

ArmBasalt

Investment Proposal

October 2023
Yerevan, Armenia
Prepared by Hundred CJSC





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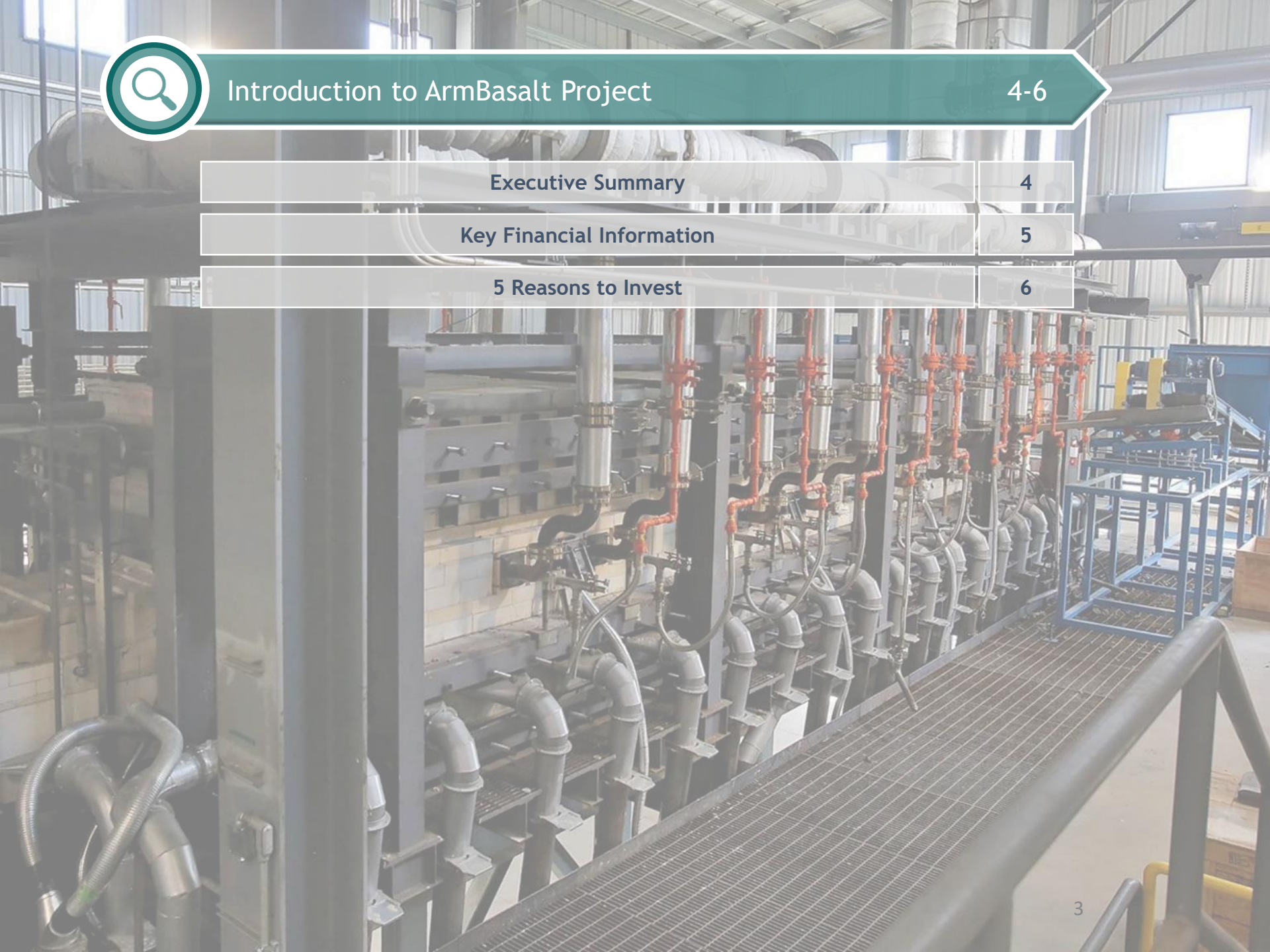
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Core Idea

Production of continuous basalt fiber (CBF) and basalt-based products in Armenia to sale in MEA, Europe and Asia regions.

Combination of stable high-quality basalt rocks in Armenia with experienced Management and modern cost-effective technologies by competitive price.

1. Renovate furnaces, install new equipment and re-launch production to about 1k tn per year
2. Construct additional 25 furnaces to increase current plant capacities up to 6k tn per year
3. Construct new plant with up to 20k tn per year



Key Milestones



Definition of Issue

1. Product features vary significantly depending on the input quality of raw materials. 2. Rising energy prices demand new cost-effective technologies to keep margin. 3. Geopolitical situation impairs position of leading market suppliers of basalt products.

Even current market researches show significantly different forecasts, overall market growth is expected to be from 5 to 12 percent p.a. Considering growth in target industries for basalt-based products and new use cases, market can achieve up from 450 mln EUR by 2030.



Market Overview



Solution

The project aims to purchase equipment for new products, renovate furnaces to increase efficiency and as a result, within I Phase, re-launch end-to-end production process on order to deliver products to already existing and new customers. Growing prices for iron-based construction materials provide market opportunities for substitutes such as CBF. Starting from year 3 of Stage I investment foresees significant expansion of the production volumes and increase diversity.

There are 2 planned investments stages; current business plan is targeted to the Stage I with total amount of 93 mln EUR expansion project. Further, within Stage II the investment will reach up to 250 mln EUR. Stage I will be implemented for renovation of existing 5 furnaces and establishment of new 25 furnaces.



Investment



Value for Customer

1. High quality products delivered by competitive price. 2. Stable product quality and required product features ensured due to homogeneous geological composition of Armenian basalt rocks. 3. Team with deep expertise supports the development and the launch of new perspective products.

Stage I activities are foreseen for 8 months since securing the investments for existing furnaces rehabilitation. Some activities as pre-sale for customers and ordering of equipment are already started. And then for establishment of new production capacities it require additional 12-14 months. The overall productivity will be up to 6,000 tns per annum, based on 30 furnaces in total to be renovated or installed.



Timeline

Green economy

Within the Green Economy Framework, construction of a 5 MW solar photovoltaic station on the premises is foreseen during the modernization and construction periods of the project. The company has implemented a shift in its energy policy towards renewables to reduce electricity costs as well as the use of capture and recycling technologies during manufacturing processes. Investment in Green Economy Framework shall cost 3 mln Euro.



Valuation Materials

Yerevan, Armenia

Executive Summary

20 October 2023

4



Key performance indicators Y10

EUR18,134 th

EBITDA

EUR42,908 th

Revenue

EUR17,897 th

Gross Profit

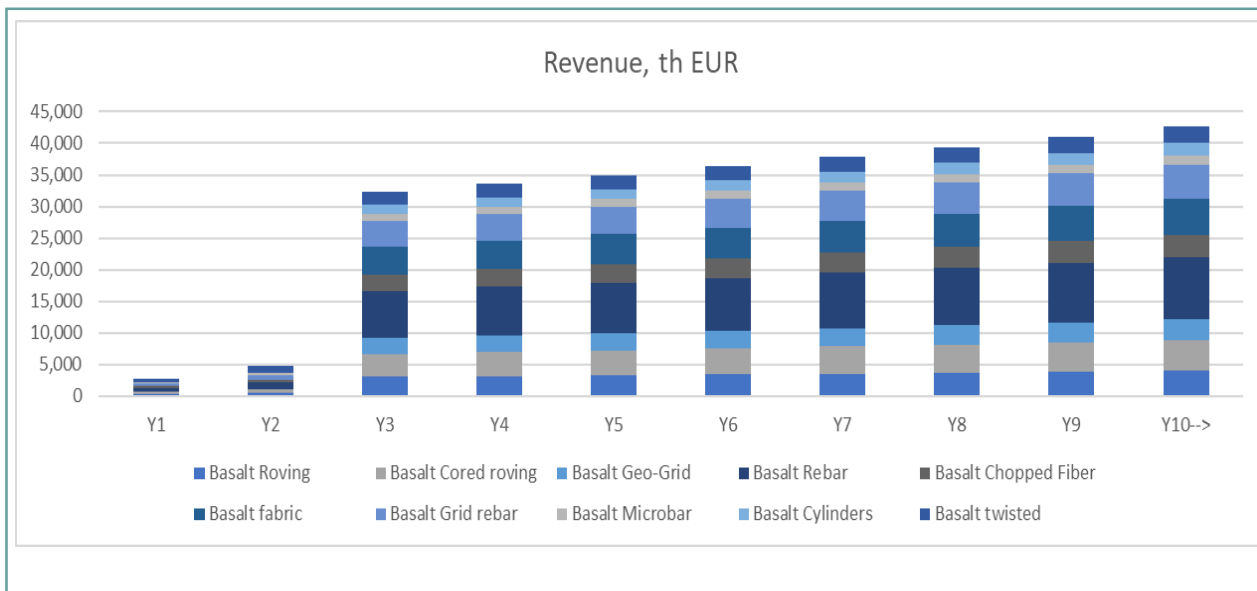
EUR14,675 th

Net Profit

EUR20,804 th

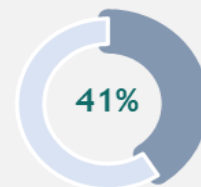
Cash Flow From Operating

Projected revenues and operational profit margin for Stage I investments

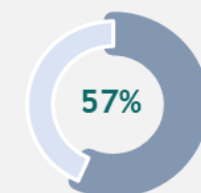


Y5 ratios

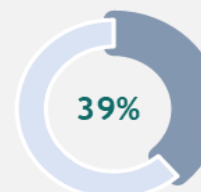
Gross Profit Margin



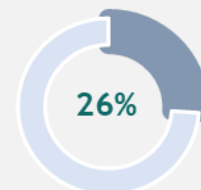
EBITDA Margin



Op. Profit Margin



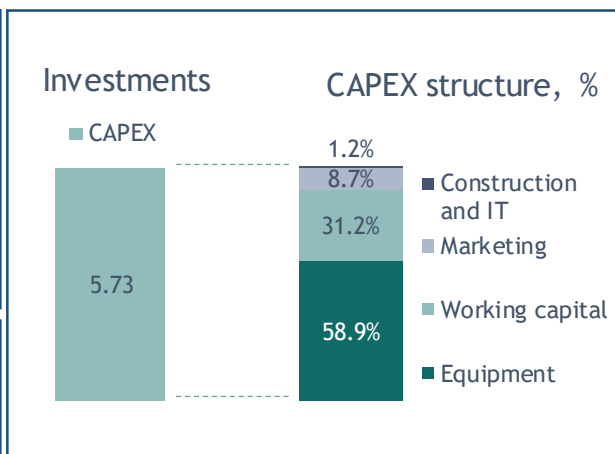
Net Profit Margin



Long run investment plan






<p>Stage I 90 mln EUR</p>	<p>Renovation and rehabilitation of existing production workshops. 5 furnaces and 1k ton of total production capacity. In parallel, establishment of 25 new furnaces and construction of new workshops. Additional capacity of 5k ton per year. Exploitation starts from year 3.</p>
<p>Stage II 250mln EUR</p>	<p>Construction of new plant with total capacity up to 20k ton.</p>

Structure of Stage I investments, mln EUR



Sources: Hundred cjsc valuation

Investing in ArmBasalt is attractive due to combination of key success factors in basalt fiber industry such as unique qualification of owner and team, stable quality of raw materials, customer experiences and network, use of modern low energy technologies.

	Factor	Description
1	 <p data-bbox="365 391 683 416">Good price-quality ratio</p>	<ul style="list-style-type: none"> • Homogeneous geological composition of Armenian basalt rocks defines stable quality and technical features of final products what is crucial for high tech customers • Local inexhaustible and best-quality raw materials by low price • New cost-effective technologies decrease the use of energy and utilities
2	 <p data-bbox="365 591 600 616">Brand recognition</p>	<ul style="list-style-type: none"> • Company's brand is well known by customers and partners in target markets • Production processes is certified by international quality standard • Company actively participates in specialized world exhibitions
3	 <p data-bbox="365 791 606 816">Unique knowledge</p>	<ul style="list-style-type: none"> • CBF (Continuous Basalt Fiber) industry requires unique experience and knowledge that is hard to find in market • Company continually invests in training of its employees • Management has vast experience in the field of products offered
4	 <p data-bbox="365 991 683 1016">Strong industry forecast</p>	<ul style="list-style-type: none"> • Global tendency to replace the classical composite steel reinforcement with CBF • By industrial production of basalt fibers based on new technologies, their cost is equal and even less than cost of glass fiber - key CBF substitute • CBF advantages (high durability, environment-friendly, no corrosion, heat resistance, etc.)
5	 <p data-bbox="365 1190 591 1216">Access to market</p>	<ul style="list-style-type: none"> • Company has its distributors with signed exclusive agreements • Customers have preliminary agreed to purchase products in volume above 1k tn p.a. - for first years and then from year 3 for total production capacity.



Company Overview

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ArmBasalt CJSC is a leader in basalt fiber production in the whole South Caucasus. The company leverages Arminian basalt rocks reserves of unique quality and available price effective energy sources, and offers products to various industries such as construction, automotive, energy etc.

2014



Armbasalt CJSC (previous “Argel” cjsc) was registered in Republic of Armenia, Kotayk Marz, Argel village, 2nd Street.

December 2014



Continuous basalt fiber plant in the village of Armbasalt (Kotayk region, Armenia) was launched in December 2014.

5 ha



The production is located in a large mechanical plant, covering more than 5.0 hectares of land, with a 12,000 m² building. The plant is also furnished with laboratory equipment, all necessary communications (there are own: substation, backup generator, gas and water supply, technical sewage) and other auxiliary devices.

1,000 tons



Target production capacity of continuous basalt fiber is 1,000 tons per annum for Phase I and additional 5,000 tons per annum for Phase II.

Sources: Company's materials

Company can produce a wide range of products from basalt roving and basalt rebars to basalt chopped and twisted fiber and finally to the most promising product - continuous basalt fiber. Current production facilities will be upgraded to decrease production costs and improve competitive advantage on the international markets by implementation of more energy efficient technologies. It will strengthen the positions on European and Asian markets in short term and open new customer segments in the middle and long run.

Company manufactures basalt roving to produce basalt rebar and reinforcing mesh, which surpasses metallic rebar and fiberglass rebar due to its technical characteristics. Company's other products are chopped fiber and twisted fiber.

Basalt Roving



Basalt Chopped Fiber



Basalt Rebar



Basalt Twisted Fiber



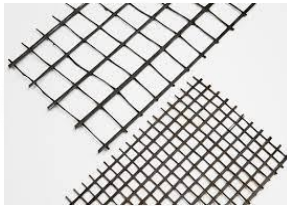
Price/Ton, VAT exclusive	EUR2,500	EUR4,000	EUR5,500	EUR5,500
Operation temperature	°C from -260 to +700	°C from -200 to +900	°C from -260 to +600	°C from -260 to +700
Uses	Primary input for derivative products such as rebar, twisted fiber, etc.	Input for strengthening of concrete products	As a lighter, cheaper, corrosion-resistant alternative to steel rebars in construction	Primary input for textiles, needled felts and electric insulation boards
Main industries	Construction Mining	Construction of roads and bridges Car industry	Construction of roads, sidewalk curbs, ports, buildings, underground walls and channels	Production of various woven and nonwoven materials, as well as production of composite materials, based on epoxy, phenolic and other matrices

Sources: Company's materials

Continued...

Company manufactures basalt roving to produce basalt rebar and reinforcing mesh, which surpasses metallic rebar and fiberglass rebar due to its technical characteristics. Company's other products are chopped fiber and twisted fiber.

Basalt Geo-Grid



Basalt Fabric



Basalt Microbar



Basalt Cylinders



Price/Ton, VAT exclusive	EUR5,000	EUR10,000	EUR8,000	EUR12,000
Operation temperature	°C from -260 to +700	°C from -200 to +900	°C from -260 to +600	°C from -260 to +700
Uses	used to reinforce soil and similar materials and can be used in areas such as road construction and marine off-shore infrastructures	can be used in tubes, bars ,pipes fittings, internal heat and sound insulation of floors, walls, frame walls, boiler shells, tanks	Basalt fiber has excellent heat resistance and is suitable for non-combustibility measures in densely built-up areas.	Basalt cylinders are regarded perfect for the hydraulic transportation of materials that are abrasive
Main industries	Construction Mining	Production of various woven and nonwoven materials, as well as production of composite materials, based on epoxy, phenolic and other matrices	Construction of roads, sidewalk curbs, ports, buildings, underground walls and channels	Construction of roads, bridges

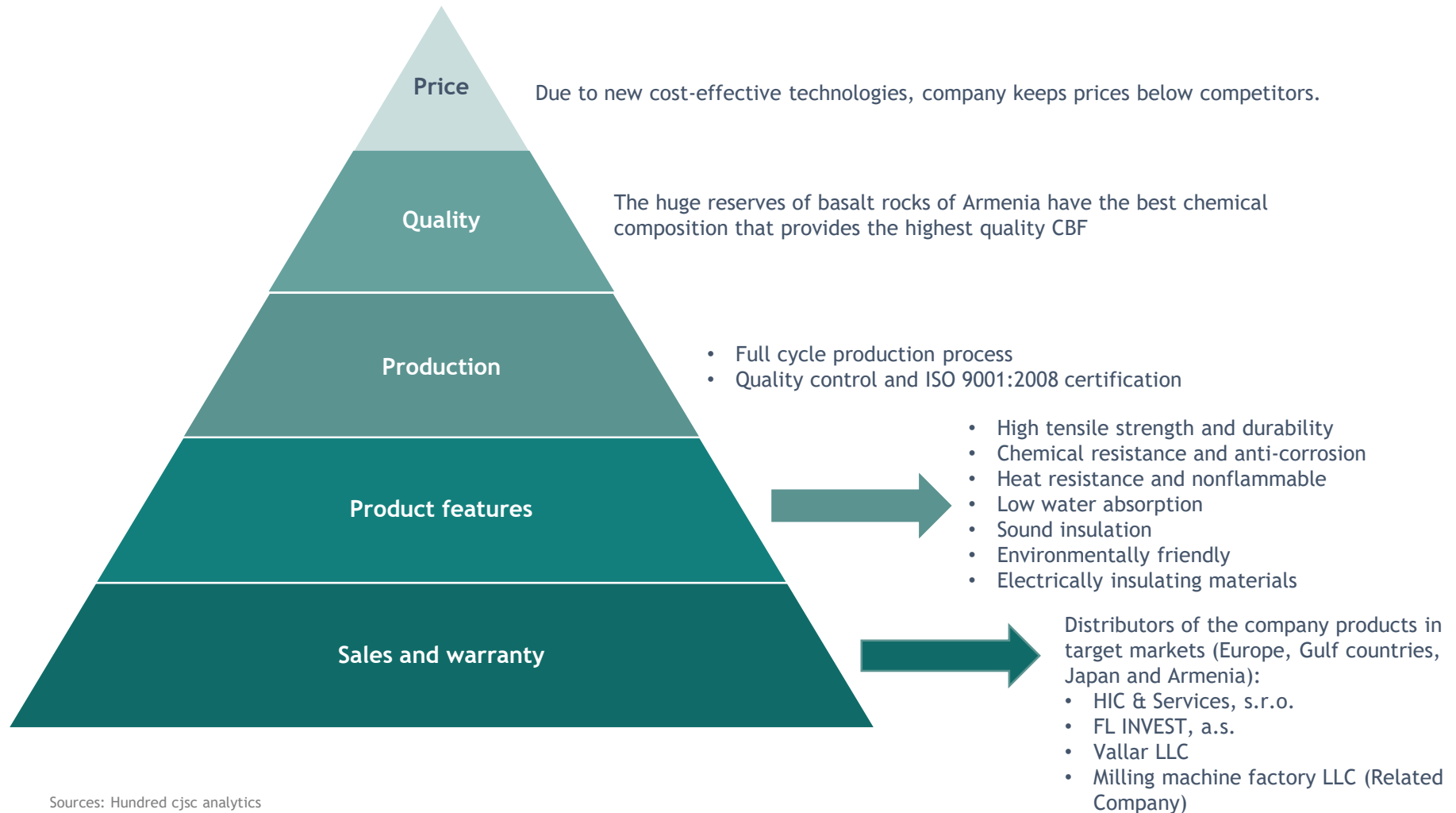
Sources: Company's materials

Full cycle production process from mining to winding provides control over product costs and allows sustainable quality management. At the same time, it requires deep understanding of underlying technologies that set industry entry barriers for potential competition.



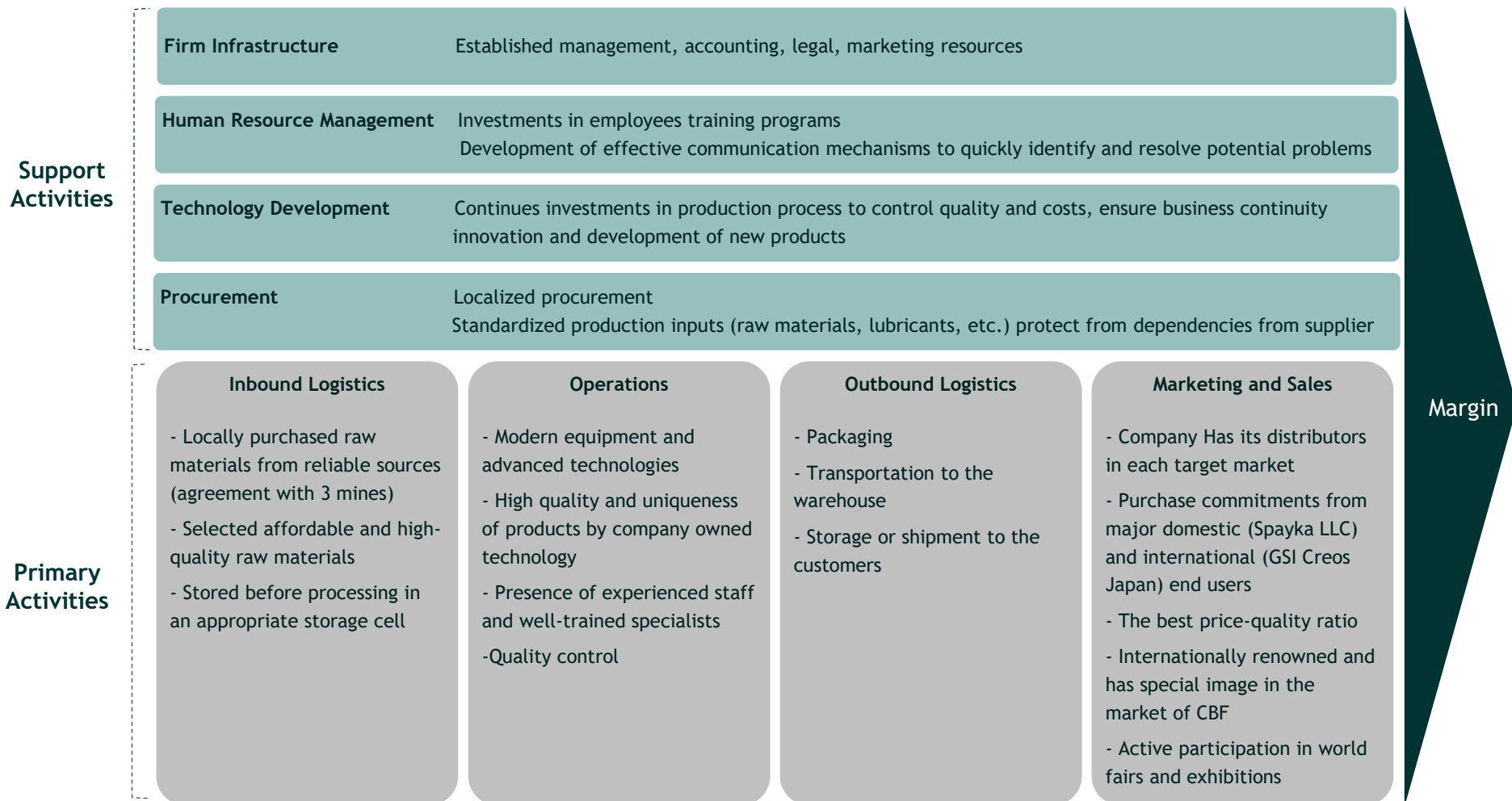
Sources: Company's materials

Company's ability to deliver customer satisfaction is based on low prices, high product quality and sales channels based on company's distributors network.



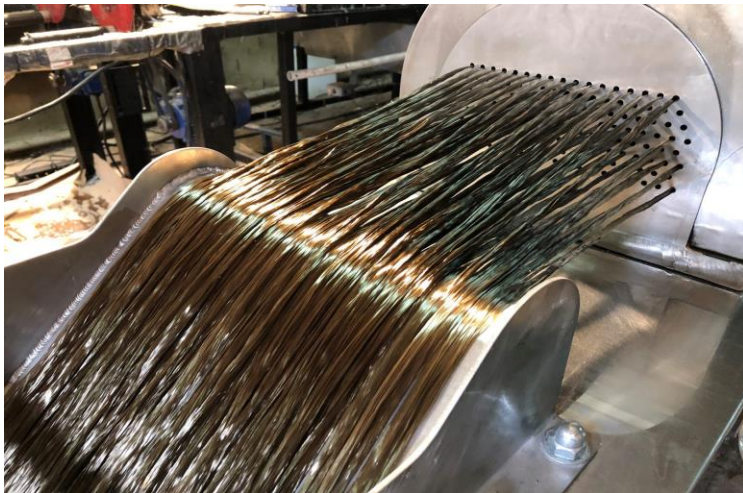
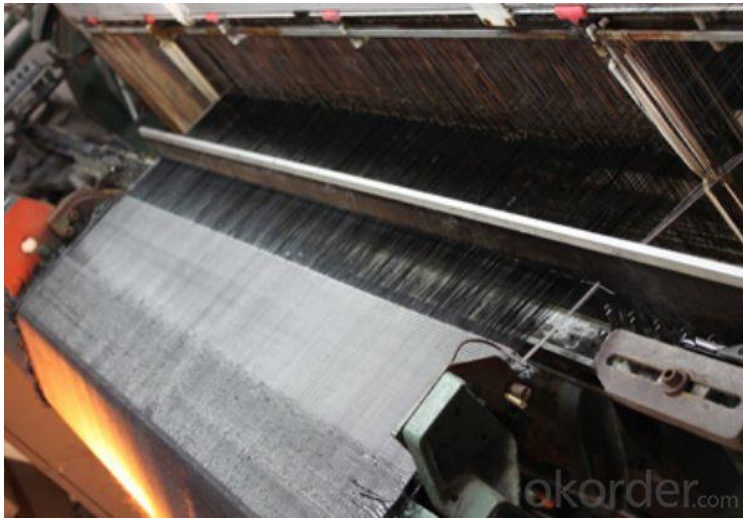
Sources: Hundred cjsc analytics

Paying attention to both primary and supporting activities company can ensure ongoing end to end production process and control over costs in the long range and enhance product range by demand without need for significant technological change.



Sources: Hundred cjsc analytics

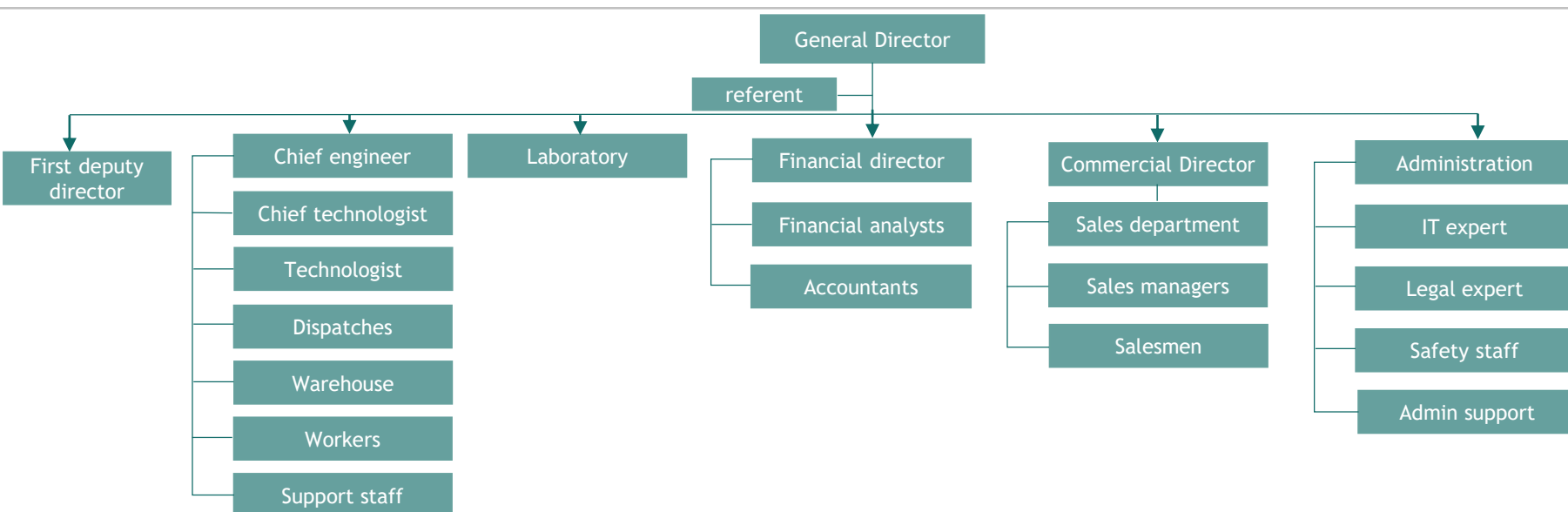
Company is planning to purchase modern equipment from leading European suppliers to enter new product markets



- Complete equipment set for manufacturing of basalt continuous fiber with a capacity of 1,080 tons per annum,
- 5 Furnaces 1,600°C, 2 bushings/furnace with 415 slots; 1000 slots after modernization
- 9 German and Japanese winding machines, 3 pultrusion lines

Sources: Company's materials

Company's organizational structure covers key areas such as engineering and sales. The Company also has strong financial team for close collaborative work with investors and financial institutions



Roles and Responsibilities of Employees

With current level of production, the Plant employs over 120 specialists to produce basalt fiber roving on operating furnaces. The employees are highly educated professionals, including 5 PhD-s of technical science, one full member of Engineering Academy of Armenia, 34 with higher education diplomas and 10 with technical high school diplomas.

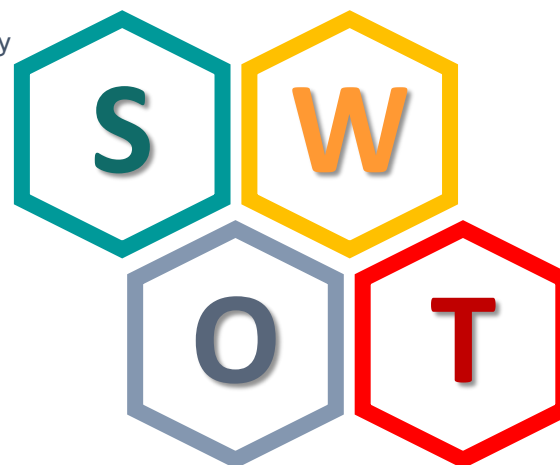
With the setup of all 5 furnaces for basalt fiber roving production, as well as production of basalt rebar from roving, the plant will need more specialists. Phase II implementation staff is assessed to be overall 504 people, including all functions- production, sales and marketing, administration and top management.

Sources: Company's materials

Company can achieve strong position in the growing market. Among key threats is substitutional competition from carbon and glass fiber. At the same time unique knowledge, infrastructure and client relationship support Company's competitive advantage.

STRENGTHS

- Own developed technology for continuous basalt fiber production
- Management has wide industry experience
- Letters of intent with 4 key distributors
- Reasonable price offering regarding high product quality
- Modern equipment ensures cost efficiency
- Efficiency and high quality of services and services provided
- Continuity and systematization of information flows certified by ISO standard
- High quality of raw materials
- Possibilities for expanding the number of products and services



WEAKNESSES

- Additional investments are required to re-launch production process (Stage I)
- Current state of furnaces may be questionable

OPPORTUNITIES

- Growing global demand for basalt fiber products
- Stability of development of Armenia, as well as the growth of economic activity of the countries of nearby regions
- Deterioration of key competitors' position due to geopolitical and economic situation

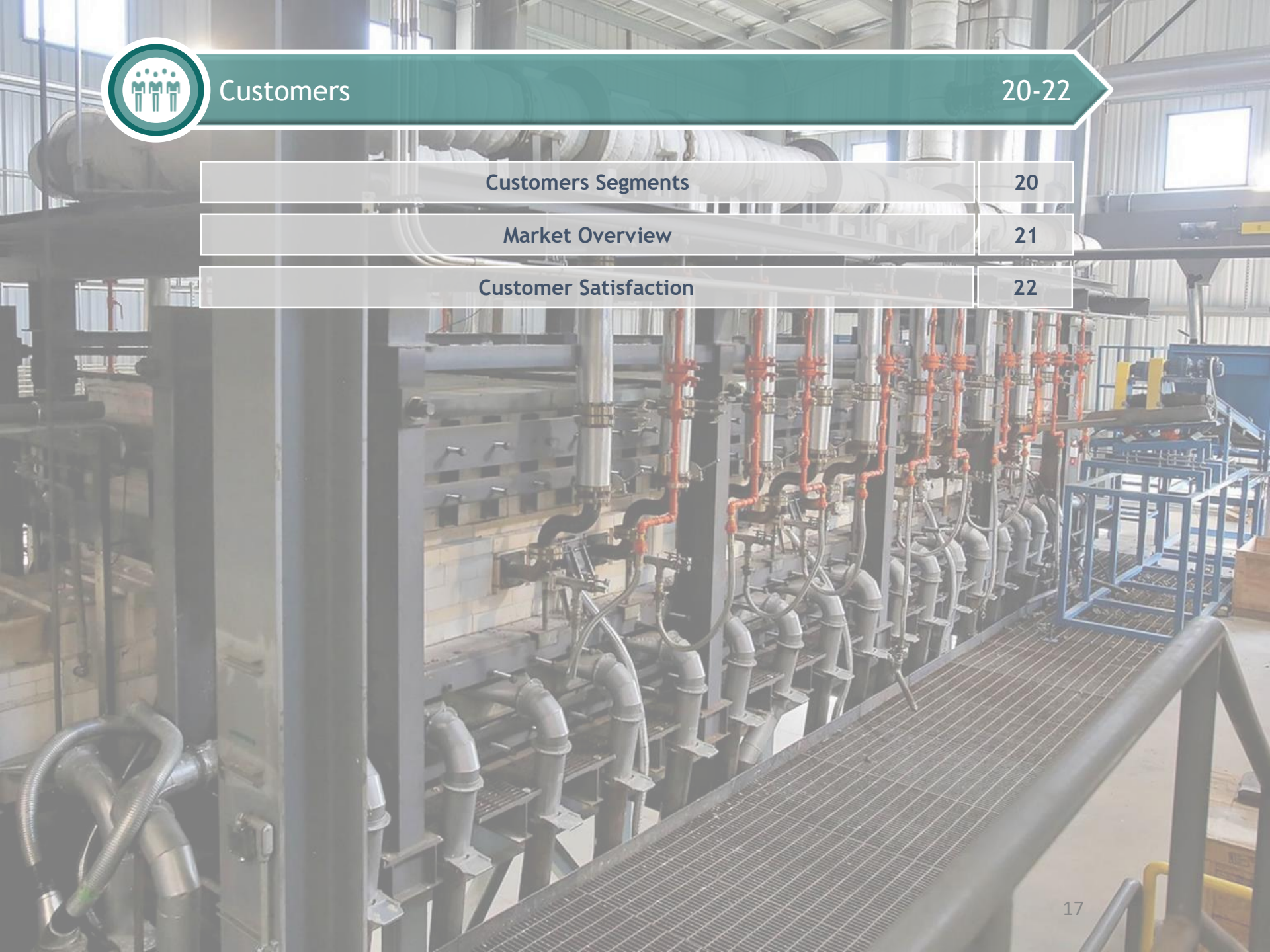
THREATS

- Strengthening competitor's position
- Strong substitute competition from carbon and glass fiber
- Appearance of new competitors on the market with sufficient funding capabilities and government support
- Rising energy prices put the pressure on end product prices

Sources: Hundred cjsc analytics

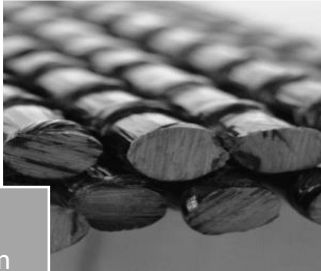


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Continuous basalt fiber is used in many industries as alternative to glass and carbon fiber due to combination of high mechanical properties, resistance to aggressive environment and high temperature.

Building & Construction



Wind Turbines



Cylinder tanks & containers



Automotive



Aerospace



Protective materials



Reservoirs



Insulation & Thermoacoustics



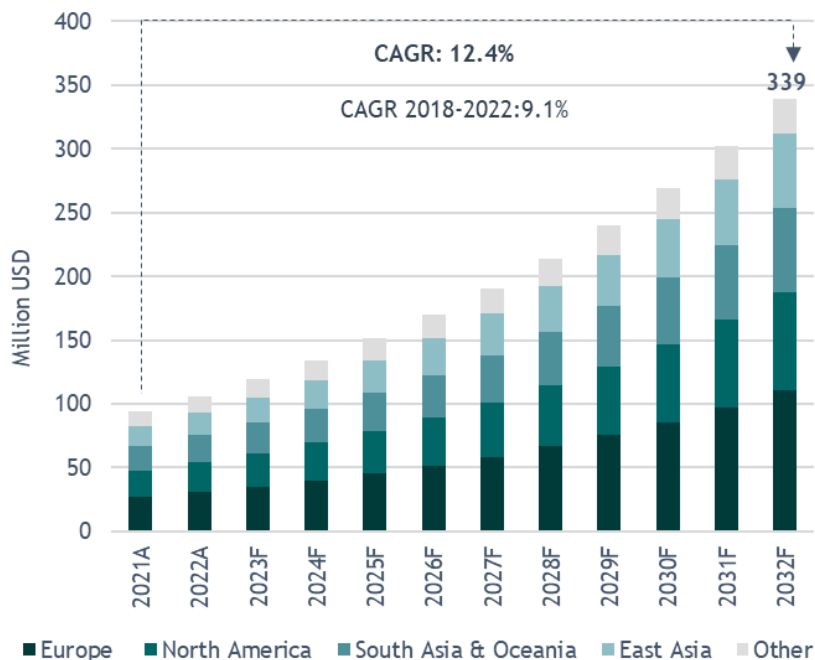
Shipbuilding



Sources: Hundred cjsc analytics

The global continuous basalt fiber market is expected to reach EUR 106 Million in 2022 and grow annually by 12.4% during the period of 2022-2032. Europe represents major market with about 30% of total share and will strengthen its position in the next years.

The market growth is attributed to the increased demand for basalt fiber from the construction & infrastructure and automotive industries.

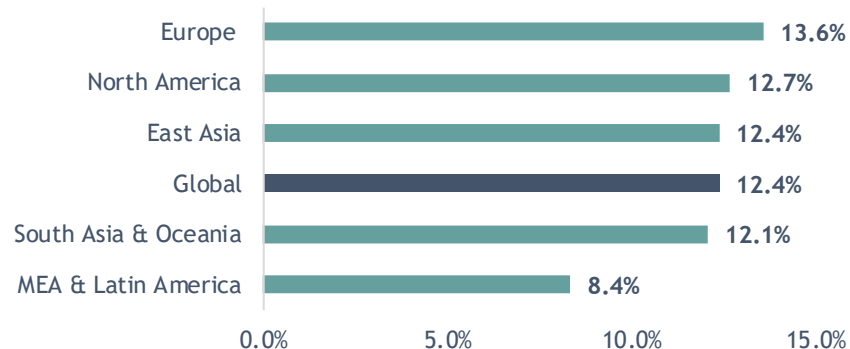


Basalt fiber market accounts for <1% share in the global building & construction material market. The demand is likely to remain concentrated in this segment owing to the product used as a replacement to carbon fiber-based reinforcements, and conventional steel.

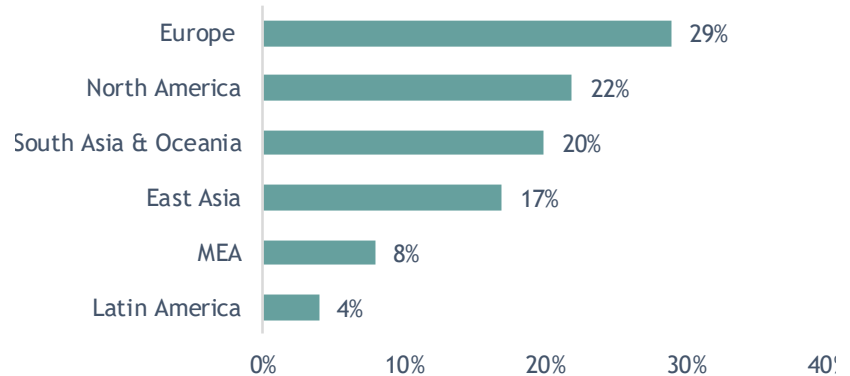
Sources: Fact.MR Market Research Report

The European basalt fiber market holds nearly 29% of the overall market share and is projected to rise at a CAGR of 13.6% in the coming years.

CAGR for Regions 2022-2032, % per annum

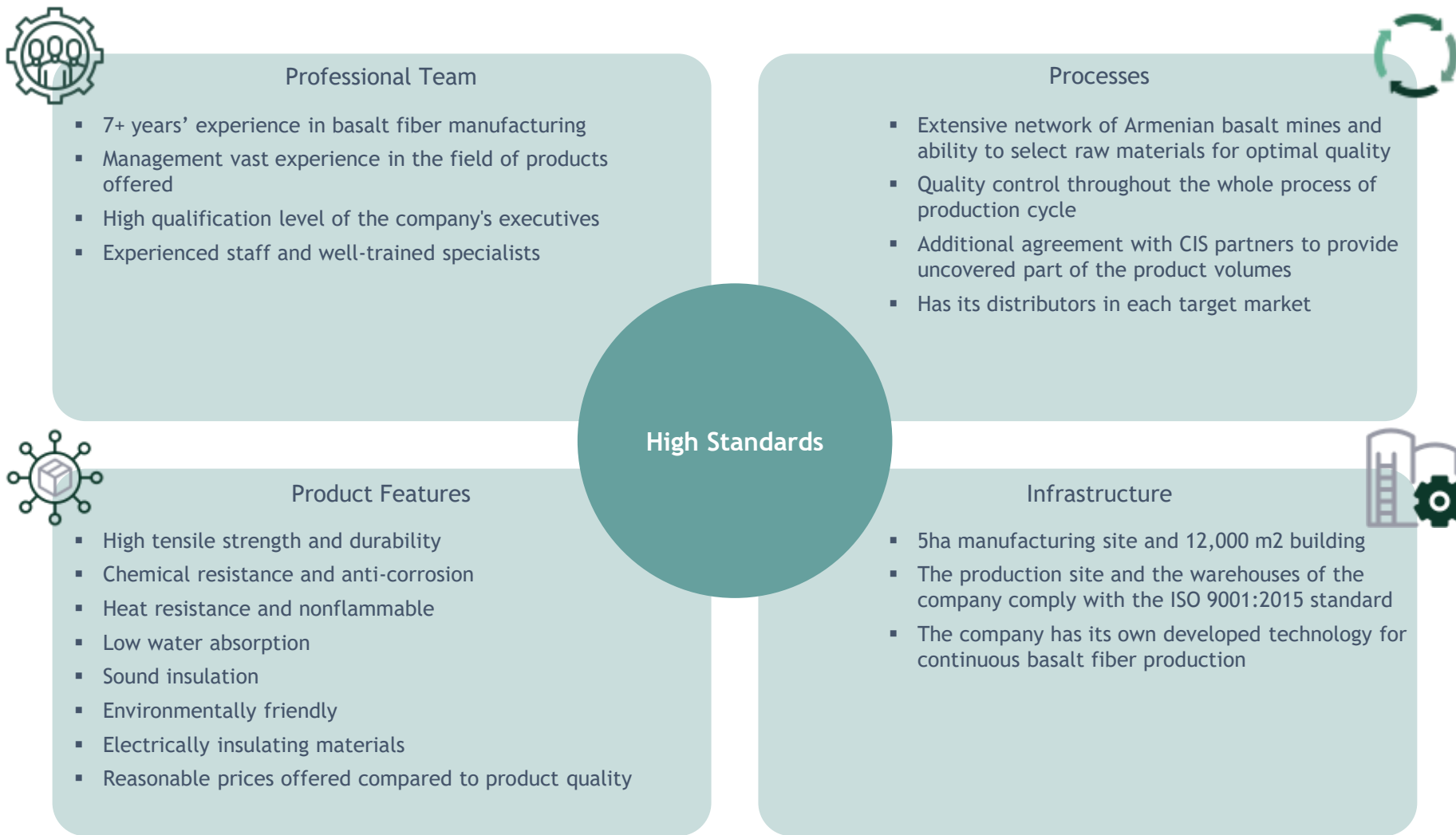


Market Split by Regions, 2022



Sources: Fact.MR Market Research Report

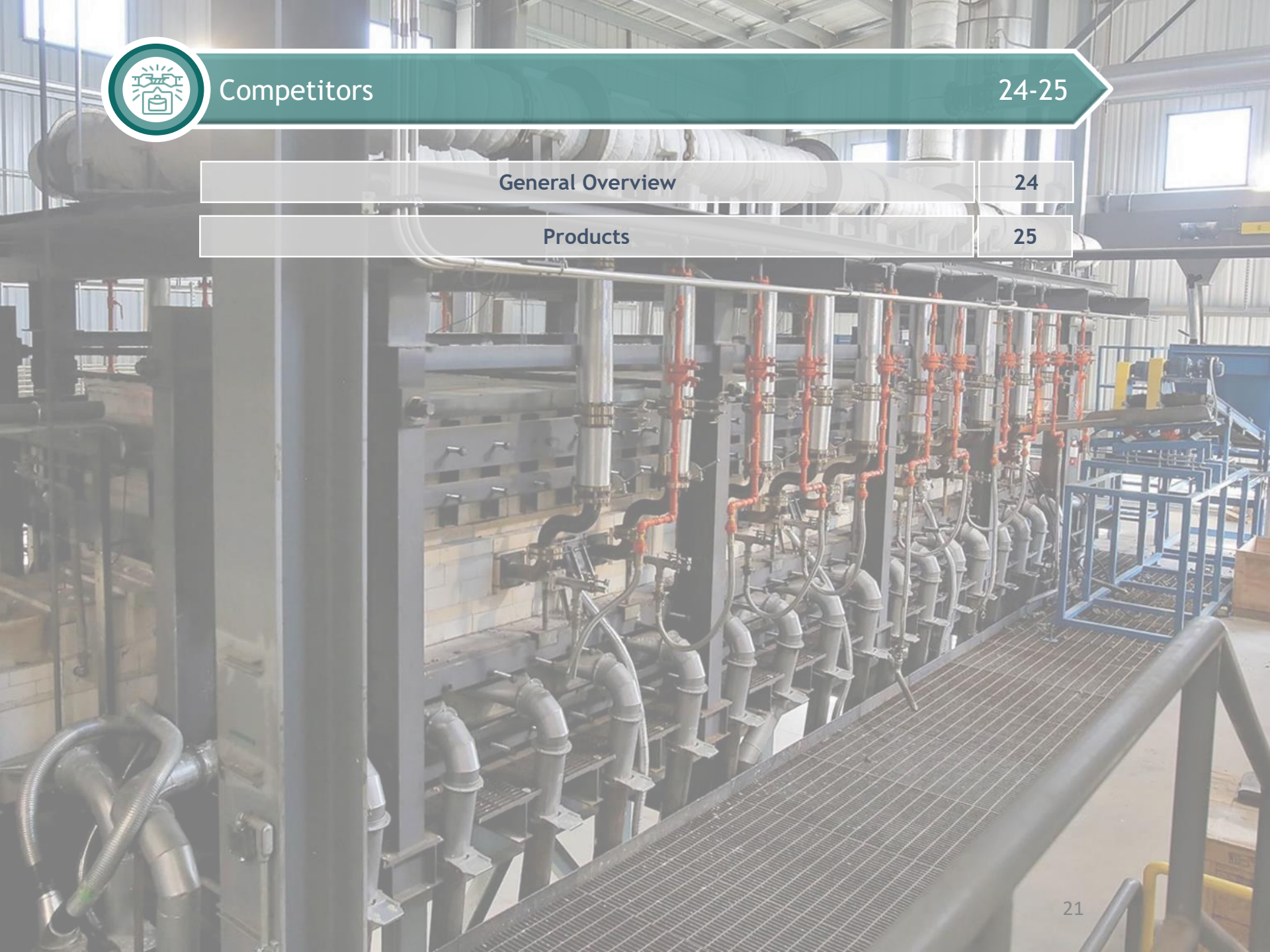
Company's management vast experience and well-trained staff, as well as established supply chain and reasonable prices, provide high customers satisfaction.














Sources: Hundred cjsc analytics



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Products	25



Most of the global continuous basalt fiber market key players are in Russia and China and were founded in last 20 years.

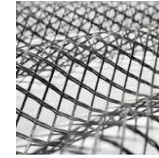
	Capacity (Ton)	Date Opened	Country
Shanxi Basalt Fiber Technology	10,000	2008	
Mafic	6,000	2015	
Sudaglass Fiber Technology	5,000	1998	
GBF Basalt Fiber	5,000	2003	
Kamenny Vek	3,500	2003	
Mudanjiang Jinshi Basalt Fiber	3,000	2007	
Galen Composite	3,000	2001	
Mineral 7	3,000	2003	
LAVIntel	3,000	2019	
Magmanit LLC	1,200	2020	
ASA. TEC	1,100	2006	

Other Companies (Private)



Sources: Hundred cjsc analytics

Company produces the main basalt fiber production set. To produce new type of fiber-based products with higher profit margins and higher prices, company needs new equipment and additional furnaces.



Company	Product	Basalt Roving	Twisted Yarn	Basalt Chopped	Basalt Rebar	Geogrid/Mesh	Basalt Fiber Fabric	Needled Felt/Mats
ARMBAS		✓	✓	✓	✓	✓	-	-
Shanxi Basalt Fiber Technology		✓	✓	✓	-	✓	✓	✓
Mafic USA, LLC		✓	-	✓	-	-	✓	-
Sudaglass Fiber Technology		✓	-	✓	✓	✓	✓	✓
GBF Basalt Fiber Co. Ltd.		✓	✓	✓	✓	✓	✓	✓
Kamenny Vek		✓	✓	✓	-	✓	✓	✓
Galen Composite		✓	-	-	✓	✓	-	-
ASA. TEC		✓	-	-	✓	-	-	-
Basaltex		✓	✓	✓	-	✓	✓	✓
Technobasalt		✓	-	✓	✓	-	✓	✓
EAS Fiberglass		✓	✓	-	-	-	✓	✓
Jiangsu Tianlong		✓	✓	✓	✓	✓	✓	✓
Jumeisheng		✓	✓	✓	✓	✓	✓	✓
LAVIntel		✓	-	✓	✓	✓	-	-

Sources: Hundred cjsc analytics



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Roadmap Stage 1 first phase	28
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Company plans three main investment stages, with which the total production capacity can be increased above 20,000 tons/year. This report and provided financials are dedicated to the Stage I both phases investments that should re-launch production and improve prices by implementation of new low energy consuming technologies, as well as increase the plant capacity up to 6,000 tons per annum.

Armbasalt CJSC foresees construction of a 5 MW solar photovoltaic plant on its premises during the modernization and construction periods of the project. The company has implemented a shift in its energy policy towards renewables to reduce electricity costs as well as the use of capture and recycling technologies for our manufacturing processes. Investment in the photovoltaic station will cost 3 mln. EUR.

Overview of investment stages		Scope of this Presentation	
	Stage I	Stage II	
Amount	93 million EUR	250 million EUR	Amount
Purpose	Restarting the production of basalt fiber roving with existing capacities and modernization of the equipment Renovation of 5 furnaces and establishment of 25 new furnaces and construction of new workshops	Construction of a new plant	Purpose
End Capacity	1,080 tons/year then 6,000 tons/year	26,000 tons/year	End Capacity
Timeline	Modernization & New Construction up to 22 months	24-30 months	Timeline

Sources: Company's materials

Considering Armbashts shifting policy towards "Green Production", the company plans to implement the use of hydrogen as a heat carrier in furnaces to improve manufacturing processes. Considering the high specific heat of hydrogen combustion, which is 119.8 MJ/kg (in the case of natural gas, it is 46.8 MJ/kg) and the result of its combustion in the form of water will provide an opportunity to obtain environmentally friendly production.

As a heat carrier it is planned to use surplus electricity produced by the solar plant during the day, which will be used to obtain gas using electrochemical methods and considering expert predictions, the costs for obtaining hydrogen in the next 15 years can be reduced by 85% due to advances in technology.

Below is the production and technical characteristics of the electrolyze station for obtaining hydrogen:

Model:	MC500
Class:	2.5 MW
Description:	Fully automated hydrogen generator of MW class
Net productivity:	492 Nm ³ /h
Net productivity:	1,062 kg/24 h
Dynamic range of production capacities:	from 10% - 100%
The average electricity demand for hydrogen production:	4.5 kWh/Nm ³
Average electricity demand for hydrogen mass production:	50 kWh/kg
Purity (with built-in dryer):	99.9995%
The pressure at the outlet:	30 bar
Release time:	8 minutes
Roam duration:	15 seconds
Ambient temperature during operation:	20 to 400C
Electrolyte Proton Exchange Membrane (PEM)	
Hydrogen year after year is a primary heat-carrying gas which can be used as additional or substitute raw material for obtaining heat.	
Sources: Company's materials	

Purchase of gas recuperators and gas-air mixture aims to decrease gas consumption as one of key costs elements. Twisting machines provide access to the perspective twisted thread products and textile and construction industries.

Equipment



Flue gas recuperators



Burners of the gas-air mixture



Twisting machines

Purpose

- The recuperator recovers heat indirectly from the flue gas and returns it to the combustion source, reducing auxiliary fuel consumption. Alternately, waste heat may be recovered indirectly by preheating process gas or other gaseous medium, improving overall system efficiency.

- Replacing old uncontrolled burners of the gas-air mixture with new modern ones to ensure that the flame is stabilized by establishing a suitable flow field to produce the initial temperature rise. The flame is used as the source of heat to preheat the fuel/air mixture to the ignition temperature.

- Considering that the plant also produces a thread with a diameter of 8 to 10 microns and significant demand for different types of fabrics in Europe, North America, and Asia, the purchase of twisting machines is of high priority. The twisted thread is mainly used in weaving.

Effect

- Reduce gas consumption by reducing the energy consumption for heating the air required for burning gas in the furnace.

- Reduce the consumption of gas burned in the furnace of basalt melting. Savings are made by controlling the flame, which leads to the complete combustion of the gas.

- Expand the market segment by supplying textile companies with twisted thread.

Sources: Hundred cjsc analytics

Weaving and knitting machines will be used for production of technical fabrics and protective suits. Wire tying machines produce geotextile grids - high perspective product in construction of roads and reservoirs.

Equipment



Weaving machines



Knitting machines



Wire tying machines



Pultrusion line

Sources: Hundred cjsc analytics

Purpose

- With the acquisition of weaving machines and the use of yarn produced at the factory, it is possible to obtain both technical fabrics and fabrics used in the production of protective suits.
- Obtain both technical fabrics and fabrics used in the production of protective suits.
- Ensure the possibility of producing building nets, geotextile grids to strengthen the soil, etc. This type of product actively replaces fiberglass products in the market as more environmentally friendly product.
- Pultrusion is a continuous manufacturing process for composite profiles. It will allow to expand production and offer the market finished products in the form of profiles of different sections to replace the metal ones, which are more applicable in aggressive environments.

Effect

- Expand the market segment and higher profit margins.
- Expand the market segment and higher profit margins.
- Expand the market segment in civil engineering projects such as roads, retaining walls, reservoirs, etc and provides higher profit margins
- Expand the market segment and higher profit margins.

Stage I second phase is aimed to significantly increase production capacities - up to 5 times, diversify production mix and increase cost efficiency due to deeper specialization and use of equipment.

Purpose of Stage I second phase investments

Stage I second phase, aiming significant expansion of production capacities for another 5,000 tons per annum, which means that 25 new furnaces will be established. Additional furnaces and production capacity will allow to diversify production mix and to produce new type of fiber-based products with higher profit margins and higher prices. This stage of investment includes also construction of new warehouses, purchase and installment of corresponding equipment for each furnace as separate production line. So, for the second phase of the Investment Project implementation, new workshop buildings needs to be constructed.

Key foreseen activities of Stage I second phase

Activity description	Measurement unit	Amount
Preparation of basement for equipment to be installed	Sq.m.	14,000
Construction of new workshop buildings	Sq.m.	14,000
Technologic infrastructure - steel constructions	unit	1
Road leading to new workshop and premises	Sq.m.	5,000
Hotel for company guests, clients and suppliers	rooms	15

Sources: Company's materials

ArmBasalt carefully analyzes new technological trends and works with local technical schools to attract young professionals. It also works with various local suppliers to diversify supply chain risks.

1. Operational Risks

#	Risk	Managed By	Mitigation Strategy
1	Gas and electricity supply failures	CEO	Company has alternative sources of power and gas uninterrupted supply
2	Supply chain risks	CEO	Company works with different suppliers and has significant reserves of key raw materials
3	Lack of qualified staff	CEO	Working with local professional/ technical schools and universities

2. Legal Risks

#	Risk	Managed By	Mitigation Strategy
1	Changes in laws and regulations	Legal expert	Risk is tolerated and monitored
2	Forms of contracts and cooperation agreements	Legal expert	Legal expert is staffed in the Company

Sources: Hundred cjsc analytics

Being heavily depended on utility costs and having customers from foreign countries, Company consistently manages its market risks. Company's industry has significant barriers to entry for being capital intensive.

3. Market Risks

#	Risk	Managed By	Mitigation Strategy
1	Increase in competition	CEO	Enhance company's image and reputation by marketing strategy, high-quality basalt product, investing in new technologies to support margin
2	Weak economic growth	CEO	Growth of client industries is supported by government investments
3	Exchange rate fluctuations	CEO	Constantly observe exchange rate market dynamics and including special elements in contracts
4	Increase of utilities prices	CEO	Optimization and modernization of production process to reduce consumption
5	Emergence and development of new technologies	CEO	Continual innovating and finding of new technological solutions, visiting conferences and exhibitions by management and key engineers

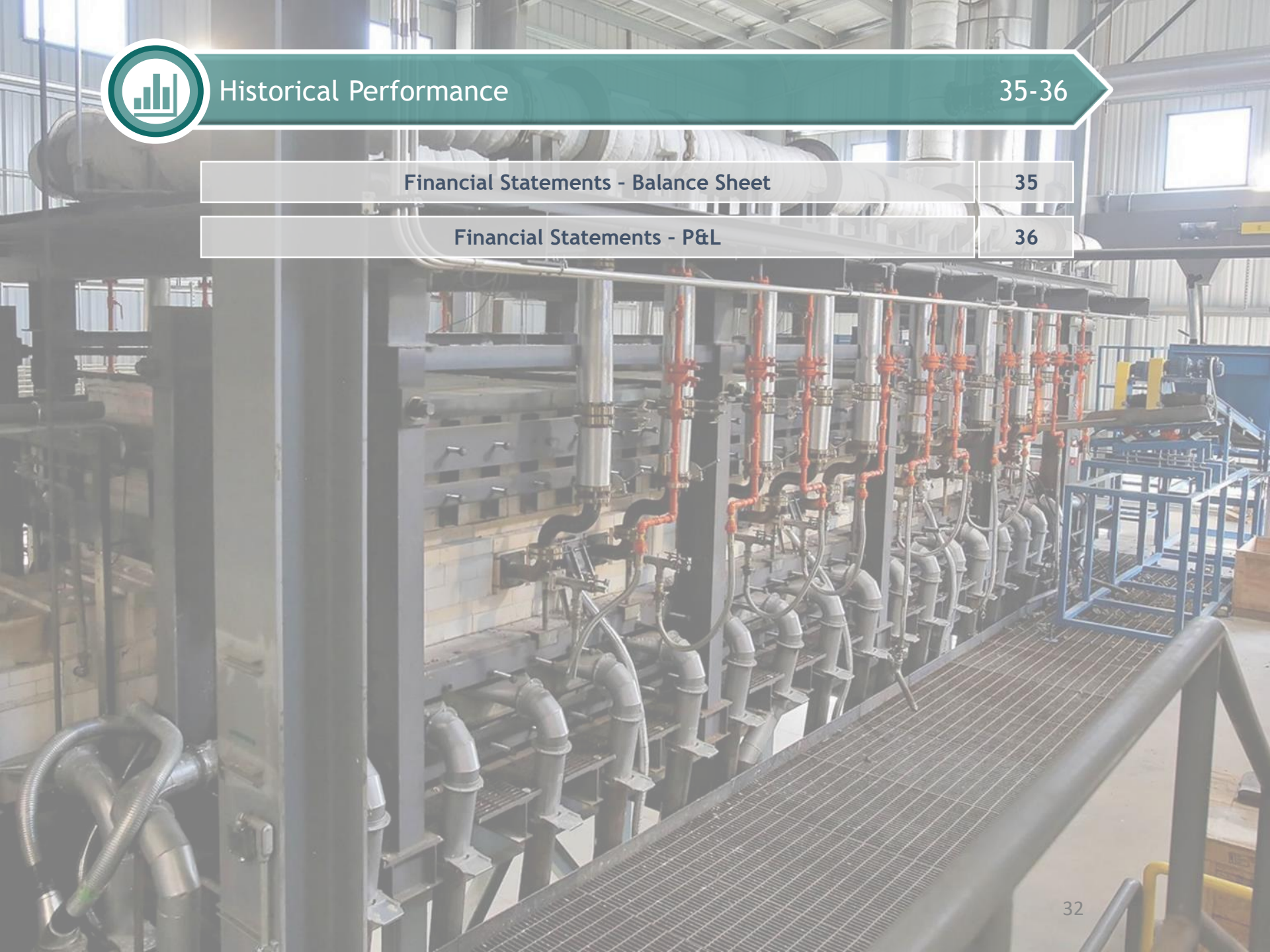
4. Environmental Risks

#	Risk	Managed By	Mitigation Strategy
1	Government regulations	CEO	Management regularly assess and evaluates possible consequences of implementing new regulations regarding environment protection

Sources: Hundred cjsc analytics



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Financial Statements - P&L	36



Key Company assets are concentrated in equipment and plant, what was partially financed by loans. The remaining represents capital injections from the owner.

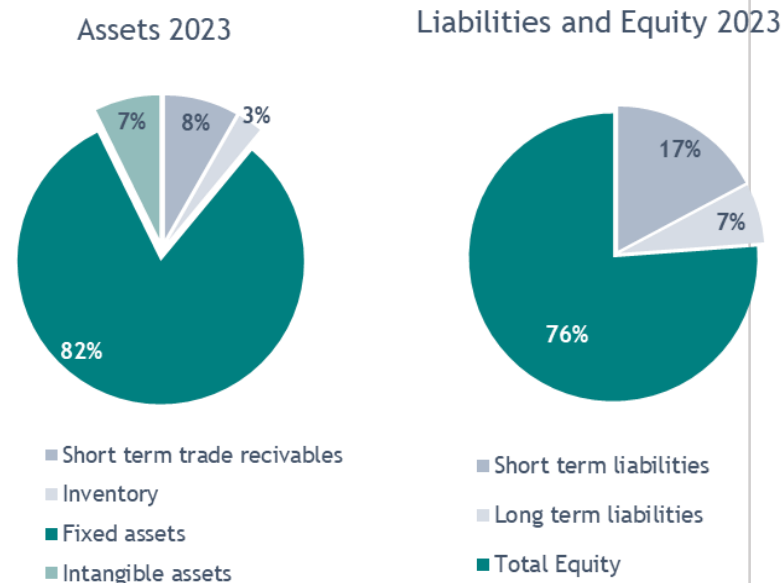
Balance Sheet as of 31.12.2023

Balance Sheet, th.EUR	31/12/2023
Cash	437
Short term trade receivables	2,900
Inventory	971
Current Assets	4,308
Fixed assets	28,779
Intangible assets	2,565
Non-Current Assets	31,343
Total Assets	35,652
Short term liabilities	6,128
Long term liabilities	2,364
Total Liabilities	8,491
Total Equity	27,161
Total Equity and Liabilities	35,652

Sources: Company's materials

In 2023, Company had over 1,000 tons of sales, in 2024 already have 2,000 tons of orders, as for 2025 financial year, 6,000 tons of manufacturing ad delivery is already planned.

Structure of Balance Sheet



Company's total assets doubled due to fixed assets revaluation to 28,779 th EUR in 2023. The total liabilities increased by 46% in 2023. The equity comprised 77% of the total liabilities & equity in 2023 due to increase in revaluation reserve up to 30,817 th EUR.



Macro-Estimations	38-39
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Republic of Armenia expects steady GDP growth with rate and targeted inflation of 4%.

Armenia's economy rebounded by 12.6 percent in 2022 and is forecasted to grow at 7.2% in 2023. Inflation target is significantly lower than in 2022 (4.0%).



Macro-Economic Indicators, %	2021	2022	Long Term
Gross domestic product, constant prices	5.66	12.60	4.50
Inflation, average consumer prices	7.20	8.30	4.01
Unemployment rate	18.50	12.56	16.50
Volume of exports of goods and services	4.60	5.36	5.90
Volume of imports of goods and services	6.60	6.80	5.47

Armenia GDP

2022

Population, million	2.8
GDP, current US billion	20.8
GDP per capita, current US	5,444.0

Sources: Hundred cjsc analytics

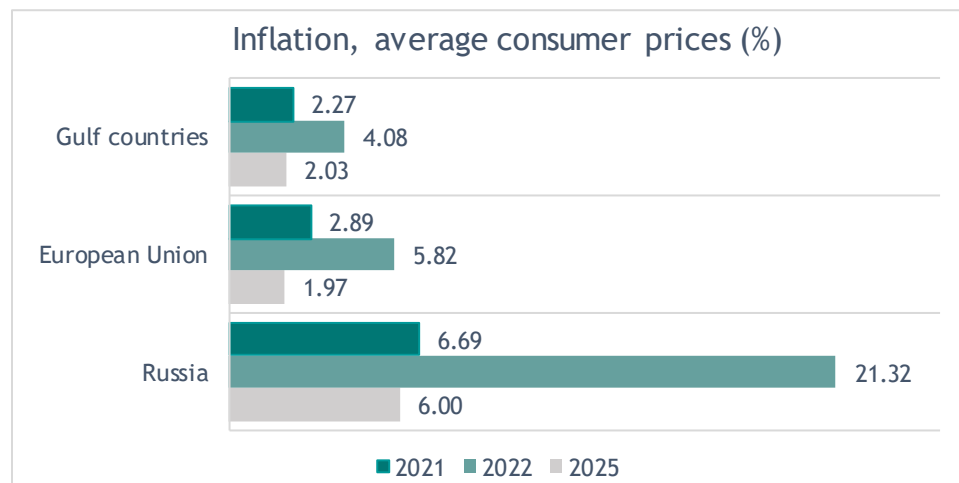
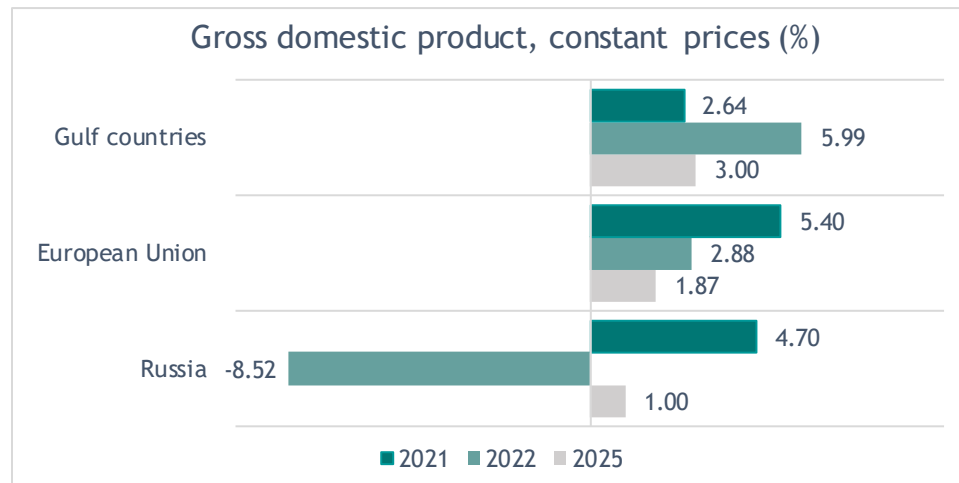
The post-Covid-19 pandemic recovery is being hit by a potentially huge global supply shock that will reduce growth and push up inflation. The war in Ukraine and economic sanctions on Russia have put global energy supplies at risk.

Macroeconomic indicators

	Gross domestic product, constant prices (%)					
Country/Region	2020	2021	2022	2023	2024	2025
Russia	-2.70	4.70	-8.52	-2.29	1.50	1.00
European Union	-5.88	5.40	2.88	2.51	2.13	1.87
Bahrain	-4.94	2.23	3.29	2.98	3.00	3.02
Iraq	-15.70	5.94	9.53	5.72	2.70	2.60
Kuwait	-8.86	1.31	8.23	2.62	2.65	2.63
Oman	-2.84	2.00	5.59	2.68	2.55	3.36
Qatar	-3.56	1.52	3.43	2.49	1.74	2.81
Saudi Arabia	-4.14	3.24	7.60	3.64	2.73	2.67
UAE	-6.14	2.27	4.24	3.80	3.84	3.90

	Inflation, average consumer prices (%)					
Country/Region	2020	2021	2022	2023	2024	2025
Russia	3.38	6.69	21.32	14.27	9.00	6.00
European Union	0.68	2.89	5.82	2.95	2.04	1.97
Bahrain	-2.32	-0.61	3.50	2.85	2.26	2.00
Iraq	0.57	6.04	6.89	4.66	3.14	2.20
Kuwait	2.11	3.40	4.75	2.30	2.29	2.54
Oman	-0.90	1.55	3.74	2.17	1.98	1.92
Qatar	-2.72	2.25	3.49	3.18	2.06	1.53
Saudi Arabia	3.45	3.06	2.51	1.96	1.96	2.00
UAE	-2.07	0.19	3.66	2.83	2.00	2.00

Sources: Hundred cjsc analytics

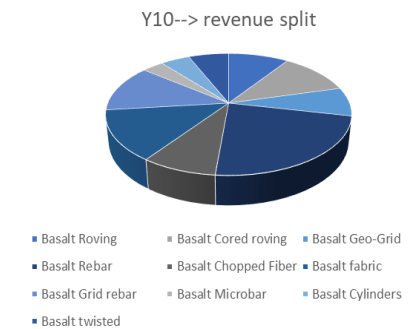
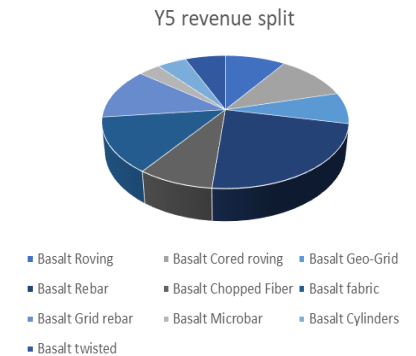
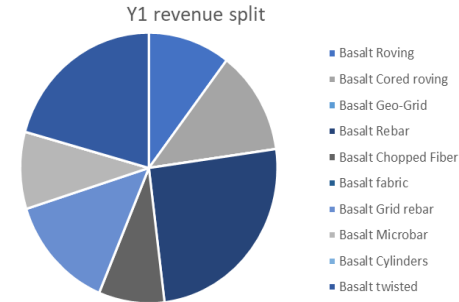


Sources: International Monetary Fund

After re-launch the Company will produce four types of products, after installation of additional capacities, the product mix will be expanded for up to 10 types. The Company plans to export 60% of its production and deliver 40% on the Armenian market. The pricing policy is based on two approaches at a time: cost of production plus margin over average market prices offered in target markets.

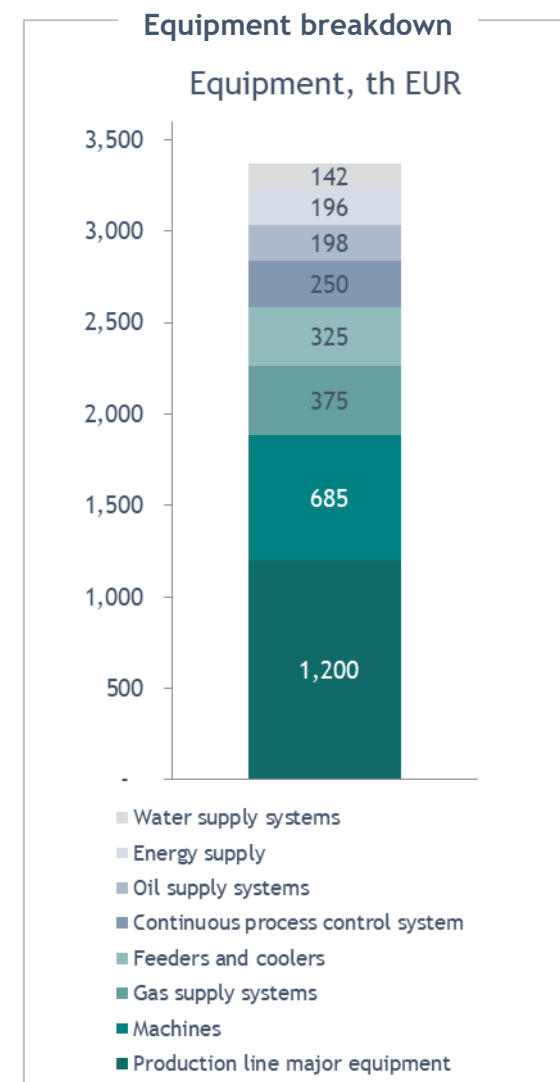
Revenue Derivation, th.EUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10-->
Melting furnace number	3	5	30	30	30	30	30	30	30	30
Total capacity (tons)	648	1,080	6,480	6,480	6,480	6,480	6,480	6,480	6,480	6,480
Capacity utilization	60.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Production Basalt Roving	117	185	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108
Production Basalt Cored roving	117	185	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108
Production Basalt Geo-Grid	0	0	492	492	492	492	492	492	492	492
Production Basalt Rebar	130	205	1,231	1,231	1,231	1,231	1,231	1,231	1,231	1,231
Production Basalt Chopped Fiber	58	92	616	616	616	616	616	616	616	616
Production Basalt Fabric	0	0	431	431	431	431	431	431	431	431
Production Basalt Grid Rebar	65	103	616	616	616	616	616	616	616	616
Production Basalt Microbar	32	51	123	123	123	123	123	123	123	123
Production Basalt cylinders	0	0	123	123	123	123	123	123	123	123
Production Basalt Twisted	97	154	308	308	308	308	308	308	308	308
Total production volume (tons)	402	636	4,186	4,186	4,186	4,186	4,186	4,186	4,186	4,186
Av price per Basalt Roving	2,500	2,632	2,744	2,857	2,975	3,097	3,224	3,356	3,493	3,636
Av price per Basalt Cored roving	3,000	3,159	3,293	3,429	3,570	3,716	3,868	4,027	4,192	4,363
Av price per Basalt Geo-Grid	0	0	5,000	5,207	5,421	5,643	5,874	6,115	6,365	6,626
Av price per Basalt Rebar	5,500	5,791	6,036	6,286	6,545	6,813	7,092	7,382	7,685	8,000
Av price per Basalt Choped Fiber	4,000	4,212	4,390	4,572	4,760	4,955	5,158	5,369	5,589	5,818
Av price per Basalt fabric	0	0	10,000	10,414	10,842	11,286	11,749	12,230	12,731	13,253
Av price per Basalt Grid Rebar	6,000	6,318	6,585	6,858	7,140	7,432	7,737	8,054	8,383	8,727
Av price per Basalt Microbar	8,000	8,424	8,780	9,144	9,520	9,910	10,315	10,738	11,178	11,636
Av price per Basalt cylinders	0	0	12,000	12,497	13,011	13,544	14,098	14,676	15,277	15,903
Av price per Basalt Twisted	6,000	6,318	6,585	6,858	7,140	7,432	7,737	8,054	8,383	8,727

Sources: Hundred cjsc valuation



Almost 60% of Stage I investments for CAPEX refers to purchases of new equipment to increase efficiency of production process, decrease consumption of energy and utilities and expand product mix.

Depreciation period (Y)	Depreciated / Expensed in	Details	CAPEX (th.EUR)
15	COGS	Production line major equipment	1,200
15	COGS	Feeders and coolers	325
15	COGS	Platinum rhodium sensors	23
15	COGS	Continuous process control system [□]	250
15	COGS	Automatic feed of basalt rubble	45
15	COGS	Collection of flue gases from furnaces	170
15	COGS	Gas pipeline	125
15	COGS	Cooling circulation water system	85
15	COGS	High pressure air supply system	80
15	COGS	Furnaces	95
15	COGS	Transformers	10
15	COGS	Clean water supply and sewage system	57
15	COGS	Oil feeding system	198
15	COGS	Drying chambers	70
15	COGS	Roving machines (for the forsaken roving)	177
15	COGS	Testing equipment and chemical laboratory	151
15	COGS	Equipment installation	51
15	COGS	Composite reinforcement and mesh	40
15	COGS	Electrical equipment	196
15	COGS	Assembly room feeders	23
Subtotal Equipment			3,370



Sources: Hundred cjsc valuation

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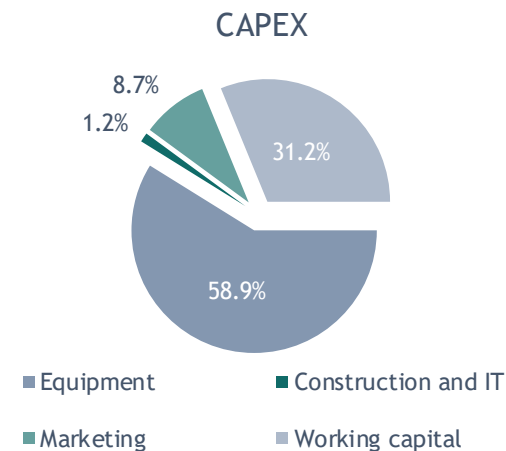
Total investments for renovation and modernization phase in Stage I amount to 5.7mln EUR. About 2.3mln EUR is foreseen for working capital financing, 500 th. EUR to support market positioning and applying EU certifications. Major share will be used to renovate production facilities.

Process	Depreciation period (Y)	Depreciated / Expensed in	Details	CAPEX (th.EUR)
Construction / Renovation	40	COGS	Hotel, road, alteration of the roof over the furnaces	500
			Subtotal	500
IT	15	OPEX	Security and surveillance system	20
			Subtotal	20
Marketing	10	OPEX	European certification, advertisement, exhibitions	500
			Subtotal	500
Working Capital			Gas, electric power, water, salary, lubricant, etc.	1,336
			Subtotal	1,336
Subtotal Non-equipment				2,356

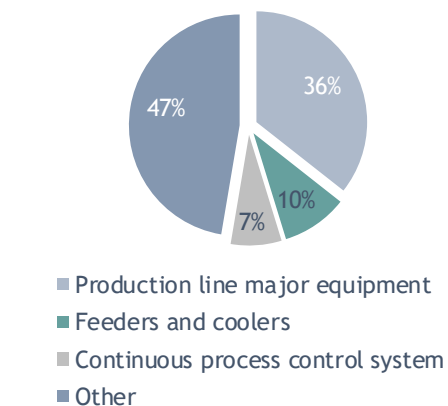
Sources: Hundred cjsc valuation

Event major amount of Stage I investments are planned for purchase of new equipment, a part will be used to finance Company's working capital. European certification is needed to work with local customers and distributors. Due to technical and innovative character of industry it is planned to continue visiting international exhibitions and conferences, where new trends and potential customers can be contracted by the management.

CAPEX breakdown



Equipment



Total investments for renovation and modernization in Stage I second phase amount to 77,320 mln EUR. Over 1.2 mln EUR is foreseen for design and bill of quantities development financing, 6.9 mln EUR for new plant and workshops construction, about 1 mln EUR for installation and employees' trainings. Major share will be used to purchase purely new equipment and se up high-tech machinery for furnaces and production lines.

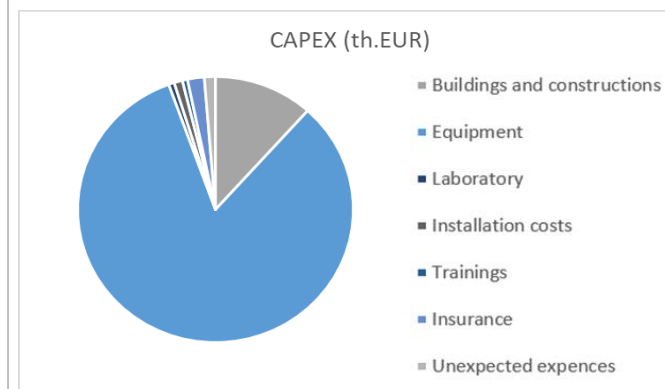
Details	CAPEX (th.EUR)
Buildings and constructions	8,140
Equipment	65,110
Laboratory	400
Installation costs	600
Trainings	370
Insurance	1,200
Unexpected expences	1500
Total	77,320

Over 82% of amount of second phase investments are planned for purchase of new equipment, only small part will be used to finance Company's working capital. European certification is needed to work with local customers and distributors. Due to technical and innovative character of industry it is planned to continue visiting international exhibitions and conferences, where new trends and potential customers can be contracted by the management.

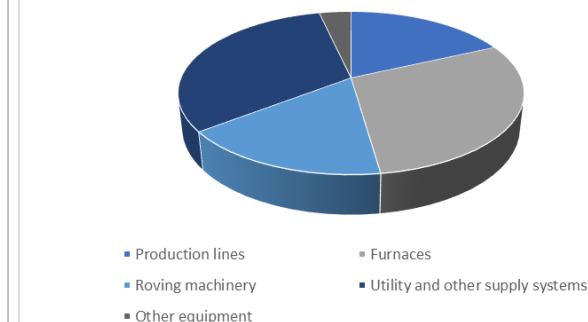
For second phase of Stage I investment, total project finance needs of 87 mln EUR will be covered by external loan. Loan in EUR with 2 years of grace period and 8 years of payback period is envisaged. Financial costs for funds lending is 10% to be paid upfront.

Sources: Hundred cjsc valuation

CAPEX breakdown



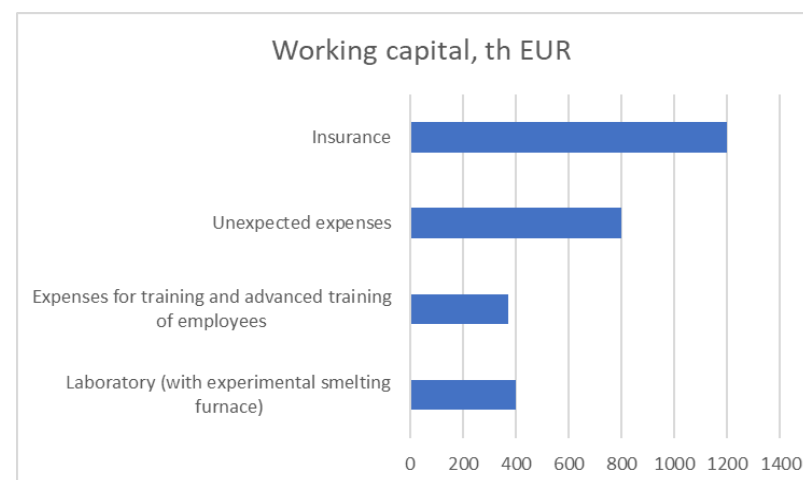
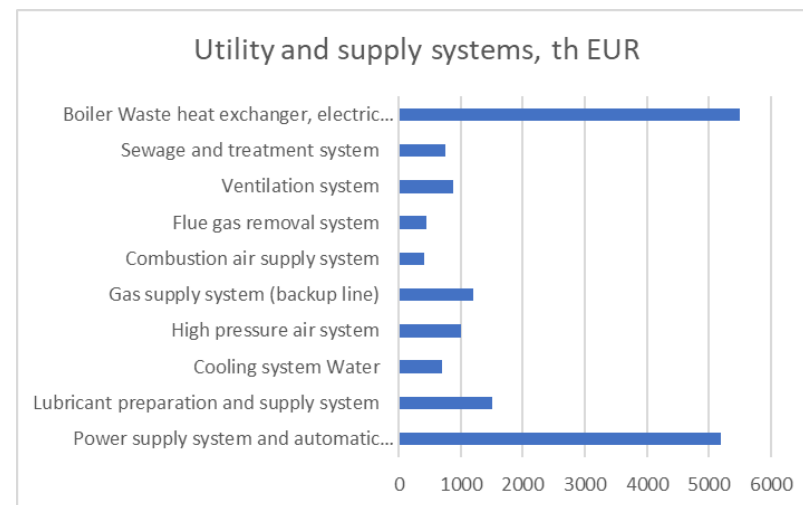
Equipment details, th EUR



Almost 60% of Stage I first phase (rehabilitation) investments for CAPEX refers to purchases of new equipment to increase efficiency of production process, decrease consumption of energy and utilities and expand product mix.

Details	CAPEX (th. EUR)
Production area, warehouse area, canteens, showers and other premises	6900
Design	1240
Supervised installation	600
Platinum products/rodium (development, purchase)	10500
Furnaces, 25 pcs., including automatic control system	15000
Power supply system and automatic input of backup power, emergency a	5200
Lubricant preparation and supply system	1500
Cooling system Water	700
High pressure air system	1000
Gas supply system (backup line)	1200
Combustion air supply system	400
Flue gas removal system	435
Ventilation system	875
Sewage and treatment system	750
Boiler Waste heat exchanger, electric energy production	5500
Drying and packaging of threads and rovings	800
Winding machines	5500
Roving machines	2250
Reinforcement and mesh production lines	10500
Unwinding - twisting - fiber winding	
Weaving machine for technical fabric	
Knitting machine for masonry mesh	
Pultrusion line	
Geogrid Production Lines	
Production lines for needle-stitched mats	
Laboratory (with experimental smelting furnace)	400
Photovoltaic station	3000
Expenses for training and advanced training of employees	370
Unexpected expenses	1500
Insurance	1200
total	77,320

Supply systems breakdown



Sources: Hundred cjsc valuation

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One of the major projected COGS expenses include cost of materials used, such as raw basalt and lubricants, utilities used for furnace heating (gas, electricity), technical water used in production, etc. which compose about 47% of cost of goods sold on average. The first product of CBF production process is basalt roving which is converted to more complex products.

Roving



Rebar



EUR	Item	Unit	Price per unit	Cons. per ton	Price per ton
Material	Raw material (Basalt)	Ton	28.1	1.1	32.0
	Lubricant	Kg	3.5	34.7	121.6
	Auxiliary materials	Ton	0.3	37.4	11.4
	Materials for maintenance	Ton	0.1	37.4	3.8
	Rent of feeders and refrigerators	Ton	244.4	1.2	281.1
	Other (sanitation, contingency, etc)				110.5
	Subtotal				
Utility	Electricity	kWh	0.1	0.2	182.5
	Water (consumption)	Cubic meter	0.2	32.7	6.8
	Water (liquid waste)	Cubic meter	0.1	31.3	2.8
	Gas	Cubic meter	0.3	1,216.7	323.4
	Subtotal				
Total costs per ton Basalt Roving					1,076.0
EUR	Item	Unit	Price per unit	Cons. per ton	Price per ton
Material	Raw material (Basalt)	Ton	28.1	1.1	32.0
	Lubricant	Kg	3.5	150.1	525.9
	Auxiliary materials	Ton	0.3	37.4	11.4
	Materials for maintenance	Ton	0.1	37.4	3.8
	Rent of feeders and refrigerators	Ton	244.4	1.2	281.1
	Other (sanitation, contingency, etc)				110.5
	Subtotal				
Utility	Electricity	kWh	0.1	0.3	219.0
	Water (consumption)	Cubic meter	0.2	36.0	7.5
	Water (liquid waste)	Cubic meter	0.1	34.4	3.1
	Gas	Cubic meter	0.3	1,216.7	323.4
	Subtotal				
Total costs per ton Basalt Rebar					1,517.8

Sources: Hundred cjsc valuation

Basalt chopped fiber is similar to carbon fiber and fiberglass, but basalt has better mechanical properties than fiberglass and is lower in cost than carbon fiber. It is used as a fireproof textile in the aerospace and automotive industries and can also be used as a composite to produce a wide range of products. Basalt twisted yarns, built up from a defined number of fine basalt continuous roving, twisted together to form a yarn.

Chopped Fiber



Twisted Fiber



Sources: Hundred cjsc valuation

EUR	Item	Unit	Price per unit	Cons. per ton	Price per ton
Material	Raw material (Basalt)	Ton	28.1	1.1	32.0
	Lubricant	Kg	3.5	52.1	182.4
	Auxiliary materials	Ton	0.3	37.4	11.4
	Materials for maintenance	Ton	0.1	37.4	3.8
	Rent of feeders and refrigerators	Ton	244.4	1.2	281.1
	Other (sanitation, contingency, etc)				
Subtotal					621.2
Utility	Electricity	kWh	0.1	0.2	209.9
	Water (consumption)	Cubic meter	0.2	36.0	7.5
	Water (liquid waste)	Cubic meter	0.1	34.4	3.1
	Gas	Cubic meter	0.3	1,216.7	323.4
	Subtotal				
Total costs per ton Basalt Chopped Fiber					1,165.1

EUR	Item	Unit	Price per unit	Cons. per ton	Price per ton
Material	Raw material (Basalt)	Ton	28.1	1.1	32.0
	Lubricant	Kg	3.5	52.1	182.4
	Auxiliary materials	Ton	0.3	37.4	11.4
	Materials for maintenance	Ton	0.1	37.4	3.8
	Rent of feeders and refrigerators	Ton	244.4	1.2	281.1
	Other (sanitation, contingency, etc)				
Subtotal					621.2
Utility	Electricity	kWh	0.1	0.3	273.8
	Water (consumption)	Cubic meter	0.2	36.0	7.5
	Water (liquid waste)	Cubic meter	0.1	34.4	3.1
	Gas	Cubic meter	0.3	1,216.7	323.4
	Subtotal				
Total costs per ton Basalt Twisted					1,229.0

Beside the materials and utilities, salary and depreciation are one of the biggest part of COGS. Together they represent 47% of COGS on average for Stage I rehabilitation phase.

Expenses per month, EUR	Details	Expense per month
Plant Employees	Dispatch for equipment	29,200
	Shift head	3,500
	Chief technologist	800
	Technologist	700
	Fillers	2,400
	Forklift driver	250
	Workshop maintenance experts	1,200
	Workshop electricians	3,150
	Cleaners	600
	Laboratories	1,600
	Unqualified workers	2,400
	Employee Income tax	9,618
	Subtotal	55,418

Plant employees dispatching equipment constitute more than half of employee related costs. Employee income tax in amount of 10000. EUR in accounted.

Expenses per month, EUR	Details	Expense per month
Services	Insurance-technologic equipment	4,575
	Transportation	4,167
	Renovation and maintenance of equipment	3,750
	Technical maintenance- PPE	522
	Waste handling	417
	Other services	250
	Subtotal	13,680
Depreciation	Equipment	49,505
	Construction	10,942
	Subtotal	60,447

Total	129,545
--------------	----------------

Another part of COGS is services where transportation and insurance costs are dominating as well as renovation and maintenance of equipment.

Depreciation of plant equipment amounts to 60000 EUR per month.

For Stage I second phase (expansion) with production capacity of 6,000 tons per annum, salary and depreciation are the biggest part of COGS, with 27% and 21% respectively.

Expenses per month, EUR	Details	Expense per month
Plant Employees	Dispatch for equipment	52,410
	Shift head	3,205
	Chief technologist	641
	Technologist	590
	Fillers	3,077
	Forklift driver	769
	Workshop maintenance experts	3,077
	Workshop electricians	5,385
	Cleaners	1,538
	Laboratories	2,359
	Unqualified workers	4,615
	Employee Income tax	15,533
	Subtotal	93,200

Plant employees dispatching equipment constitute more than half of employee related costs. Employee income tax in amount of 15000 EUR in accounted.

Expenses per month, EUR	Details	Expense per month
Services	Insurance-technologic equipment	4,575
	Transportation	4,167
	Renovation and maintenance of equipment	3,750
	Technical maintenance- PPE	522
	Waste handling	417
	Other services	250
Subtotal	13,680	
Depreciation	Equipment	103,282
	Construction	23,320
	Subtotal	126,602
Total	233,482	

Sources: Hundred cjsc valuation

Another part of COGS is services where transportation and insurance costs are dominating as well as renovation and maintenance of equipment.

Depreciation of plant equipment amounts to 126000 EUR per month.

SG&A costs are mostly represented by management salaries, expenses for loan, property tax and marketing costs.

Other Operational Expenses, EUR	Details	Expense per month	Other Operational Expenses, EUR	Details	Expense per month
Selling Expenses	Sales manager	1,000	General & Administrative Expenses	General director	2,000
	Market experts	2,000		Deputy directors	7,000
	Warehouse	1,600		Deputy chiefs	3,300
	Drivers	400		Chief accountant	1,000
	Income tax	1,050		Accountant	1,400
	Subtotal salary	6,050		IT expert	450
	Marketing costs	4,167		Safety experts and fairman	2,000
	Certification, testing, checking, etc.	104		Security	900
	Subtotal other expenses	4,271		Income tax	3,791
Subtotal	10,321	Subtotal salary		21,841	
Other Operational Expenses	Property tax	4,703		Office expenses	130
	Insurance	1,120		Other (sanitation, contingency, etc)	2,087
	Other operational	760		Travel and accomodation	567
	Fees for natural resource utilisation	192		Telecommunication, Internet, IT, etc	608
	Ecologic fees	152		Legal and financial services	208
	Subtotal	6,927		Subtotal other expenses	3,600
Loans	Subtotal	28,907		Subtotal	25,441
Depreciation (IT)	Subtotal	65	Total OPEX	71,660	

Sources: Hundred cjsc valuation

Starting from Year 3, within the expansion phase investment, G&A costs are mostly represented by management salaries, expenses for loan, property tax and marketing costs: the details are provided next.

Phase II					
Other Operational Expenses, EUR	Details	Expense per month	Other Operational Expenses, EUR	Details	Expense per month
Selling Expenses	Sales manager	2,564	General & Administrative Expenses	General director	3,846
	Market experts	8,974		Deputy directors	15,385
	Warehouse	5,385		Deputy chiefs	10,256
	Drivers	2,564		Chief accountant	1,410
	Income tax	3,897		Accountant	2,051
	Subtotal salary	23,385		IT expert	1,026
	Marketing costs	7,500		Safety experts and fairman	3,205
	Certification, testing, checking, etc.	208		Security	1,800
	Subtotal other expenses	7,708		Income tax	7,796
	Subtotal	31,093		Subtotal salary	46,775
Other Operational Expenses, EUR	Details	Expense per month	Office expenses	391	
Other Operational Expenses	Property tax	4,703	Other (sanitation, contingency, etc)	3,130	
	Insurance	1,118	Travel and accomodation	667	
	Other operational	760	Telecommunication, Internet, IT, etc	1,521	
	Fees for natural resource utilisation	192	Legal and financial services	417	
	Ecologic fees	152	Subtotal other expenses	6,125	
	Subtotal	6,924	Subtotal	52,901	
Loans		Subtotal	42,947		
Depreciation (IT)	Trade mark		Total	OPEX	134,087
	Subtotal	222	In the ranges of incentive schemes, based on annual financial outcomes, bonuses also are foreseen as part of employee remuneration. Bonuses shall be calculated and allocated based on KPIs established for each division or function in the plant.		

Sources: Hundred cjsc valuation

The Company's production compound annual growth rate (CAGR) is 12%. Basalt rebar accounts for 35% of all production, basalt roving and twisted chopped fiber have about the same proportion in production (28%).

The major components for cost of materials are lubricant and rent of feeders and refrigerators, which account for average 40% and 39% of total cost of materials respectively in projected period.

COGS Derivation, tons	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10-->
Production Basalt Roving	117	185	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108
Production Basalt Cored roving	117	185	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108
Production Basalt Geo-Grid	0	0	492	492	492	492	492	492	492	492
Production Basalt Rebar	130	205	1,231	1,231	1,231	1,231	1,231	1,231	1,231	1,231
Production Basalt Chopped Fiber	58	92	616	616	616	616	616	616	616	616
Production Basalt Fabric	0	0	431	431	431	431	431	431	431	431
Production Basalt Grid Rebar	65	103	616	616	616	616	616	616	616	616
Production Basalt Microbar	32	51	123	123	123	123	123	123	123	123
Production Basalt cylinders	0	0	123	123	123	123	123	123	123	123
Production Basalt Twisted	97	154	308	308	308	308	308	308	308	308
Total Production (tons)	616	975	6,156	6,156	6,156	6,156	6,156	6,156	6,156	6,156

Sources: Hundred cjsc valuation

The Company's production compound annual growth rate (CAGR) is 12%. Basalt rebar accounts for 35% of all production, basalt roving and twisted chopped fiber have about the same proportion in production (28%).

The major components for cost of materials are lubricant and rent of feeders and refrigerators, which account for average 40% and 39% of total cost of materials respectively in five years.

COGS Derivation, th. EUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10-->
Raw Materials (Basalt)	19.7	33.0	217.5	226.4	235.6	245.0	254.8	265.1	275.7	286.7
Lubricant	149.7	251.3	1,633.8	1,701.0	1,769.8	1,840.8	1,914.7	1,991.5	2,071.3	2,154.4
Auxiliary materials	7.0	11.8	77.8	81.0	84.2	87.6	91.1	94.8	98.6	102.5
Materials for maintenance	2.3	3.9	25.9	27.0	28.1	29.2	30.4	31.6	32.9	34.2
Rent of feeders and refrigerators	173.1	290.4	1,912.3	1,991.0	2,071.5	2,154.6	2,241.0	2,330.9	2,424.4	2,521.6
Other (sanitation, contingency, etc)	68.0	114.1	751.5	782.4	814.1	846.7	880.7	916.0	952.8	991.0
<i>Supplies Inflation</i>	<i>na</i>	<i>6.0%</i>	<i>4.3%</i>	<i>4.1%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>
Total Cost of Materials	419.8	704.6	4,618.8	4,808.8	5,003.3	5,204.0	5,412.7	5,629.8	5,855.6	6,090.5
Electricity	147.1	246.8	1,632.9	1,700.0	1,768.8	1,839.7	1,913.5	1,990.3	2,070.1	2,153.1
Water	6.4	10.8	71.0	73.9	76.9	79.9	83.1	86.5	90.0	93.6
Gas	199	334	2,200	2,290	2,383	2,479	2,578	2,682	2,789	2,901
<i>Supplies Inflation</i>	<i>na</i>	<i>6.0%</i>	<i>4.3%</i>	<i>4.1%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>
Utilities	352.6	591.7	3,903.8	4,064.4	4,228.8	4,398.4	4,574.8	4,758.3	4,949.2	5,147.7

Sources: Hundred cjsc valuation

After cost of materials, the major components of COGS are depreciation, salary and utilities, respectively 26%, 23% and 20% on average. CAGR of COGS by this type is 10%.

COGS Derivation - cont, th.EUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Total Cost of Materials and Utilities	772.4	1,296.4	8,522.6	8,873.2	9,232.1	9,602.4	9,987.5	10,388.1	10,804.8	11,238.2
Equipment	1,239.4	1,351.7	3,599.1	5,846.4	5,846.4	5,846.4	5,846.4	5,846.4	5,846.4	5,846.4
Construction	285.5	291.7	378.0	464.2	464.2	464.2	464.2	464.2	464.2	464.2
Depreciation	1,524.8	1,643.4	3,977.0	6,310.6	6,310.6	6,310.6	6,310.6	6,310.6	6,310.6	6,310.6
Salary	932.0	987.9	3,846.1	4,004.3	4,166.3	4,333.4	4,507.2	4,688.0	4,876.0	5,071.6
Income Tax	186.4	197.6	769.2	800.9	833.3	866.7	901.4	937.6	975.2	1,014.3
<i>Salary Inflation</i>	<i>na</i>	<i>6.0%</i>	<i>4.3%</i>	<i>4.1%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>
Salary Costs	1,118.4	1,185.5	4,615.3	4,805.2	4,999.6	5,200.1	5,408.7	5,625.6	5,851.3	6,085.9
Technical maintenance- PPE	6.3	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.8	9.1
Renovation and maintenance of equipment	45.0	47.7	49.7	51.8	53.9	56.0	58.3	60.6	63.0	65.6
Insurance-technologic equipment	54.9	58.2	60.7	63.2	65.7	68.4	71.1	73.9	76.9	80.0
Transportation	50.0	53.0	55.3	57.5	59.9	62.3	64.7	67.3	70.0	72.9
Waste handling	5.0	5.3	5.5	5.8	6.0	6.2	6.5	6.7	7.0	7.3
Other services	3.0	3.2	3.3	3.5	3.6	3.7	3.9	4.0	4.2	4.4
<i>Services Inflation</i>	<i>na</i>	<i>6.0%</i>	<i>4.3%</i>	<i>4.1%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>
Services Costs	164.2	174.0	181.4	188.9	196.5	204.4	212.6	221.1	230.0	239.2
COGS	3,579.8	4,299.3	17,296.3	20,177.8	20,738.8	21,317.5	21,919.4	22,545.5	23,196.6	23,873.9

Sources: Hundred cjsc valuation

Interest payments amount up to quarter of OPEX but decline during repayment period of loan. SG&A expenses will grow mostly due to additional staff for new plant, increase in salary costs as effect of relatively high expected salary inflation.

Other Expenses, th.EUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10-->
Marketing costs	51.3	51.3	51.4	51.4	51.5	51.6	51.6	51.7	51.8	51.8
Marketing CAPEX depreciation	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Certification, testing, checking, etc.	1.3	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.8
<i>Other Expenses Inflation</i>	<i>na</i>	<i>6.0%</i>	<i>4.3%</i>	<i>4.1%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>
Salary	164.3	174.2	181.6	189.0	196.7	204.6	212.8	221.3	230.2	239.4
Selling Expenses	215.6	225.5	232.9	240.5	248.2	256.1	264.4	273.0	281.9	291.2
Other expenses	43.2	45.8	47.7	49.7	51.7	53.8	56.0	58.2	60.5	63.0
Salary	315.7	334.7	348.9	363.2	377.9	393.1	408.9	425.3	442.3	460.1
Depreciation	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
General & Administrative Expenses	360.3	381.8	398.0	414.3	431.0	448.2	466.2	484.8	504.2	524.4
Property tax	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4
Insurance	13.4	14.2	14.8	15.4	16.1	16.7	17.4	18.1	18.8	19.5
Other operational	9.1	9.7	10.1	10.5	10.9	11.4	11.8	12.3	12.8	13.3
Fees for natural resource utilisation	2.3	2.4	2.5	2.6	2.8	2.9	3.0	3.1	3.2	3.4
Ecologic fees	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7
<i>Other Operational Expenses Inflation</i>	<i>na</i>	<i>6.0%</i>	<i>4.3%</i>	<i>4.1%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>	<i>4.0%</i>
Other Operational Expenses	83.1	84.7	85.9	87.1	88.3	89.6	91.0	92.3	93.8	95.3
Loans	537.0	9,547.2	3,000.7	2,966.0	2,668.8	2,214.1	1,759.4	1,304.7	850.0	395.3
Interest Expenses	537.0	9,547.2	3,000.7	2,966.0	2,668.8	2,214.1	1,759.4	1,304.7	850.0	395.3
OPEX	1,196.0	10,239.2	3,717.5	3,707.8	3,436.3	3,008.1	2,580.9	2,154.8	1,729.9	1,306.2

Sources: Hundred cjsc valuation

Working capital is stable for the first phase, and then significantly will be increased for the years 3-10. WC includes mainly inventory, staff costs and utilities prepayments, to be financed by cash generated from operations. The tables below show average WC needs for 1,000tns and 6,000tns capacities, respectively.

Cash Outflows, EUR	WC required
Gas	390,000
Electric power	240,000
Water	7,000
Salary	670,000
Lubricant	260,000
Other overhead expenditures	219,380
Total WC required	1,786,380

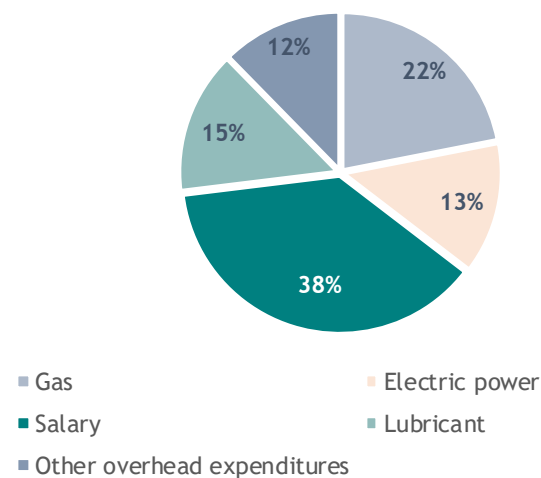
Cash Outflows, EUR	WC required
Gas	975,000
Electric power	1,080,000
Water	35,000
Salary	1,675,000
Lubricant	1,300,000
Other overhead expenditures	438,800
Total WC required	5,503,800

Sources: Company's materials

Overview

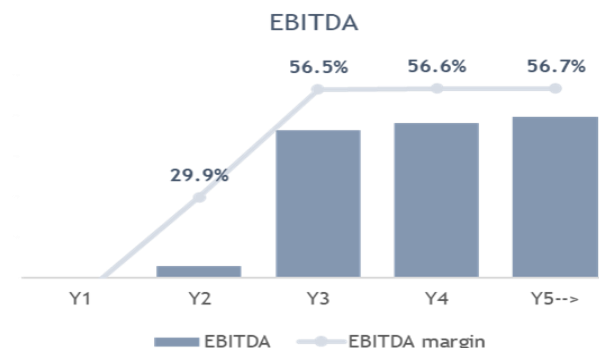
Working capital represents funds required to provide business continuity. The loan was mainly used for funding of investments made and for period working capital needs. 38% is the proportion of salary in working capital, the second highest cost is gas and the third lubricant, respectively 22% and 15%.

Working Capital Breakdown



After Stage I total investments when expansion and modernization will be in place, the Company's projected net profit margin will reach up to 33%, also due to the low cost of products. Additional furnaces and production capacity will allow to diversify production mix and to produce new type of fiber-based products with higher profit margins and higher prices.

Company expects flat EBITDA margin rate of 56% -57% from the year 2 and slightly growing net profit margin 25%-33% from the year 4.



Income Statement, th.EUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10-->
Revenue	2,819	4,700	32,238	33,580	34,973	36,423	37,939	39,523	41,178	42,908
Cost of goods sold	-3,580	-4,299	-17,396	-20,378	-20,939	-21,517	-22,119	-22,745	-23,397	-24,074
Cost of Materials	-420	-705	-4,619	-4,809	-5,003	-5,204	-5,413	-5,630	-5,856	-6,090
Utility	-353	-592	-3,904	-4,064	-4,229	-4,398	-4,575	-4,758	-4,949	-5,148
Depreciation	-1,525	-1,643	-4,077	-6,511	-6,511	-6,511	-6,511	-6,511	-6,511	-6,511
Salary	-1,118	-1,185	-4,615	-4,805	-5,000	-5,200	-5,409	-5,626	-5,851	-6,086
Services Costs	-164	-174	-181	-189	-197	-204	-213	-221	-230	-239
Gross Profit	-761	400	14,841	13,202	14,034	14,906	15,819	16,777	17,781	18,834
Selling expenses	-216	-225	-233	-240	-248	-256	-264	-273	-282	-291
General & Administrative expenses	-360	-382	-398	-414	-431	-448	-466	-485	-504	-524
Other Operational expenses	-83	-85	-86	-87	-88	-90	-91	-92	-94	-95
Income From Operating Activities	-1,420	-292	14,125	12,460	13,267	14,112	14,998	15,927	16,901	17,923
Financial& interest Expenses	-537	-9,847	-3,091	-3,056	-2,749	-2,280	-1,810	-1,340	-871	-401
Profit Before Income Tax	-1,957	-10,139	11,034	9,404	10,517	11,832	13,188	14,587	16,031	17,522
Income tax	0	0	-1,986	-1,693	-1,893	-2,130	-2,374	-2,626	-2,886	-3,154
Profit For The Year	-1,957	-10,139	9,048	7,711	8,624	9,702	10,814	11,961	13,145	14,368

Sources: Hundred cjsc valuation

Non-current assets for 10Y period represent 30% of assets, mostly it is PPE. The leverage ratio (Total Debt/Total Assets) of the Company is 26% on average. The proportion of loan in the total liabilities is almost 69%. The interest rate of the loan is 3%.

Accumulated Returned earnings are about 7mln dollar loss for Y0, which will decrease because of raising company's profit. Since Y8 the loss of returned earnings will be recovered. Long-term borrowing in the amount of 1.7mln EUR represents loan from owner and not excluded from enterprise value for equity value calculation.

Balance Sheet, th.EUR	Y0	Y1	Y2	Y3	Y4	Y5-->	Y6	Y7	Y8	Y9	Y10-->
Cash and bank balances	437	1,921	78,824	1,909	1,815	1,744	2,766	4,882	22,627	15,037	33,150
Cash box	437	1	10	12	20	22	25	25	26	30	32
Bank accounts	0	1,921	78,814	1,897	1,795	1,722	2,741	4,857	22,601	15,007	33,118
Trade and other receivables	2,116	846	1,410	9,671	10,074	10,492	10,927	11,382	11,857	12,353	12,872
Inventories	971	1,093	1,313	5,314	6,224	6,396	6,572	6,756	6,947	7,146	7,353
Raw materials	716	788	946	3,829	4,486	4,609	4,737	4,869	5,007	5,150	5,299
Production in progress	78	94	113	456	534	549	564	580	596	613	631
Finished goods	176	212	254	1,028	1,204	1,237	1,272	1,307	1,344	1,383	1,423
Other current assets	785	0	0	0	0	0	0	0	0	0	0
Current Assets	4,308	3,861	81,547	16,894	18,113	18,631	20,265	23,020	41,432	34,537	53,376
Property, plant and equipment	28,779	31,143	29,498	102,740	96,228	89,716	83,204	76,692	70,180	63,668	57,156
Land plot	705	705	705	705	705	705	705	705	705	705	705
Buildings and construction	11,168	11,668	11,668	18,568	18,568	18,568	18,568	18,568	18,568	18,568	18,568
Machinery and equipment	16,906	20,296	20,296	90,716	90,716	90,716	90,716	90,716	90,716	90,716	90,716
Depreciation	0	(1,526)	(3,171)	(7,249)	(13,761)	(20,273)	(26,785)	(33,297)	(39,809)	(46,321)	(52,833)
Intangible assets	2,565	3,015	2,965	2,915	2,865	2,815	2,765	2,715	2,665	2,615	2,565
Trade mark	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565
Brand, etc.	0	500	500	500	500	500	500	500	500	500	500
Amortisation	0	(50)	(100)	(150)	(200)	(250)	(300)	(350)	(400)	(450)	(500)
Non-Current Assets	31,344	34,158	32,463	105,655	99,093	92,531	85,969	79,407	72,845	66,283	59,721
Total Assets	35,652	38,019	114,010	122,549	117,206	111,162	106,234	102,427	114,277	100,820	113,097

Sources: Hundred cjsc valuation

For Stage I overall investments, total project finance needs of 90 mln EUR will be covered by external loan. Loan in EUR with 2 years of grace period and 8 years of payback period is envisaged. Financial costs for funds lending is 10% to be paid upfront.

Balance Sheet, th.EUR	Y0	Y1	Y2	Y3	Y4	Y5-->	Y6	Y7	Y8	Y9	Y10-->
Short term liabilities	6,128	678	717	18,024	17,878	18,118	18,396	18,683	18,980	4,786	5,103
Short term loans and borrowings	3,955	408	408	14,908	14,908	14,908	14,908	14,908	14,908	408	408
Trade payables	2,097	159	191	773	905	930	956	982	1,010	1,039	1,069
Payables to budget	76	0	0	1,986	1,693	1,893	2,130	2,374	2,626	2,886	3,154
salary and vacation reserve		111	118	357	372	387	403	419	436	453	471
Long term liabilities	2,364	6,410	92,502	74,686	61,777	46,869	31,961	17,053	16,645	4,237	1,829
Long term loans	2,364	5,910	92,502	62,686	47,777	32,869	17,961	3,053	2,645	2,237	1,829
Long term borrowings	0	500	0	12,000	14,000	14,000	14,000	14,000	14,000	2,000	0
Total Liabilities	8,491	7,088	93,219	92,710	79,655	64,988	50,357	35,736	35,624	9,023	6,931
Statutory capital	3,386	9,113	9,113	9,113	9,113	9,113	9,113	9,113	9,113	9,113	9,113
Reserve fund	30,817	30,817	30,817	30,817	30,817	30,817	30,817	30,817	30,817	30,817	30,817
Accumulated profit (previous years)	(7,042)	(7,042)	(8,999)	(19,138)	(10,090)	(2,379)	6,245	15,947	26,762	38,723	51,868
Current year profit	0	(1,957)	(10,139)	9,048	7,711	8,624	9,702	10,814	11,961	13,145	14,368
Total Equity	27,161	30,930	20,791	29,839	37,550	46,174	55,877	66,691	78,652	91,797	106,166

Sources: Hundred cjsc valuation

Indirect method of cash flow calculation is used. EBIT is adjusted by non-cash movements such as depreciation expense during the life period of equipment and results in significant cash inflows from operating activities. In the scope of investment activities, Company acquires new equipment for Roving workshop, Weaving, Geogrid, Twisting and winding, Knitting, needle punching, etc.

Cash outflows by financial activities represent loan payments.

According to calculations, Company has more than 39mln EUR cash at the end of year 10.

Cash Flow, th. EUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10-->
Cash Balance BoP	437	1,921	78,824	1,909	1,815	1,744	2,766	4,882	22,627	15,037
EBIT	-1,420	-292	14,125	12,460	13,267	14,112	14,998	15,927	16,901	17,923
Δ Receivables	2,055	-564	-8,261	-403	-418	-435	-455	-475	-497	-519
Δ Payables	-1,827	39	821	147	40	41	43	45	46	48
Δ Inventory	-123	-220	-4,000	-911	-171	-177	-184	-191	-199	-207
Δ Depreciation	1,576	1,695	4,078	6,562	6,562	6,562	6,562	6,562	6,562	6,562
Tax paid	-76	0	0	-1,986	-1,693	-1,893	-2,130	-2,374	-2,626	-2,886
Cash generated from operations	185	658	6,762	15,870	17,587	18,210	18,835	19,493	20,189	20,922
Fixed Assets	-4,390	0	-77,270	0	0	0	0	0	0	0
Cash generated from investments	-4,390	0	-77,270	0	0	0	0	0	0	0
Increase in statutory capital	5,727	0	0	0	0	0	0	0	0	0
Loan repayment	0	86,592	-15,316	-14,908	-14,908	-14,908	-14,908	-408	-14,908	-408
Borrowing	500	-500	12,000	2,000	0	0	0	0	-12,000	-2,000
Interest paid	-537	-9,847	-3,091	-3,056	-2,749	-2,280	-1,810	-1,340	-871	-401
Cash generated from financing activities	5,690	76,245	-6,407	-15,964	-17,658	-17,188	-16,718	-1,748	-27,779	-2,809
Cash Balance EoP	1,921	78,824	1,909	1,815	1,744	2,766	4,882	22,627	15,037	33,150

Sources: Hundred cjsc valuation

Required Return on Equity Derivation

1. Required Return on Equity

$$R_E = R_F (6.59\%) + \text{Adj ERP} (8.82\%) = 15.41\%$$

2. Risk Free Rate

$$R_F = \text{TSY Bond rate} (10.15\%) - \text{Country Risk} (3.56\%) = 6.59\%$$

2.1. TSY Bond rate

TSY Bond rate = Average yield curve for AMD denominated bonds with maturity of 30Y since 02/2022 to 02/2026 = 10.15%

2.2. Country Risk

See 3.1.2.

3. Adj ERP

$$\text{Adj ERP} = \text{ERP} (7.80\%) * \beta (1.13) = 8.82\%$$

3.1 ERP

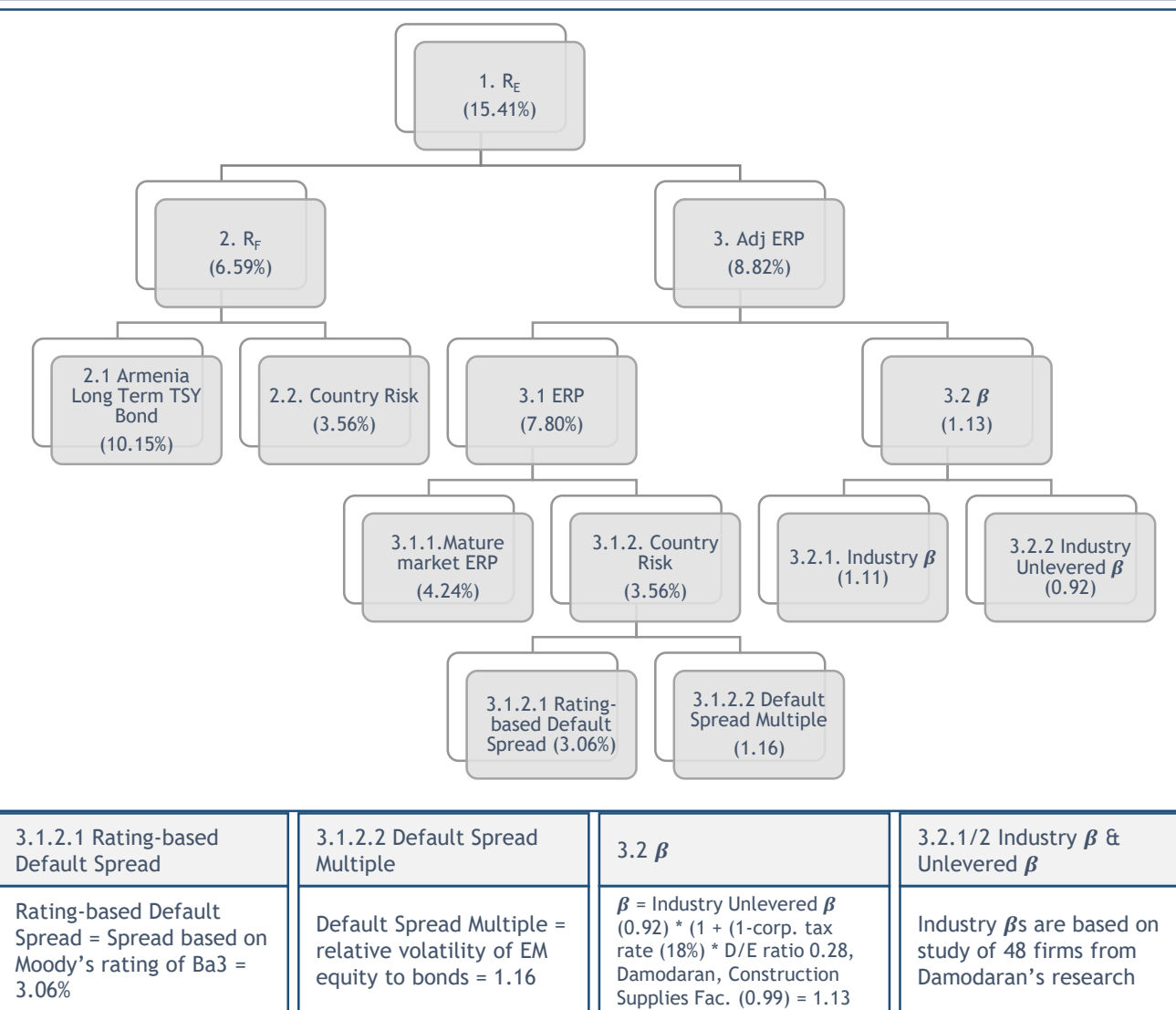
$$\text{ERP} = \text{Mature Market ERP} (4.24\%) + \text{Country Risk} (3.56\%) = 7.80\%$$

3.1.1 Mature Market ERP

Mature Market ERP = Implied equity risk premium for S&P 500 (01/2022) = 4.24%

3.1.2 Country Risk

$$\text{Country Risk} = \text{Rating-based Default Spread} (3.06\%) * \text{Default Spread Multiple} (1.16) = 3.56\%$$



Sources: Hundred cjsc valuation

Equity valuation according to the base scenario achieves almost 98.1mIn EUR with 11.5% WACC

Calculated equity value addresses Stage I both phases investment Projects valuation.

According to the model, equity value equals 98.1 mln EUR with 11.5% WACC and terminal value of future cash flows amounting 102mln EUR.

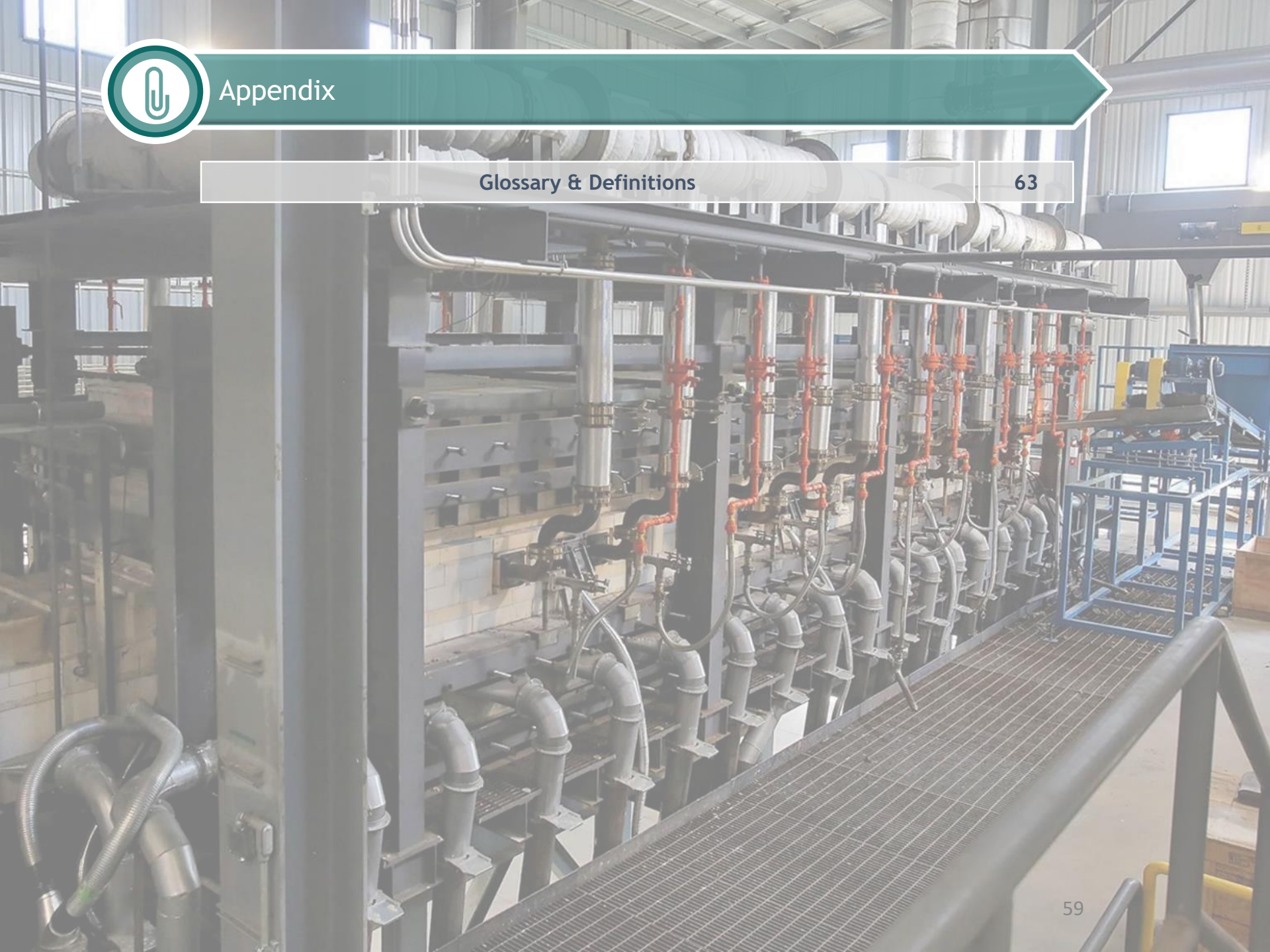
Conservative assumption is made about the growth rate of future cash flows after year 10 which is estimated at 4.4% per year.

For WACC calculation target capital structure is used. For enterprise value calculation Unlevered Free Cash Flow is used.

1.7mln EUR loan from owner is not considered as debt by equity value calculation.

Income Statement, th.EUR		Y0	Y1	Y2	Y3	Y4	Y5-->	Y6	Y7	Y8	Y9	Y10-->
Equity valuation approach	EBIT		-1,420	-292	14,125	12,460	13,267	14,112	14,998	15,927	16,901	17,923
	-Tax		256	52	-2,542	-2,243	-2,388	-2,540	-2,700	-2,867	-3,042	-3,226
	+Deprecation/Amortisation		1,576	1,695	4,078	6,562	6,562	6,562	6,562	6,562	6,562	6,562
	-Capex	-4,390	0	-77,270	0	0	0	0	0	0	0	0
	-Changes in Net Working Capital		29	-745	-9,454	-1,460	-349	-334	-352	-370	-389	-409
	Unleverd Free Cash Flow	-4,390	441	-76,560	6,206	15,319	17,092	17,800	18,509	19,252	20,032	20,850
	Growth% Y10-->		4.4%									
	WACC		11.5%									
	PV Y1-Y10 at Y0	-4,390	395	-61,556	4,474	9,903	9,907	9,252	8,626	8,046	7,507	7,006
	PV Y10--> at Y0	102,446										
Enterprise Value	101,617											
+Cash	437											
-Debt	-6,318											
Equity Value	95,736											

Sources: Hundred cjsc valuation



Glossary

CAGR - compounded annual growth rate

CAPEX - capital expenditure

CBF - continuous basalt fiber

CEO - chief executive officer

COGS - cost of goods sold

Covid effect - influence of pandemic of Covid-19 virus

DCF - discounted cash flow

EBIT - earnings before interest and tax

EBITDA - earnings before interest, tax, depreciation and amortisation

ERP - equity risk premium

HR - human resources

OPEX- operating expenses

QA - quality assurance

SOP - standard operating procedures

TOM - target operating model

TSY - treasury

WC - working capital

bln - billion

k, th - thousand

m / mln - million

MIN - minimum value

MAX - maximum value

p.u. - per unit

tn - tonn

w/o - without