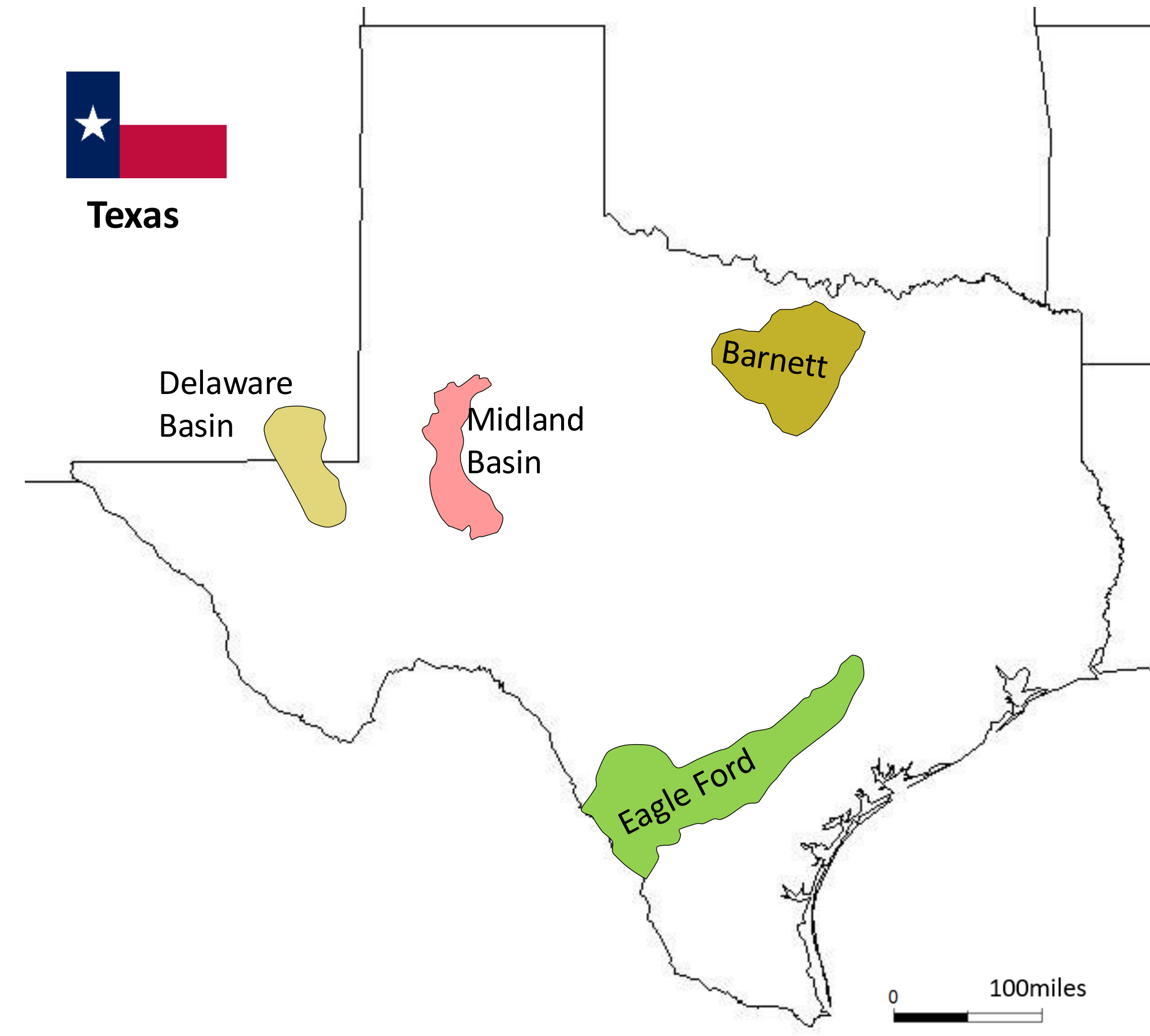
Ukraine



- Total play area 13,572 km²
- Play area on UGV licenses: 18% (2,506 km²)
- EUR unrisked 290 BCM
- De-risking stage: 4-6 horizontal well drilling plan for 2025-26



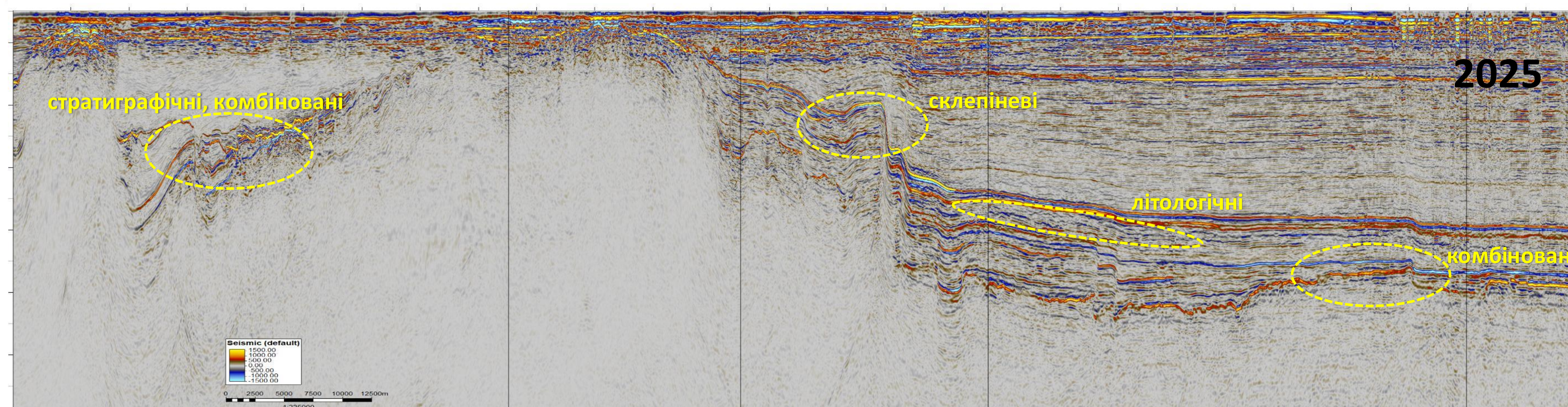
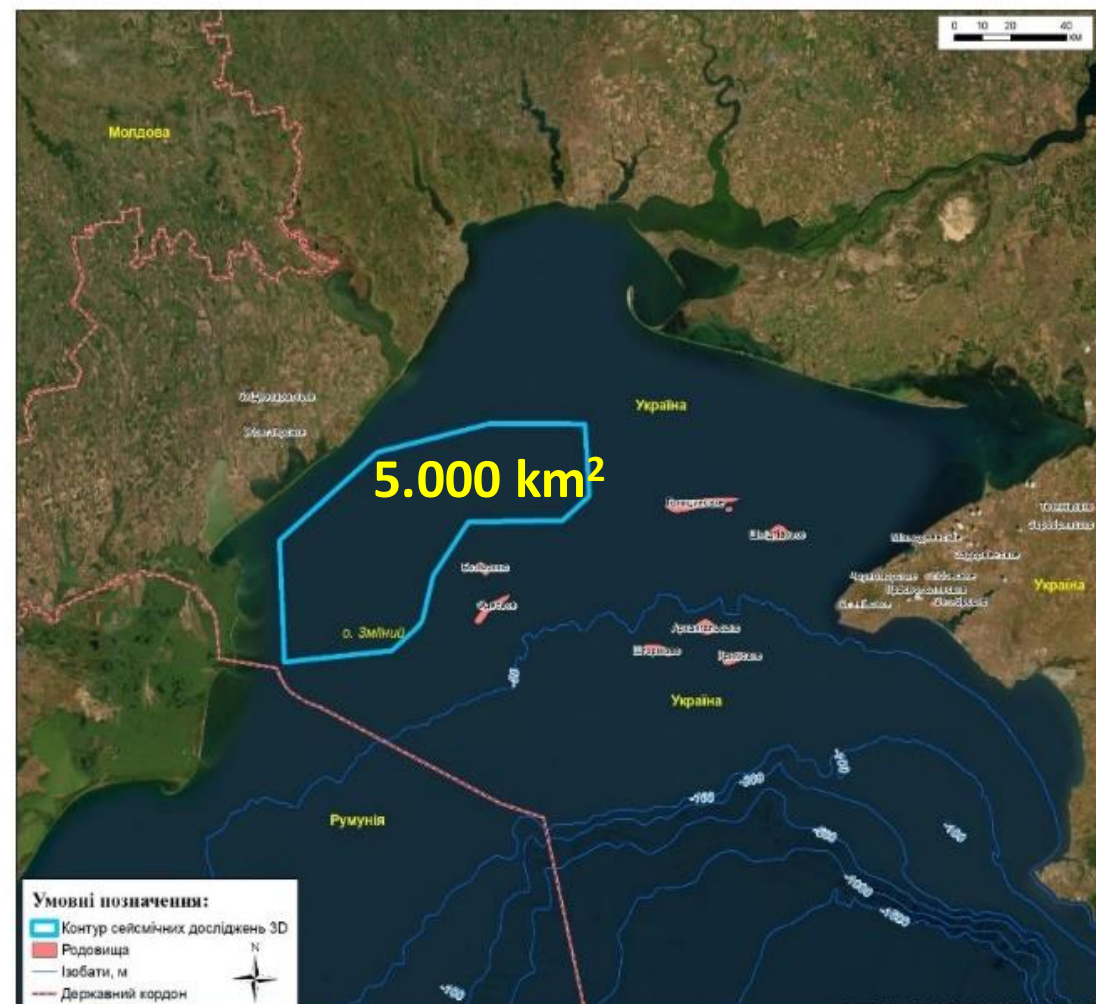
Texas



Note: Same scale for Ukraine and Texas maps

Source: Naftogaz Group

Major offshore exploration initiative in the Black Sea: 5,000 km² 3D seismic and 40+ drill ready prospects



- 2021 Field work 5,000 km² 3D seismic completed
- russian interference during 3D acquisition field work
- 2022 Time processing PSTM completed
- 2023-25 deep processing PSDM+FWI and interpretation ongoing
- 40+ prospects based on new 3D

Key strategic areas for increasing gas production

- 3D seismic
- Horizontal drilling
- Offshore

