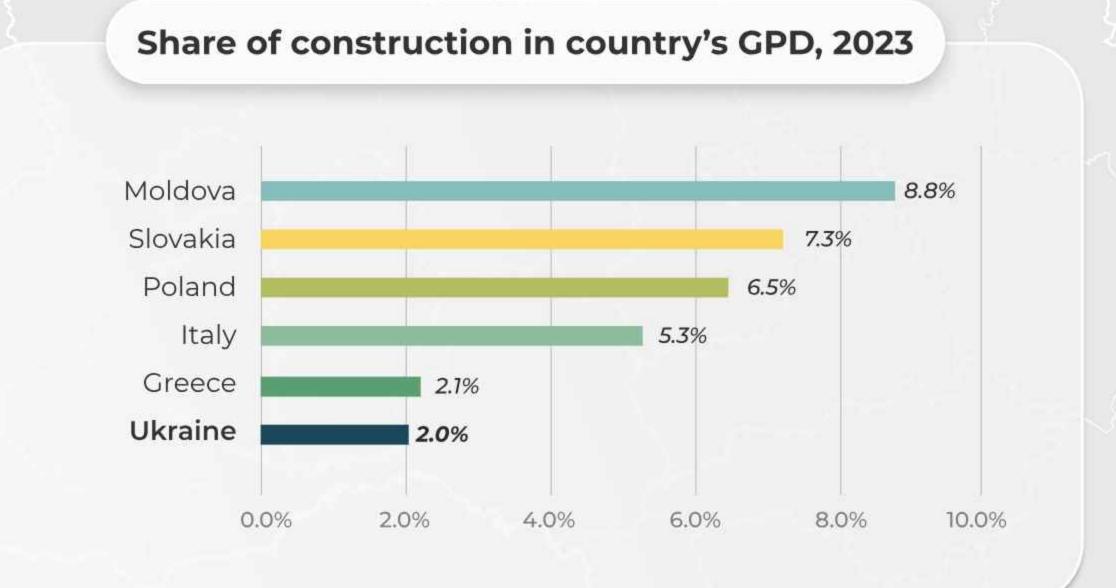
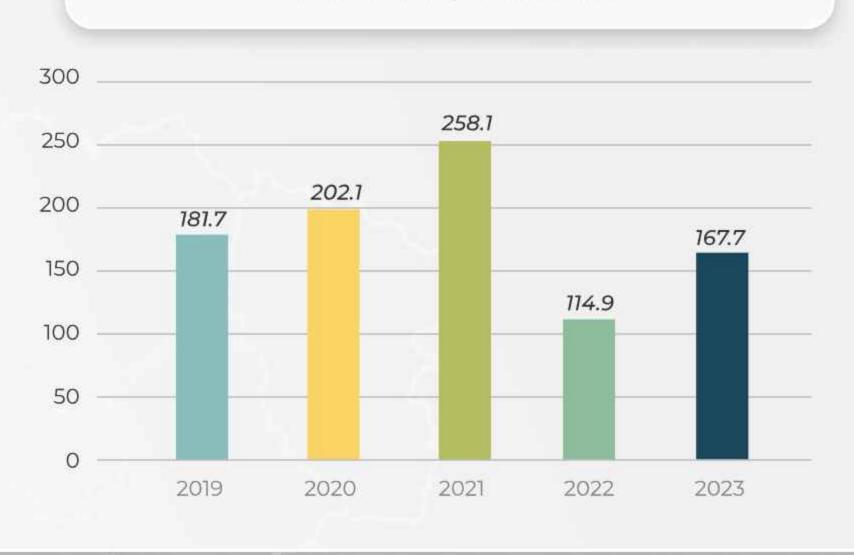




### Macroeconomics



# Annual volume of produced construction materials, bln UAH



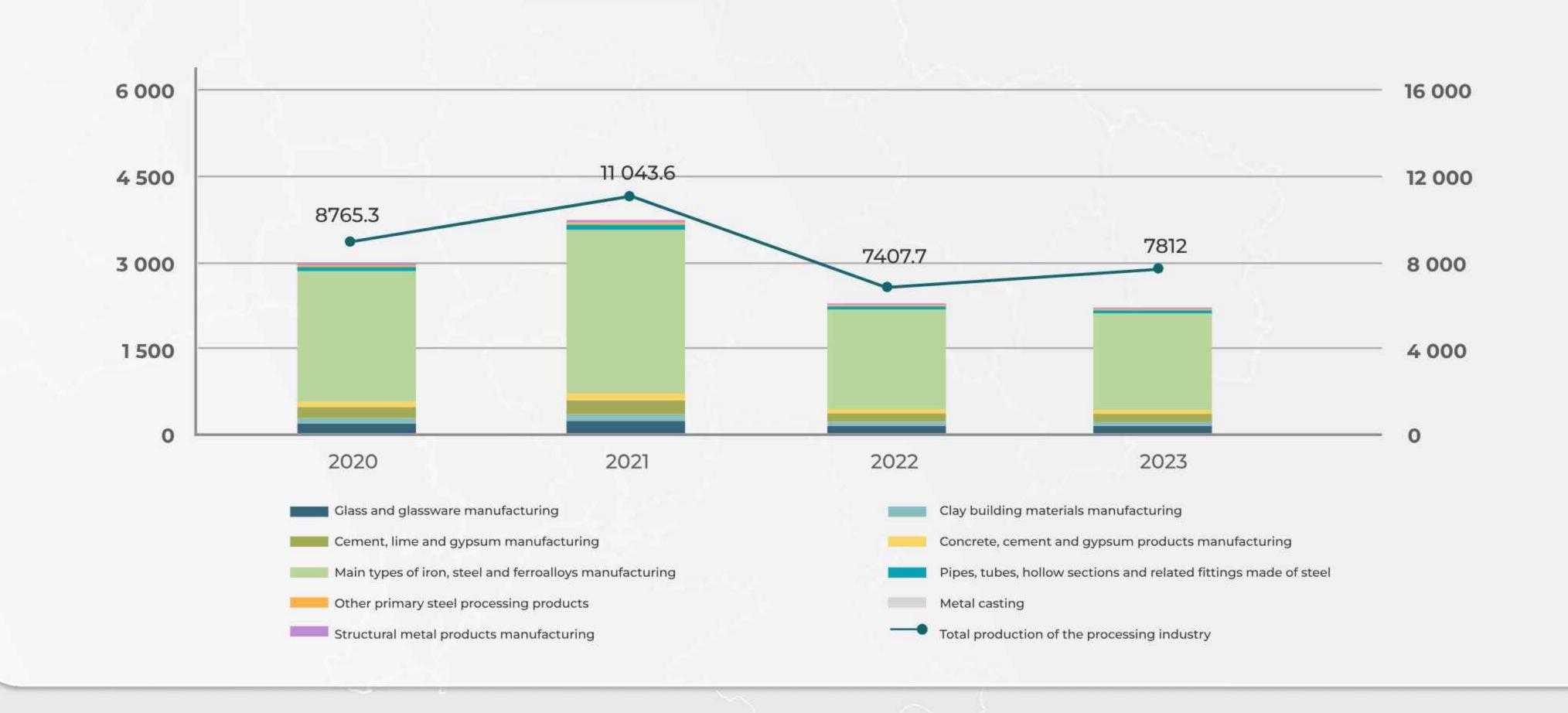


2.2% of Ukraine's population employed in the construction sector as of August 2023



FDI snapshot





Sources: National Bank of Ukraine



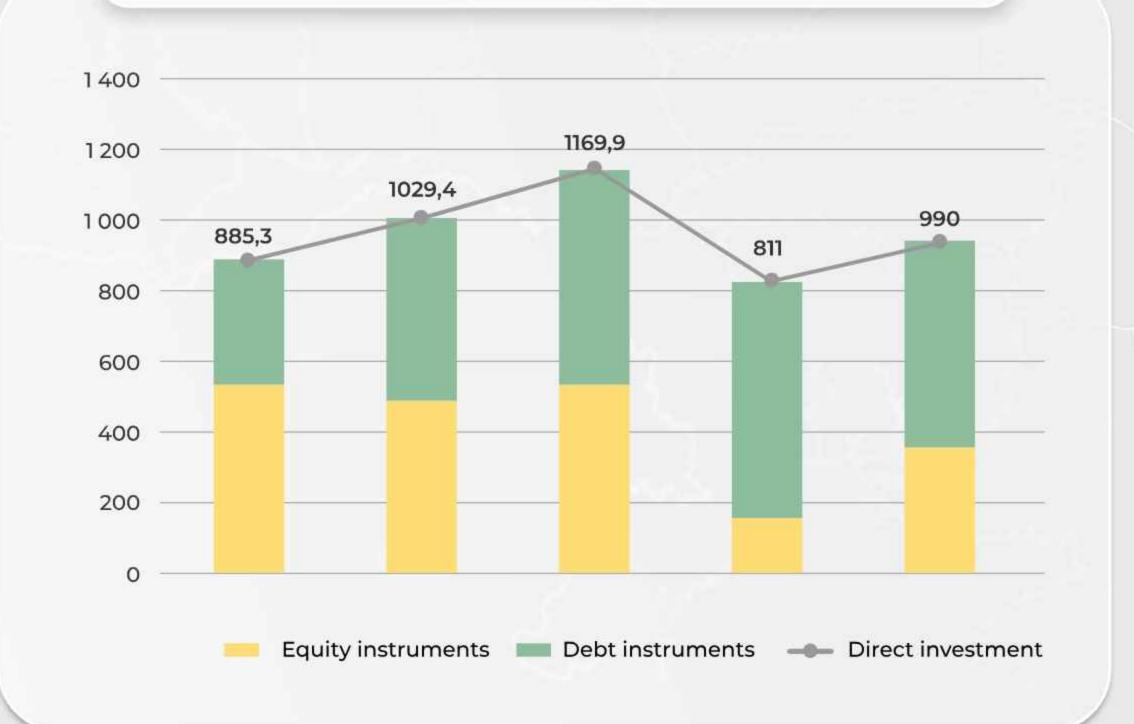
## FDI snapshot

The decline in 2022 at the beginning of russia's full-scale invasion of Ukraine was followed by a gradual recovery of the industry in 2023 despite the ongoing hostilities

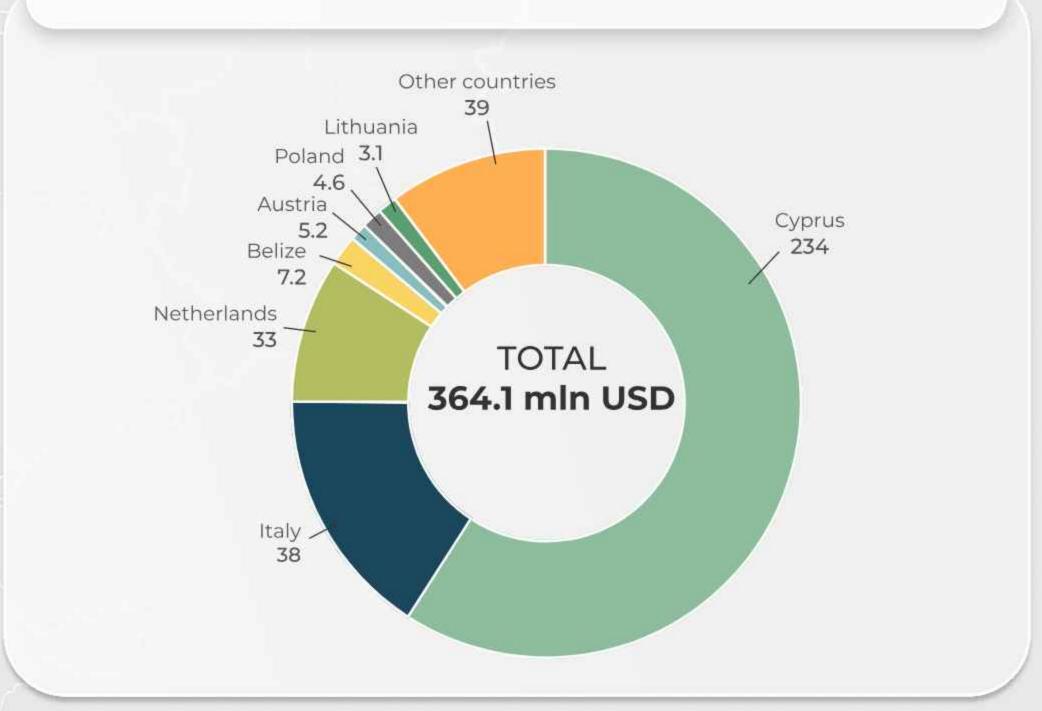
War risk insurance and government policies aimed at improving the investment climate contribute to the growth of the industry



#### Construction sector FDI balances, mln USD



# Country-specific construction FDI balances, mln USD, 2023



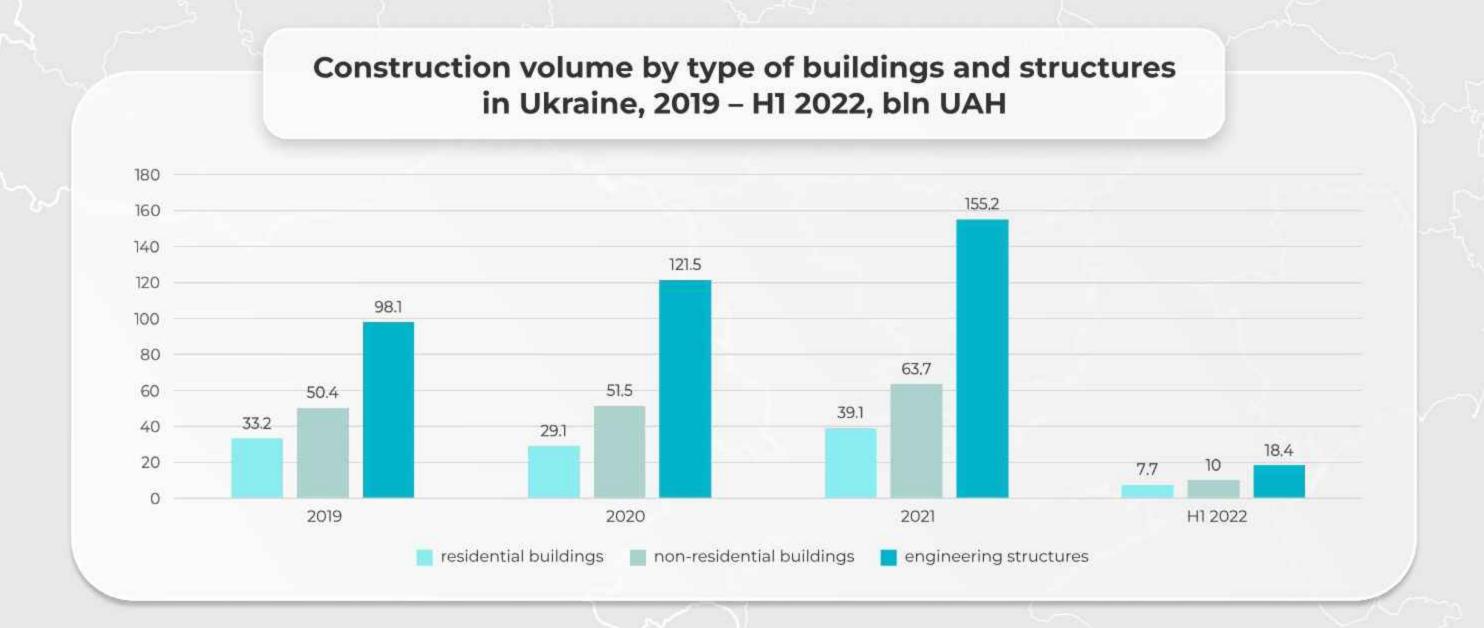
Sources: National Bank of Ukraine



## Losses and damages

According to the 2020 data, **6 mln** Ukrainians didn't have their own property. This amounted to **14.4%** of the country's population at that time.

As a result of the full-scale invasion, this figure has increased. Almost 5 mln Ukrainians lost their homes



Damaged and destroyed infrastructure objects in Ukraine

## 155 bln USD

total amount



250 000 Residential buildings



211 700 Passenger vehicles



16 000 Public transport



3 800 Educational institutions



1300 Healthcare institutions



**426**Private and state enterprises









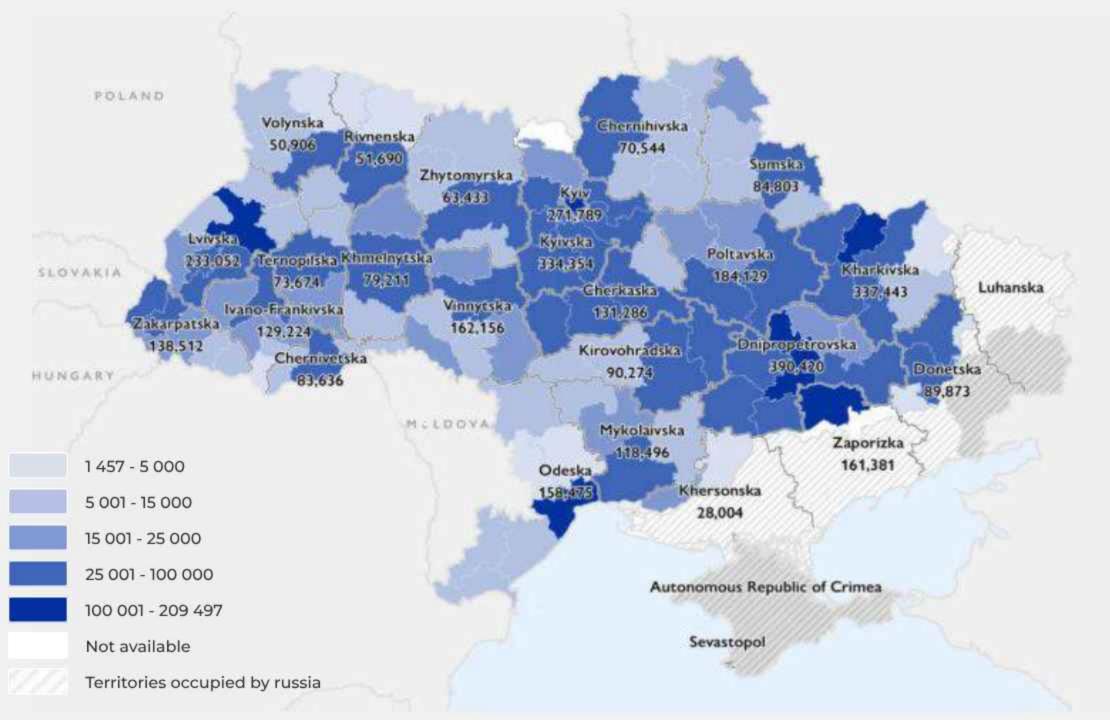


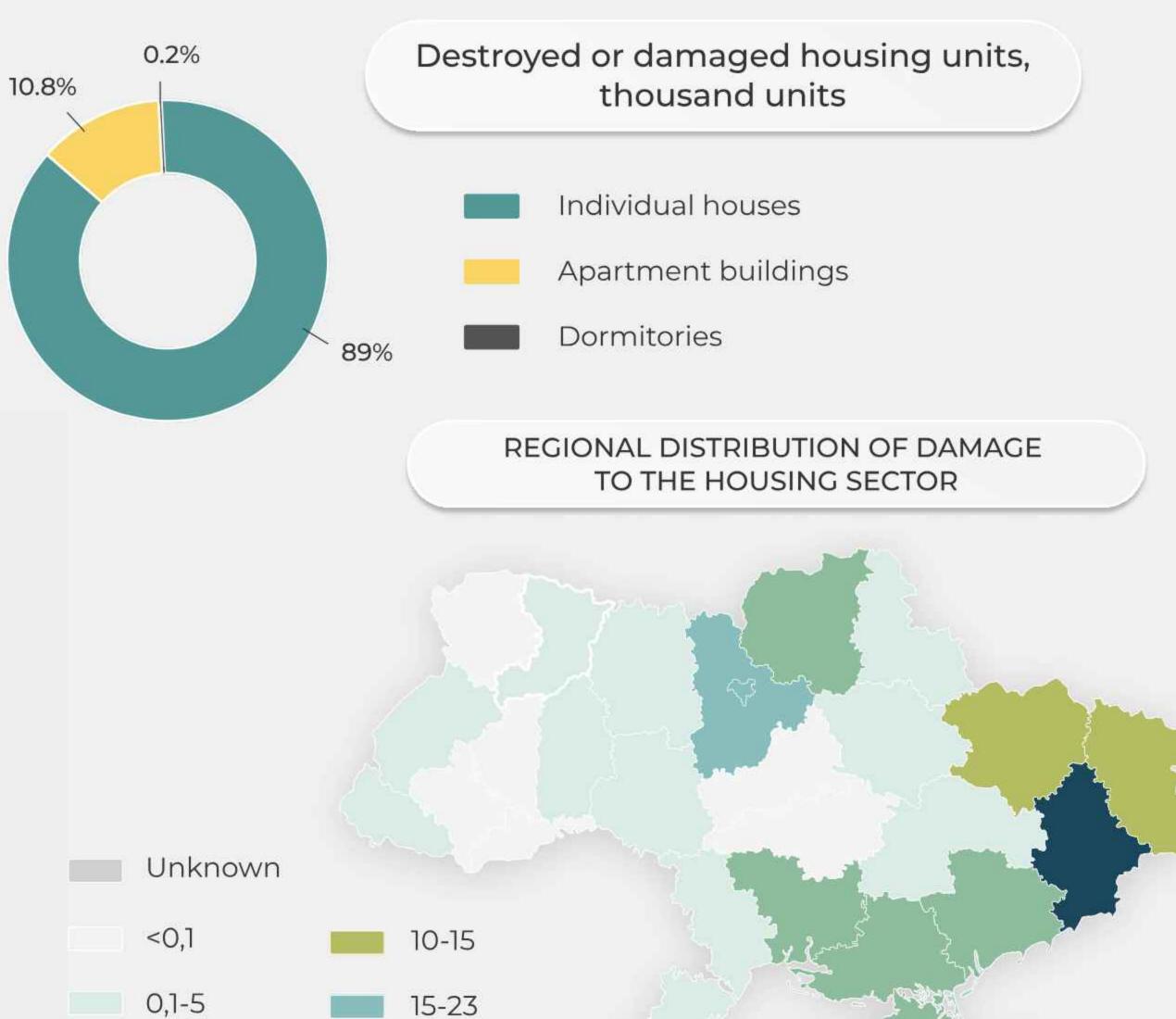


## Losses and damages



MAP OF REGISTERED IDPS AT THE DISTRICT LEVEL\*





15-23

23<

5-10

\* - as of February 29, 2024 Sources: KSE



#### Raw material base

Ukraine's construction sector prospects are determined by the country's leading position in the extraction of various minerals, as well as the possibility of locating enterprises near deposits

#### MINERAL DEPOSITS

of critical industrial raw materials

#### WEALTH OF MINERAL RESOURCES

types of minerals found in Ukraine (out of the 120 most common)

thousands industrial-grade deposits

bln USD

total volume of the mining industry

#### Positions of Ukraine in the world by volume of production

METALLIC MINERALS		NON-METAL MINERALS	LIC	MINERAL RESOURCES
2nd place 5th place 6th pace 8th place	Gallium Germanium Titanium Manganese	6th place 8th place 10th place		10th place Uranium 12th place Coking coal 13th place Thermal coal

METALLIC MINERALS			HYDROCARBONS		RBONS
37 licensed sites and deposits	22.857 ha corresponding licensed area	195 licensed sites and deposits	43.826 ha corresponding licensed area	49 licensed sites and deposits	6.440 ha corresponding licensed area

licensed sites and deposits

280 ha corresponding licensed area

Titanium

and deposits

licensed area

Au Gold

licensed sites and deposits

1.280 ha corresponding licensed area

NON-FERROUS METALS

Ni Nickel Cobalt

Zr

10th place Iron

Chromium

Mo Copper Molybdenum

licensed sites

RARE EARTH **METALS** 

Be

Beryllium

Zirconium

Ta Tantalum Niobium

Nb

Sc Scandium

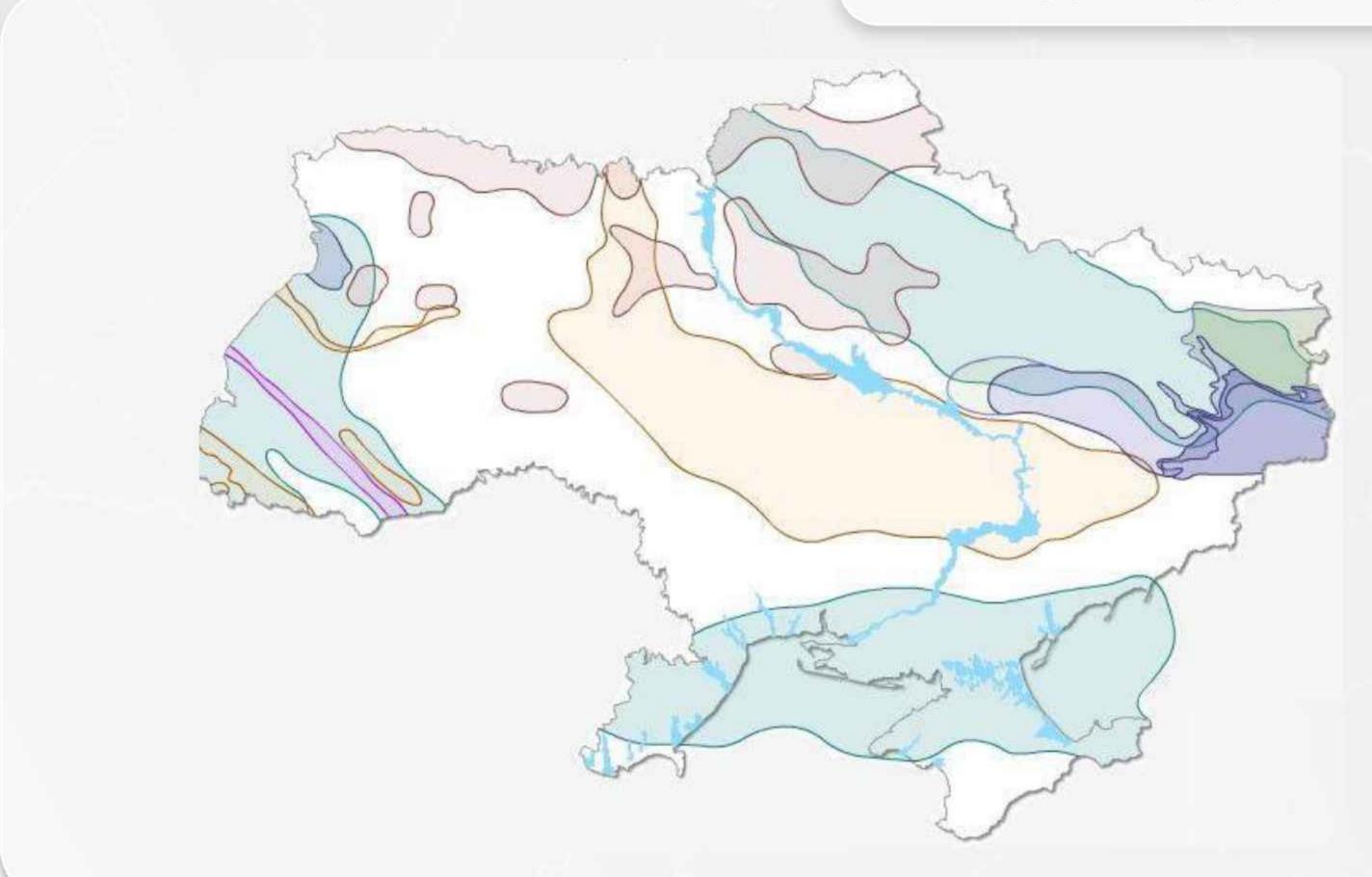
licensed sites and deposits

1.870 ha corresponding licensed area



Mineral resource maps





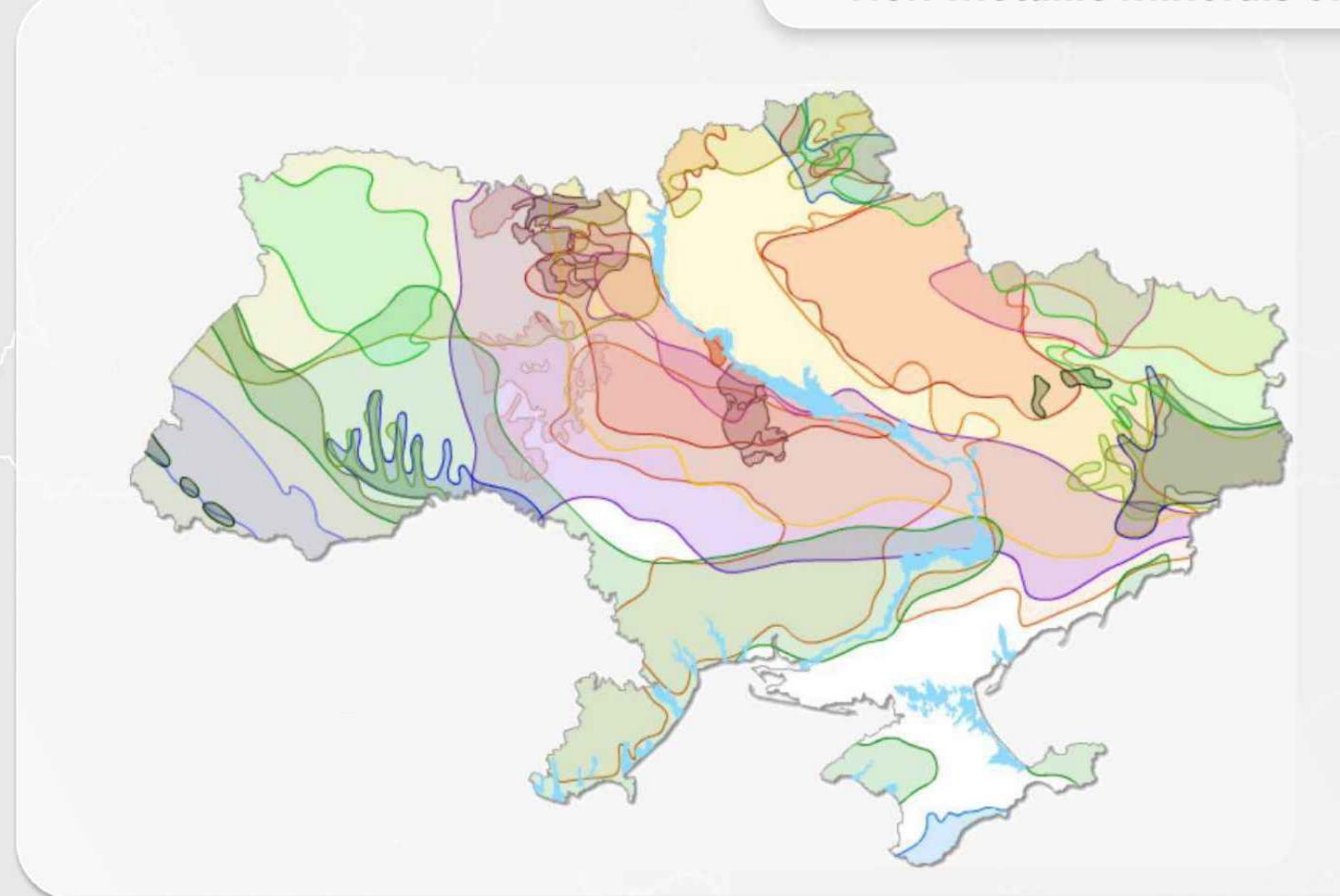
- Hard coal
- Lean, semi-anthracites and anthracites
- Fat, coking and semi-lean caking
- Long-flame and gas coal
- Transitional from brown to hard longflame coal
- Brown coal
- Oil and gas
- Menilite shales
- Peat

Sources: Ukrainian Geological Survey



Mineral resource maps

#### Non-metallic minerals of Ukraine



#### Sedimentary clay rocks

- Primary and secondary kaolins, kaolin refractory clays
- Spondyl clay (blue marl) of the Kyiv formation of the Paleogene
- Variegated clays of the Neogene
- Brown and reddish-brown clays of the Pliocene and Quaternary
- Argillites, clay shales, and clays of the Carboniferous and Permian

#### Sedimentary clastic rocks

- Monomineral quartz sands in the deposits of the Poltava formation
- O Glass, concrete, and ballast quartz sands in fluvioglacial deposits
- Monomineral sands in the Lower Tortonian deposits
- Donetsk region of Paleozoic and Carboniferous sandstone deposits
- Podolian region of Paleozoic sandstone deposits
- O Carpathian region of Cretaceous and Paleozoic sandstone deposits
- Hlukhiv region of Buchach formation sandstone deposits
- Crimean region of Triassic-Jurassic sandstone deposits
- Trakhtemyriv sandstone deposits region

#### Sedimentary carbonate rocks

- Neogene limestones
- O Chalk
- Jurassic limestones
- Permian and Carboniferous limestones and dolomites
- Devonian and Silurian limestones and dolomites

#### Igneous and metamorphic rocks of the Ukrainian Shield

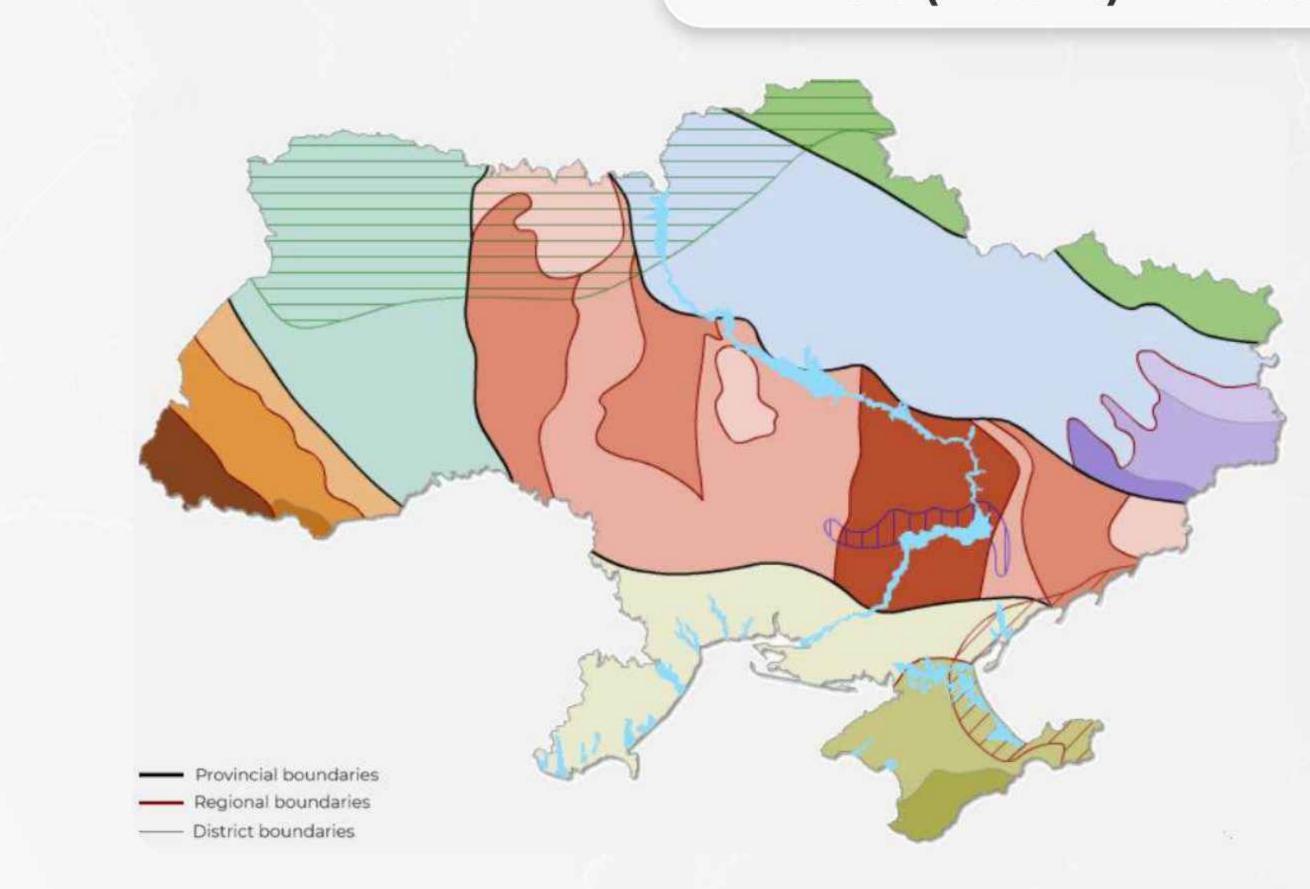
- Crystalline schists of the Ovruch series
- Granitoids of the Korosten complex
- Basic rocks of the Korosten complex
- Osnytsia granites
- Chudniv-Berdychiv granitoids

Sources: Ukrainian Geological Survey



Mineral resource maps

#### Ore (metallic) minerals of Ukraine



#### Ukrainian Shield province

- Archean metallogenic region (Al, Ti, Cr, Fe, Co, Ni, Cu, Zn, As, Mo, Sb, W, Pb)
- Area of Archean and Proterozoic formations (Al, Ti, Cr, Fe, Co, Ni, Cu, Zn)
- Lower Proterozoic metallogenic zones (Mg, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Ag, Pb)
- Middle and Upper Proterozoic metallogenic regions (Al, Ti, Fe, Ni, Cu, Mo, Sn)

#### **Donetsk-Dnipro province**

- Onipro region (Al, Ti, Mn, Fe, Cu, Zn, Pb)
- Northern district of Donetsk region (Zn, Pb)
- Central district of Donetsk region (Mg, Al, Ti, Mn, Fe, Cu, Zn, As, Ag, Sb, Au, Ng, Pb)
- Southern district of Donetsk region (Al, Mn, Fe, Co, Cu, Zn, As, Mo, Hg, Pb)

#### **Black Sea province**

- Mountainous Crimea region (Cu, Zn, Hg, Pb, Bi)
- Steppe Crimea and Kerch Peninsula region (Mg, As, Hg)
- Other regions (Al, Ti, Fe, Mn)

#### Carpathian province

- Pre-Carpathian region (Mg, Mn, Fe, Cu, Zn, As, Pb)
- Central Carpathian region, Rakhiv district (Al, Mn, Fe, Co, Ni, Cu, Zn, Mo, Pb)
- Central Carpathian region, other districts (Fe)
- Zakarpattia region (Mg, Al, V, Mn, Fe, Cu, Zn, As, Mo, Ag, Sb, Te, Au, Hg, Pb, Bi)
- Volhynia-Podilsk region (Mg, Al, Mn, Cu, Zn, Pb)
- The southern slope of the Voronezh crystalline massif (Al, Ti, Fe)

#### Transstructural facies-metallogenic regions

- Priazov region of Kimmerian iron ore deposits (V, Mn, Fe, As)
- Nikopol-Tokmak region of Oligocene manganese ore deposits (Mn)
- Polissia region of the modern phase of Pliocene-Quaternary iron ore epoch deposits (Fe, Mn)

Sources: Ukrainian Geological Survey



Access to regional consumer markets

Nearly 1 bln consumer market can be reached within 2 500 miles

- 448 mln European Union
- 100 mln CIS (selected)
  - 502 mln Non EU
- 44 mln Ukraine

The EU, the UK and Canada have suspended import duties on exports from Ukraine in 2022.

This creates new opportunities for Ukrainian exporters. Trade turnover between Ukraine and these countries is expected to increase, thus, strengthening mutually beneficial partnership.

Ukraine has 19 FTAs with 47 countries, including DCFTA with the EU



## CEMENT

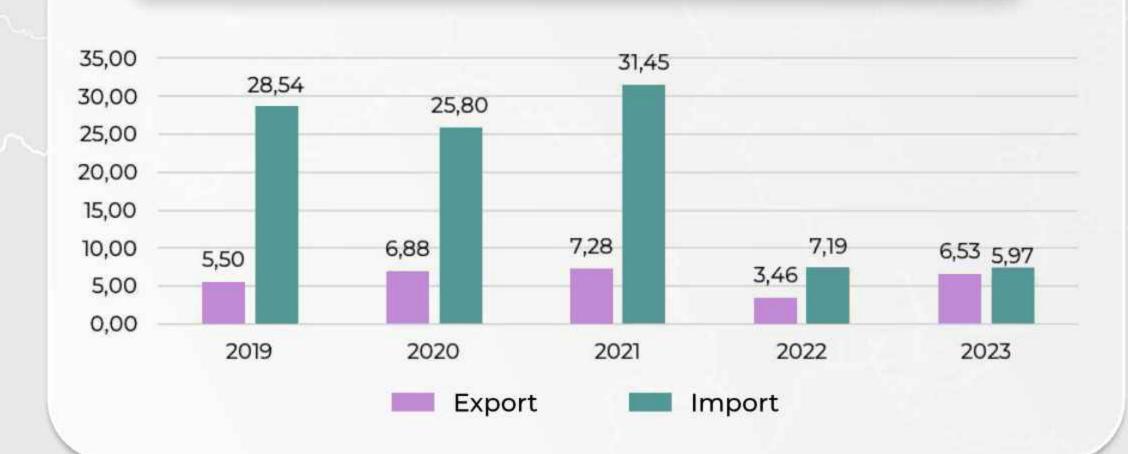


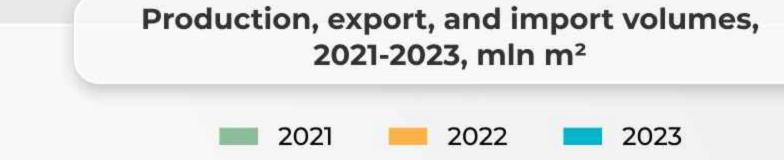


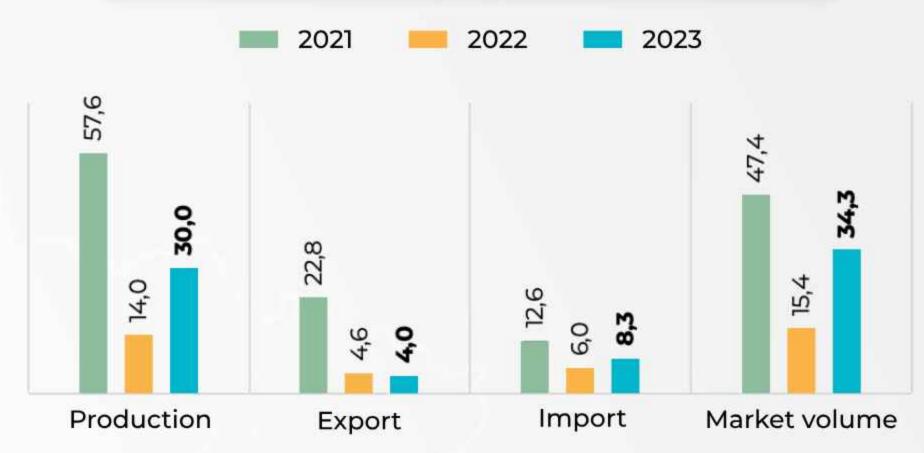
## 2.6-8.1 mln t/year

market surplus

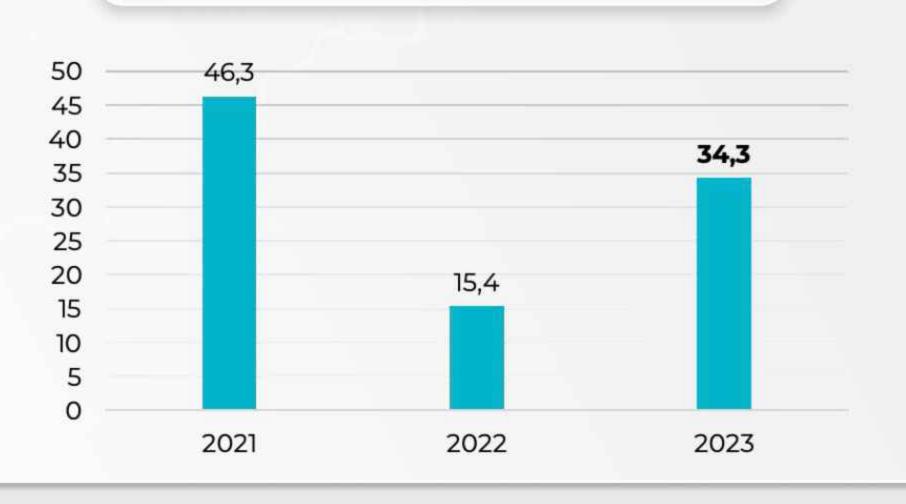
Turnover of cement, concrete or artificial stone products, reinforced or not, 2019-2023, mln USD







#### Consumption volumes, 2021-2023, mln m<sup>2</sup>



Sources: State Customs Service of Ukraine, E&Y

## CEMENT



13

#### Leading market players:

#### Ivano-Frankivskcement

#### Kryvyi Rig Cement

- Kryvyi Rih Cement Plant
- · Kamianske Cement Plant

#### **Dyckerhoff Cement Ukraine**

- Volyn-Cement
- Pivden-Cement

#### CEMARK

- Podilsk-Cement
- · Odesa Cement Plant
- Mykolaiv-Cement

# Number of SKUs at Ukrainian cement plants, units

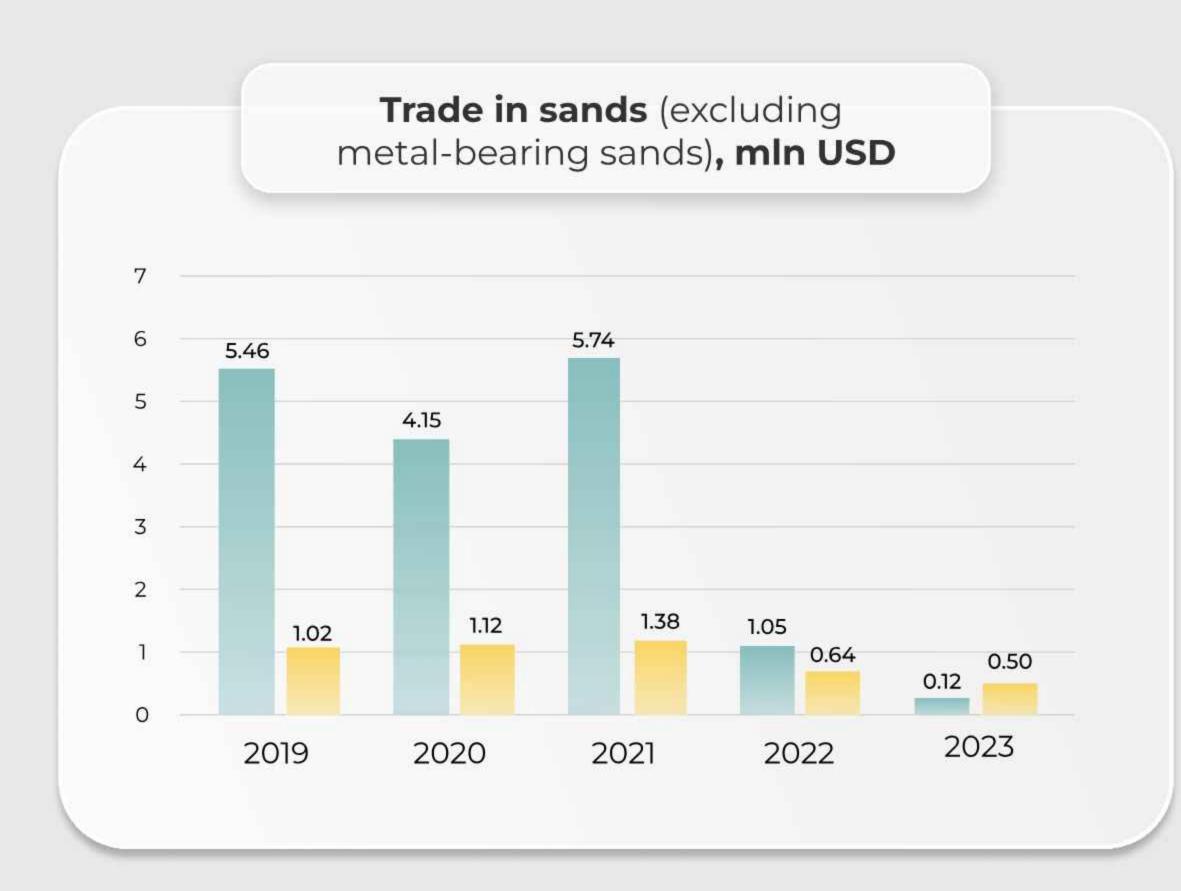


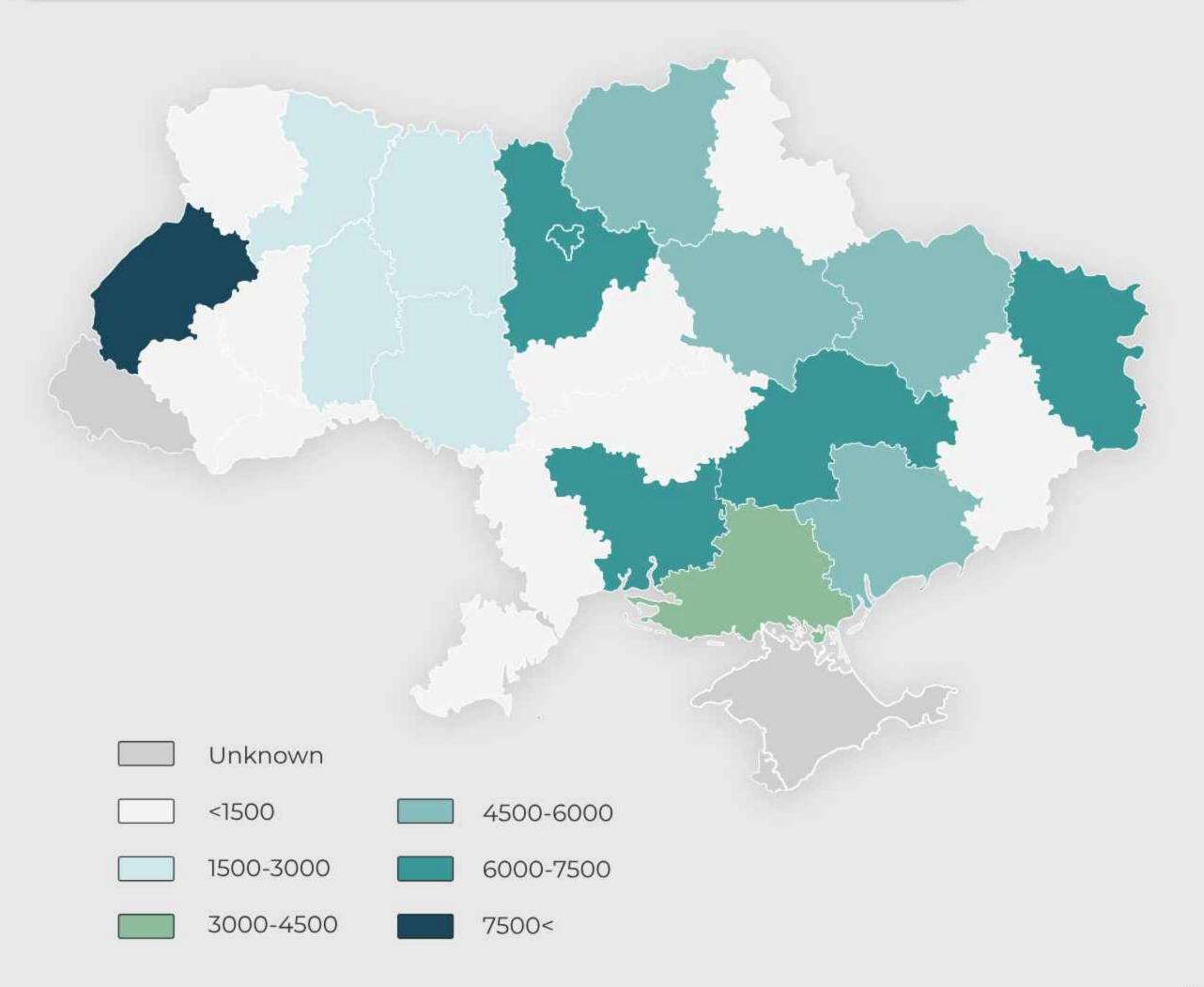
Sources: Ukrainian Business Awards

## SAND



Geographical structure of construction sand extraction, 2018-H1 2021, thousand tons





Sources: State Customs Service of Ukraine

## **BRICK**

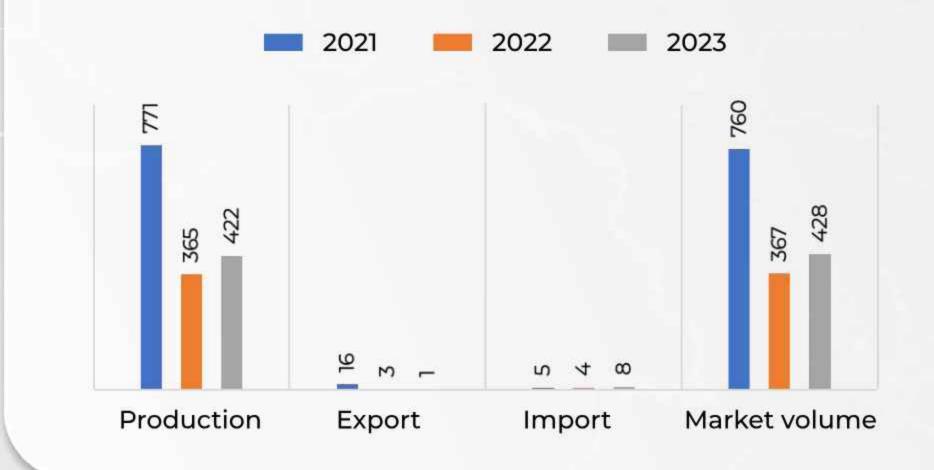




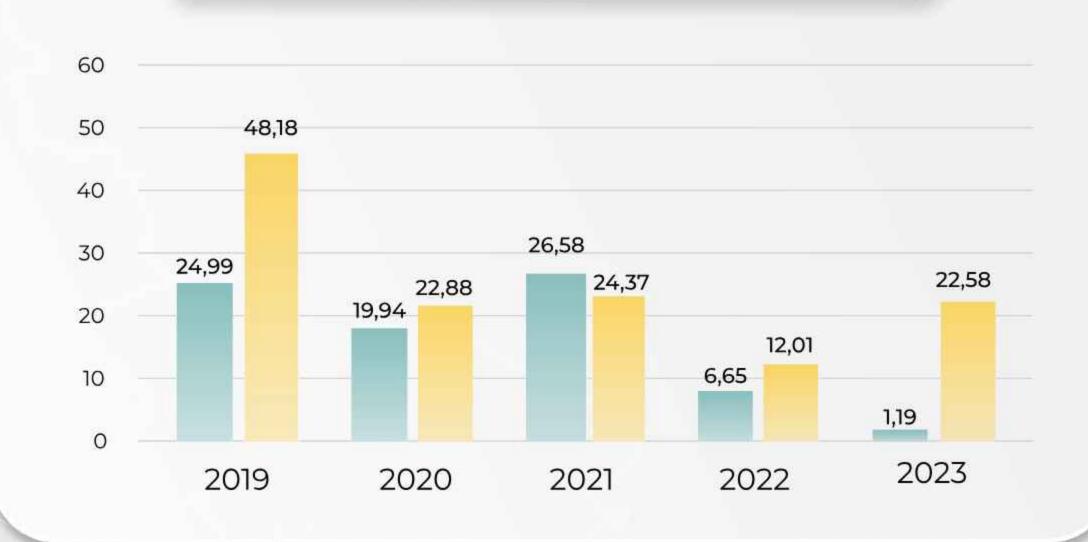
## 292-585 mln units/year

Market surplus

# Production, export, and import volumes, 2021-2023, mln units



#### Brick turnover, 2019-2023, mln USD



#### Consumption volumes, 2021-2023, mln units



Sources: State Customs Service of Ukraine, E&Y

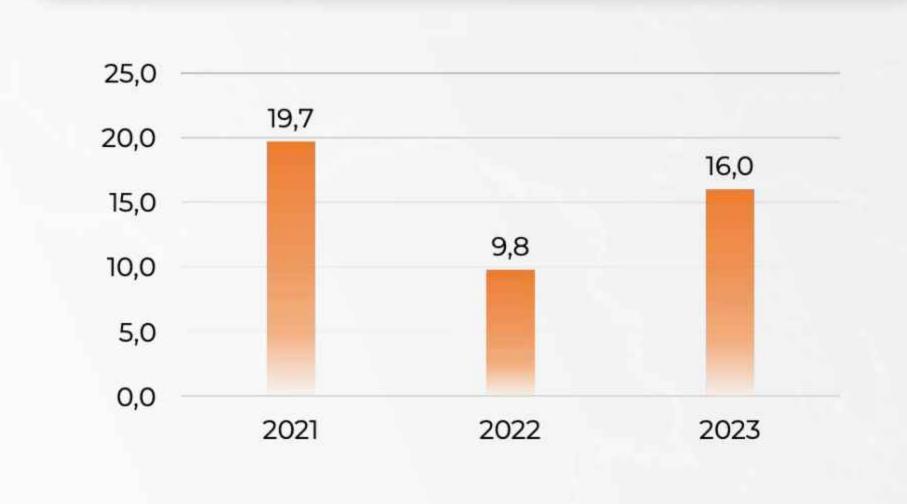
## CONCRETE



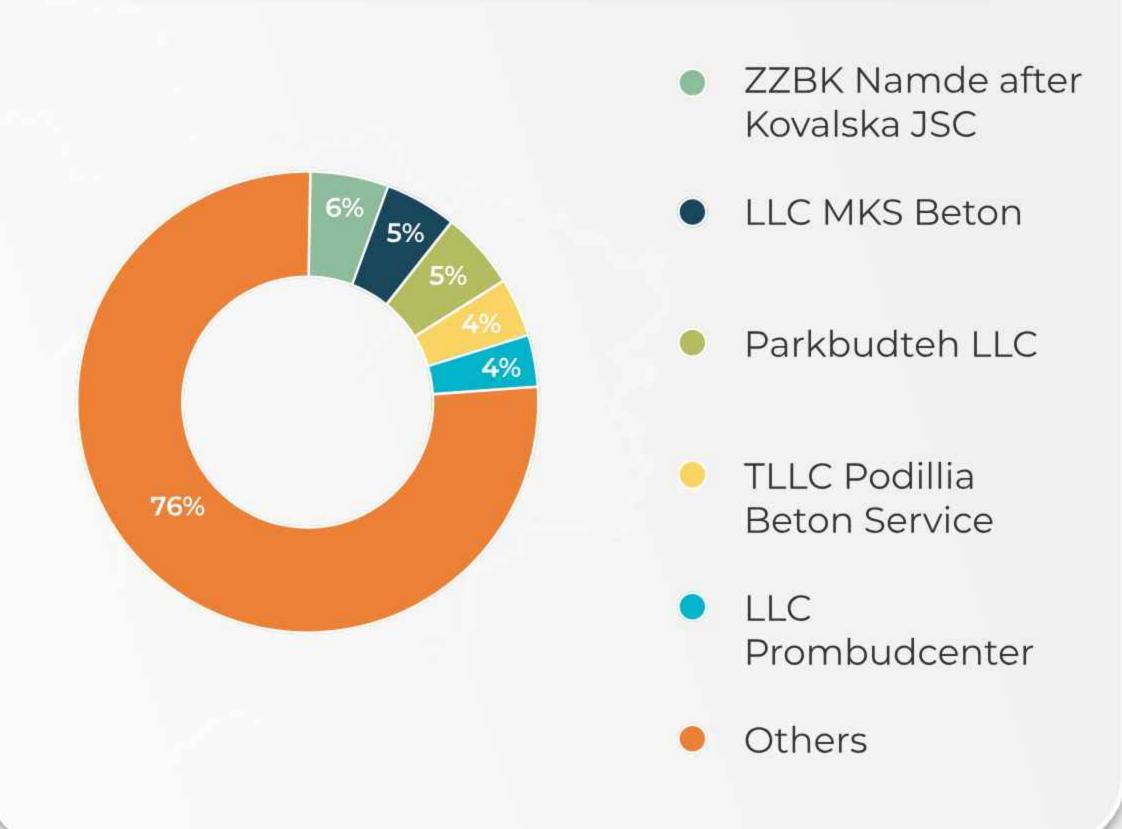


## 15.0-18.0 mln t/year Market surplus

#### Consumption volumes, 2021-2023, mln tons



# Major concrete market operators' share, 2023, %

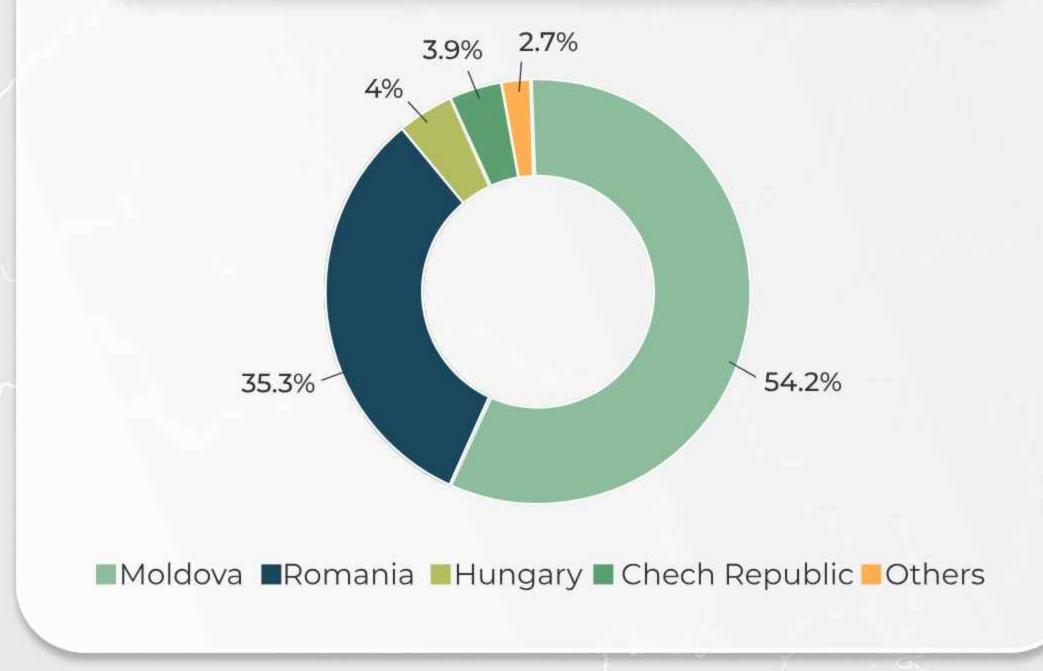


Sources: E&Y, ProConsulting

## **AERATED CONCRETE**



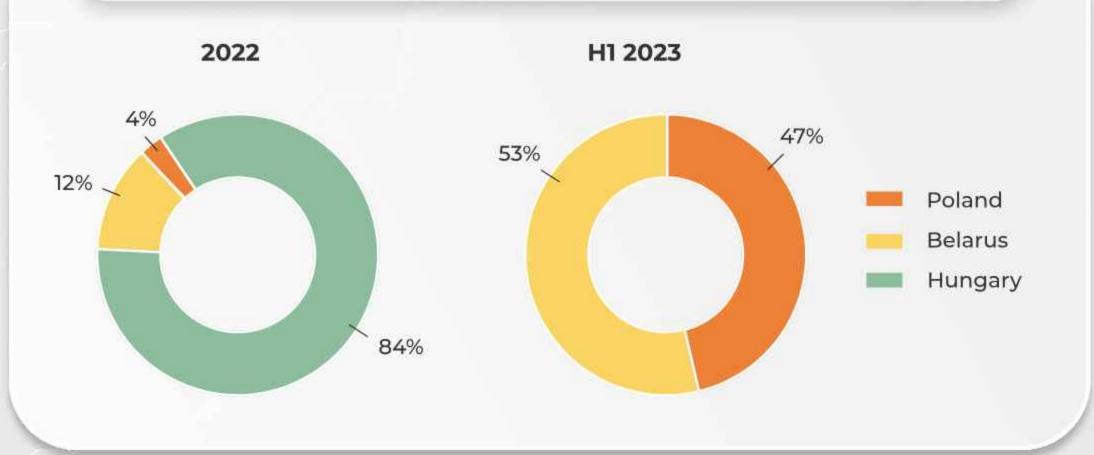




# Aerated concrete market volumes in Ukraine, mln UAH

Year	Market capacity	Growth rate, %	
2018	4416,38		
2019	4855,02	10%	
2020	6102,15	26%	
2021	6323,88	4%	
2022	3290,7	-48%	
H1 2022	1195,01		
H1 2023	2033,60	70%	

# Geographical structure of aerated concrete imports to Ukraine, %



Sources: InVenture, ProConsulting

## **AERATED CONCRETE**



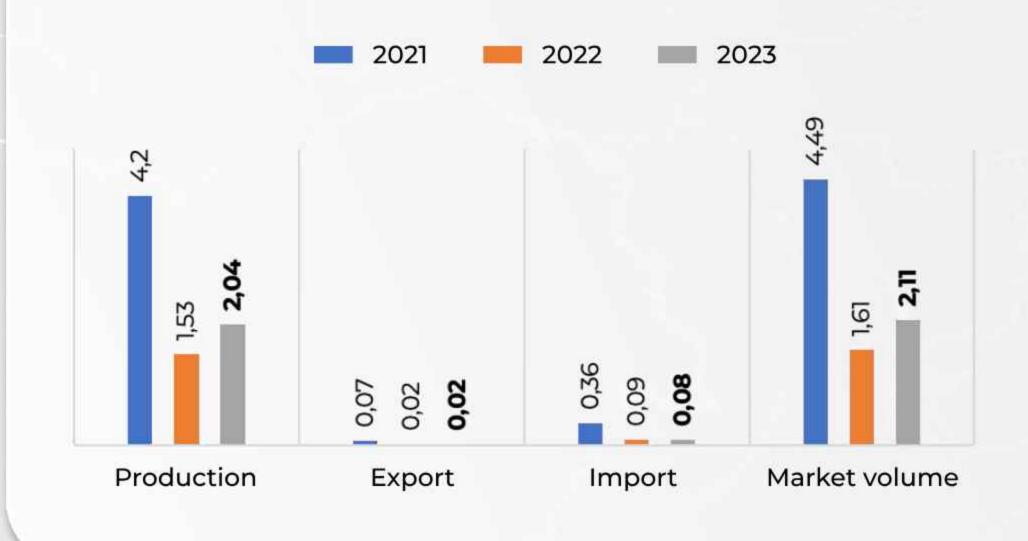
18



## 42 - 586 thousand m<sup>3</sup>

Annual projected demand/ supply gap volume, 2026-2034

# Production, export, and import volumes, 2021-2023, mln m<sup>3</sup>



# Consumption volumes, mln m<sup>3</sup> 5 4,5 4,5 4 3,5 3 2,5 2 1,6 1 0,5 0 2021 2022 2023

#### Aerated concrete market leaders in Ukraine:



LTD Orientir-Budelement



Aeroc LLCvENERGY PRODUCT» LLCv



Zavod KBM LTD



Energy Product LLC

Sources: E&Y

## **GLASS**

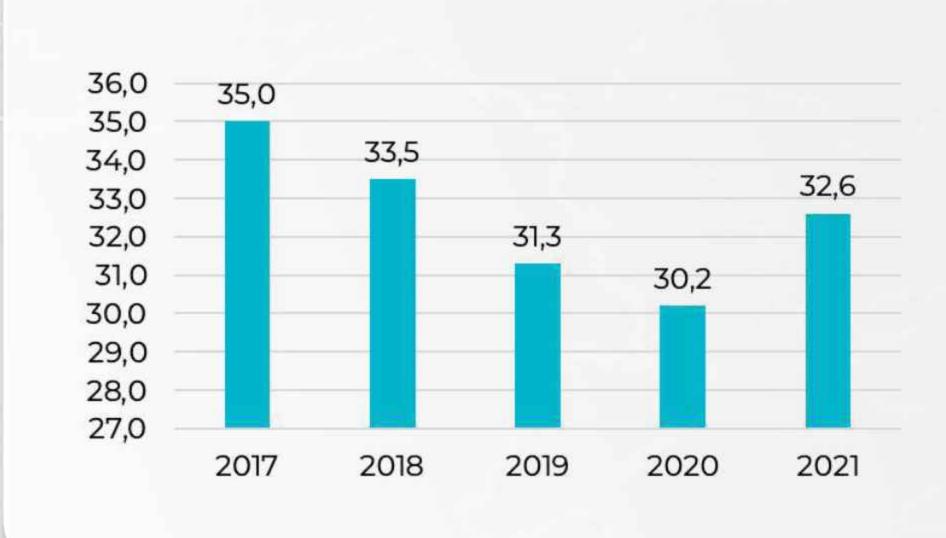




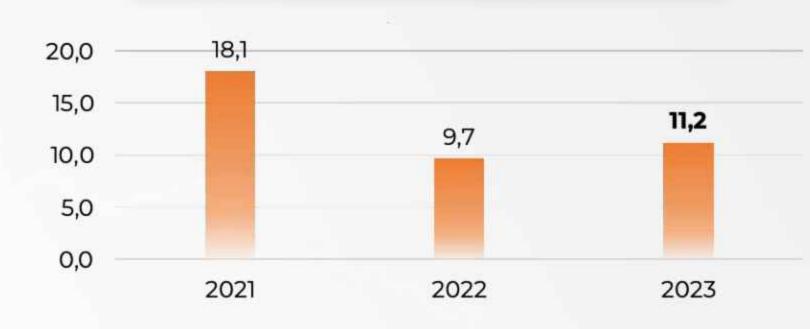
## $4.0 - 8.1 \, \text{mln m}^2$

Annual projected demand/ supply gap volume, 2025-2034





## Consumption volumes, 2021-2023, mln m<sup>2</sup>



#### Glass turnover, 2019-2023, mln USD

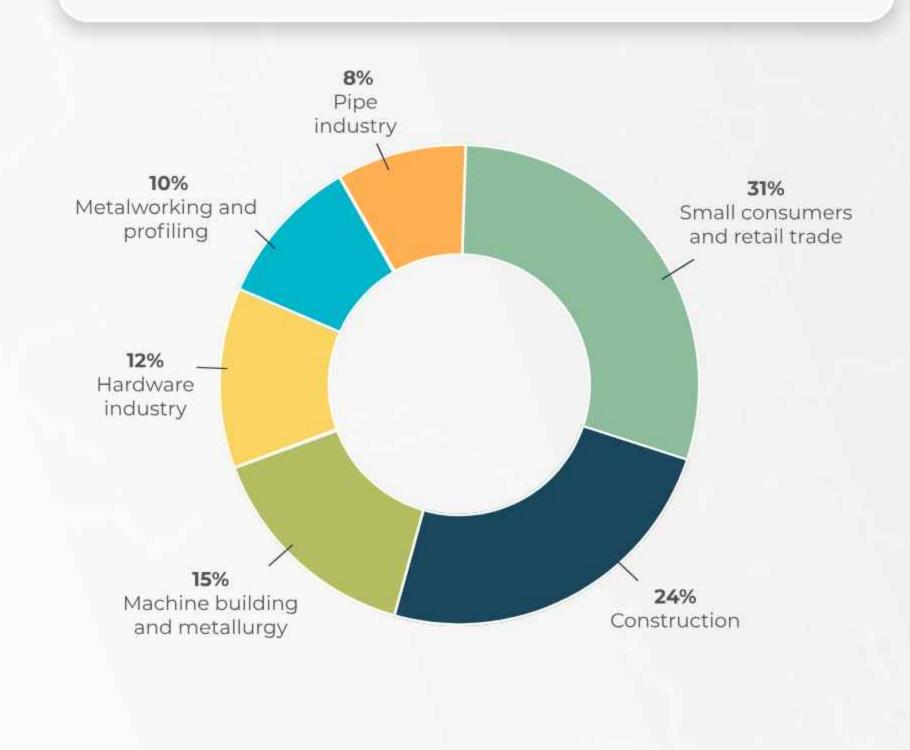


Sources: KorFor

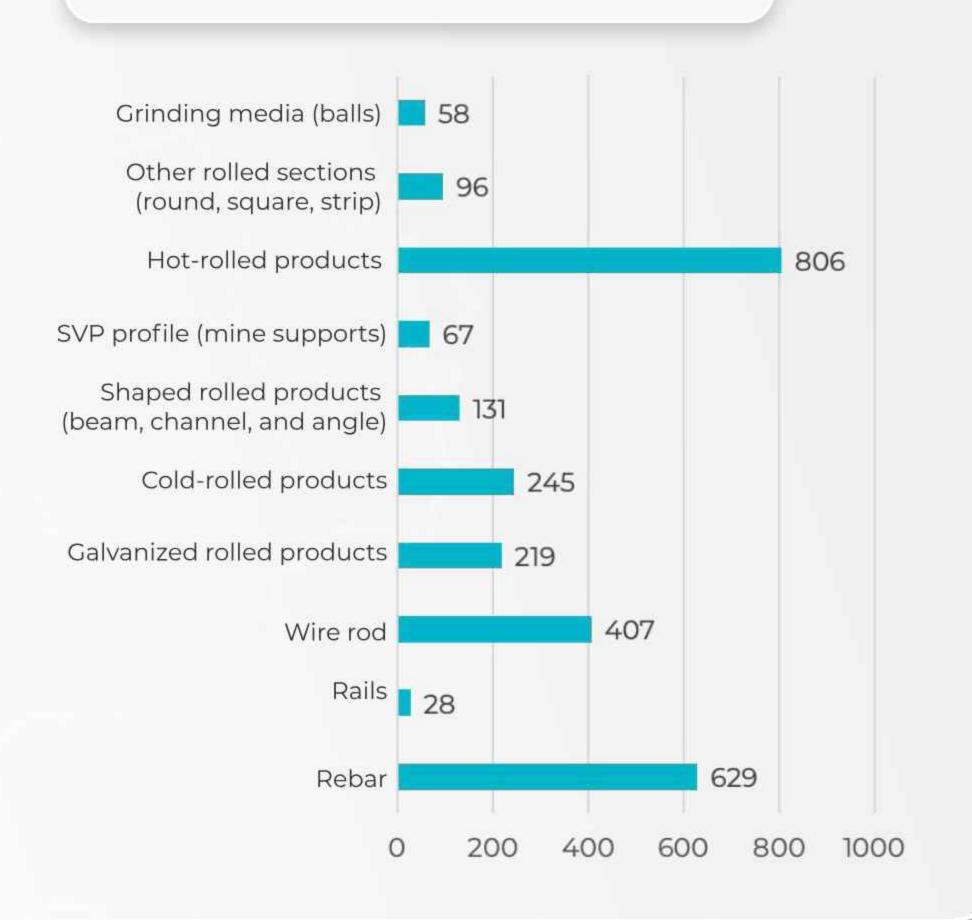
## METAL



# Sectoral structure of demand for metal products in Ukraine, 2023, %



# Metal consumption volume in Ukraine, 2023, thousand t



Sources: GMK Center

## STEEL





9,5-10,1 mln t/year Market surplus volume

Production, export, and import volumes, 2021-2023, mln t

2021 2022 2023

Production

Export

Import

Market volume

World's leading steel producers, 2023

Steel consumption volumes, mln t

China
1+ bln t

2

India 140+ mln t 3

Japan 87+ mln t

• • •

Ukraine
6+ mln t

## REBAR





63%

increased the demand for rebar in 2024 compared to 2021

Rebar market capacity in Ukraine, thousand t

\* data for 2024 - projected.

#### MAJOR REBAR PRODUCERS IN UKRAINE

During its operation in Ukraine, Metinvest has invested more than 10 bln USD in the country. The group employs over 65,000 people.

The main production facilities are located in the Donetsk and Dnipropetrovsk regions.

\*

During its operation in Ukraine, ArcelorMittal invested more than 5 bln USD in Ukraine. More than 26,000 people work in the company.

The main production facilities are located in Kryvyi Rih.

## DRY BUILDING MIXES





## 1.3 -1.4 mln t/year

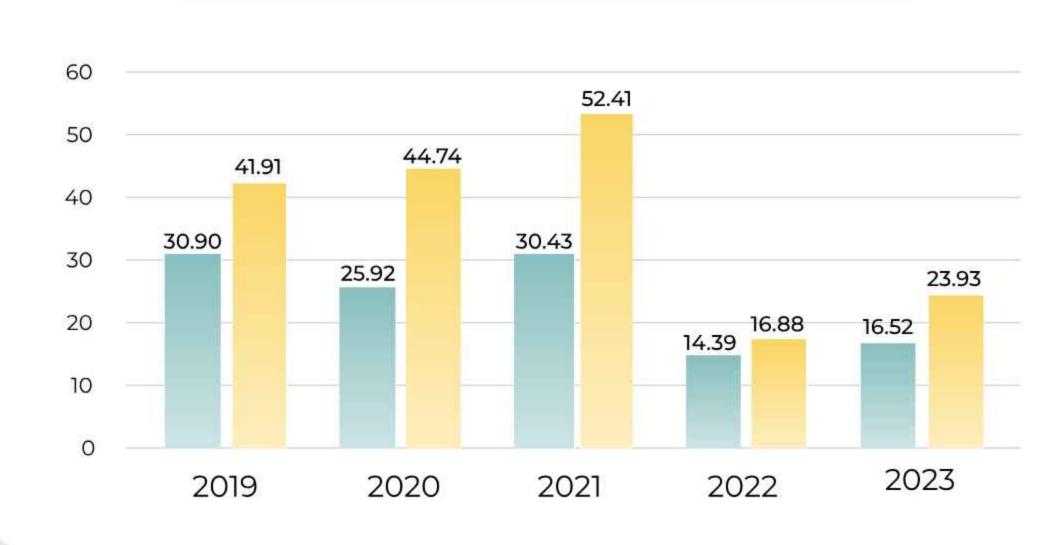
Market surplus volume

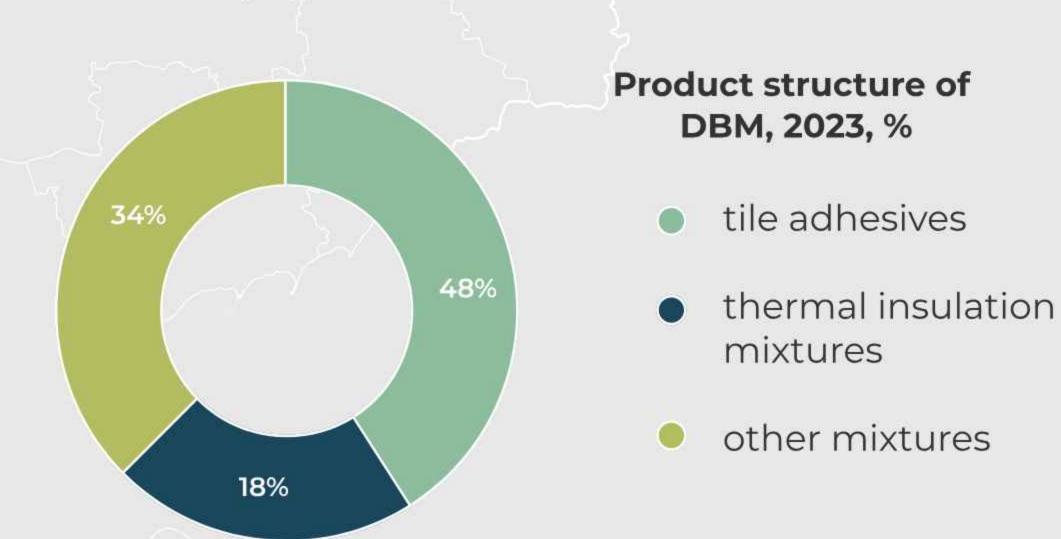
Production, export, and import volumes, 2021-2023, mln t



Production Export Import Market volume

#### Turnover of DBM, 2019-2023, mln USD





Sources: E&Y, Korfor

## DRY BUILDING MIXES

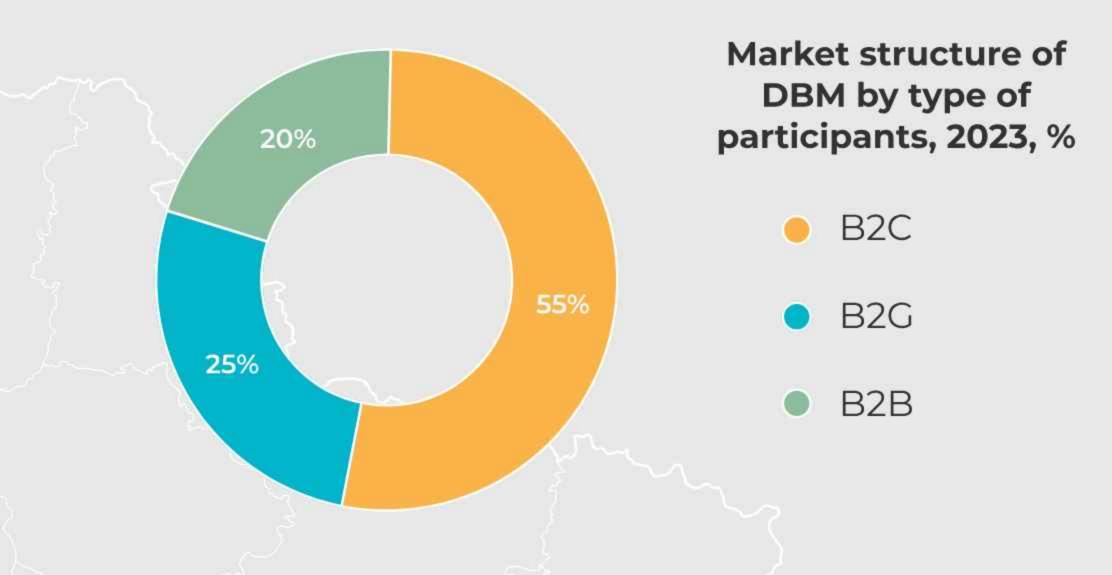


#### **DBM** market leaders in Ukraine

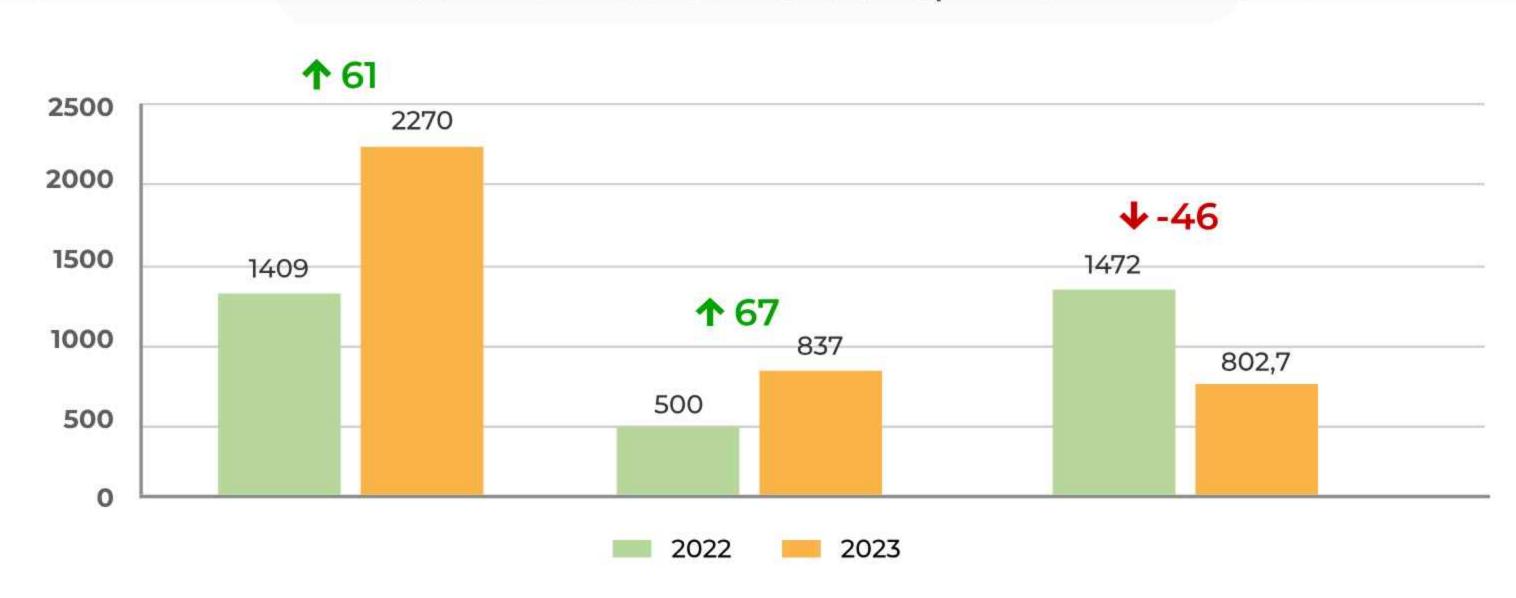
KNAUF – leading player in the world

Ceresit – a part of Henkel

Kreisel – a more niche player



#### Cement mixes market volume, mln UAH



Sources: ProConsulting, Korfor

## MINERAL WOOL





## 22 - 256 thousand t

Annual projected supply/demand gap volume, 2025-2034

Market production, export and import, 2021-2023, thousand t

2021

2022

2023

Production Market volume Export Import

Consumption volumes, 2021-2023, thousand t

Mineral wool turnover, 2019-2023, mln USD

Export

Import

25

## **PVC PROFILE**



26



## 48-61 thousand t/year

Market surplus

Market production, export and import, 2021-2023, thousand t

2022

2023

Production

Import

Market volume

PVC profile turnover, 2019-2023, mln USD

Consumption volumes,

2021-2023, thousand t

Export

Import

Sources: E&Y

## **SOLAR PANELS**





204 - 989 MW

Annual projected supply/demand gap, 2025-2034

#### Turnover and market volume, 2021-2023, MW

2023 2022

Export

Import

Market volume

Electricity consumption generated by SPPs in Ukraine, 2021-2023, MW



**53,4%** increase of the number of new solar panel installations worldwide, 2023

#### **Insolation indicators**

Ukraine

From **1100** to 1500 kWh/m<sup>2</sup> Europe

From 600 in the north to 2200 kWh/ m<sup>2</sup> in the south

27 Source: E&Y, TrendForce, Globalsolaratlas

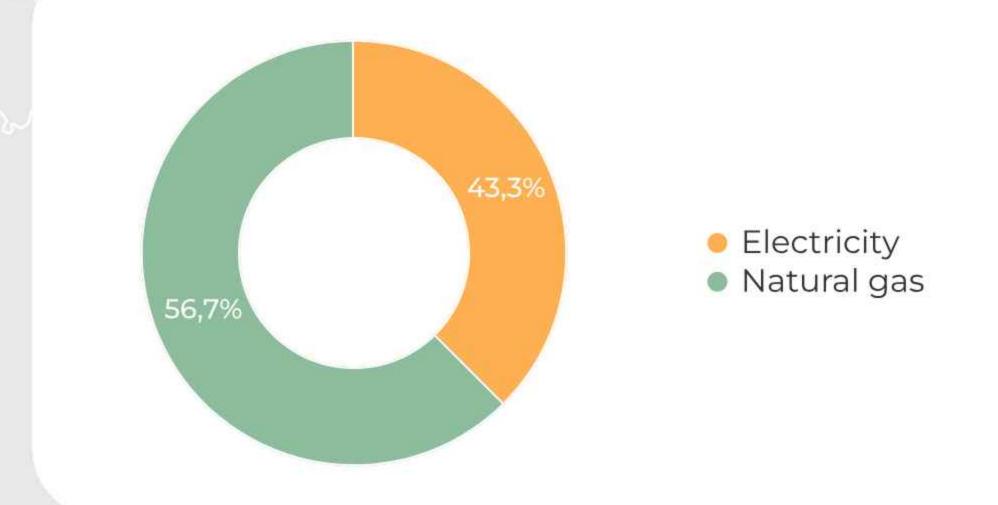


## Energy efficiency

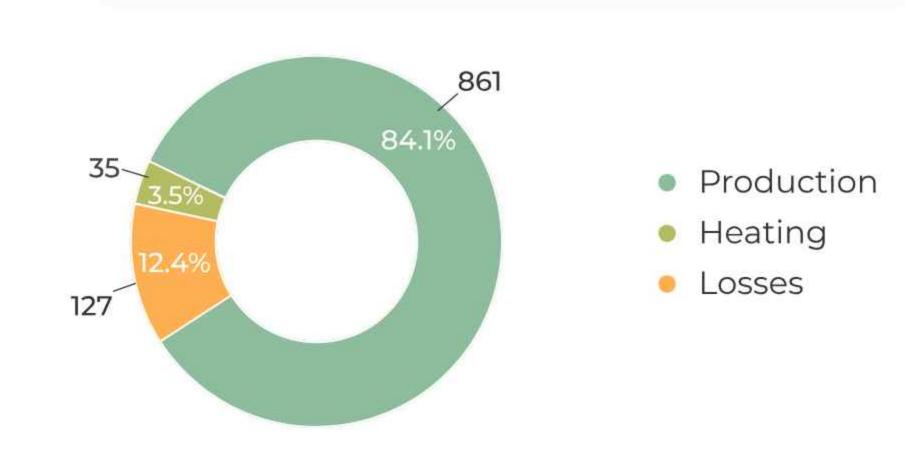
82%

energy savings that can be achieved by implementing energy efficiency measures with a simple payback period of less than 2 years

#### Ratio of primary energy resources



# Energy consumption costs, thousand USD/year





## 11 mln USD

Total annual cost-saving potential for large and medium-sized enterprises in the building materials sector\*



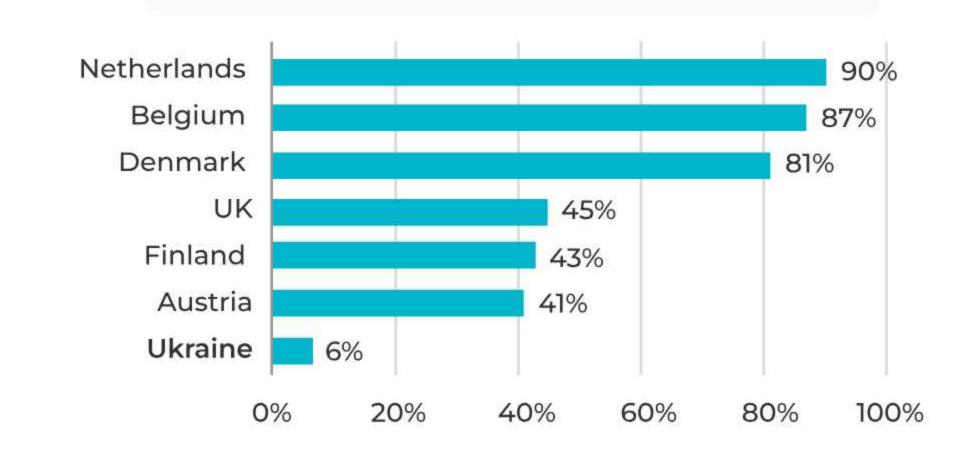
## Construction waste recycling



#### 670 thousand tons

of debris resulting from destruction (due to military actions, including shelling) had accumulated in Ukraine as of the end of 2023. A significant portion of this is construction waste.

# Construction materials recycling rates in the world



Recycling construction waste in Ukraine presents a compelling investment opportunity, especially with the increasing global emphasis on sustainability and waste reduction.

Implementing recycling technologies can significantly ease the strain on landfills and the environment, while also generating employment and fostering the growth of a secondary building materials industry.

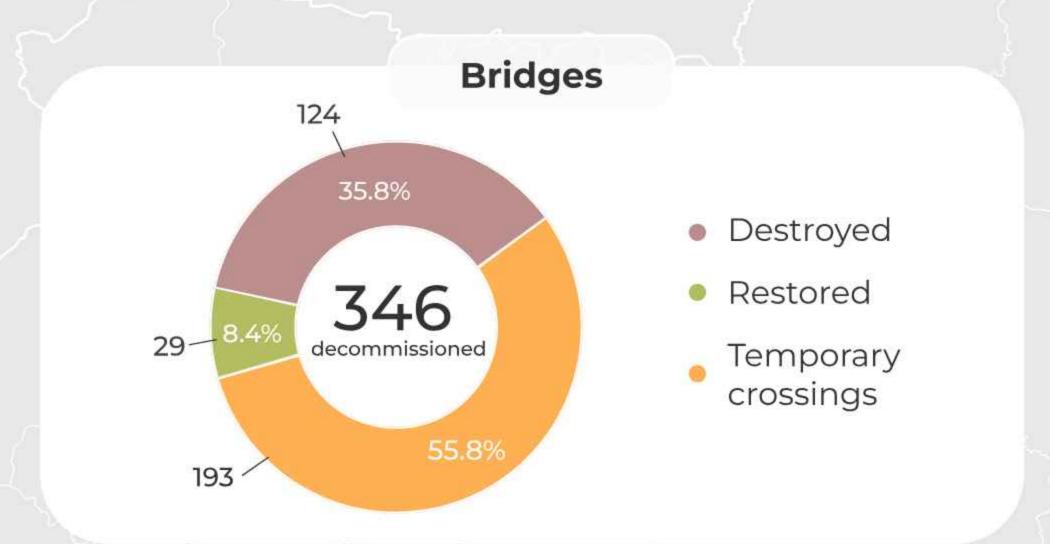
#### **IMPACT INVESTMENT**

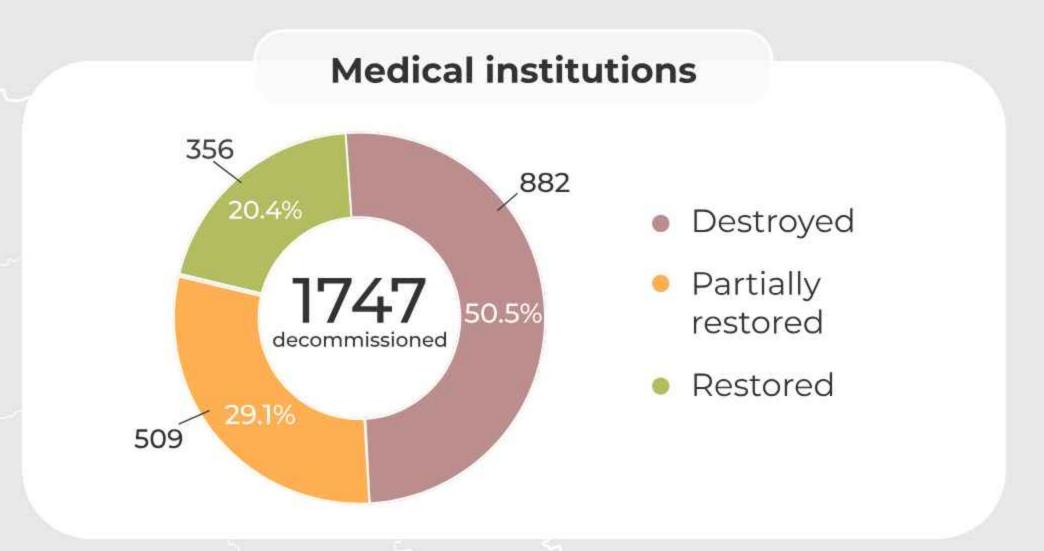
Investing in such enterprises can ensure high profitability, given the growing demand for building materials and the need for environmentally sustainable solutions in the context of Ukraine's large-scale reconstruction

Sources: Hmarochos, DTKR 29



Infrastructure projects







still require restoration



#### **MPACT INVESTMENT**

Investing in the construction of infrastructure objects will not only contribute to economic reovery but also improve the standard of living for the population, while creating new jobs

Sources: Slovo i Dilo

Construction sector capacity losses

At least 15% of enterprises involved in the production of construction materials have experienced varying degrees of damage

#### Bricks

39.3 mln m<sup>3</sup> or 14 bln units of bricks will be required to restore housing, which is more than 1,5 bln USD\*

#### Concrete

5.7 mln m<sup>3</sup> or 11.9 bln tons of concrete will be required for rebuilding, which is more than 300 mln USD\* SUB-SECTORAL INVESTMENT OPPORTUNITIES

#### Roofing

45 mln m<sup>2</sup> of roofing tiles will be required to restore housing, which is more than 200 mln USD\*

#### Cement

Market for dry cement mixes has experienced a loss of production capacity of 20% due to the war

#### Gypsum

At least 75% of production facilities stopped operation

#### Glass

75 - 90% market decrease due to termination of imports from russia and belarus



## **INVESTMENT INCENTIVES**

## Significant investments

#### REQUIREMENTS FOR INVESTMENT PROJECT



12+ EUR mln of investment



10+ of new jobs



up to 5 years\*\*\*

of project implementation



#### construction, modernization

technical and/or technological reequipment of objects

#### **FORMS OF SUPPORT**





CIT exemption\* (for 5 years by choice)



for importing new equipment and components to it \*\*



Exemption from **import duties** for new equipment
and components to it \*\*



Construction/compensation for built engineering and transport infrastructure (highways, communication lines, utilities, etc.).



Lease of state or communal land plots without land auctions



Compensation for costs of connection to engineering and transport networks



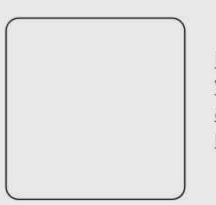
Land tax exemption/ reduced land tax rates



Exemption from compensation for losses of forestry production

#### **AMOUNT OF SUPPORT**

up to 30% CAPEX



For more detailed information, we recommend paying attention to the following regulatory acts

<sup>\*</sup> Not applicable to projects in the field of extraction for the purpose of further processing and/or enrichment of natural resources.

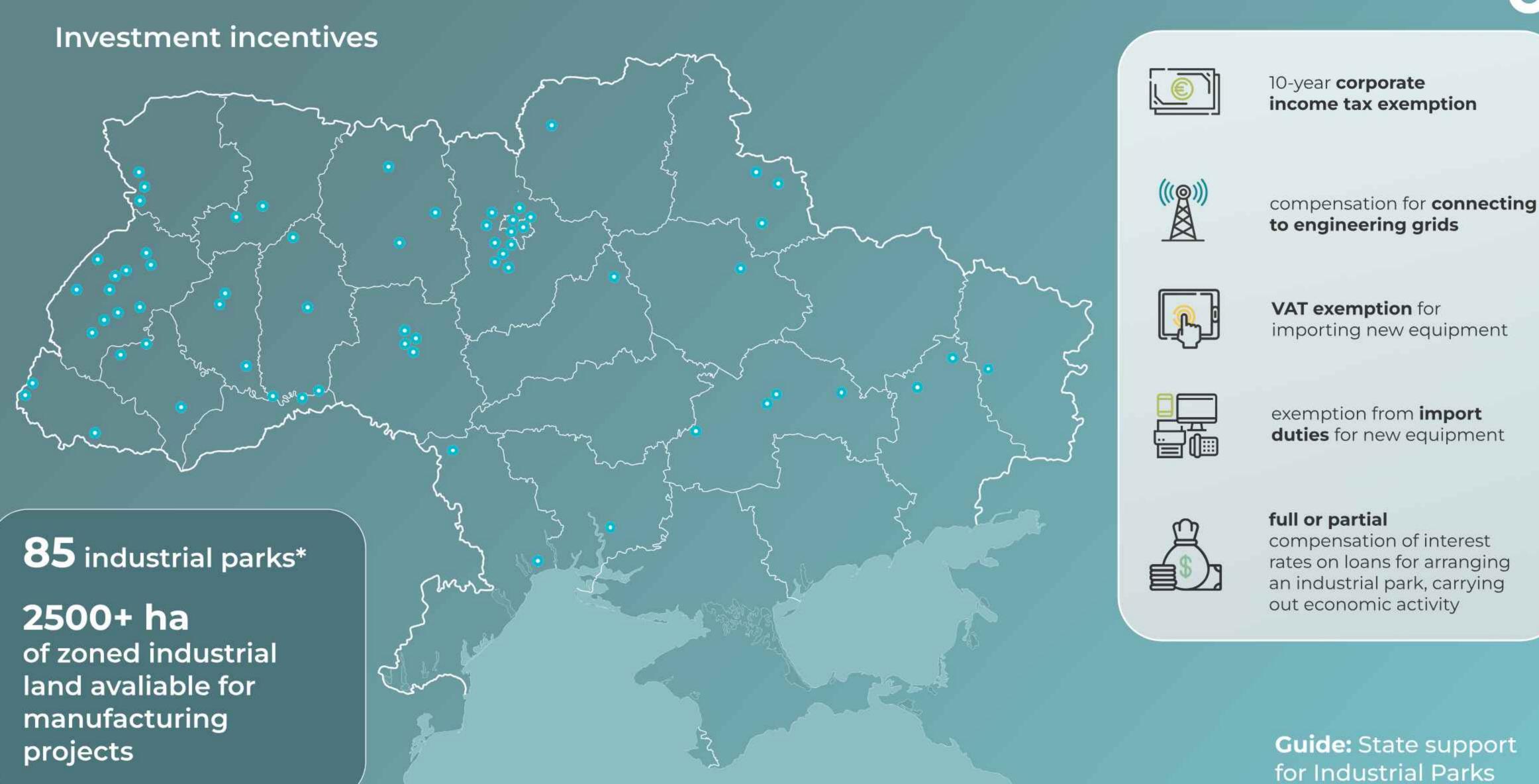
\*\* List and volume of equipment is approved by the CMU for each project.

<sup>\*\*\*</sup> The applicant, not earlier than 18 months before the date of submission of the application to the authorized body, may make investments in investment facilities in the amount not exceeding 30% of the total amount of significant investments required for the implementation of an investment project with significant investments

## INVESTMENT INCENTIVES



32

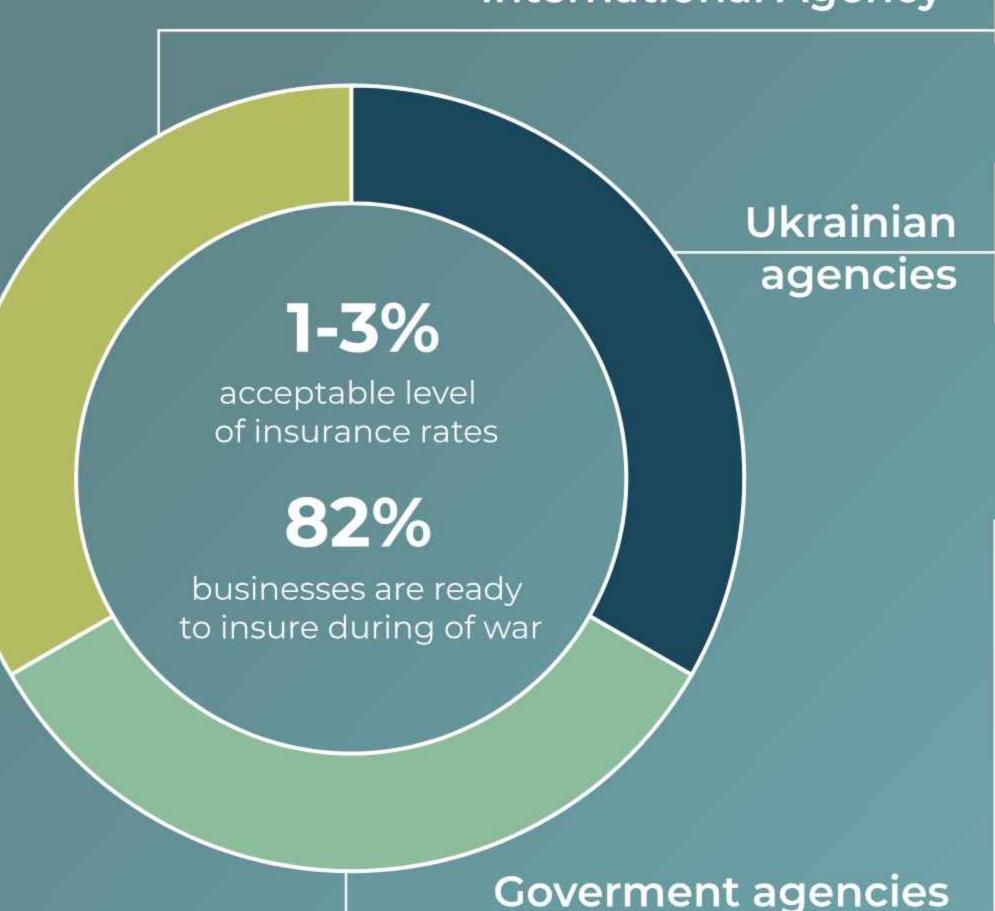


Source: Cabinet of Ministers of Ukraine

## INVESTMENT INSURANCE







A formalized agreement on the implementation of the investment insurance mechanism for foreign investments: 2022

Annual rate: 2-3%

Insurance period: 10 years

Coverage of the amount of losses: up to 90% Sure Trust Fund: USD 110 mln, goal - USD 330 mln

Law No. 9015 "On Amendments to the Law of Ukraine "On financial mechanisms for stimulating export activity" regarding insurance of investments in Ukraine against military risks": 2023

Annual rate: 0.49% - 8.05% Insurance amount: UAH 200 mln

Insured for 5 months in 2024: UAH 2.93 bln

Property insurance against war risks: 2024 Implemented cases: Grain elevators

Ship insurance in the Black Sea: 2023

Containers with grain, iron ore, and steel, electrical equipment, fodder

Annual rate: 0.75%

Coverage amount: USD 50 mln

Memorandum on coverage of American, international and Ukrainian investments in Ukraine: 2023 Coverage of the amount of losses: up to 85%

Insurance for SMEs: USD 50 mln

Insurance of the agricultural sector, manufacture: USD 300 mln

22 export-import agencies: Germany, WB, USA, Japan, Canada, Italy, Poland, Norway, Slovakia, France, Bulgaria, Estonia, Latvia, Lithuania, Czech Republic, Austria, UAE, Portugal, Spain, Sweden,

Finland, Denmark

Volume of the collected fund: EUR 1 bin

33 Source: MIGA, Ministry of Economy of Ukraine, USAID

