

# UKRAINE

# Investment Opportunities

# in Exploration & Production

Strategic and Critical Raw Materials



Ministry of Environmental  
Protection and Natural  
Resources of Ukraine



Au  
Co  
Mo  
Ti  
Li  
Zr  
Be  
Cr  
Ni  
Cu  
Ta



## Key messages

**Mineral resources base of Ukraine** is able to meet the needs of the national industry and to facilitate its export potential.

Domestic enterprises consume mainly local raw materials for metallurgy, machine building and construction. Energy resources, agrochemical raw materials, non-ferrous metals and coking coal are imported in significant amounts, thus referring them to the **critical minerals** category.

Meanwhile, deposits of the so-called metals of a low-carbon future used in innovation technology are hardly produced. It is important now to increase their production and create beneficiation and primary processing capacities, as demand for them is expected to grow rapidly in the world market.

Available resources and prospects for production of metals of the future will enable development of new modern industries in the country. This flags their **strategic importance** for establishment of Ukraine on the global stage a in a new role.

The **Investment Atlas** contains proposals with deposits of strategic and critical raw materials for their purchase at e-auctions.



# Strategic and Raw Materials

<b>Li</b> Lithium	<b>Ti</b> Titanium	<b>Ni</b> Nickel	<b>Co</b> Cobalt	<b>Cr</b> Chrome	<b>Ta</b> Tantalum	<b>Nb</b> Niobium	<b>Be</b> Beryllium
<b>Zr</b> Zirconium	<b>Sc</b> Scandium	<b>Mo</b> Molybdenum	<b>Au</b> Gold	<b>C</b> Graphite	<b>C<sub>(x)</sub>H<sub>(x)</sub></b> Hydrocarbons	<b>Ce</b> Cerium	

The list is not limited to the above mentioned

# Lithium

- Ukraine possesses one of the largest lithium deposits in Europe with proved reserves and measured resources.
- It is an ultralight metal used for manufacturing of cell phone batteries, computers and electric cars, glass and ceramics.
- There are three lithium fields and one explored prospective area, as well as a number of promising accumulations.
- Nowadays Lithium is not extracted in Ukraine. One lithium field was licensed in 2017.

### KRUTA BALKA license



- lithium ore, tantalum niobium, rubidium cesium-containing
- exploration license
- Zaporizhzhia region
- 150 ha
- lithium oxide content: ~0.86%
- measured resources – 'for official use only'

Open for nomination

### DOBRA license



- lithium ore, tantalum niobium, rubidium, cesium beryllium, tin
- production license
- Kirovohrad region
- 90 ha
- lithium oxide content: ~1.38
- measured resources – 'for official use only'

Open for nomination

### SHEVCHENKIVSKE license



- lithium ore tantalum, niobium, beryllium
- production license
- Donetsk region
- 40 ha
- lithium oxide content: ~1.1
- proved reserves – 'for official use only'

Is being prepared for e-auction

# Lithium ore spots



- Licensed blocks
- Prepared for e-auction
- Is being prepared for e-auction



# Titanium

- Ukraine is among top ten countries in the world in terms of proven reserves of titanium ores and provides more than 6% of their global production.
- 27 discoveries fields and more than 30 prospective areas have been explored. The main titanium-containing mineral is ilmenite.
- Currently, only placer deposits are being developed, which are about 10% of all proven reserves. The rest is contained in indigenous deposits. Assers prepared for auction are placer deposits.
- Titanium and its alloys are used in aviation and missile technology, ship-building, machine building, food, medical industry and non-ferrous metallurgy.

## SELYSHCHANSKA license



- titanium ore
- exploration license
- Zhytomyr region
- 1860 ha
- content of  $TiO_2$  –  
50–70 kg / m<sup>3</sup>

Sold for \$1.8 million  
April, 2021

## MALYSHIVSKE (North-Western – 2) license



- titanium ores, zirconium  
disten, sillimanite, staurolite
- exploration license
- Dnipropetrovsk region, Kirovohrad region
- 3310 ha
- indicated resources (thousand tons):  
Disten + sillimanite – 1408  
staurolite – 568  
rutile-ilmenite sands – 'for official use only'

Open for nomination

## PIDLISNA license



- titanium ores, zircon
- exploration license
- Zhytomyr region
- 570 ha
- inferred resources  
(million tons):  
P<sub>2</sub> – 17

Is being prepared for e-auction

## BILOVODSKA license



- titanium ores, zirconium
- exploration license
- Sumy region
- 62 ha
- inferred resources of titanium-zirconium ores (thousand tons):  
zircon – 11  
rutile – 15

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Open for nomination

## KORCHAKIV license



- titanium ores, zirconium
- exploration license
- Sumy region
- 750 ha
- inferred resources of titanium-zirconium ores (thousand tons):  
zirconium – 115  
rutile – 137

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Open for nomination

## KHRAPIVSCHYNA license



- titanium ores, zirconium
- exploration license
- Sumy region
- 170 ha
- inferred resources of titanium-zirconium ore (thousand tons):  
zirconium – 59  
rutile – 75

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Open for nomination

## HAYDARIV license

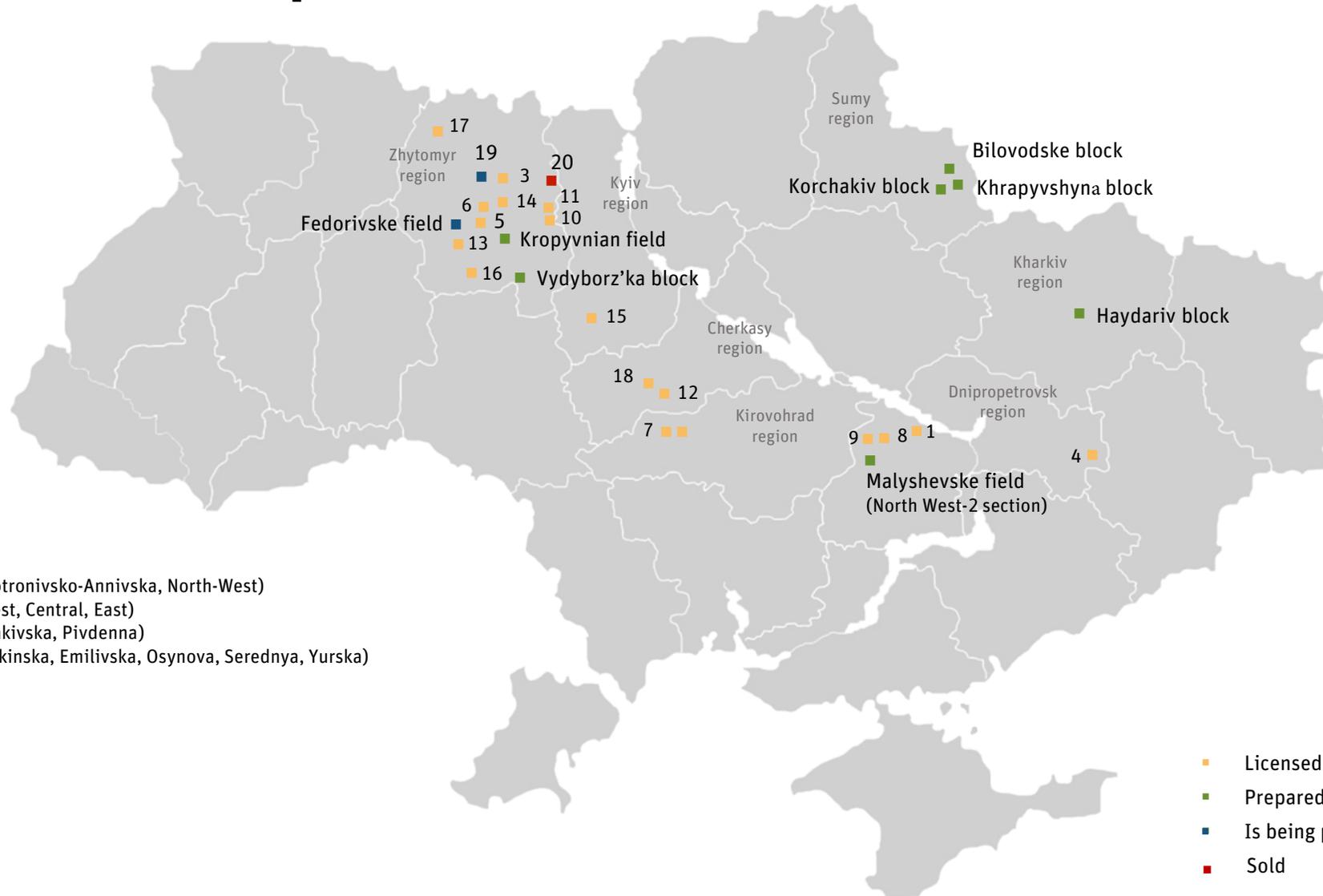


- titanium ores zirconium
- exploration license
- Kharkiv region
- 971 ha
- inferred resources of titanium-zirconium ores cat. P<sub>2</sub> (thousand tons):  
ilmenite – 1759  
zirconium – 402

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Open for nomination

# Titanium ore spots



1. Balka Kruta technogenic field
2. Birzulivske field
3. Valky-Gatskivske field
4. Vovchanske field
5. Krasnorichenske field
6. Livoberezhne field
7. Likarivske field
8. Malyshevske field (sections Motronivsko-Annivska, North-West)
9. Malyshevske field (sections West, Central, East)
10. Mezhyrichne field (sections Isakivska, Pivdenna)
11. Mezhyrichne field (sections Bukinska, Emilivska, Osynova, Serednya, Yurska)
12. Nosachivske field
13. Paromivske field
14. Stremyhorod field
15. Tarasivske field
16. Trostyanets field
17. Yurivska block
18. Avramivska block
19. Pidlisna block
20. Selyshchanska block

- Licensed blocks
- Prepared for e-auction
- Is being prepared for e-auction
- Sold

# Nickel, cobalt, chromium, copper, molybdenum

- Ukraine possesses considerable deposits of non-ferrous metals and imports significant volumes of those for its own needs.
- Explored fields and prospective areas are complex and mainly concentrated within the Ukrainian Crystalline Belt.
- The production of these raw materials is either not carried out or is very limited.
- The estimated reserves are (thousand tons):  
nickel – 215, cobalt – 8.8, chromium oxide – 453;  
measured and indicated resources (thousand tons):  
chromium oxide – 3120, copper – 95.

### PROSPECTIVE FIELD ZALISY-SHMEN'KY license



- ores of copper
- exploration license
- Volyn region
- 2337 ha
- content of Cu – up to 2.6%
- measured resources  
(thousand tons):  
cat. P<sub>2</sub> – 160

Sold for \$ 735 000  
February, 2021

### LYPOVENKIVSKE license



- ores of chromium, nickel  
cobalt
- production license
- Kirovohrad region
- 42 ha
- content of Co – up to 0.043%,  
Ni – up to 1.05%
- chromium ore reserves  
(thousand tons) cat. C<sub>1</sub> – 1.061  
ores of cobalt-nickel-silicate  
reserves cat. A+B – 4694  
inferred resources – 3225

Open for nomination

## VERBYNSKA license



- molybdenum ore
- exploration license
- Zhytomyr region
- 290 ha
- content of Mo – up to 2%
- measured resources (thous. tons)  
cat. C<sub>2</sub>: molybdenum – 1.792  
Mo – 5  
cat. P<sub>1</sub>: molybdenum – 90  
Mo – 2.7

Open for nomination

## ZHELEZNIAKY license



- ores of copper, nickel, cobalt  
platinum, palladium
- exploration license
- Zhytomyr region
- 290 ha
- content of Ni – 0.66%  
Cu – 0.063%, Co – 0.013%
- inferred resources (thous. tons)  
cat. P<sub>3</sub>: Ni – 151  
Cu – 14  
Co – 3

Open for nomination

## SUKHOKHUTIRSKA license



- ores of talc-magnesite  
nickel, cobalt
- exploration license
- Dnipropetrovsk region
- 127 ha
- content of Ni – up to 0.5%
- ore reserves (thous. tons)  
cat. C<sub>2</sub>: talc-magnesite –  
75739, Ni – 73  
Co – 4

Open for nomination

# Non-ferrous metal spots



# Graphite, tantalum, niobium, beryllium, zirconium, scandium

- Graphite reserves are registered within six fields, production is carried out within only two.
- Zirconium and scandium are concentrated in placer and indigenous deposits in significant volumes, however, their extraction is not carried out.
- Reserves of tantalum pentoxide, niobium, beryllium are registered within six fields, production is carried out within Malyshevske and Vovchanske fields.
- Lipnyazhske, Tashlytske and Novostankuvatske prospective accumulations belong to one structure, there are also deposits of beryllium, lithium. Proposals are offered for exploration and can be considered as one investment project.

## HORODNIAVSKA license



- graphite
- production license
- Khmelnytskyi region
- 105 ha
- proved reserves of graphite  
graphite ore (thousand  
tons): cat. B – 28165  
 $C_1$  – 85225,  $C_2$  – 16586  
graphite oxide (thousand  
tons): cat. B – 1736  
 $C_1$  – 4848,  $C_2$  – 898

Sold for \$1.6 million  
March, 2021

## Technogenic field MAZURIVSKE (Eastern section)



- niobium ores, zirconium, feldspar
- production license
- Donetsk region
- 9 ha
- content of  $ZrO_2$  – 0,172%  
 $Nb_2O_5$  – 0,095%
- feldspar reserves  
(thousand tons) cat. B+C – 826;  
reserves of niobium, zirconium –  
'for official use only'

Open for nomination

## ZOLOCHIVSKA license

- zirconium ores  
titanium ores
- exploration license
- Kharkiv region
- 780 ha
- measured resources  
(thousand tons):  
 $Zr$  – 87  
rutile – 124

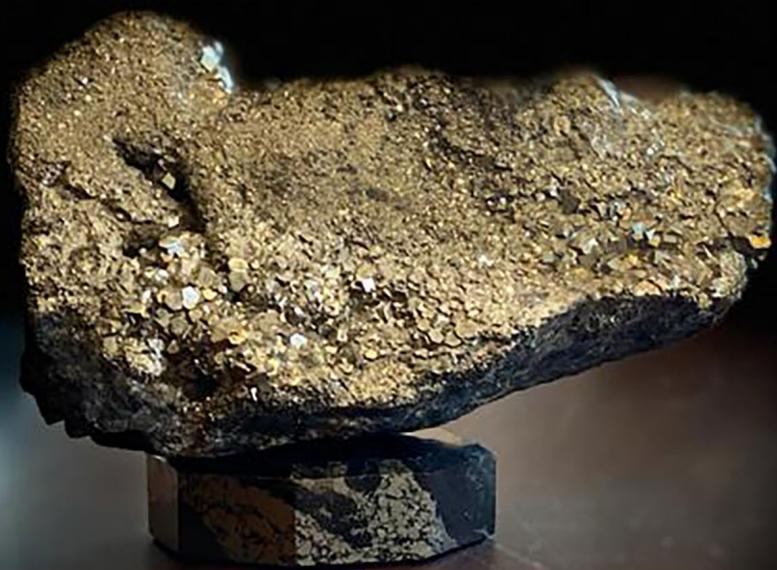
Is being prepared for e-auction

# Rare earth minerals spots



1. Lypnyazkyy prospective field
2. Tashlytsky prospective field
3. Novostankuvatske prospective field
4. Anadolske field
5. Dianivske prospective field
6. Zhovtorichenske field
7. Gurivske prospective field

- Licensed blocks
- Prepared for e-auction
- Can be nominated for an auction
- Auction
- Sold



# Gold

- Ukraine has a gold ore reserves of 3000 tons and may take one of the leading places in gold mining in Europe.
- Seven fields have been discovered, five concession licenses have been issued, and small production is currently carried out at Muzhiyivske field.
- New 5-years licenses for exploration and pilot development are open for e-auctions.

## ZHOVTOVODSKA license



- Dnipropetrovsk region
- 1150 ha
- 29 wells drilled, total depth 7.4 thousand m
- gold content – avg 1.22–2.78 g/t  
min. 0.8 g / t; niobium – 20–50 g/t
- measured, indicated resources  
of gold (thousand tons):  
P<sub>1</sub> – 16.5, P<sub>2</sub> – 12, P<sub>3</sub> – 11

Sold for \$ 205 000  
December, 2020

## BALKA SHYROKA license



- Dnipropetrovsk region
- 200 ha
- 285 wells drilled  
total depth 92.5 thousand m;  
mine depth – 168 m
- gold content – avg 7.1 g/t  
min. 3.9 g/t
- measured, indicated  
resources (thousand tons):  
P<sub>1</sub> – 12.5  
P<sub>2</sub> – 15

Open for nomination

## YURIIVSKA license



- Kirovohrad region
- 160 ha
- 71 km inclined deep wells  
17 km exploration and  
mapping wells
- gold content – avg 9.2 g/t
- measured, indicated  
resources (thousand tons):  
P<sub>1</sub> – 1.7, P<sub>2</sub> – 10.6, P<sub>3</sub> – 15

Open for nomination

## KVITKIVSKA license



- Odesa region
- 670 ha
- 25 wells drilled total depth – 8.9 thousand meters
- gold content – 0.1–14.7 g/t
- indicated resources (thousand tons): P<sub>2</sub> – 40
- Kvytkivska and Mayska blocks can be considered as a single investment project

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Open for nomination

## MAISKA license



- Odesa region
- 250 ha
- 177 wells drilled, total depth – 64,5 thousand m, mine depth – 204 m
- gold content – avg 3.4 g/t
- measured, indicated resources (thousand tons): P<sub>1</sub> – 22, P<sub>2</sub> – 19

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Open for nomination

# Gold ore spots



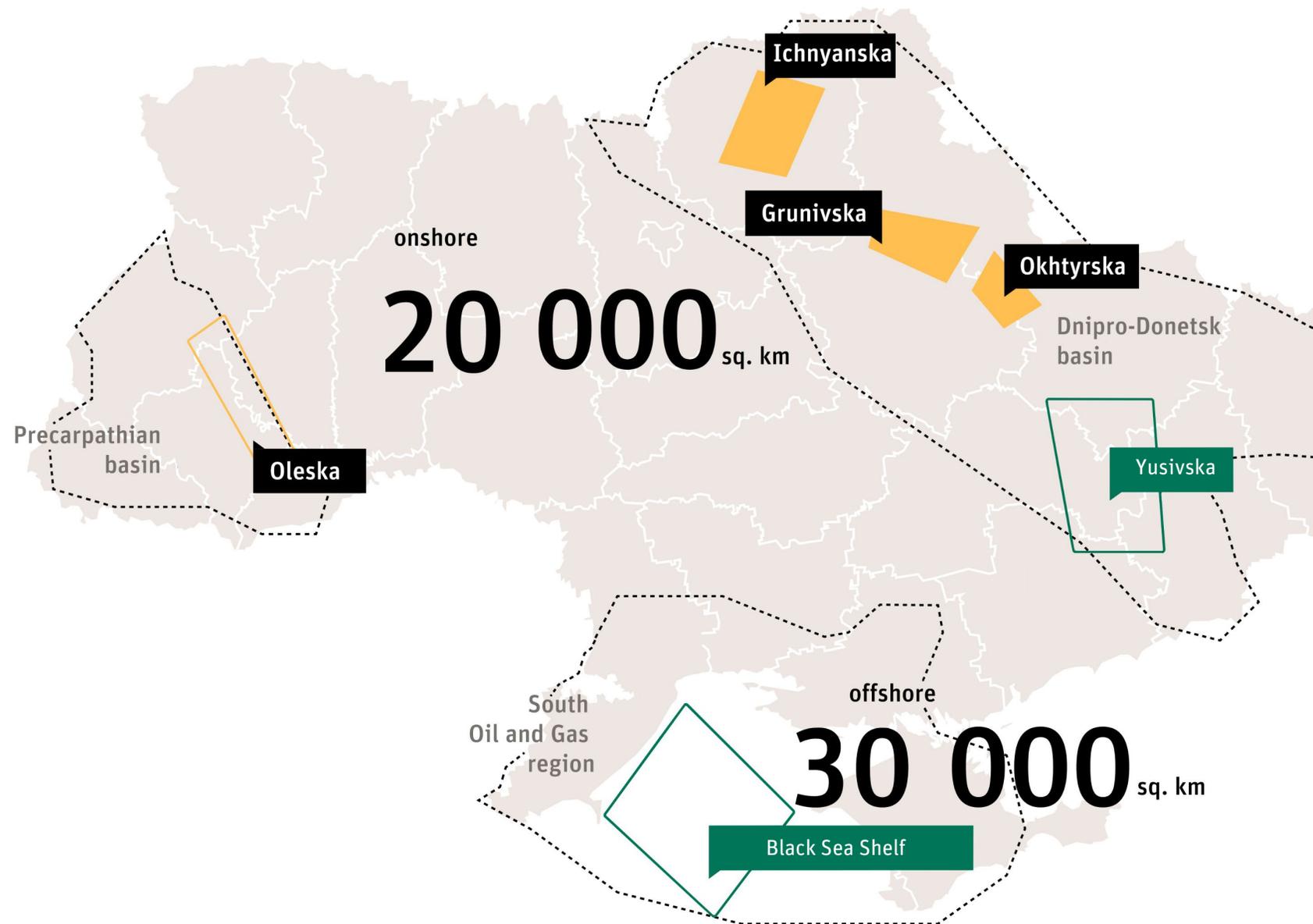
# Hydrocarbons

## Results

- Two concession licenses were sold on e-auctions
- Signing of 8 PSAs
- Re-launch of Yuzivska PSA
- Launch of offshore projects in the Black Sea

## Plans

- Signing of new PSAs
- Re-launch of Oleska PSA
- New concession licenses prepared for e-auctions



## YULIIVSKA field (ZOLOCHIV block)



- natural gas, condensate  
ethane, propane  
butanes
- production license for 20 years
- Kharkiv region
- 14 km<sup>2</sup>
- developed & undeveloped  
reserves: natural gas –  
1128 million m<sup>3</sup>  
condensate – 251 thousand tons

Sold for \$4.3 million  
April, 2021

## SCHERBAKIVSKO- SHKURUPIIVSKA license



- oil  
natural gas  
condensate
- exploration & production  
license for 20 years
- Poltava region
- 100 km<sup>2</sup>
- contingent resources –  
50–100 thousand tons / 1 km<sup>2</sup>

Auction  
26.05.2021

## PSA OLESKA license



- hydrocarbons
- exploration & production  
license, till 2063
- Lviv region,  
Ivano-Frankivsk region
- 6300 km<sup>2</sup>
- contingent resources of  
unconventional gas – 3 trillion m<sup>3</sup>
- «Nadra Oleska» LLC  
is a license holder

Open for nomination

## SOUTH-RUSANIV license



- oil  
natural gas  
condensate
- exploration & production license  
for 20 years
- Sumy region
- 310 km<sup>2</sup>
- inferred resources of  
natural gas – 3.3 billion m<sup>3</sup>

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Open for nomination

## ANDRIIVSKA license



- oil  
natural gas  
condensate
- exploration & production license  
for 20 years
- Poltava region
- 50 km<sup>2</sup>
- prospective resources of  
natural gas – 1.5 billion m<sup>3</sup>  
oil – 196 thousand tons

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Open for nomination

## ZHUKIVSKA license



- oil  
natural gas  
condensate
- exploration & production license  
for 20 years
- Poltava region
- 60 km<sup>2</sup>
- prospective resources of  
natural gas – 1.2 billion m<sup>3</sup>  
oil – 229 thousand tons

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Is being prepared for e-auction

# Geologic reports virtual data room

- The database contains descriptions of investment objects, information about land plots within the contours of deposits, as well as geologic reports.
- 47 geologic reports consist of 266 books including 171 textual information folders (47 025 pages) and 95 graphic (2 269 pages).
- Information about land plots is published with a list of cadastral numbers.
- Data-room will be filled up.



### ■ Investors' support

State Geologic and Subsoil Survey of Ukraine  
Head of international cooperation  
Mykhaylo Kamasa  
tel.: 044 456 2357, m.kamasa@geo.gov.ua

### ■ Auctioning

State Geologic and Subsoil Survey of Ukraine  
Head of Auction Department Valeria Olefir  
tel.: 044 456 6056, valeriyaolefir@gmail.com

### ■ Support on doing business in Ukraine

UkraineInvest  
Investment Advisor Andrii Pavliv  
tel.: 044 256 78 32  
info@ukraineinvest.gov.ua  
andrii.pavliv@ukraineinvest.gov.ua

### ■ Membership



### ■ Detailed geological information

#### **Metallic minerals**

Kirovgeology (uranium, gold)  
Chief geologist Oleksiy Mychaylychenko  
tel. 068 598 5095, amgeo2017@gmail.com

Ukrainian Geological Company (lithium, non-ferrous metal)  
CEO Bohdan Slobodian  
tel.: 095 444 2168, sbiv@ukr.net

SE «Geoinform»  
Chief geologist Natalia Kovalenko  
tel.: 044 456 3027, natashakovalenko8@gmail.com

State Commission of Ukraine on Mineral Resources  
Deputy Head Vadym Karly – tel.: 044 284 9357

#### **Oil and gas deposits**

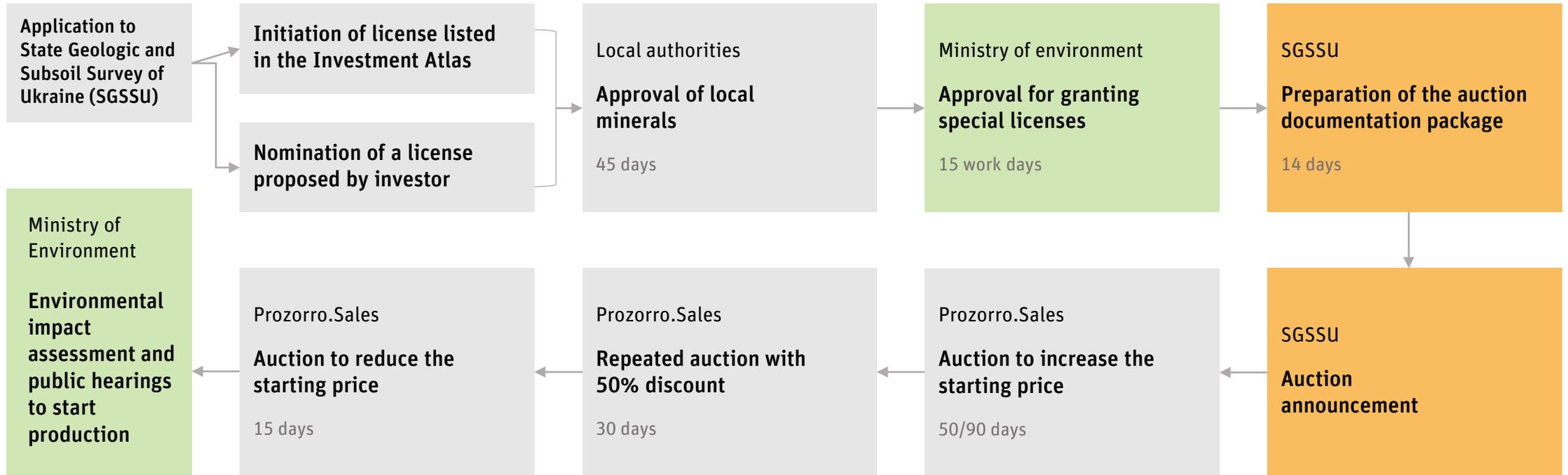
SE «Ukrnaukageocentr» (Ukrainian Scientific Geological Center)  
(reports, well geodata)  
Deputy Chief geologist Sergiy Vynogradov  
tel.: 050 289 6897, vynograd63@gmail.com

SE «Ukrgeophysics» (seismic data and processing)  
Chief geologist Ivan Semchuk – tel.: 050 304 6448

NJSC «Nadra of Ukraine» (Oleska PSA)  
First Deputy Chairman of the Board Sergiy Paiuk  
tel.: 044 454 1502, S.paiuk@nadraukrayny.com.ua

# **Annexes**

# Obtaining a Special Permit (License) through E-auction



## Winner:

1. Signs the protocol of auction
2. Pays a fee to the exchange operator
3. Concludes a contract of purchase and sale of a special license
4. An agreement on compensation of state expenses for exploration works is concluded
5. Pays the fee to the state budget
6. Concludes an agreement on terms and conditions of subsoil use
7. Receives a license

Cabinet of Ministers Resolution № 993 dated September 23, 2020

# Ukrainian Government announced the Open Door Policy for foreign investors

## Farm-in

Partnerships with  
current license holders

## Concession

Easy way to obtain E&P license for  
up to 20 years through e-auctions

## PSA

Agreement with the Government for  
up to 50 years with fiscal stability  
and international arbitration clauses

# The Government encourages new upstream investments

## Incentives

- ▶ up to 30% compensation of investments
- ▶ land plots allocation
- ▶ infrastructure settlement

## Project requirements

- ▶ processing and enrichment
- ▶ > € 20 millions of investment
- ▶ > 80 jobs created
- ▶ > 30% CAPEX
- ▶ < 5-year project implementation period

# Licensed fields and open offers

Existing Concession licenses				Concession licenses offers		
Activity	Owner	Type of activity	Terms	Activity	Region	Type of activity
Lithium ores						
Polokhivske field	Ukrliityvydobuvannya	production	2017–2037	Shevchenkivske field Balka Kruta block Dobra block	Donetsk Zaporizhzhia Kirovohrad	production exploration exploration
Nickel, cobalt, copper chromium						
West Lashchiv block Zhyrychi field South Rafalivskiyi prospective field Prutivskiyi prospective field Kapitanivske field(South,Central sections)	VIP-Trade Volynpryrodrurs NorthWest Mining Colormet of Ukraine Mine Extraction LLC	production production exploration exploration production	2016–2026 2017–2037 2016–2021 2019–2024 2019–2032	Zheleznyaky block Lypovenkivske field Karnaukhivska block Sukhohutirska block Zalisy-Shmen'ky prospective field	Zhytomyr Kirovohrad Dnipropetrovsk Dnipropetrovsk Volyn	exploration production exploration exploration exploration
Tantalum, niobium, apatite-rare metal ores						
Vovchanske field Malyshevske field Novopoltavske field Mostove block	Demurinsky Mining and Processing Plant JSC UMCC Volyn Mining and Chemical Company Taurus Infinity	exploration* production* exploration production	2002–2031 2007–2027 2009–2029 2019–2029	Mazurivske field (North section) Mazurivske tecnogenic field (East s.) Lypnyazkyi prospective field Tashlytskyi prospective field Novostankuvatske prospective field	Donetsk Donetsk Kirovohrad Kirovohrad Kirovohrad	exploration production exploration exploration exploration
Beryllium, zinc						
Perzhanska field	Perzhanska Ore Company	production	2019–2039	Lypnyazkyi prospective field Tashlytskyi prospective field Novostankuvatske prospective field	Kirovohrad Kirovohrad Kirovohrad	exploration exploration exploration
Zirconium, scandium, rare earth elements						
Yastrebitska block Anadolske field	CFR Group LLC RM Minings LLC	exploration production	2009–2024 2019–2034	Azovske field Zhovtorichynske field Hurivskiyi prospective field Starodubivskiyi prospective field Dianivskiyi prospective field Zolochivska block	Donetsk Dnipropetrovsk Dnipropetrovsk Donetsk Donetsk Kharkiv	exploration exploration exploration exploration exploration exploration
Molybdenum						
Chervona block	Rud Investium	exploration	2020–2025	Verbynska block Skhidnoseriivskiyi prospective field	Zhytomyr Dnipropetrovsk	exploration exploration

\* In production

## Existing Concession licenses

## Concession licenses offers

Existing Concession licenses				Concession licenses offers		
Activity	Owner	Type of activity	Terms	Activity	Region	Type of activity
Titanium: zircon-rutile-ilmenite-apatite placers, scandium						
Tarasivske field	Rutile-ilmenite company	production	2012–2032	Malyshevske field (North West sections)	Dnipropetrovsk	production
Balka Kruta technogenic field	Koliorovi metaly	production *	2003–2033	Kropyvniian field	Zhytomyr	production
Vovchanske field	Demurinsky Mining and Processing Plant	production *	2002–2031	Vydyborz'ka prospective field	Zhytomyr	exploration
Yurivska block	Titanium-apatite group	exploration	2019–2024	Fedorivske field	Zhytomyr	production
Stremyhorodske field	Valki Ilmenite	production	2004–2032	Korchakiv prospective field	Sumy	exploration
Livoberezhne field	Zhytomyrburozvidka	production	2013–2033	Bilovodskyi prospective field	Sumy	exploration
Trostryanetske field	Zhytomyrburozvidka	production	2004–2034	Haidarivskyi prospective field	Kharkiv	exploration
Mezhyrichne field (Isakivska, South s.)	Mezhyrichensk MCC	production *	2015–2035	Khrapivshchyna prospective field	Sumy	exploration
Mezhyrichne field (B., E., O., S., Y. s.)	Joint Mining and Chemical Company	production *	2002–2032	Pidlisna block	Zhytomyr	exploration
Malyshevske field (C., E., W. sections)	Joint Mining and Chemical Company	production *	2007–2027	Selyshchanska block	Zhytomyr	exploration
Malyshevske field(M.-A.,N-W sections)	Motronivsk MCC	production *	2013–2033			
Valky-Gatskivske field	Valki Ilmenite	production *	2001–2031			
Byrzulivske field	Velta	production *	2015–2023			
Likarivske field	Velta	production	2019–2039			
Nosachivske field	TioFab	production	2007–2027			
Paromivske field	Zhytomyrburozvidka	exploration	2013–2017			
Krasnorichynske field	Zhytomyrburozvidka	exploration	2013–2017			
Avramivska block	TsentrUkrGeologiya	exploration	2020–2025			
Gold ore						
Muzhiivske field	Karpatska Rudna Company	production *	2012–2032	Zolota Balka field	Dnipropetrovsk	production
Sauliak field	Sauliak	production	2010–2030	Balka Shyroka block	Dnipropetrovsk	exploration
Serhiivske field	Stone processing company of Ukraine	production	2010–2030	Kvitkivska block (East, Central sections)	Odesa	exploration
Bobrykivske field	Donetskyi Kryazh	production	2013–2018	Maiska block	Odesa	exploration
Klyntsiivske field	Lyra Mine Minerals	production	2019–2034	Yuriivska block	Kirovohrad	exploration
Berehivske field	Karpatska Rudna Company	exploration	2020–2024			
Kvasivske prospective field	Western Geological Explorational Company	exploration	2019–2022			
Zhovtovodska block	Spys Ukrayina	exploration	2021–2025			
Graphite						
Zavallivske field (Zarichna section)	Pobuzhzhya's Development LCC	production *	1996–2035	Burtynske field (Horodnyavska section)	Khmelnitskyi	production
Zavallivske field (South-East section)	Zavally Grafyt Kombinat	production	2019–2039	Burtynske field (Khmelnivska section)	Khmelnitskyi	exploration
Balakhivske field (South section)	Ukrainian supply group	production	2019–2039	Mlynkivska prospective field	Kirovohrad	exploration

# Mineral resource base of Ukraine

## key minerals used by domestic industry

Metallurgy	Proved reserves, <sup>1</sup> mln tons	Annual production mln tons	Export/import USD mln
iron ore	18836.5	157.4	+3400
manganese ore	2167	3.9	-210
coking coal	12096.3	8.5	-260
flux limestone	2253.4	4.9	-47
dolomite	365.8	0.98	-7
bentonite clays	60.3	0.1	-
kaolin (secondary)	78.4	0.45	+54
molding sands	672.5	8.0	0
chrome	0.453	-	-6
molybdenum	-	-	-7
vanadium oxide	0.0155	-	-10

Construction industry	Proved reserves, <sup>1</sup>	Annual production	Export/import USD mln
construction sands	298 mln m <sup>3</sup>	12.5 mln m <sup>3</sup>	+4
primary kaolin	365.5 mln t	1.2 mln t	none data
building stone	7898 mln m <sup>3</sup>	27.2 mln m <sup>3</sup>	none data
facing stone	333.4 mln m <sup>3</sup>	0.577 mln t	+7

Mechanical engineering, electrical industry	Proved reserves, <sup>1</sup> thous. tons	Annual production thous. tons	Export/import USD mln
aluminum	6403	-	-220
lead	301.5	-	-0.1
zinc	723.8	-	-0.1
copper	-	-	-0.1
nickel	215.6	-	-68
cobalt	8.83	-	+0.4
titanium (ore)	classified	550	+154
lithium	classified	-	-
tantalum oxide	classified	0.42	-
niobium oxide	classified	-	-
beryllium	11.4	-	-
zirconium oxide	classified	15.6	+22
scandium oxide	classified	0.032	-
hafnium	4.9	0.28	none data
graphite	13760.7	1.5	+1

### Notes:

1. Categories A+B+C<sub>1</sub> (according to the Ukrainian national classification)
2. Category C<sub>2</sub> (according to the Ukrainian national classification)
3. Petroleum products and LPG account for 5.5 and 0.780 million dollars.
4. 70% of nuclear fuel is made of foreign uranium

Fuel and energy complex	Proved reserves, <sup>1</sup> mln tons	Annual production mln tons	Export/import USD mln
natural gas	680 bln m <sup>3</sup>	20.7 bln m <sup>3</sup>	-2900
gas of compacted rocks	98 bln m <sup>3</sup>	-	-
oil	94	1.7	-6580
condensate	37	0.8	-
anthracite coal	6089.2	25.5	-2800
uranium (ore)	classified	classified	-520
peat	644.38	0.6	-3

Agrochemical industry	Proved reserves, <sup>1</sup> mln tons	Annual production mln tons	Export/import USD mln
apatite	71.9	-	-
phosphorite	11.1	-	-13
magnesite	105	-	-50
potassium salts	250	-	-50
native sulphur	100	-	-27

Source:  
State research and production enterprise  
«State Information Geological Fund of Ukraine»,  
State Statistics

# Procedure for Granting Access to Geological Information Designated as «For Official Use Only»

## Step 1

- a letter of request shall be sent to the head of SGSSU with a request to be made aware of the geological information

## Step 2

- SGSSU shall make a decision on granting access for making aware of the geological information designated as «For Official Use Only»

## Step 3

- a subsoil user gets access to the information for making aware in the information repository premises
- a requesting company enters into a non-disclosure agreement with SGSSU

Additionally for foreign investors

A letter of request shall be accompanied with copies of identity documents confirming affiliation to a company operating in the field of subsoil use, indicating the purpose of being made aware of information

**Forbidden!**

- To transfer data to third parties
- To copy information
- To remove documents from the information repository

# Procedure for Granting Access to Geological Information Designated as «Secret»

(balance reserves in the country and uranium)

## Step 1

a letter of request shall be sent to the head of SGSSU with a request to be made aware of the geological information

## Step 2

SGSSU provides access to information on the basis of an agreed list with the Security Service of Ukraine

## Step 3

the requesting company shall enter into a non-disclosure agreement with SGSSU

Important: the subsoil user's representative shall obtain the respective level of access – «For Official Use Only», «secret» – provided by the Department of Protection of National Security Information of the State Security Service upon request of a company

## Forbidden!

- To transfer data to third parties
- To copy information
- To remove documents from the information repository

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