### AGENCY FOR STRATEGIC AND ECONOMIC DEVELOPMENT

# Investment Teaser HOT ZINC COATING PLANT

## The Republic of Belarus



GDP (USD) 55.65 bln (2018) Rank in the world: 79/191

Foreign

trade

(% of GDP)

121.5% (2018)

Religion

orthodox - 61.5% atheists - 28.6%

catholics - 8.7%

Currency (BYN) 2.15 for 1 USD (January 2019)

GDP per capita (USD)

**5 920** (2018)

Rank in the

world: 95/190

Population 9.49 mln (2018) Rank in the world: 89/191

Languages (official) Russian Belorusian



Economic Structure (2018) Industry - 22% Trade - 9.4% Agriculture - 7.2%

> Political System Presidential republic

Average Age 39.7 years (2018) Rank in the world: 41/201

Capital Minsk Population - 1.99 mln people (2018)

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# Comparison with neighboring countries

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	Belarus		Russia		Poland		Litva	
	value	latest update	value	latest update	value	latest update	value	latest update
Exchange rate (for 1 USD)	2,15 BYN	Jan.19	66,92 RUB	Jan.19	3,72 PLN	Jan.19	0,87 EUR	Jan.19
GDP growth rate	2,3%	Dec.18	1,8%	Nov.18	1,7%	Sept.18	-0,3%	Sept.18
Nominal GDP (bln. USD)	55,65	Dec.18	1 578	Dec.17	525	Dec.17	47,17	Dec.17
Nominal GDP per capita (thousand USD)	5,86	Dec.18	11,41	Dec.17	15,75	Dec.17	16,79	Dec.17
Expansion rate of industrial output	6,1%	Nov.18	2,4%	Nov.18	4,7%	Dec.18	2,8%	Nov.18
Unemployment	0,3%	Nov.18	4,8%	Nov.18	5,7%	Nov.18	8,3%	Sept.18
Employed (mln.)	4,34	Nov.18	72,6	Nov.18	16,62	Sept.18	1,38	Sept.18
Average wage (USD per month)	462	Nov.18	639	Nov.18	1231	Sept.18	1076	Sept.18
Minimal wage (USD per month)	153	Jan.19	167	May 18	552	Dec.18	460	Sept.18
Retirement age for females (years)	56,5	Jan.19	55,25	Jan.19	60	Dec.18	62,3	Dec.18
Retirement age for males (years)	61,5	Jan.19	60,25	Jan.19	65	Dec.18	63,7	Dec.18
Average interest rate	10%	Dec.18	7,75%	Dec.18	1,5%	Jan.19	0%	Dec.18
M0 money supply (bln. USD)	1,31	Nov.18	134,20	Nov.18	72,36	Nov.18	7,11	Nov.18
M2 money supply (bln. USD)	7,14	Nov.18	670,83	Nov.18	375,07	Nov.18	31,04	Nov.18
Foreign exchange reserves (bln. USD)	7,44	Nov.18	462	Nov.18	116,96	Dec.18	3,91	Nov.18
Inflation (in a year)	5%	Dec.18	3,8%	Nov.18	1,3%	Nov.18	1,9%	Dec.18
Trade balance (mln. USD)	-357	Oct.18	19 697	Oct.18	-676	Oct.18	-159	Nov.18
Monthly export volume (bln. USD)	2,92	Oct.18	41 315	Oct.18	23,15	Oct.18	3,05	Nov.18
Monthly import volume (bln. USD)	3,27	Oct.18	21 618	Oct.18	23,83	Oct.18	3,21	Nov.18
Foreign debt (bln. USD)	39,46	Sept.18	467	Sept.18	367,24	Sept.18	41,22	Sept.18
National debt to GDP	29%	Sept.18	12,6%	Dec.17	50,6%	Dec.17	39,7%	Dec.17
National expenses (bln. USD)	1,27	Dec.18	58,73	Sept.18	24,4	Nov.18	1,49	Dec.17
National debt (bln. USD)	21,2	Nov.18	181,3	Sept.18	258	Oct.18	17,11	Nov.18

## Risks of the Republic of Belarus

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#### Dynamics of the risk indices of the Republic of Belarus (100 - the lowest risk)

Index name	2016	2017	2018			
Position in the economic risk index rating – 169/202						
Level of short-term economic risk	29.2	34.2	46.0			
Level of long-term economic risk	32.2	33.7	39.4			
Position in the political risk index rating – 130/202						
Level of short-term political risk	62.5	62.5	62.5			
Level of long-term political risk	50.3	56.2	56.2			
Position in the operational risk index rating – 63/201						
Level of operational risk	57.2	56.5	57.2			

Note: Fitch

Risk indices of the Republic of Belarus in comparison with the neighboring countries (100 - the lowest risk)

Country	Operational risk index	Labor market risk index	Trade and investment risk index	Criminal risk index	Logistic risk index
Poland	69.5	55.6	69.2	78.4	78.4
Lithuania	68.5	55.2	71.8	71.5	75.5
Belarus	57.2	56.5	59.2	49.9	63.3
Russia	55.9	63.6	56.2	40.9	62.9
Ukraine	45.7	54.9	45.6	30.5	52.0

#### Position of countries in the "DoingBusiness" rating



Note: World Bank Group

## Vitebsk Region workforce



Universities and academies



Colledges

33

### Working-age population

245 thousand people

254 thousand people



### Vitebsk Region



Population of the Region as of January 1, 2018 -1 180.2 thousand people

## FEZ "Vitebsk" preferences

### Exemption from taxes:

- ✓ Income tax;
- ✓ Real estate tax;
- $\checkmark$  VAT for imported goods;
- ✓ Land tax.



Customs preferences under customs procedure of the FCZ:

- ✓ exemption from paying import customs duties for the production within the investment treaty;
- exemption from paying customs duties when exporting the product outside EAEU;
- $\checkmark$  exemption from VAT when exporting the product within EAEU;





FCZ - "free customs zone" customs procedure

## Pros of FEZ "Vitebsk"

- Government guarantees the protection of investment
- Developed infrastructure
- Advantageous geographical position
- Access to the EAEU market
- Great staff potential
- ➢ Visa-free entry for nationals from 80 countries
- Economic and political stability

Low crime rate





Access to the common EAEU market (Belarus, Russia, Kazakhstan Kyrgyzstan, Armenia)



183 mln. people



14% land in the world



budgetary means

## World zinc market





## Producers of zinc in EAEU

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### Republic of Kazakhstan

Ust-Kamenogorsk zinc plant

Ridder metallurgic plant



Structure of the final comsumption of zinc in the Russian Federation in 2018 (total consumption - 242 thousand tons)



## Zinc coating of metals

### > galvanic method

➢ hot zinc coating

 $\succ$  diffusion zinc coating

➤ metallization

 $\succ$  cold zinc coating

➤ gas-dynamic zinc coating



Hot zinc coating is considered to be one of the most cost-effective and widespread methods of protecting metal from corrosion



### Hot zinc coating

### average zinc consumption per 1 ton of metal - 50-75 kg



### Pros of the finished product

- ✓ corrosion resistance approaches the levels of resistance of stainless steel
- ✓ the coating is restoring on its own in the damaged areas
- ✓ the coating is more resistant to chipping than paint and varnish coating

## Belarusian zinc market



### Dynamics of the export of zinc and its scrap





### Yearly consumption of zinc





The country doesn't have local production of zinc: it is imported or exptracted from metal waste and scrap

## Belarusian market of zinc coating

2015

Consumption of zinc for the purpose of zinc coating of metals (estimates)



2017

2018

2016

tons

NOTE: ASEC

NOTE: ASED



Annual production of zinc coated metal structrures



Key factors





current machinery market current market of non-residential construction

## Existing hot zinc coating workshops

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#### "Zapadelectrosetstroy" JSC

(part of SE "Belenergo"), has a hot zinc coating workshop for the metal structures produced





### государственное предприятие КОНУС завод горячего цинкования

### "BelLuxeStroy" LLC

capable of hot zinc coating of metal structures of 11.7x1.4x1.9 veters and wighing up to 2.5 tons

### "Rechickij Metiznyj Zavod" JSC

(part of the "BMK"), capable of hot zinc coating of metal structures of 12.5x1.5x2.5meters and weighing up to 7 tons

#### SE «Konus»

capable of hot zinc coating of metal structures of 15x1.8x3.5 meters and weighing up to 6 tons

Mass of a metal structure	Price w/o VAT for 1 ton
up to 1 kg	2 500 BYN
1-5 kg	1 500 BYN
5-10 kg	1 000 BYN
10-100 kg	780 BYN
more than 100 kg	700 BYN



Prices for the hot zinc coating of metal structures services largely depend ontheir witht as well as the voilume of contract - in majority of cases the prices are set individually frfor every consumer of the service. государственное предприятие КОНУС завод горячего цинкования

The data provided is based on the current pricing of SE "Konus"

## Necessary equipment



#### Prices for the basic equipment

Equipment	Price, x1000 USD
Furnace with impulse heating	249
Zinc coating tub	189
Casing from zinc coating fumes	140
Baghouse for zinc coating fumes	280
Conveyor-type drying oven	128
A lid for a zinc coating tub	21
A ladle for collecting zinc gard	11
Equipment exactification	

### Equipment specification



Productivity10,8 tons/hourElectric energy consumption332 kW/hour

NOTE: Westech

Gas consumption

Zinc consumption

720 kg/hour

203 m<sup>3</sup>/hour

The layout of the basic equipment for the hot zinc coating line



## Investment and project efficiency



FREE

70NF

Investment volume required	7.7 mln. USD	
Инвестиции	Цена, тыс. USD	
Basic equipment	1 694	
Preliminary equipment preparation	1 303	
Transportation system	1 204	
Blueprints and design	43	
Equipment installation, testing and start up services	377	
Construction and installation	1 911	
Operating capital	1 200	

This investment project is cost-efficient and can be successfully implemented within FEZ "Vitebsk" territory

> Preliminary indicators of the project financial efficiency (horizon - 16 years)

The total average annual proceeds from the project upon the enterprise reaching its planned capacity will amount to 21.77 mln. USD.

The created hot molding enterprise is a profitable business and will allow investors to receive sizeable profits from capital investment

The average annual net profit - 6.5 mln. USD.

Investment	Meas.	Amount
Net present value	x1000 USD	39 170,7
General payback period	years	3,32
Discount payback period	years	3,48
Profitability index		6,53
Term of reaching planned capacity	years	3
Annual revenue (upon reaching the planned capacity)	x1000 USD	21 770
Annual profit (upon reaching the planned capacity	x1000 USD	6 532

\*payback horizon – 14 quarters



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