

# Ukrainian Geological Survey: Modern Upstream Regulation

Annual report 2020



State Geological and  
Subsoil Survey of  
Ukraine



Ministry of Environmental  
Protection and natural  
Resources of Ukraine

## Єдине вікно надрокористувача

Priority #1

# Restoring Trust and Confidence

*Eliminating subjectivity and selectivity in work*

### Reorganization

- HR policy reboot
- optimization of the structure of geological enterprises

### One-stop shop

- comprehensive consultations for license holders
- one center for purchase of geological data and license cost calculation
- e-cabinet of the subsoil user

### Objectivity

- new transparent method of a license cost calculation
- automatic calculation of geological information cost
- standardized calculation of license cost without reserves



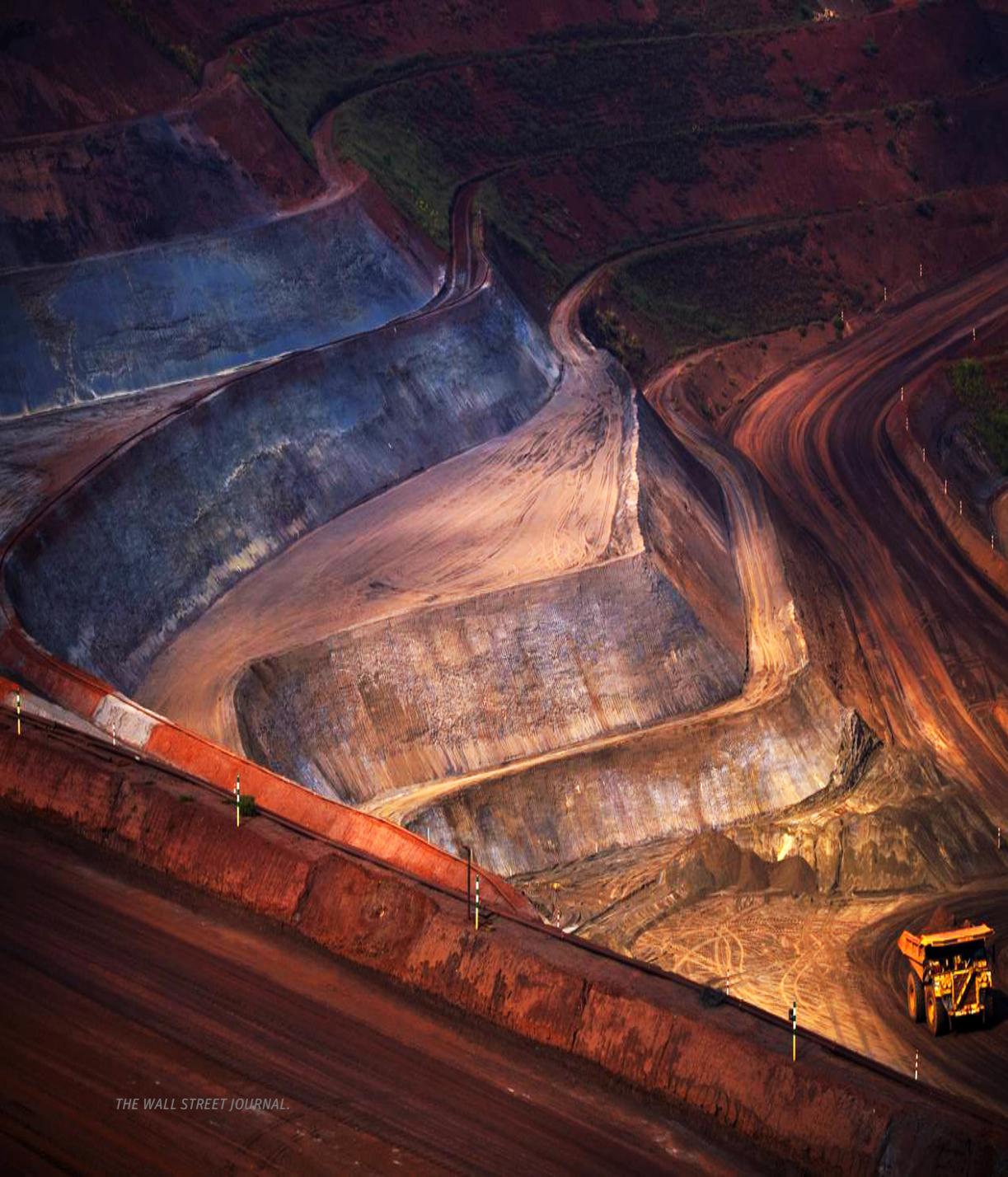
# Improving Efficiency of Mineral Resources Use

*Removing artificial barriers in legislation and 'dormant' licenses preventing*

## Modernization of legal environment

- transparent rules of mineral resources and geodata for use (specified in six updated Government resolutions)
- two laws adopted to simplify production of amber and other minerals
- assistance in elaboration of draft laws:
  - support for domestic E&P industries (#4187)
  - strengthening liability for illegal mining (#3576)
  - updating the National Plan for Development of Mineral Resources by 2030
  - the new Subsoil Code of Ukraine

## Inspection measures



## Attracting Investment to Explore Ukrainian Mineral Resources

### Conducting e-auctions and PSA bidding

- Investment Atlas of Subsoil User launched (> 300 opportunities)
- 8 auctions held, 58 licenses sold for UAH 826 million
- the Black Sea offshore unlocked and Yuzivska PSA relaunched
- PSAs signed with winners of tenders

### Simplifying access to geological data

- data-room opened for PSA tenders
- partnerships with USGS, USAID, Schlumberger, EuroGeoSurveys, CEEC ScoutmGroup, Duff & Phelps, Institute of Geology of KNU Taras Shevchenko
- open register for reserves and resources launched, digital versions of geological reports compilation started
- online interactive map of minerals updated
- public catalog of geological information created



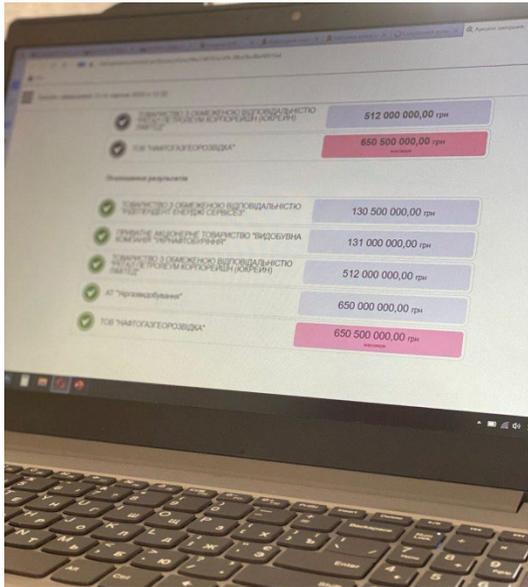
Інвестиційний атлас  
надрокористувача

Державна служба  
геології

# Result-oriented Approach

Investment attraction

*New investment projects are being implemented despite the world crisis and pandemic*



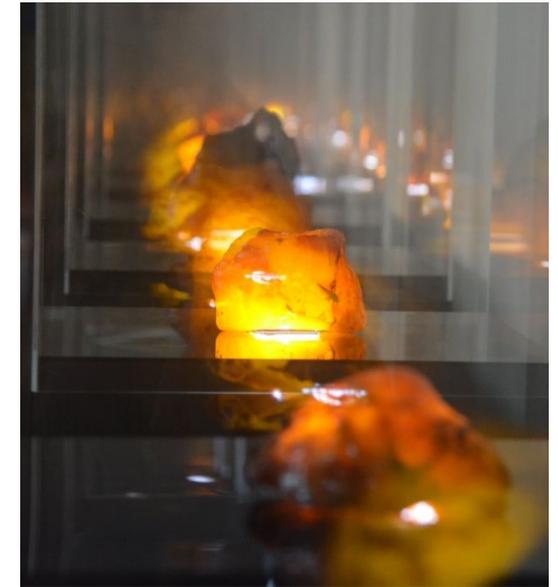
An oil and gas field sold for a record-breaking \$23 million



Lithium ore and gold deposits offered for auction



National infrastructure projects supported



>40 amber promising areas for e-auction prepared

## 2020: A Year of Oil and Gas Large Greenfield Projects

*Despite the global oil prices collapse, the Government started to launch mid and large-scale projects for the future energy independence of Ukraine*

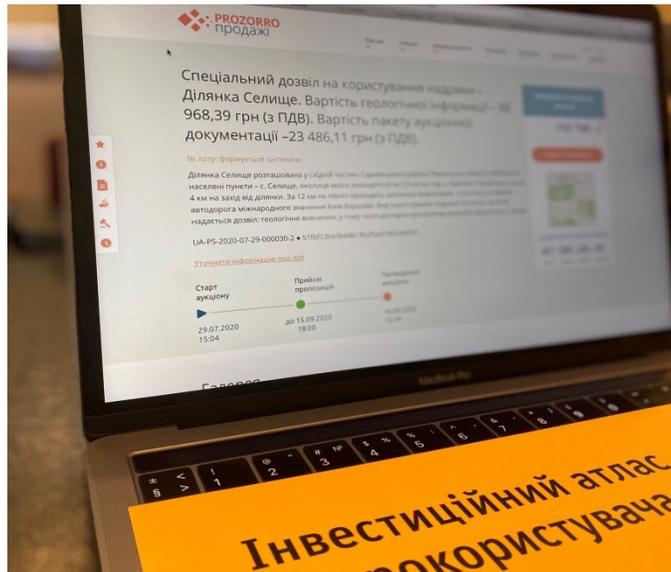
- **Seven PSAs** for \$350 million signed to explore onshore acreage with over 6400 sq.km
- **Yuzivska PSA** with an acreage of 7800 sq km unlocked, able to provide early production in 2021
- Concession licenses acquired by Naftogaz of Ukraine to explore **offshore blocks** with an area of 30 000 sq km located in the deep and shallow waters of the Black Sea



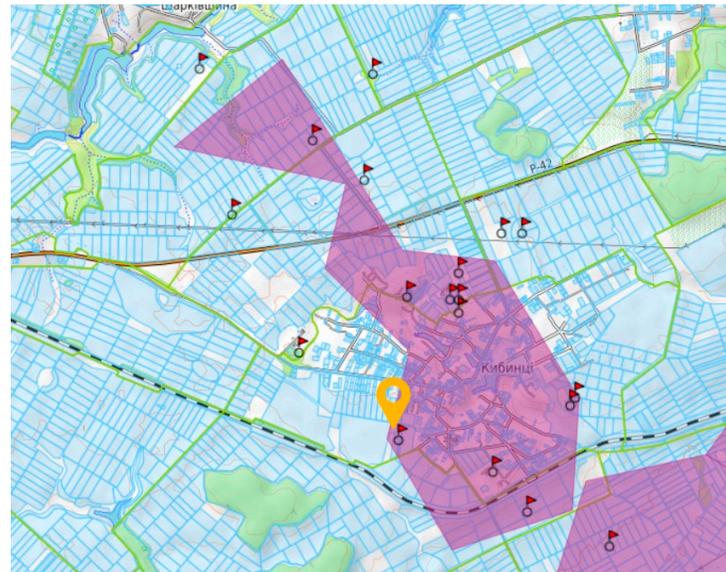
# Modern Digital Solutions

Digital solutions

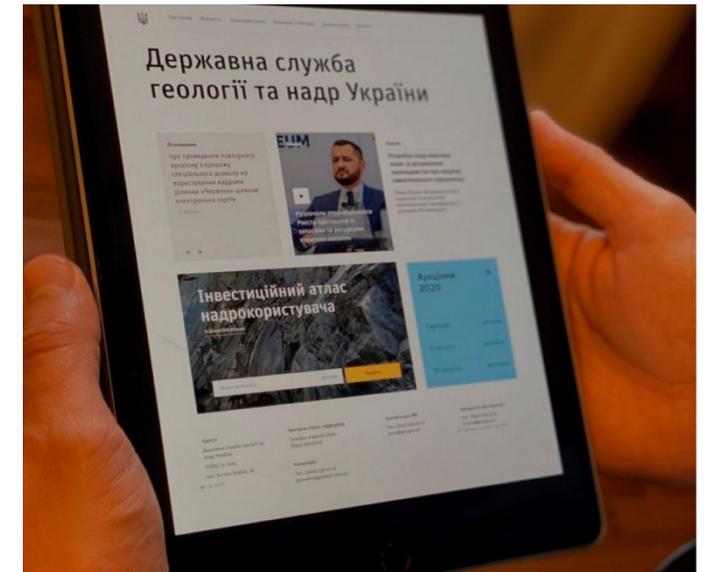
*From September, 2021, the authorities will not have the right to claim paper documents – **Diia** program*



■■■ Electronic auctions



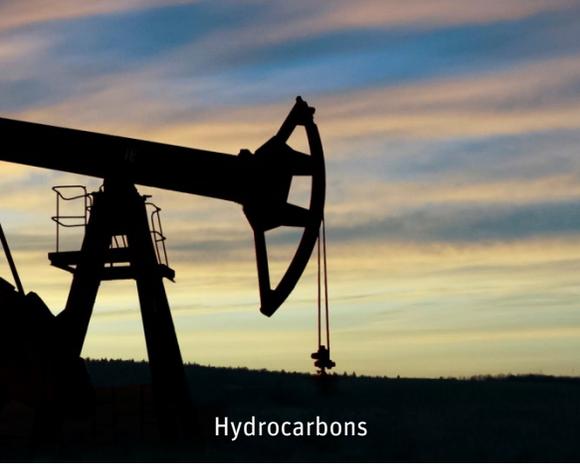
■■■ Interactive map of minerals



■■■ E-cabinet of Subsoil user

# Investment Atlas of Subsoil User

*The online platform contains >300 proposals for licenses with deposits of strategic and critical minerals, which can be acquired via e-auctions*



Hydrocarbons



Metallic minerals



Non-metallic minerals



Groundwater



Combustible solid minerals



Precious and semi-precious stones

# Minerals Online

*Geoinformation and information on land plots is displayed on the National Geospatial Data Portal of Ukraine \**

- ■ ■ contours of current licenses (3 thousand)
- ■ ■ information on land plots and parks
- ■ ■ oil and gas wells (> 10 thousand)
- ■ ■ contours of mineral deposits (~ 9 thousand)
- ■ ■ geological structure of the subsoil
- ■ ■ artesian wells (> 100 thousand)
- ■ ■ areas of natural risk: landslides, karsts, disturbed lands
- ■ ■ prospective areas and mineralization zones

Big Data is to ensure the placement of relevant information, geological enterprises of SGSSU maintain 43 registers

*\* According to the Law on National Infrastructure of Geospatial Data, which enters into force on 01 January 2021*



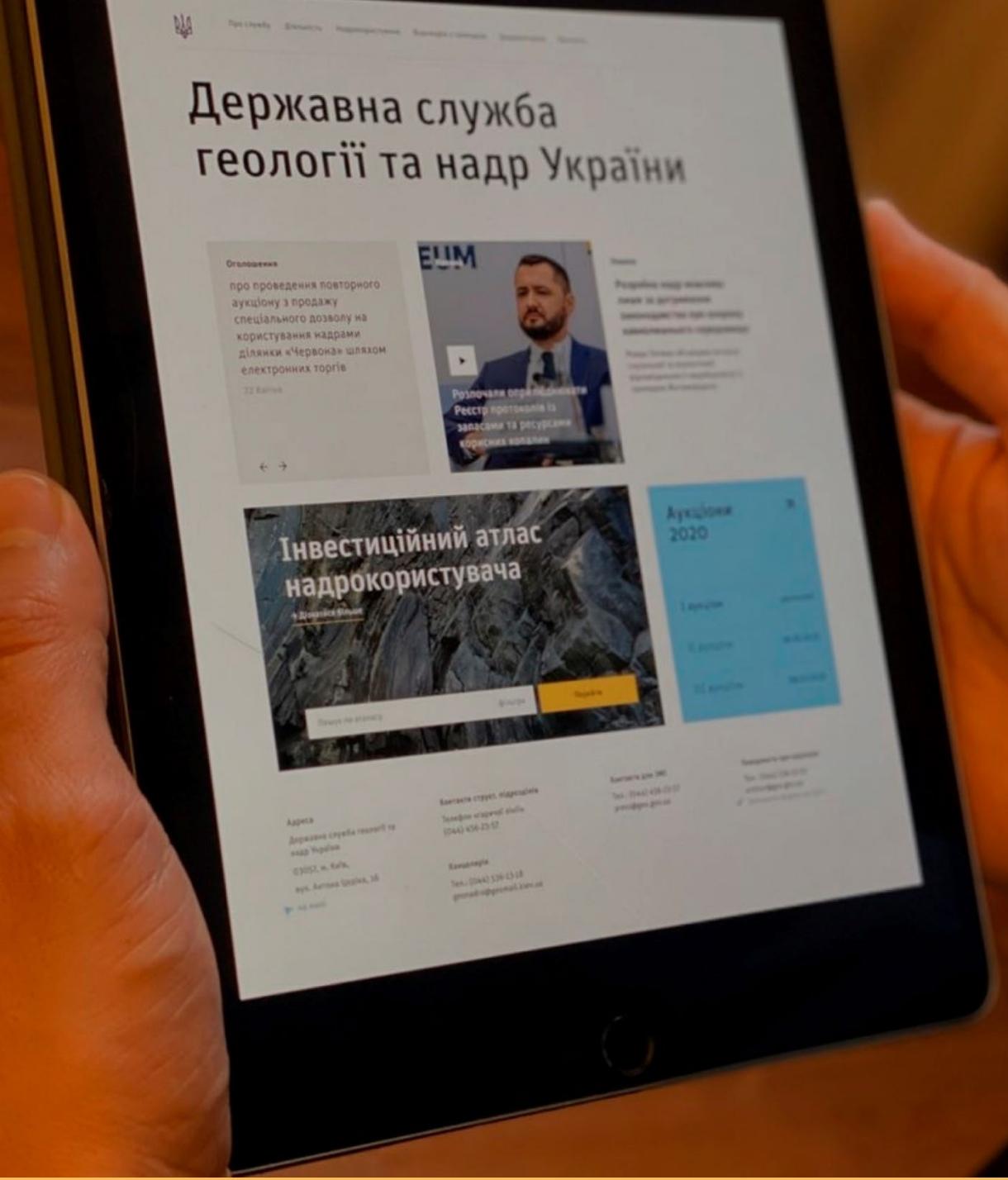
# E-cabinet

## Obtaining an e-license

- License holders can apply for extension, boundaries expansion, introduction of changes to a license
- Reporting and registration of geological works
- Work with the Interactive map of minerals

### Three stages of implementation (2021):

1. Development of system modules – Quarter I
2. Launch of beta version and testing – Quarter II
3. Launch of e-cabinet – Quarter III



The Draft Law #4187 and the new Subsoil Code

# Progressive and Predictable Regulation of the Upstream Industry

## ■ Digital approach

- online auctions on Prozorro electronic system – Interactive map of mineral deposits
- submission of documents and reports in e-cabinet

## ■ Transparent rules of access to mineral resources

- standardized calculation of license cost
- automated calculation of geological information cost
- evaluation of mineral reserves in compliance with international standards

## ■ Small Subsoil Use Support

- simplified issuance of licenses for local minerals for landowners up to 25 hectares

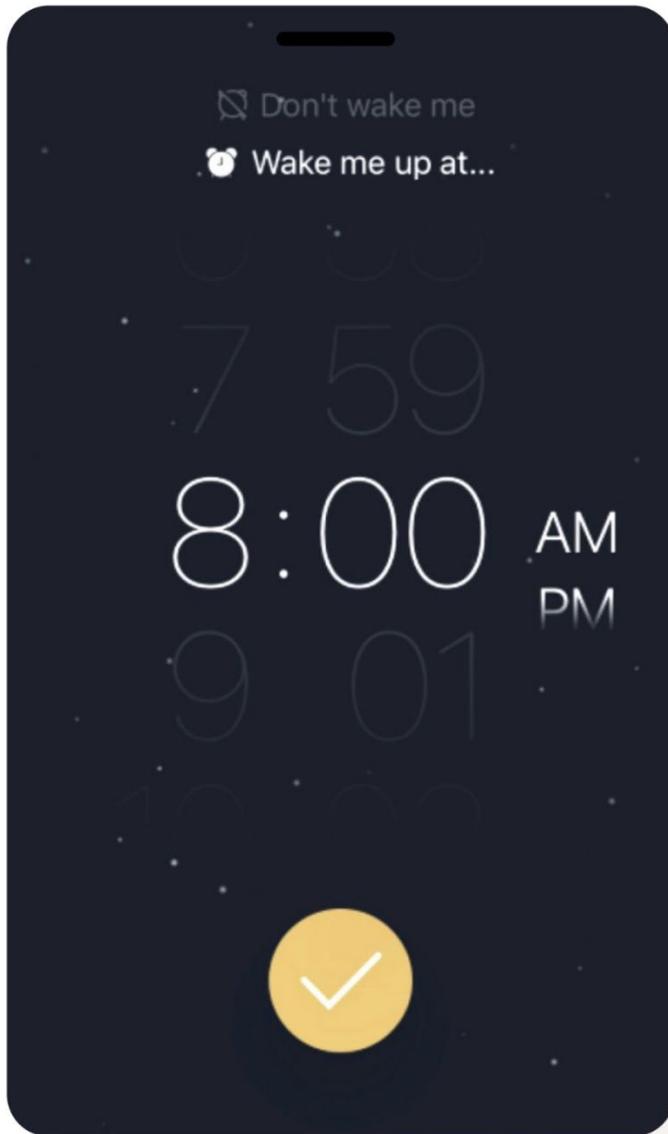
## ■ Increasing the attractiveness of E&P

- combined licenses for exploration and production for up to 20 years
- installment payment for a license

## ■ Liberalization of license circulation

- open market for license sale





The Draft Laws ##4187, 4251, 4252

# Dormant License Fee

*Preventing emergence of inactive licenses and strengthening subsoil users' responsibility*

## Current geological inspection procedure:

- Inspection (every 2–5 years) and giving time to eliminate violations, if any
- ↓
- Suspension of a license in case of non-compliance with the Procedure
- ↓
- Cancellation of a license in a court

! Risk of survey selectivity and court bias

Proposal: introduction of the 'use or drop' principle will become a mechanism for 'dormant' licenses phenomenon counteraction

The fee shall be charged:

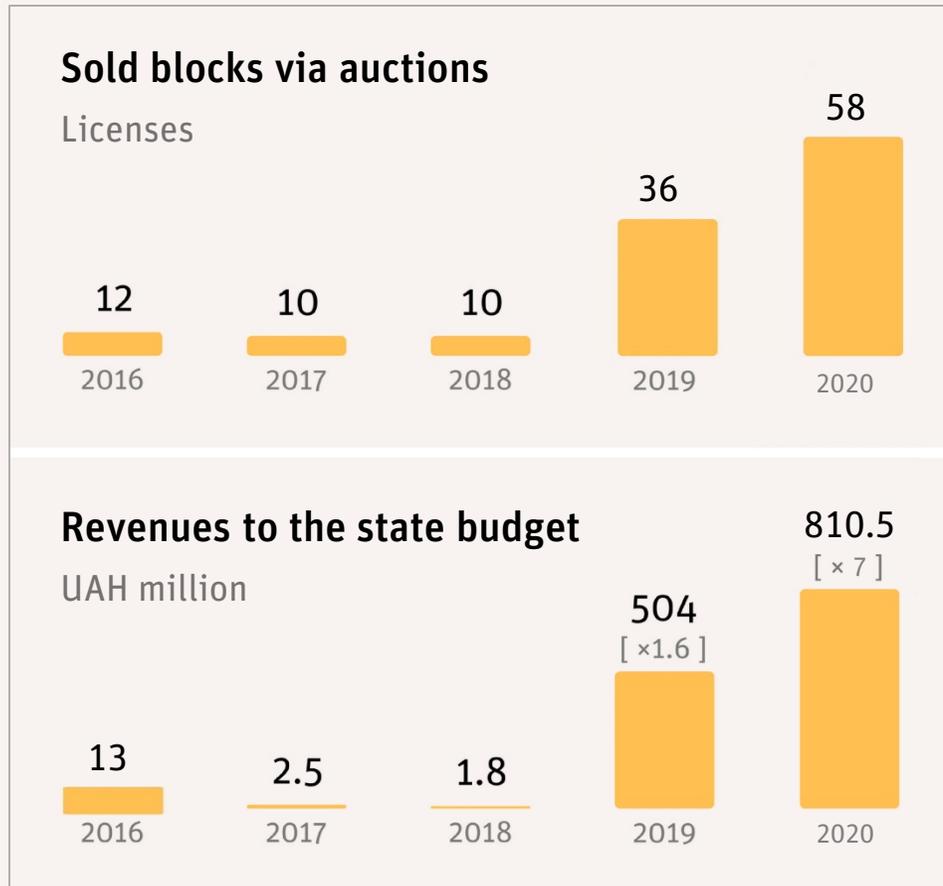
- for new licenses issued after 01 January 2021
- for current licenses after 01 January 2023/25

# Annexes

## E-auctions

*A convenient way for investors access to minerals*

- The Survey created the Investment Atlas of Subsoil User – an online platform with more than 300 proposals to be initiated for e-auctions
- This year 58 lots sold for over UAH 810.5 million – a 7-fold increase in the starting price
- The permanent procedure for conducting e-auctions through Prozorro approved

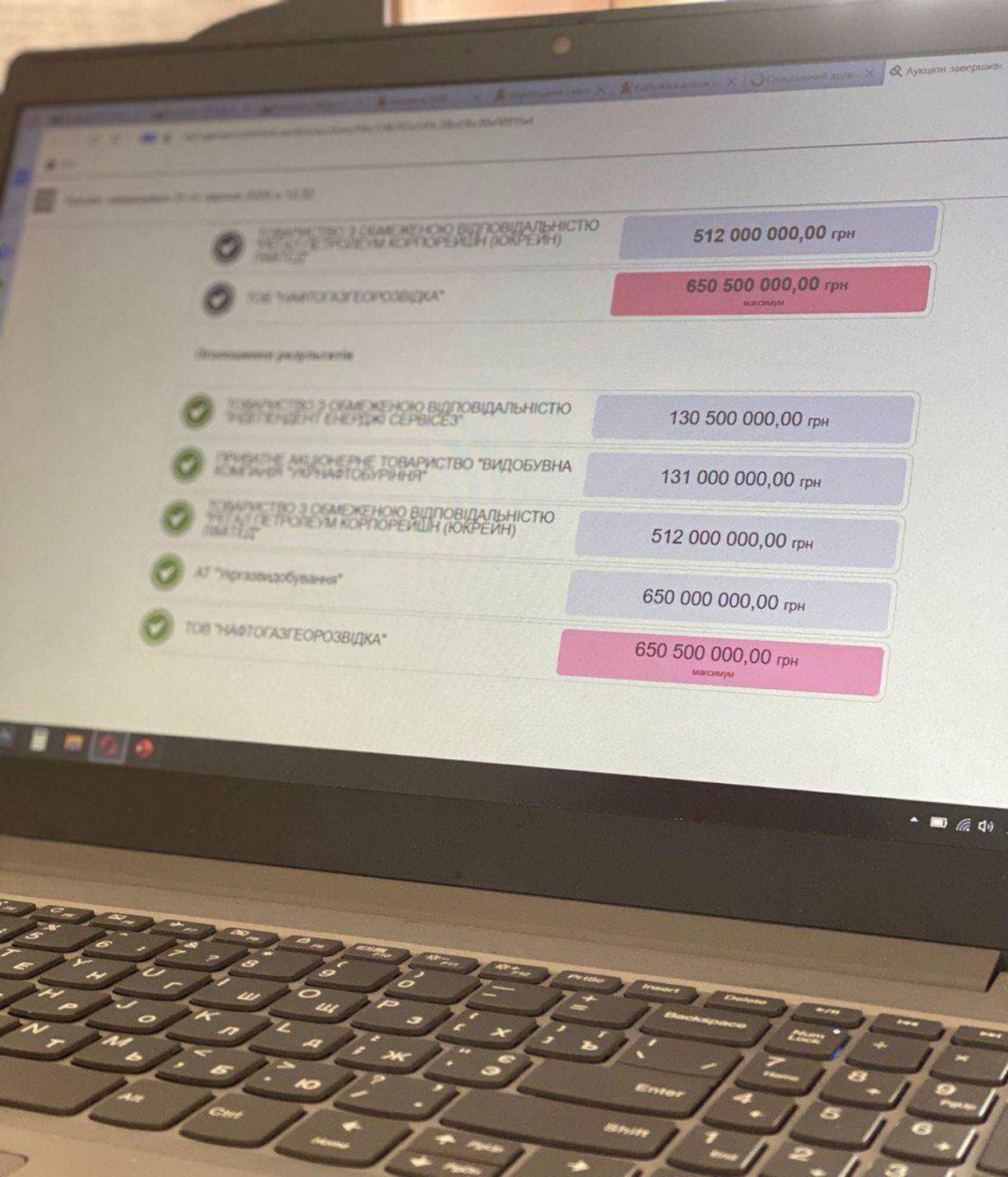


## An Oil and Gas Field Sold Online for a Record-breaking \$23 million

*This is the highest cost of a license in the history of auctions for subsoil use*

- According to geologists, this is the most interesting hydrocarbon area in the last 10 years
- As a result of transparent bidding, the final cost of a license increased 8 times
- The largest domestic oil and gas companies took part in the auction

Budyschansko-Chutivska block is located in Poltava region. Oil reserves are estimated at 2,73 thousand tons, gas – 856 million cubic meters, prospective resources of oil are 2006 thousand tons, gas – 20,587 million cubic meters





ПРОГРАМА ПРЕЗИДЕНТА УКРАЇНИ



## Supporting National Infrastructure Projects

- The first 79 parcels with proven reserves of sand and solid minerals required for the production of crushed stone and quarystone proposed for initiation at auctions
- The minerals meet requirements of national standards for construction of roads
- All the facilities are located within 80 km from the priority roads under construction by Ukravtodor
- Licenses are offered for production in five regions: Kharkiv, Poltava, Kirovohrad, Dnipro, Mykolaiv

## More than 40 Promising Areas with Amber Deposits Prepared

- Proposals are offered in Zhytomyr and Rivne regions
- The total area of blocks is about 300 hectares with an initial cost of over UAH 10 million
- 11 blocks were sold via auctions in 2020
- Most objects are prepared in accordance with the updated legislation: area up to 10 hectares, 5-year combined license for exploration and development



## The Shevchenkivske Lithium Ore Field Open for Auction

- There are three prospective lithium areas in Ukraine
- Shevchenkivske field is located in the Donetsk region. A license of 39.84 hectares is offered for production
- Probation of previously explored reserves of lithium ores and lithium oxide
- The estimated initial cost of the lot on Prozorro.Sales is \$2 million



# New Prospective Areas for Geological Exploration

*The Survey is working on creation of new proposals with deposits of gold, uranium, titanium, graphite. The blocks will be offered for exploration and pilot production for a period of 5 years*

Ti

## **MALYSHEVSKE placer field (North-Western – 2)**

(Dnipro, Kirovohrad regions)

- 3.310 ha
- Titanium ores, zirconium; concomitant – disten, sillimanite, staurolite
- Contingent resources (thousand tons): disten + sillimanite – 1.407, staurolite – 567

U

## **SADOVA license**

(Mykolaiv region)

- 2.227 ha
- The thickness of ore bodies in wells is from 0.35 to 7.7 m
- Explosive and excavation works on the block not performed

# Big Data

## *Interactive map of minerals*

### 1. Geological information catalog:

- 175 thousand digitized reports
- 12 thousand resources and reserves reports
- 100 thousand units of information about primary geoinformation

### 2. State accounting of deposits and reserves of minerals:

- Balance of mineral reserves
- Register of groundwater deposits
- Register of oil and gas wells
- Register of artesian wells

### 3. State Geological Map of Ukraine – 200 (160 sheets)



Map of licenses of combustible minerals



Map of licenses of metallic minerals



Map of licenses of non-metallic minerals



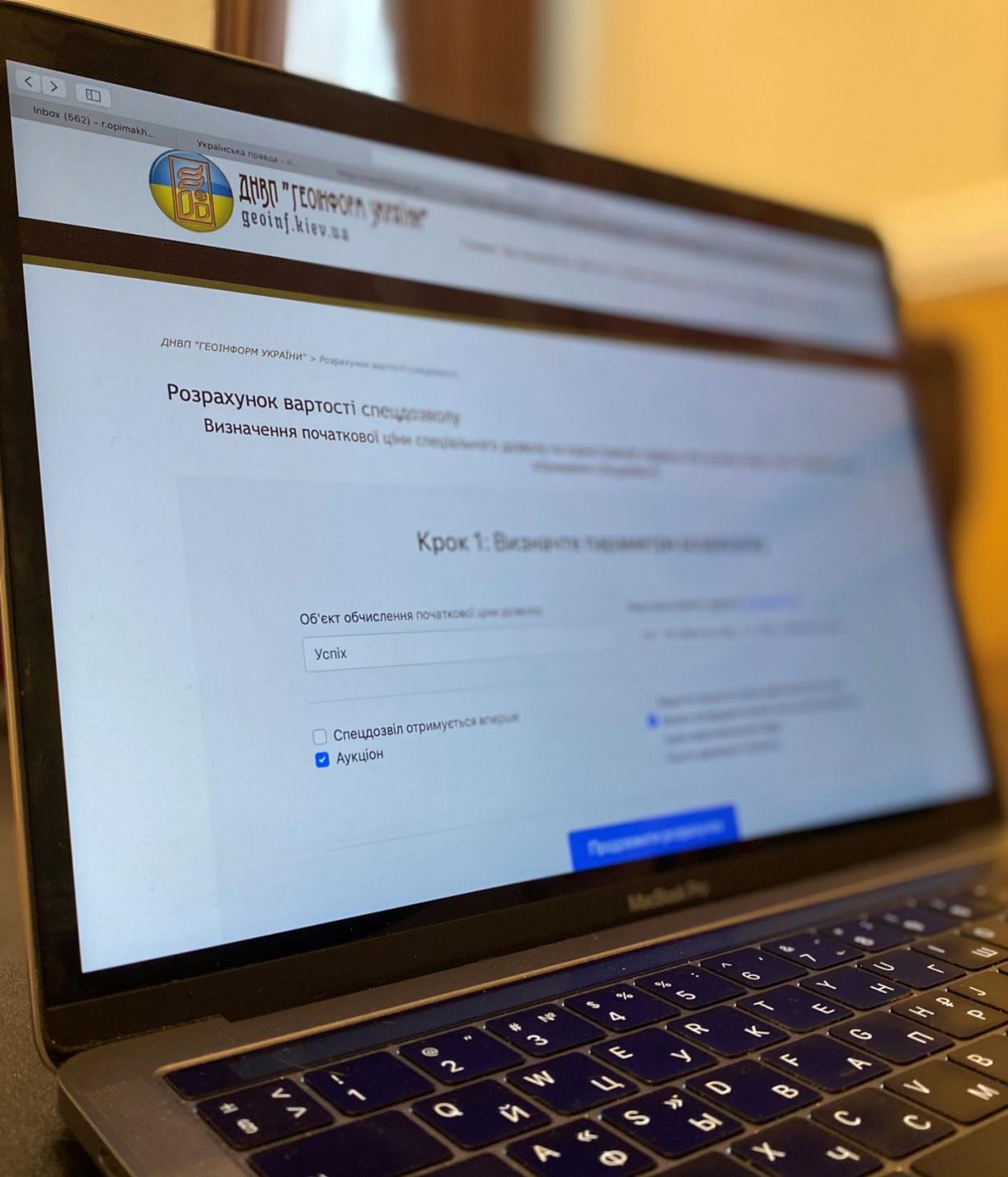
Map of licenses of groundwater,  
therapeutic mud and brine

<http://minerals-ua.info>

# Online Calculator

*Predictability and transparency in determining the initial cost of a license*

- Objective and clear pricing
- Convenient automated calculation
- Simplifying investment decisions



## Online Check-in

*Since May, 2020, the registration for a consultation is possible via Google calendar*

To register, please enter the following information into the form:

- subject of an application
- your question
- choose day and time

