BUKHARA EURO CEMENT

“BUKHARA EURO CEMENT” LLC

Cement plant capacity: 2,040 tons/day

Year: 2025

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1. Confidentiality Notice

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Author

Project Summary

Project Promoter:	Bukhara Euro Cement LLC
Name of the Investment Project:	Establishment of a Modern Cement Production Complex
Objective of the Investment Project:	Construction of a cement plant with an annual production capacity of 612,000 tons.
Project Location:	59A Bozachi Village, Bozachi Makhalla, Karaulbazar District, Bukhara Region, Republic of Uzbekistan
Planned Products, Volumes, and Types:	Mass production of cement grades Sem П/В – К(П-З-И) 32.5 Н and Sem П/А – К(П-З-И) 42.5 Н, with a total annual production capacity of 612,000 tons.
Planned Product Pricing, Sales Markets, Production and Export Volumes:	Total projected sales over the project period: **USD 300 902 056,69** of which **USD 60 180 411** is expected from export markets.
Required Infrastructure and Engineering Facilities for Project Implementation:	Available.
Reliminary site layout includes the main production facility, equipment and technological lines, administrative and utility buildings, warehouses, and other auxiliary structures.	Details are provided in Section 3.2 of the Business Plan.
Description of Planned Production Technology with Environmental Compliance:	A conclusion regarding compliance with environmental requirements was obtained prior to the commissioning of the project. Environmental conclusion No. 04-01/10-08-1240 dated July 23, 2021. (Annexed)
Calculations of economic efficiency, as well as the most effective technical, organizational, and economic solutions for the implementation of the investment project:	Provided in Appendices 1-33 of the business plan
Financial and economic performance calculation period, years	2025-2035 years

<table>
<tr><td rowspan="3">The volume, type, and duration of the planned investments, sources of financing, and, if debt funds are attracted, the planned collateral security:</td><td>The total cost of the project</td><td>USD 38 053 163,00</td></tr>
<tr><td>In terms of credit and other investment funds</td><td>USD 25 000 000</td></tr>
<tr><td>The company's own funds</td><td>USD 13 053 163,00</td></tr>
<tr><td rowspan="2">The estimated production costs and sale prices for the products under the project</td><td>Production costs</td><td>Sale prices</td></tr>
<tr><td>CEM II/B-K (P-Z-I) 32.5 N – 40.57
CEM II/A-K (P-Z-I) 42.5 N– $43.37</td><td>CEM II/B-K (P-Z-I) 32.5 N – $49.19
CEM II/A-K (P-Z-I) 42.5 N– $52.39</td></tr>
<tr><td>Key financial indicators</td><td colspan="2">ROI (Return on Investment) – 17.09%
DSCR (Debt Service Coverage Ratio) – 2.65</td></tr>
<tr><td>The characteristics of the technological equipment planned to be used in production, their compliance with modern technological requirements, and the implementation of a management system in the investment project that complies with international standards:</td><td colspan="2">A management system compliant with international standards will be implemented during the commissioning process of the project</td></tr>
<tr><td>The number of jobs to be created</td><td colspan="2">new jobs will be created</td></tr>
<tr><td>Licenses and permits related to the activity</td><td colspan="2">A decision regarding the allocation of 20 hectares of land for the factory area, a decision confirming the inclusion of a 65-hectare limestone quarry in the company's balance sheet, and the license for its use, Environmental Permit, and Compliance Certificates are attached</td></tr>
<tr><td>Project currency and equivalents</td><td colspan="2">USD 1 = 13 000 sum
EUR 1 = 15 000 sum</td></tr>
</table>

2. PROJECT PASSPORT

2.1. Project Name and Brief Description

Project Name:

"BUKHARA EURO CEMENT" LLC – Construction of a cement production plant in the industrial zone.

Brief Description:

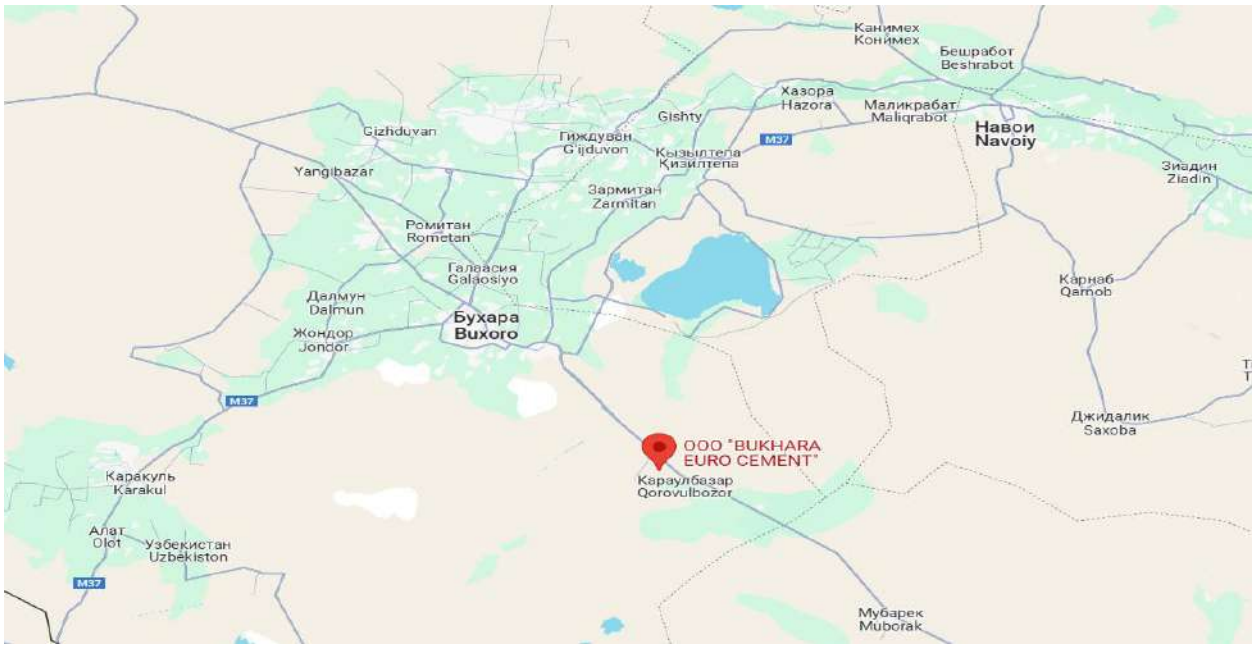
This project aims to establish an industrial facility with a modern cement production capacity in Bukhara region. The project intends to supply local and export markets with an annual cement production capacity of 612,000 tons. During the production process, energy-efficient technologies from China and Europe will be implemented. The raw material will be sourced from its own limestone quarry, which will reduce costs and shorten delivery times.

2.2. Geographical Location and Infrastructure

Address:

Bukhara Region, Korovulbozor District, Bozachi Makhalla (MFY), Bozachi Village, House 59A.

Factory Location: (Coordinates: 39.55850865358044, 64.75532737022374)



Land Area:

A 20-hectare land area is registered under the company's balance sheet (attached).

Aerial view of the factory:

Strategic location advantages, road and rail connections:

The plant site is connected to local roads, enabling fast delivery of goods to the Samarkand, Navoi, and Kashkadarya regions from a logistics standpoint.

Railway network:

A railway line is located 700 meters from the facility. The project includes the construction of an internal service road and a loading platform (annexed).

Energy supply:

A 110 kW transformer substation is available for power supply. Connections to the natural gas network and coal-fired lines will be implemented.

Water supply:

Water supply is planned through wells and reservoirs. Sources of technological water for production have been identified (annexed).

Office and dormitories:

An administrative building and dormitories for workers and engineers have been constructed.

2.3. Initiator, Company Information, and Founders

Company Name:

"BUKHARA EURO CEMENT" Limited Liability Company (LLC)

Tax Identification Number (TIN): 304794394

Date of Registration: April 4, 2017

Legal Address: Bo‘zachi MFY, Bo‘zachi village, house 59A, Qorovulbozor district, Bukhara region

Type of Activity (OKED): 23630 – Production of ready-mix concrete and cement

Charter Capital: 5,719,086,900 UZS ($439,430)

Founders:

Bafoyev Sherali Zokirovich – 96.70%

Bafoyev Nurali Zokirovich – 2.00%

Khamroev Isomidin Qovmidinovich – 1.30%

Managing Director: Bafoyev Sherali Zokirovich

Contact Information: Tel: +99899 957 00 99

2.4. Project History and Existing Resources

Project History:

2018: The project initiative was launched. A Technical and Economic Justification (TEJ) was prepared.

2022: Land, infrastructure, and licensing procedures were completed. Negotiations were held with Chinese and European companies regarding specialized equipment.

2022: Construction works and equipment installation were scheduled to begin.

Raw Materials:

The company owns a limestone quarry with reserves sufficient for 30.2 years at current production capacity. Limestone constitutes up to 70% of the cement composition (annexed).

Equipment and Logistics:

Special cargo trucks, dump trucks, and excavators are available for transportation.

Auxiliary Facilities:

Product warehouses, an administrative building, dispatch, and control points have been constructed.

3. PROJECT JUSTIFICATION

3.1. Relevance of Activity and Economic Demand

Demand for cement products in Uzbekistan continues to grow steadily. According to national statistics, 11.8 million tons of cement were produced in Uzbekistan in 2023, and this figure increased to 16.0 million tons in 2024 — representing a 34.2% growth.

This growth is largely driven by infrastructure development, large-scale construction projects, and government-supported industrial modernization. As a result, strengthening the local production base has become a matter of strategic importance.

3.2. Regional Advantage (Bukhara Region – Absence of Other Plants)

To address this shortage, "Bukhara Euro Cement" LLC is building a cement plant in Qorovulbozor district of Bukhara region with an annual capacity of 612,000 tons.

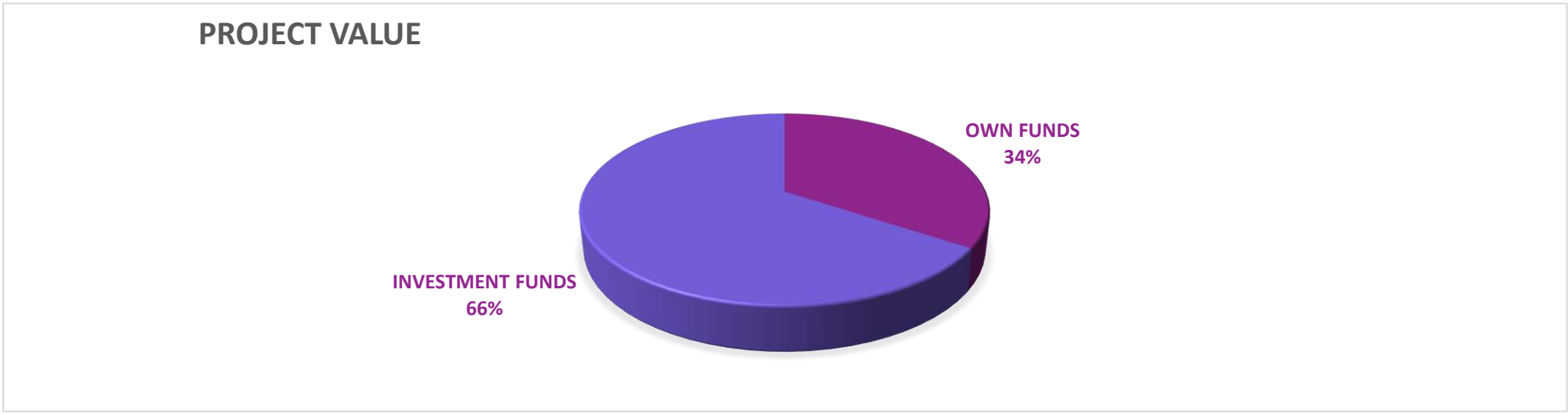
A 20-hectare land plot has been allocated for the project, where all necessary infrastructure is already in place: a railway line, 110 kV power supply, gas-coal systems, administrative offices, dormitories, laboratory, and other essential facilities.

Based on the plant layout (illustrated in the annex), the project covers a complete technological cycle — from raw material intake to loading and packaging.

3.3. FINANCIAL PLAN

In USD

Description	In National Currency	In USD	Total	Structure%	Share %
From own funds					
For fixed capital	12 219 823		12 219 823,00	93,6	
For working capital	300 000,00		300 000,00	2,3	
Financial expenses	533 340		533 340,00	4,1	
Total Own Funds	**13 053 163,00**		13 053 163,00	100,0	34,3
From Planned Investment Funds					
For Fixed Capital		5 000 000	5 000 000,00	20,0	
To Increase Liquidity (for full repayment of previous loan at 12% annual interest)		20 000 000	20 000 000,00	80,0	
Total Invesment Funds		**25 000 000,00**	25 000 000,00	100,0	65,7
Total Financing	**13 053 163,00**	**25 000 000,00**	**38 053 163,00**		



INVESTMENT EXPENDITURE

Assets required for production operations

№	Name and model	Unit of measurement	Quantity	Unit price, USD	Total, USD	Source of financing
1	Purchase of cement production line: acquisition of the clinker line	complect	1	1600000	1600000	From investment funds
2	Construction of the clinker line, cement plant kilns, and other operational units	unit	1	3 400 000	3400000	
3	Liquidity improvement, including full repayment of the 12% annual interest loan to Aloqabank and financial stabilization of the enterprise	unit	1	20000000	20000000	
	Delivery terms based on Incoterms 2020				**25000000**	

3.4. Prioritization Based on Presidential Decrees and Government Resolutions

According to Presidential Decree No. PF-5890 dated December 27, 2019, and Cabinet of Ministers Resolution No. 443 dated June 12, 2018, the production of construction materials has been designated as a strategic sector in Uzbekistan. These documents emphasize the efficient use of local raw materials, the creation of new capacities, and the production of export-oriented products.

In line with regional government decisions, “Bukhara Euro Cement” LLC was allocated 20 hectares of land (2017, district administration resolution) and a 65-hectare quarry area (2019, regional administration and geology committee statement). These decisions were made in full compliance with national policy. (All official documents are included in the annexes.)

3.5. Tax and Customs Incentives (See Section 9)

The following benefits are available to investors in the cement production sector (supporting documents annexed):

Exemption from customs duties and VAT for imported technological equipment.

Exemption from profit tax during the initial years of operation.

Tax relief for investments aimed at improving energy efficiency.

From 2024, the VAT rate for cement producers was reduced from 15% to 10%. (https://gazeta.uz)

3.6. Competitive Advantages

“Bukhara Euro Cement” benefits from the following advantages:

Geographic Advantage: The only regional cement plant with a raw material quarry located just 20 minutes away.

Infrastructure: Availability of a 110 kV transformer, railway line, office facilities, laboratory, water and gas supply systems.

Territorial Exclusivity: The only compact and full-cycle plant in Bukhara that is located close to both export and domestic markets.

Local Brand and Trust:

Under the trademark “Bukhara Euro Cement,” the company produces SEM P/V-K(P-Z-I) 32.5 N Portland Cement (Grade 450) and SEM P/V-K(P-Z-I) 42.5 N Portland Cement (Grade 550), distinguished by their high quality.

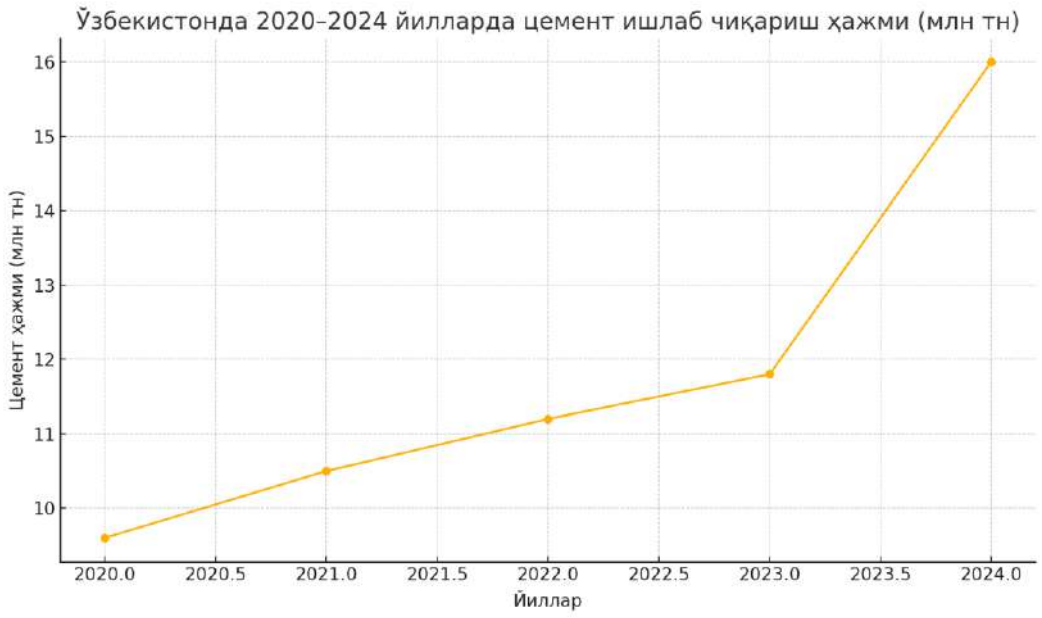
Lower Transportation Costs:

There is an opportunity to offer 15–25% lower prices when delivering to local customers due to reduced transportation expenses.

4. MARKET ANALYSIS

4.1. Domestic Market Volume and Growth Trend

Cement production volume in Uzbekistan has shown steady growth over the past five years. In 2020, production stood at 9.6 million tons, reaching 16 million tons by 2024. This represents approximately 67% growth between 2020 and 2024.



(http://uz.kursiv.media/en/2025-02-17/cement-production-in-uzbekistan-increases-by-34-2/)

4.2. Regional Consumption Segments

The cement market in Uzbekistan is unevenly distributed across regions. The following regions account for the majority share of domestic consumption:

Tashkent city and region – 34%

Samarkand – 15%

Kashkadarya – 14%

Fergana – 8%

Others – 29%

(http://www.globalcement.com/news/item/18293-uzbekistan-s-cement-sales-rose-by-58-in-2024)

The share of the Bukhara region is 5.2%, with a consistent annual demand of more than 800,000 tons of cement.

4.3. Competitive Environment and Key Market Participants

Currently, more than 40 cement plants operate in Uzbekistan. However, the majority of the market share is concentrated in the hands of 3–4 major producers:

Ohangaroncement – 18%

Kyzylkumcement – 3%

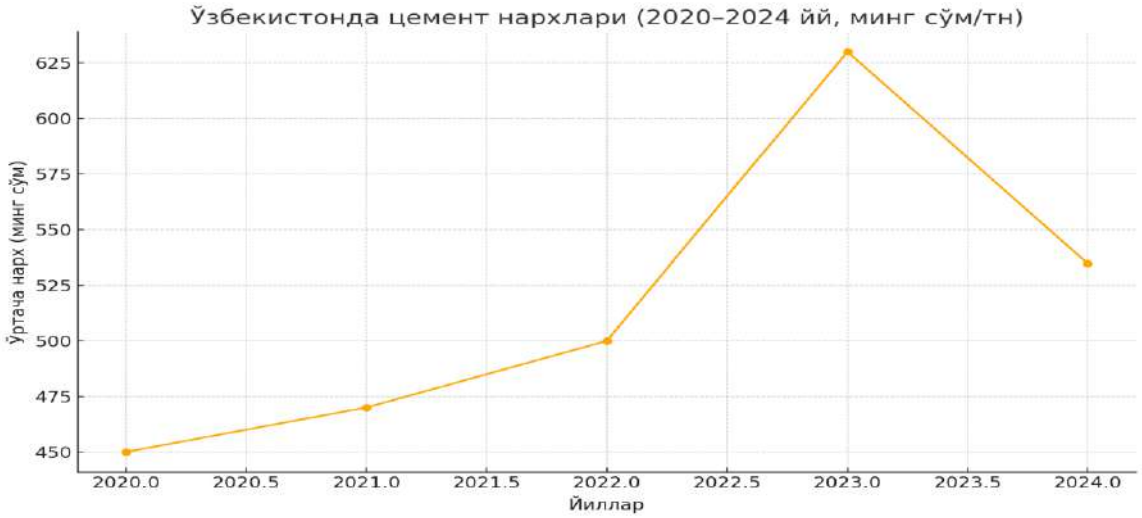
Bekabadcement – 1%

Others (37+) – 78%

(http://www.globalcement.com/news/item/18293-uzbekistan-s-cement-sales-rose-by-58-in-2024)

4.4. Local and Export Price Analysis

Over the past five years, cement prices in Uzbekistan have fluctuated multiple times. In 2024, the average price was 534,700 UZS, which represents a decrease compared to 2023.

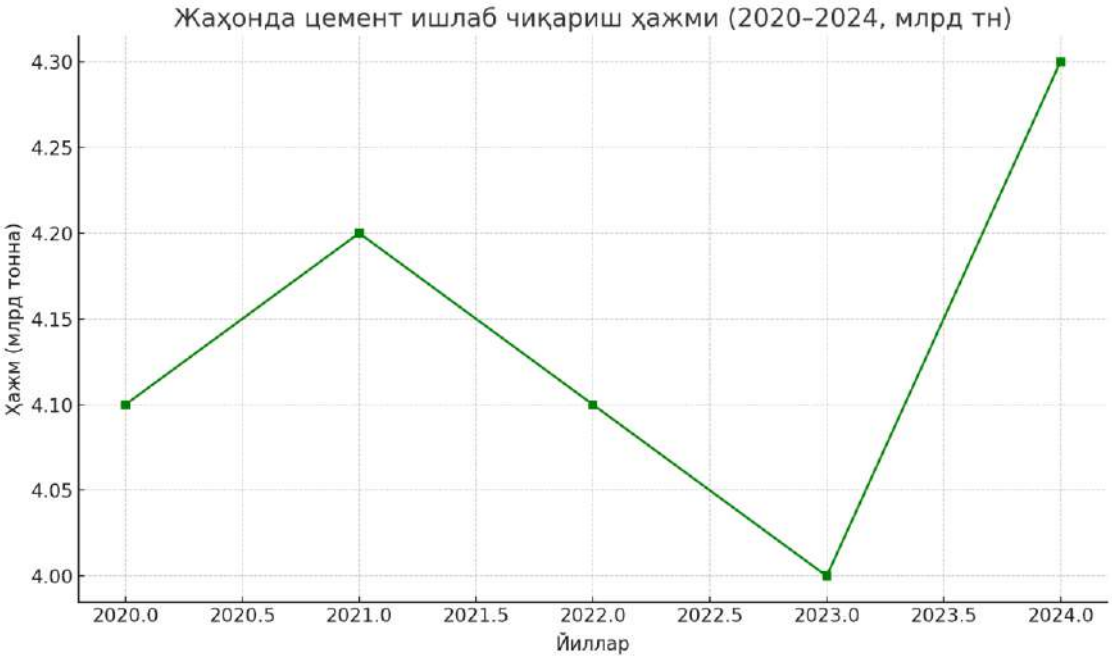


(http://uz.kursiv.media/en/2025-02-17/cement-production-in-uzbekistan-increases-by-34-2/)

4.5. Advantage in Delivery Costs in Bukhara

Due to its location within the Bukhara region, the “Bukhara Euro Cement” plant benefits from reduced transportation costs when delivering cement to local customers. This allows the product to be sold at prices that are 15–20% lower compared to the nearest competitors in the region.

4.6. International Market and Global Trends



In 2024, global cement production reached 4.3 billion tons. This represents a 7.5% increase compared to 4.0 billion tons in 2023.

China: 2.1 billion tons

India: 350 million tons

USA: 95 million tons

Turkey: 83 million tons

(http://www.statista.com/statistics/219343/cement-production-worldwide/)

4.7. Forecast and Scenario Analysis

The volume of Uzbekistan's cement market is projected to reach 22 million tons by 2030. The reserve market volume for new plants may increase by at least 1.2–1.5 million tons per year.

Scenario Analysis (based on BCG model):

Optimistic: 40% – driven by growth in infrastructure investments and expansion of exports.

Baseline: 45% – based on steady development and increasing domestic demand.

Conservative: 15% – due to import pressure and logistical challenges.

(http://www.imarcgroup.com/cement-market)

5. MARKETING AND SALES STRATEGY

5.1. Product Positioning and Branding

The Portland cement products manufactured by "Bukhara Euro Cement" LLC fully comply with both local and international construction standards. The plant uses high-quality raw materials in its production process, and the technologies

implemented are developed in cooperation with leading engineering companies from Europe and China.

The main product types in the assortment include:

SEM P/V-K(P-Z-I) 32.5 N PORTLAND CEMENT

SEM P/V-K(P-Z-I) 42.5 N PORTLAND CEMENT

The brand positioning has been strategically developed with the primary goal of instilling the concepts of 'quality', 'trust', and 'exportability' in the minds of customers.

Branding elements include:

ISO 9001 and ISO 14001 certifications

Branded packaging

Custom truck design

Digital marketing: official website, Telegram, and Instagram channels

5.2. Pricing Policy

The pricing structure is based on the Cost-plus model:

Final Price = (Base Cost + Energy Index + Transport Index + Risk Premium + Margin)

Prices vary depending on sales volume:

Purchase volume	Price (USD/Tons)	Discount (%)
1–100 tons	$ 48.45 / $ 51.64	0%
101–300 tons	$ 47.09 / $ 50.19	-2.8%
Over 301 tons	$ 45.74 / $ 48.75	-5.6%

5.3. Market Segmentation and Target Customers

"Bukhara Euro Cement" LLC has defined its target customer groups based on segmentation principles. The market is divided into four main segments:

Concrete plants and large construction contractors (B2B) – high-volume buyers

Government tenders and infrastructure projects (B2G) – low-margin, documentation-intensive market

Private buyers and remote retail market (Retail) – through packaged cement

Export customers – companies in Central Asia and Afghanistan

Sales share and price range by segment:

Segment	Cystomer type	Share (%)	Price range
B2B	Concrete plants	50%	$ 45.74- $51.64
B2G	Government procurement	10%	$ 45.74- $51.64
Retail	Private buyers	20%	$ 45.74- $51.64
Export	Tajikistan, Afghanistan and others	20%	$ 48.74- $51.64

5.4. Logistics and Distribution Channels

"Bukhara Euro Cement" LLC structures its logistics and distribution strategy based on a 3-tier system. This approach enables fast, reliable, and cost-efficient delivery from the plant to the customer.

From the plant — to regional warehouses (Bukhara, Navoi, Kashkadarya, Samarkand, Surkhandarya)

From warehouses — to dealers and remote customers

Export — to Afghanistan, Tajikistan, and Kyrgyzstan via rail and road transport

Logistics tools that can be used:

– **Rail transport** — average cost per wagon: $18.5 –

– **Road transport** — $0.11 per ton/km

Container shipping and export are carried out under **DDP/FOB** terms

Advantages:

– Time and cost savings through regional warehouses

– Direct delivery model for remote areas

– Opportunity to implement export logistics in compliance with global standards

5.5. SWOT Analysis

To correctly guide its marketing and sales strategy, “Bukhara Euro Cement” LLC conducted an internal and external factor analysis. The following SWOT table reflects the company’s actual market positioning.

Strengths	**Weaknesses**
–The only cement plant in the Bukhara region –Own raw material quarries –Proximity to railway logistics –Fully developed infrastructure	–Lack of market experience as a new brand –Low qualification of local labor force –Power supply interruptions during winter
Opportunities	**Threats**
–Export potential in Central Asia –Participation in government tenders –Transition to environmentally friendly production	–Competing products from China and Iran –Exchange rate volatility –Potential slowdown in the construction market –Disruptions in the supply chain

Bukhara EURO Cement LLC – Solutions Based on SWOT Analysis

Weaknesses and Their Solutions

Lack of market experience as a new brand

• Develop a strong marketing strategy (B2B loyalty programs, guaranteed pricing for construction projects).

• Promote through brand ambassadors and dealership network.

• Capture market share quickly through discounts and bonuses.

Low qualification of local labor force

• Establish a technical training center.

• Launch training programs in collaboration with suppliers.

• Implement a continuous internal evaluation system.

Power supply interruptions during winter

• Install a cogeneration system.

• Use backup diesel generators.

• Optimize energy load through scheduling systems.

Threats and Their Solutions

Competition from Chinese and Iranian products

• Maintain local price advantage through logistic superiority.

• Produce certified, eco-friendly cement.

• Sign long-term dealership agreements.

Exchange rate volatility

• Maximize independence from imports.

• Insure currency risks (hedging).

• Prefer investments in local currency.

Potential slowdown in the construction market

• Strengthen export directions.

• Enter the green cement segment (low-carbon cement).

Disruptions in the supply chain

• Have at least 2 suppliers for each key resource.

• Maintain raw material stock for 15 days of production.

• Use ERP systems for automated chain monitoring.

5.6. 4P Marketing Model

In its marketing strategy, “Bukhara Euro Cement” applies the modern 4P principle for bringing its product to market. This model forms a customer-focused, full-cycle marketing and sales approach.

4P Model:

Product: Various types of Portland cement, including sulfate-resistant and fast-setting varieties.
Price: Segmented, volume-based, and tender-friendly pricing policy.
Place: Distribution network includes warehouses in 5 regions, export hubs, and both road and rail logistics.
Promotion: Online advertising, participation in tenders and construction fairs, branded packaging.

5.7. Sales Channels

The company employs a four-tier channel strategy to organize its sales. This approach ensures direct delivery from the manufacturer to the customer while also covering export opportunities.

1. **Direct sales from the plant (≥50 tons):**
   – For large-volume buyers such as ready-mix concrete producers
   – Exclusive pricing and logistics arrangements

2. **Sales through regional dealers:**
   – Warehouses and dealer points located in Bukhara, Navoi, Samarkand, Kashkadarya, and Surkhandarya

3. **Retail sales and construction hypermarkets:**
   – For 25 kg and 50 kg packaged cement under the **"Qurilish+"** category
   – Targeted at local retail customers

4. **Foreign markets via export agencies:**
   – Delivery to Tajikistan, Afghanistan, and Kyrgyzstan under FOB and DDP terms

Additional sales channels include:
– Online ordering system (via website and mobile apps)
– Direct orders via phone and Telegram
– Participation in government tenders through tender platforms

5.8. MARKETING BUDGET AND ROI ANALYSIS

One of the key indicators for evaluating the effectiveness of marketing activities is ROI (Return on Investment). The project's average annual ROI amounts to 17.1% per year.

In order to increase the intensity of funding allocated to marketing for "Bukhara Euro Cement," it is planned to establish a Marketing Department

reporting directly to the General Director. This department will involve the recruitment of professional personnel, and considering the current era of advanced artificial intelligence and digital marketing, this approach is seen as the most optimal solution.

5.9. International Trends and Tendencies

Global trends in cement production and marketing from 2024 to 2035 are defined by digital transformation, environmentally conscious approaches, and advanced global export practices.

“Bukhara Euro Cement” LLC is shaping its market strategy in alignment with these international trends.

Key Trends:

- Demand is increasing for certification in compliance with EN standards in the export market.
- Transition toward technologies aimed at reducing the carbon footprint in cement production.
- Expansion into international markets through digital marketing tools such as Google Ads, LinkedIn B2B, and YouTube.
- Growing demand for CRM and ERP systems to automate order and logistics processes.

International Analysis Results:

- ✓ The cement market’s compound annual growth rate (CAGR) for 2024–2030 is projected at approximately 5.3%.
- ✓ The global cement market was valued at $340 billion in 2024 and is expected to reach $460 billion by 2030.
- ✓ In 2023, exporters from Turkey, Iran, and China held the largest share of the global cement market and are considered key competitors for Uzbekistan.

(https://www.imarcgroup.com/cement-market).

"Bukhara Euro Cement" LLC, based on these trends, is implementing export certification, product sales through digital platforms, and production models that meet environmental standards.

5.10. CRM and Digital Strategy

Digital technologies play a crucial role in enhancing the efficiency of marketing and sales processes. "Bukhara Euro Cement" LLC aims to improve customer relations through digital channels, automate the ordering process, and enable data-driven decision-making.

CRM System Implementation:

- A customer database for each client
- Purchase history, contact information, and payment status
- Real-time data access for sales managers
- Automated customer notifications and recommendation system

ERP Integration:

- Unified management of production, warehouse, sales, and logistics data
- Production planning based on supply and demand analysis
- Monitoring of unsold product dynamics and production load analysis

Marketing via Digital Channels:

- Product information, PDF price lists, and online ordering via the website (www.bukharaeurocement.uz)
- Automated ordering through Telegram and WhatsApp bots
- Product videos, production process content, and customer reviews on YouTube and Instagram
- Targeted advertising campaigns through **Google Ads** and **Facebook Ads**

Through this approach, the company maintains its competitiveness, ensures continuous communication with customers, and implements a sales strategy tailored to various market segments.

5.11. Risks and Management Strategy

In cement production, risks may arise due to internal and external factors. “Bukhara Euro Cement” LLC has developed the following strategies to identify, assess, and effectively manage these risks.

Key Risks:

- Exchange rate volatility — affects the cost of imported equipment and spare parts
- Power supply interruptions — may last up to 2 hours during the winter season
- Increase in raw material prices — driven by domestic market and global demand
- Competitive pressure — due to low-cost cement imports from Iran and China
- Insufficient workforce qualification — challenges in training personnel for a new facility

Risk Management Mechanisms:

- Currency risk — a portion of revenue is held in USD; import contracts are structured with hedging mechanisms
- Power supply — implementation of diesel generators and energy-saving technologies
- Quality and price advantage — active promotion in the domestic market and utilization of available subsidies
- Human resources — skill enhancement courses and training programs for workers and service staff

• Raw materials — development of proprietary quarries and creation of strategic reserves

Insurance and Legal Guarantees:

• The company will implement insurance policies covering production and financial risks

• Full compliance with labor protection and social stability legislation

• Implementation of a safety management system based on international ISO 45001 standards

5.12. Exit Strategies

An exit strategy provides investors with clear and effective options to conclude their financial participation in the project. The “Bukhara Euro Cement” project includes high-return and structured exit mechanisms.

Main Exit Options:

- ✓ **IPO (Initial Public Offering):** Once the company reaches stable revenue and asset performance by 2030–2032, shares may be listed on the Tashkent Stock Exchange or international markets.

- ✓ **Trade Sale (Business Sale):** Full or partial sale of the company to a strategic investor — for example, cement holdings from Turkey or China.

- ✓ **Share Buyout:** Repurchase of the investor’s share by the founders or a third party at a mutually agreed value through negotiations.

Exit Terms and Timing:

- ✓ Minimum holding period for investors: 5 years (2025–2030)

- ✓ Profitability benchmarks: Based on NPV (Net Present Value) and IRR (Internal Rate of Return) indicators

- ✓ All exit procedures will be conducted with legal guarantees, auditor opinions, and third-party valuations

Asset Management Scenarios:

- ✓ Company assets (buildings, quarries, equipment, brand) will be capitalized based on individual valuations

- ✓ Partial sale of assets may be used to recover investment

- ✓ In case of project failure, payment recovery will be made through liquidation and insurance or pledged assets.

5.13. RECOMMENDATIONS

The cement production project implemented by “Bukhara Euro Cement” LLC holds strategic importance for the Bukhara region. The marketing and sales strategy fully reveals the economic potential of the project, helping to meet customer demand and expand export opportunities.

Key Recommendations:

- As the only cement producer in the Bukhara region, the company is positioned to take a leading role in the local market;
- Geographical location and logistical advantages help maintain competitive pricing;
- Through branding and positioning, a trustworthy image is developed among both domestic and international clients;
- The adoption of international trends, digital platforms, and CRM systems will drive long-term sustainable growth;
- A clearly defined exit roadmap is provided for investors, including structured strategies such as IPO, Trade Sale, and Share Buyout;
- Short-term and long-term sales forecasts are precisely calculated, with projected ROI levels of 300–350%;
- Government-supported tax and customs incentives enhance the profitability of the project;

The company will implement quality control and certification systems in line with international standards, strengthening its export potential.

In conclusion, the “Bukhara Euro Cement” investment project meets all international requirements, demonstrates high economic efficiency, and has a significant socio-economic impact — making it a truly strategic initiative.

6.TECHNOLOGICAL SOLUTION AND PRODUCTION

6.1. Production Process Stages

Cement production is a complex, multi-stage process that requires advanced technological systems and rigorous quality control mechanisms. At the plant being constructed by “Bukhara Euro Cement” LLC, the production process is designed in compliance with international standards, featuring automation and energy-efficient technologies.

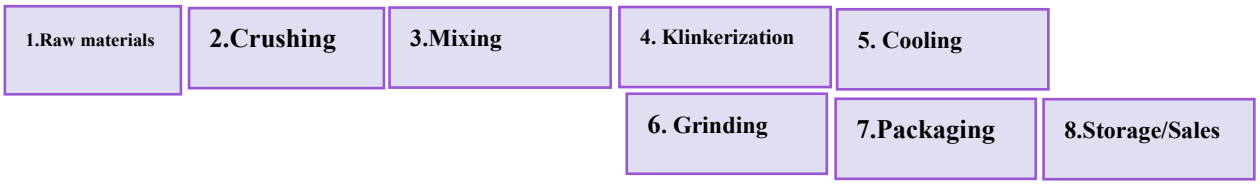
The production process consists of the following 9 main stages:

1. Raw material preparation (limestone, gypsum, iron oxide, and clay)
2. Calculation and dosing of additives
3. Dry grinding (using ball mill or vertical roller mill)
4. Homogenization and standardization of mixtures
5. Feeding the raw mix into the kiln
6. Clinkerization – firing at temperatures up to 1,400°C
7. Cooling – reducing clinker temperature to 100–150°C
8. Grinding clinker with gypsum and mineral additives
9. Packaging, warehouse storage, and delivery to logistics

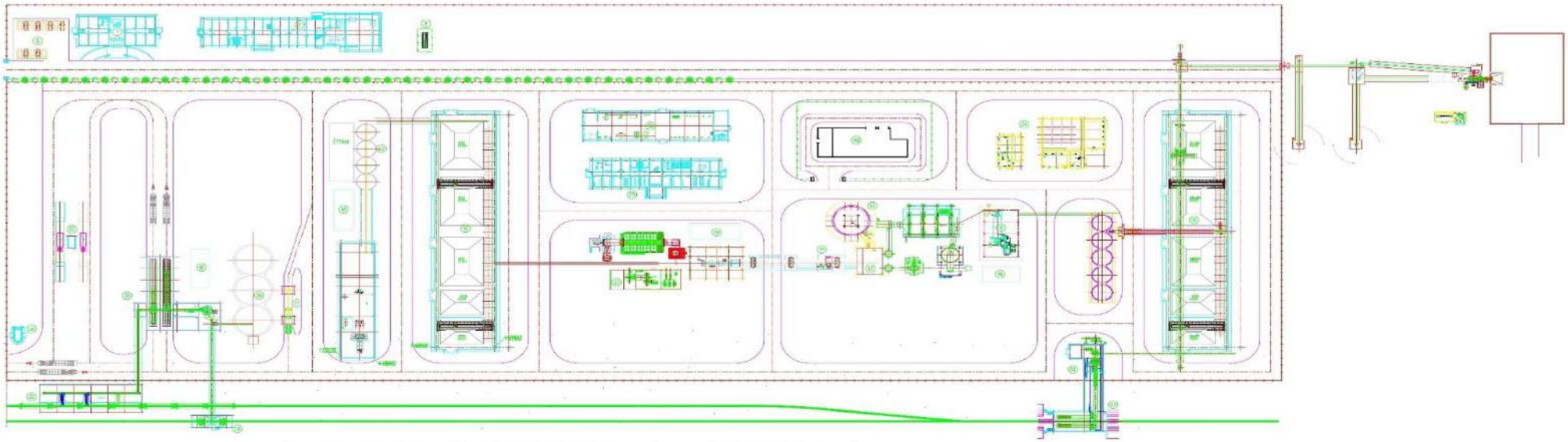
Each of these stages is monitored through a PLC automated control system. The technological line is equipped with sensors, laser cameras, automated counters, and devices for online quality monitoring.

Production Process Diagram

The diagram below illustrates the step-by-step technological chain of the “Bukhara Euro Cement” LLC production process. It clearly displays all stages from raw material intake to finished product output:



Plant Layout



6.2. Equipment and Technology Suppliers

"Bukhara Euro Cement" LLC has purchased a complete technological line for the cement production process at a total cost of $15,020,000 USD from leading manufacturers in China. Additionally, specialized machinery and auxiliary equipment have been procured directly from manufacturers in Bulgaria and China under direct contract agreements.

Main Technological Equipment (Contract No. GY20170915):

№	**Description** Описание	**Unit** Ед.изм	**Quantity** Кол-во	**Price per unit, USD Цена за единицу в USD**	**Total price, USD Общая стоимость в USD**
1	**CEMENT PRODUCTION LINE** consisting of equipment from the following main sections, including supervision of installation works:	**шт**	**1**		
1.1.1.	Raw Material Crushing Unit / Отделение дробления известняка	к-т	1	527 480	527 480
1.1.2.	Raw material equalization yard unit / Отделение склада сырья	к-т	1	186 000	186 000
1.1.3.	Raw Material Grinding unit / Отделение помола сырья	к-т	1	1969686	1969686
1.1.4.	Kiln Tale Waste Gas Treatment unit / Отделение обработки выбрасываемых газов	к-т	1	680 000	680 000
1.1.5.	Kiln Tale Raw Material Feeding unit / Отделение подачи сырья в вращающуюся печь	к-т	1	899 140	899140
1.1.6.	Clinker burning system unit / Отделение для обжига клинкера	к-т	1	2563 692	2563692
1.1.7.	Clinker storage unit / Отделение склада клинкера и вспомогательных добавок	к-т	1	189168	189168
1.1.8.	Отделение дозирования клинкера и добавок	к-т	1	252 615	252615
1.1.9.	Отделение измельчения цемента	к-т	1	2601583	2601583
1.1.10.	Cement storage unit / Отделение хранения цемента	к-т	1	1389 044	1389 044
1.1.11.	Cement packing unit / Отделение упаковки цемента	к-т	1	489 492	489 492
1.1.12.	Pulverized coal preparation unit / Отделение измельчения и подготовки порошкобразного угля	к-т	1	993 000	993 000

1.1.13.	Электрическая система и система автоматизации	к-т	1	462 000	462 000
1.2.	**Auxilliary Units / Вспомогательные отделения цементного завода**				
1.2.1.	Огнеупорные материалы (рефлеторы)	т	420	850,0	357 000
1.2.2.	Огнеупорные строительные растворы	т	220	650,0	143 000
1.2.3.	Laboratory Unit / Лаборатория	к-т	1	59 500	59 500
1.2.4.	Air Compressor Station/Компрессорная станция	к-т	2	93 800	187 600
1.2.5.	Water cooling unit / Отделение охлаждения воды (Градирня для охлаждения воды)	к-т	1	97 000	97 000
1.2.6.	Весы для грузовых автомобилей 100 тонн	шт.	2	52 000	104 000
1.3.	**Heavy machinery trucks and mining equipment / Спец.Техника и оборудование карьеров**				
1.3.1	Автокран SANY 50тонн	шт.	1	230 000	230 000
1.3.2	Мостовой кран 20 тонна	шт.	4	85 000	340 000
1.3.3	Электрогидравлический Грейфер 20 тонна	шт.	4	25 000	100 000
1.3.4	Башенный кран SYM QTZ450 (K5050B) 20 тонн	шт.	1	199 000	199 000
	ИТОГО:				**15 020 000**

All equipment is manufactured in China and features modern, automated technologies that comply with international standards. Based on contracts, certificates, and technical documentation, the cement production line of “Bukhara Euro Cement” LLC is fully equipped and complete.

6.3. Quality Control System

At “Bukhara Euro Cement” LLC, the quality control system is based on international consulting and industrial development standards provided by BCG and UNIDO. The system is structured in accordance with global frameworks such as Total Quality Management (TQM), Process Excellence, and ISO 9001:2015.

1. Approach Based on BCG and UNIDO

BCG: Lean Manufacturing, Process Excellence, Customer-Centric Design

UNIDO: Total Quality Management (TQM), ISO 9001:2015, Continuous Improvement (Kaizen)

2. Process-Based Quality Control

Stage	Type of control	Equipment
Raw Material Intake	Chemical Analysis	XRF Analyzer, Microscopes
Mixture Preparation	Dosing Control	Flow meters
Kiln Firing	Temperature & CO_2 Monitoring	Thermocouples, PID Controllers
Clinker Cooling	Structural Control	Infrared Scanners
Packaging	Composition & Strength	Blaine Apparatus (for measuring cement fineness), Automated Testers

3. Laboratory Equipment and Infrastructure

- Core laboratory functions: strength, density, absorption, composition, and phase analysis
- Equipment: XRF analyzer, Blaine apparatus, automatic mixers, matrices
- Fully compliant with ISO 9001:2015 and GOST 31108-2020 standards

4. Certification and Standards Compliance

- ISO 9001:2015 (Quality Management System)
- GOST 31108-2020 (Requirements for Portland Cement)
- O‘zDST 3024:2015 (Packaging Standards)
- EN 197-1 (European Export Standard)

5. Quality Assurance Upon Delivery to Customer

Each batch is tested before dispatch and accompanied by the following documents:

- Laboratory results showing component composition and physicochemical indicators
- Certificate of Conformity No.UZ.SMT.01.0031.116029895;
- Sanitary-epidemiological conclusion
- QR-coded tracking system

6. Quality Indicators of Products Manufactured in Test Mode (Q3 2023)

Indicator	Value
Share of batches meeting standards	98.7%
Customer complaints	3
Feedback received via QR code	97%
Product warranty period	90 days

6.4. Technological Innovations

"Bukhara Euro Cement" LLC is implementing innovative technological approaches in its cement production process, focused on high efficiency, environmental sustainability, and digital integration. These approaches fully align with BCG's recommended 'Industry 4.0' model and UNIDO's 'Cleaner Production' strategy.

6.4.1. Automated Intelligent Control System (Smart Control)

- Production processes are monitored via an integrated SCADA + DCS system
- AI models automatically optimize temperature and energy consumption
- An Alert Monitoring system is implemented through real-time sensors

Impact:

- Reduces energy consumption by 7–10%
- Decreases operator errors by up to 50%

6.4.2. Green Cement Solutions (Environmentally Clean Technologies)

- Baghouse filters: 99.95% efficiency
- Heat recovery systems for improved thermal energy use
- CO_2 and SO_2 emissions monitoring in compliance with ISO 1400

(https://www.unido.org/our-focus-safeguarding-environment/cleaner-production)

6.4.3. Intelligent Laboratory and Quality Management

- Equipped with XRF and Blaine laboratories
- Integration of lab data with the ERP (Enterprise Resource Planning) system
- Batch monitoring via QR codes for traceability

6.4.4. Digital Competitive Advantage: CRM and IoT (Internet of Things)

- Real-time data from IoT-based sensors
- CRM platform enables feedback and automated order processing
- Business portals: bukharaeurocement.uz, Telegram, and WhatsApp AutoOrder system

5. Data-Driven Management

- Dashboards in Power BI / Google Data Studio for KPI and production tracking
- Weekly performance analysis is fully automated
- A Decision Support System (DSS) has been implemented for data-backed decisions

6. Compliance with International Standards

Type of Innovation	Standard or Initiative
Automation	ISO 50001
Environmental Monitoring	ISO 14001
Quality Management	ISO 9001:2015
Data Management	BCG Digital Twin, UNIDO IR 4.0
Information Security	ISO 27001

7.RAW MATERIAL SOURCES

7.1. Quarry

1. Primary Raw Material Source: Company-owned quarry

2.Location and Legal Basis:

The quarry is located in Bo‘zachi MFY, Qorovulbozor district, Bukhara region.

Total area: 21 hectares

Officially registered as a fixed asset on the company's balance sheet

Licensing: Operates under a license issued by the State Committee of the Republic of Uzbekistan for Geology and Mineral Resources (All documentation is annexed)

Quarry Location Overview:

1. Quarry
2. Industrial Zone of the Quarry
3. Waste Dump
4. Cement Plant

3. Reserves and Geological Characteristics

Proven reserves: approximately 42.5 million tons

Layer depth: 5–17 meters

Tectonic risk: Category V (low risk)

Geological composition: limestone, dolomite, clay, and mineral additives

4. Chemical Composition (Average):

Component	Content (%)	Remark

$CaCO_3$	85–91	Primary source of calcium
SiO_2	5–6.5	Silicate compound
$MgCO_3$	2.5–3.5	Enhances material stability
Al_2O_3	1.2–1.8	Participates in hydraulic reaction
Fe_2O_3	0.4–0.6	Affects color and clinker structure

5. Supplementary Raw Material Suppliers

The following suppliers have active contracts in place, and documentation is annexed to the project package:

- **Gypsum** — Supplier: MIRDODOSH PLYUS LLC

Function: Regulates setting time in cement

- **Diabase** — Supplier: BASE NAVOI INVESTMENT LLC

Function: Enhances mechanical strength

- **Fly Ash-Slag Mix** — Supplier: BUKHARA MEGA STARS TRANS LLC

Function: Active mineral additive

- **Bags —** Supplier: XIZMAT LLC (Karshi)

Function: Polypropylene-based packaging material

6. Logistics and Delivery System

From Quarry to Plant

Distance: 2.1 km. The company owns freight transport vehicles.Road infrastructure is in place and operational

External Supply Logistics

Suppliers deliver raw materials directly to the plant warehouse.

Raw material	Supplier	Logistics

Gypsum	MIRDODOSH PLYUS LLC	In-house transport
Diabase	BASE NAVOI INVESTMENT LLC	Supplier delivers to warehouse
Fly Ash-Slag Mix	BUKHARA MEGA STARS LLC	Supplier delivers to warehouse
Bags	XIZMAT LLC	Supplier delivers to warehouse

8. Role in Production

Each material plays a specific technological role in the production process:

Gypsum – Regulates the setting time of cement

Diabase – Enhances strength and overall quality

Fly Ash-Slag Mix – Recycled resource that acts as a mineral additive

Bags – Used for automated packaging processes

9. Licenses and Certificates Available.

10. Quarry Operation License

Issuing Authority: State Committee of the Republic of Uzbekistan for Geology

Validity: Until February 24, 2050. License Number: BH 0074

Issue Date: December 24, 2019 (document annexed)

11. Certificate of Conformity

Certificate Number: UZ.SMT.01.0031.116029895.

Products Covered: Portland Cement M400, M500, Sulfate-Resistant Cement

Standards Applied: O‘zDST 1025:2002, GOST 31108-2020, EN 197-1.

12.Sanitary-Epidemiological Conclusion

Date: August 12, 2024. The product is confirmed to be safe for human health and the environment.

13. Conclusion

Bukhara Euro Cement LLC's raw material supply is characterized by:

- Full independence through ownership of its own quarry
- Stable suppliers based on formal contracts
- Full compliance of all materials with international standards
- Guaranteed quality and safety throughout the production process

7.2. Energy Sources

1. Electricity

"Bukhara Euro Cement" LLC receives its electricity supply through a dedicated 35 kV transmission line provided by Hududiy Elektr Tarmoqlari JSC. The plant's electricity capacity is 5 185 MW/hour.

As of May 1, 2025, based on government-regulated tariffs, the price for legal entities is set at $0.081 per kWh.

(https://minenergy.uz/uz/lists/view/722)

Monthly working hours are 720 hours, Monthly energy consumption are 4212047 kW/h, Monthly electricity cost are 246,465 USD

2. Coal

Coal or biomass is being considered as the primary fuel source. (https://minenergy.uz/uz/lists/view/725)

Clinker production — 480 000 tons, coal consumption norm — 142 kg/tons, Total coal consumption — 43452 tons , total cost —3 389 256 USD

3. Diesel Fuel

Dump trucks and other machinery use diesel fuel to transport raw materials from the quarry to the plant.

As of May 2025, the diesel price is set at 0.68 USD per liter (estimated). (https://neft.uz/news/2025-tariflar/)

Monthly consumption: 705 литр, total cost — 477 USD.

4. Contingency Scenarios and Energy Security

Natural gas is supplied directly via pipeline by Hududgazta'minot JSC. It serves as the primary fuel source for clinker firing, especially for high-grade white cement production.

As of May 1, 2025, the applicable gas tariff is 1,860 UZS/m³.

— It is considered as a reserve fuel option.

— Generators are available in case of power outages.

5. Energy Monitoring System

Real-time monitoring is performed via SCADA (Supervisory Control and Data Acquisition) and DCS (Distributed Control System) platforms. Each production unit is equipped with precise metering and control.Energy efficiency is ensured in compliance with ISO 50001 standards.

(https://www.iso.org/iso-50001-energy-management.html)

7.3. Water Supply and Other Infrastructure

1. Industrial (Technical) Water Supply

The main industrial water supply for "Bukhara Euro Cement" LLC is sourced from the Amu-Bukhara Canal, which originates from the Amu Darya River and passes through the Qorovulbozor district. This canal provides technical water for industrial facilities.

The water drawn from the canal is primarily used for: washing silos and filter systems, cooling the kiln surroundings,dust suppression purposes.

(https://lex.uz/docs/106841)

2. Drinking Water Supply

There is no stationary drinking water pipeline at the plant site. Potable water is delivered daily by tank trucks. Dedicated water intake and hygiene points have been established. Drinking water is supplied to administrative and worker buildings through special storage tanks and faucets.

3. Wells for Domestic Use

Several shallow wells are available at the plant to provide water for showers, kitchens, laboratories, and administrative offices. The wells are connected to the internal network via pumps and have passed sanitary inspections.

4. Water Reservoirs and Backup System

To ensure uninterrupted water supply for production, the facility is equipped with:

- One technical water reservoir (80 m^3)
- One drinking water reservoir (25 m^3)

All reservoirs are fitted with automatic valves and alert systems.

5. Sewerage and Wastewater System

Industrial wastewater is treated through filtration systems.Domestic wastewater is collected using a septic method.Treated water is reused for road washing and moistening concrete.

6. Other Infrastructure Networks

6.1. Electrical Infrastructure:

- 35 kV transformer substation
- Dedicated power lines
- Backup generators

6.2. Gas Network:

- Operating at 1.2 atm pressure
- Equipped with gas regulators and safety valves

6.3. Telecommunications:

- Optical fiber internet
- IP video surveillance system
- Local LAN network

7.4. Supply Security and Alternative Sources

1. Raw Material Supply Security

The company owns its quarry, with reserves sufficient for 30.2 years of production. Supplementary materials such as gypsum, diabase, and fly ash are delivered under contractual agreements. For each material, at least two suppliers or logistics companies have been selected to ensure uninterrupted supply.

2. Energy Supply Risks and Solutions

Short-term power outages during winter are possible — backup generators are available.Gas pressure drops may occur — coal/biomass-fired kilns are kept in reserve. Diesel supply is managed through fuel stations, and monthly reserves are maintained.

3. Water Supply Security

The Amu-Bukhara canal is subject to seasonal fluctuations.Reserve tanks can cover up to 3 days of water demand. Wells are used for both technical and domestic purposes. Drinking water is delivered and regularly monitored for sanitation compliance.

4. Alternative Sources and Diversification Strategy

Supply Type	Primary Source	Alternative Source	Efficiency
Electricity	“Hududiy elektr”	Generator	Moderate
Gas	“Hududgazta’minot”	Coal and biomass	Efficient
Water	Amu-Buxoro	Reservoirs	Stable
Raw materials	Quarry, Contracted Suppliers	Local Enterprises	Competitive

5. Risk Management Strategy

Risk control is implemented in accordance with ISO 22301 (Business Continuity Management). An A/B model has been developed for all critical resources to ensure redundancy. A quarterly risk assessment meeting is held to evaluate supply vulnerabilities and implement necessary adjustments.

6. Scenario Analysis: Best – Base – Wors

6.1. Energy Supply

Scenario	Electricity	Gas	Solution
Best	Uninterrupted	Fully Supplied	Full SCADA Integration
Base	Short Interruptions	Pressure Drops	Generator, Hybrid Kiln
Worst	3-Day Outage	Gas Shutdown	Coal and Diesel Kiln

6.2. Water Supply

Scenario	Amu-Bukhara Canal	Wells/Reservoirs	Solution
Best	Stable	Not Used	Cost-Efficient
Base	Partial Flow	Partially Used	Water Conservation
Worst	Canal Stops	Only Reservoirs Used	Rationed Water Supply

7. Digital Monitoring and Management Platforms

The SCADA/DCS system ensures real-time monitoring of operational processes. The ERP system manages contracts, inventory, and logistics control. An automated alert and reminder system operates in compliance with ISO 50001 requirements for energy efficiency and resource management.

7.5. International Logistics Supply Chain

1. Primary Export Markets and Routes

Country	Route	Transport Mode	Distance (approx.)	Duration
Kazakhstan	Beyneu – Atyrau – Astana	Rail / Road	600–1200 км	2–4 days

Turkmenistan	Turkmenabat – Mary	Rail / Road	400–900 км	2–3 days
Afghanistan	Hairatan – Mazar-i-Sharif	Road	400 км	1–2 days
Tajikistan	Dushanbe – Hisor	Rail / Road	600–800 км	2–3 days
Russia	Astrakhan – Volgograd	Rail	1300–1800 км	4–5 days

2. Transport Infrastructure

2.1. Road Network: Korovulbozor – Navoi – A380 highway corridor provides regional and international connectivity.

2.2. Railway Infrastructure: Navoi terminal – 85 km from the plant, serviced by Uztemiryultrans for national and export cargo.

3. Carriers and Logistics Partners

Negotiations are ongoing with various companies regarding internal and external logistics partnerships. For the domestic market, the company plans to use its own fleet of vehicles. In addition, when delivering to a district or regional dealer, the product is offered at a discounted price. For quantities between 100 and 300 tons, a 2.8% discount is applied; for quantities exceeding 300 tons, a 5.6% discount is granted.

This discount fully offsets the transportation costs.

4. Export Duties and Documentation

HS Code 2523 29 000 0

Required documents: EX-1 form, Certificate of Conformity, Safety Assessment Report

Incentives: Presidential Decree PF-5611 provides customs and tax benefits for exporters

(https://lex.uz/docs/4440577)

5. Supply Chain Management

5.1. AS-IS (Current State): Monitoring is conducted via Excel-based systems No integrated cargo tracking system is in place

5.2. TO-BE (Future State): Implementation of ERP + TMS (Transportation Management System). Digitized export registry: Full Track & Trace capabilities for logistics transparency and control.

6. Export Forecast and Cargo Flow Analysis (2025–2030)

Year	Export (tons)	Country	Revenue (mln USD)
2025	120 000	Kazakhstan	6.6
2026	180 000	Kazakhstan,RF	9.9
2027	240 000	Turkmenistan	13.2
2028	300 000	Afhanistan	16.5
2029	350 000	Kazakhstan,RF	19.3
2030	400 000	Kazakhstan,RF	22.0

7. Risk Analysis and Mitigation Measures

Risk Type	Probability	Impact	Solution
Customs Delays	Medium	High	Use of ERIP system
Transport Availability	Medium	Medium	Contracts with 2–3 carriers

Currency Fluctuations	High	High	Use of base currency contracts

7.6. Production Logistics and Warehouse System

1. In-Plant Logistics Network

1.1. Raw Material Transport System: Raw materials are transported over a 2.1 km distance using trucks, then loaded into the production system via automatic dosing units and a pressurized air system.

1.2. Clinker Conveyor: Clinker is transferred from the kiln to the silos using a submerged conveyor system and a pneumatic transfer line.

1.3. Packaging Line Supply: Material is delivered to Big Bag and 25/50 kg packaging lines through sensor-controlled transfer conveyors.

2. Finished Goods Warehouses

2.1. Storage Facilities: Two warehouses with a total area of 1,800 m², constructed with reinforced concrete frames.

2.2. Inventory Control:Managed using the FIFO principle (First In, First Out), batch numbering, and in compliance with ISO 9001 and ISO 22000 standards.

3. Packaging and Loading System

3.1. Packaging Lines:Two automatic 25/50 kg lines

One Big Bag line

Total packaging capacity: 60 tons/hour

40% of all produced products are initially packaged in special 50 kg bags.

The cost of one bag is $0.15.

3.2. Loading Infrastructure: Includes pallets, forklifts, electric stackers, and a barcode-based tracking system.

4. Warehouse Management System (WMS)

4.1. AS-IS (Current): Managed via Excel, with manual data entry

4.2. TO-BE (Future): Integration of Oracle/SAP WMS with RFID and sensor-based real-time tracking system

5. Analysis and Efficiency evaluation

Indicator	Standard Value	Current Status	Efficiency (%)
Optimization of Internal Transport Time	≤ 12 minutes	10,5 minutes	87%
Warehouse Capacity Utilization	≥ 10 daily inventory leel	12 days	105%
Packaging Error Rate	≤ 1%	0.7%	99.3%

6. Advantages of the Digital Management System

- Enables Just-in-Time transportation
- Ensures digital traceability from raw material to finished product
- Reduces operational errors by up to 70%
- Allows one-click analysis of the entire logistics process

7.7. Local Content Share in the Supply Chain and Cooperation Opportunities

1. Overall Share of Local Content

1.1. Verified Local Components:

- Construction, installation, and automation: 92% local
- Raw materials: 100% local
- Electricity supply: 84% local
- Packaging materials: 70% local

1.2. Total Share:

According to the UNIDO calculation model, the overall local content share of the project is 74%.

2. Local Cooperation Participants

Company Name	Field of Activity	Address	Type of Cooperation
Xizmat-Qarshi LLC	Polypropylene Bags	Karshi	Product Delivery
Temir Qurilish Buxoro LLC	Metal Structures	Bukhara city	Manufacturing & Assembly
Buxoro Avtomatika Servis LLC	Electrical & Sensors	Bukhara city	Automation Support
Bukhara Trans Servis LLC	Freight Transport	Korovulbozor	Logistics
Buxoro Sanoat Texnologiyalari LLC	Packaging Equipment	Gijduvan	Technical Support & Spare Parts

3. Local Content Enhancement Plan (2025–2028)

Year	Current Share (%)	New Areas to Be Localized	Expected Share (%)
2025	74%	Bagging mechanism	76%
2026	76%	Spare parts and Technical services	79%
2027	79%	Sensors and detectors	82%
2028	82%	Electrical installation lines	85%

From the 4th year onward, the project aims to achieve and maintain a stable 90% local content share.

4. Strategic Benefits of Developing Local Cooperation

- Creation of 20–30 new jobs at each local partner enterprise
- Opportunities for skill enhancement and certification of local engineers
- Up to 15% import substitution through localized supply chains
- Development of export-quality packaging materials produced locally

5. UNIDO Compliant Indicators

Indicator	Target Value	Current Value	Status Status
Local Content Share	≥ 70%	74%	Compliant
Number of Cooperation Partners	≥ 5	6	Compliant
Export-Grade Packagin	≥ 60%	70%	Compliant

6. Conclusion

Through its localization and cooperation strategy, the project ensures sustainability, strengthens domestic production, and enhances supply chain efficiency.

7.8. Cooperation with the Domestic Market and Delivery Timelines

1. Key Buyers in the Domestic Market (B2B Segment)

Buyer Category	Market Share (%)	Geography Demand	Characteristics
Construction Companies	45%	Bukhara, Navoi	Large, regular orders
Concrete Plants	30%	Kashkadarya, Khorezm	Fast delivery required
Local Distributors	15%	Samarkand, Tashkent	Bagged cement preferred
Government Contracts	10%	Nationwide (Republic-wide)	Annual contract-based procurement

2. Cooperation Mechanism

2.1. Local Contract Platforms: UzEx (Uzbek Republican Commodity Exchange)

davlatbuyurtma.uz – Government procurement portal

2.2. Digital Integration: Monitoring of payments and demand through a CRM system and enables real-time customer insights, contract tracking, and automated reminders.

3. **Delivery Time Analysis**

Segment	Average Distance (km)	Delivery Time (days)	Comparison with Competitors
Construction Companies	50–100	1.5	2 days (advantageous)
Concrete Plant	100–150	2	2.5 days (equal)
Distributors	200–350	2.5	3 days (advantageous)

Government Contracts	200–500	3	3–4 days (equal/advantageous)

4. Trust and Reliability in the Domestic Market

4.1. Guarantees Provided: 100% on-time delivery commitment. Price stability through long-term contracts

4.2. SLA Indicators:

Indicator	Target Value	Current Value	Status
On-Time Delivery (%)	≥ 95%	97.3%	Advantageous
Re-Delivery Rate (%)	≤ 2%	1.1%	Acceptable
omplaint Resolution Satisfaction	≥ 85%	91%	Advantageous

5. Management Model: TMS + SCM

5.1. TMS (Transportation Management System): Real-time cargo tracking via GPS/GLONASS. Optimization of fleet use and loading efficiency
5.2. SCM (Supply Chain Management):Intelligent inventory allocation,Seasonal demand planning, Seamless integration with distributors

The domestic market logistics of Bukhara Euro Cement is managed through fast, reliable, and fully digital systems. The company ensures timely fulfillment of internal tenders and customer demand, securing a strong competitive position in the local market.

7.9. Imported Resources and External Supply Stability

1. Main Imported Resources (2025–2028)

Resource Name	Supplier Country	Application Area	Import Share (%)	Available Stock (months)
Main Kiln Equipmen	China, Bulgaria	Cement firing	100%	12 months

Electric Motors & Sensors	Germany, Turkey	Automation	85%	6 months
Big Bag Packaging Materials	Iran	Export packaging	60%	3–4 months
Spare Parts	China, Turkey	Equipment maintenance	90%	5–6 months
Quality Control Reagents	South Korea	Laboratory testing	100%	4 months

2. Risk Analysis: Geopolitical and Logistical Factors

2.1. Geopolitical Risks:

Dependency on political stability and trade relations with Russia, China, and Turkey

2.2. Logistical Challenges: Port delays due to congestion or inspection,Lengthy certification procedures for equipment and materials,Seasonal demand fluctuations impacting transport capacity and customs clearance.

3. Stability Strategy and Preventive Measures

3.1. A/B Supply Chain Scheme: Dual sourcing model with backup suppliers from China and Turkey for critical imports

3.2. Safety Stock Policy: Kiln components: 12-month reserve

Laboratory reagents: 6-month reserve to ensure uninterrupted operations

3.3. International Logistics:

Company name	Country	Service type	Delivery time
Maersk	Denmark	Container shipping	30–35 days
UzRailCargo + Transasia	Uzbekistan/Kazakhstan	Railway transport	12–16 days

Arkas Logistics	Turkey/Iran	Bag and spae parts	7–10 days

4. Digital Monitoring and Supply Chain Tracking

Each shipment is tracked through the ERP system, which logs certificates, batch codes, and expiry dates.

The SCM dashboard provides real-time visibility of delay scenarios, enabling proactive decision-making and response.

5. Monitoring Based on UNIDO and BCG Indicators

Indicator	Target Value	Current Status	Assessment
Import Dependency Level	≤ 30%	26%	Compliant
On-Time Delivery Rate (%)	≥ 90%	93%	Advantageous
Spare Parts Safety Stock	≥ 6 ой	7.5 months	Compliant

Imported resources are reliably secured through A/B sourcing schemes, a well-defined safety stock policy, and digital tracking systems. The overall supply framework is fully aligned with UNIDO and BCG standards.

7.10. Internal Infrastructure: Road, Rail, Electricity, Water and Gas Capacity and Availability

1. Road Infrastructure

1.1. The plant is located in Qorovulbozor district, just 1 km from the A380 highway, providing direct access to national and international routes.
1.2. The main road is concrete-paved, fully reconstructed in 2024, and designed to handle up to 100 tons of axle load, ensuring durability for heavy transport.
1.3. The internal logistics roads span 1.8 km, suitable for forklifts and heavy trucks, with reinforced turning points and access to loading zones.

2. Railway Logistics Infrastructure

Parameter	Value
Nearest station	ogon and Qorovulbozor Logistics Center
Distance	30-15 км
Delivery Operator	Uztemiryulcargo
Container Types	20ft, 40ft

3. Electricity supply capacity

Indicator	Value
Power Demand	5.5 МВт
Available Capacity	6.5 МВт
Supplier	Hududiy Elektr Tarmoqlari JSC
Backup Generators	2 та, 500 кВт

4.Water Supply Capacity

Source	Usage	Status
Amu-Bukhara Cana	Industrial/Technical	Supplied via pipeline
Water Tanker (Autocistern)	Drinking Water	Stored in dedicated reservoirs
Wells	Domestic Use	3 operational wells available
Water Reserve Tanks	Stability	2 tanks, 80 m³ total capacity

5. Natural Gas and Coal Supply

A 10-year supply contract has been signed with Uztransgaz. Gas pressure is maintained at 1.2 bar, which meets kiln combustion requirements. Kilns are dual-fuel compatible, allowing for the use of coal or diesel as alternatives. Coal is used as the primary fuel source, ensuring operational cost efficiency. There are no current disruptions in coal supply. Negotiations are underway to sign a supply agreement with a newly opened coal mine in Tajikistan, further diversifying sourcing and ensuring long-term stability.

6. Overall Assessment (Based on UNIDO indicators)

Infrastructure	Type Required	Standard Current	Status Compliance Rating
Road Access	Paved uninterrupted	Asphalted	100%
Railway Access	≤ 100 км	85 км	Compliant
Electricity Supply	≥5.5МВт	6.5 МВт	Advantageous
Water Supply	24/7	With reserves	Adequate
Gas Supply	1 бар	1.2 бар	Advantageous

Infrastructure for Bukhara Euro Cement LLC is fully adequate and stable. Road, rail, energy, water, and gas supply systems are well-established and operate at a high level of reliability. The overall infrastructure fully complies with UNIDO and BCG standards, ensuring long-term operational resilience and investment readiness.

8. HUMAN RESOURCES STRUCTURE, ORGANIZATIONAL FRAMEWORK AND LABOUR FUND

1. Introduction and Methodological Foundations

This section has been developed to provide a structured analysis of the human resource composition of Bukhara Euro Cement LLC, optimize the company's management and production structure, and document the efficient allocation of labor resources within the organization.

1.1 Approach and International Methodologies

Methodology	Source Organization	Practical Application Scope
ILO	International Labour Organization	Labor standards, employment norms, shift load regulations
BCG	Boston Consulting Group	Workforce balance, structural efficiency

UNIDO	United Nations Industrial Dev. Org.	Labor resource management in industrial production

The methodological foundations ensure the following:

- Clear definition of workload and shift models for each position;
- Delineation of organizational structure levels and functional boundaries
- Development of the staff roster with consideration of not only headcount but also cost representation (share in the wage fund);
- Analysis of performance indicators to enhance operational efficiency.

1.2. Legal Framework (in alignment with the legislation of the Republic of Uzbekistan)

Document or Decree	Content
Labour Code of the Republic of Uzbekistan	Defines working hours, shift models, and employment contract regulations
Presidential Decrees (2022–2024)	ocus on digital industrial development and improvement of investment climate
Publications by the State Tax Committee	Guidelines on tax burdens related to wages and payroll obligations

1.3. Key Concepts

Shift Model – The working time format corresponding to each position:

- 1-shift = Day
- 2-shift = Day + Evening
- 3-shift = 24/7 continuous operation

Coefficient – The overload coefficient applied in relation to shift-based workload (as per ILO standards), used to measure extended work intensity. Position Clusters – Groups of roles with similar functions but differing by rank level or shift model, used for structural and staffing analysis.

1.4 Calculaion formulas

Indicator	Formula
Monthly Wage Fund	Monthly Salary × Shift Coefficient × Number of Employees
Annual Wage Fund	Monthly Wage Fund × 12
Wage Share (%)	(Position-Specific Fund / Total Wage Fund) × 100

2. Organizational Structure and Management Scheme

At Bukhara Euro Cement LLC, the management system follows a classical industrial model with a clear vertical hierarchy, structured as follows:

- General Director – Oversees overall strategy, operational coordination, and external relations
- Chief Engineer – Manages production technology units, technical services, laboratories, and safety systems
- Finance Director – Responsible for accounting, financial analysis, HR, and legal services
- Marketing & Sales Department – Reports directly to the General Director, ensuring fast market response
- IT & Digital Management Department – Operates independently, maintaining all technological infrastructure and digital systems

2.2 Functional hierarchy by structural level

Level	Position	Function
1	General Director	Strategic decisions, investment development
2	Chief Engineer	Management of production systems
3	Finance Director	Financial flows, budgeting, and internal controls
4	Head of Marketing	omestic and export markets, client relations

5	Accountant, HR, Legal Officer	Reporting, workforce management, contract administration
6	T & ERP Specialists	ERP systems, information security, technical support
7	Shift Supervisors, Technicians	Operational supervision, day-to-day production management

2.3 Visual Scheme of the Management Structure

The management structure of Bukhara Euro Cement LLC follows a 3–4 level hierarchical model, organized as follows:

General Director

- **Chief Engineer**
  - **Production Department**
  - **Technical Services & Energy**
  - **Laboratory & Quality Control**
  - **Safety & Occupational Health**
- **Finance Director**
  - **Accounting**
  - **HR Department**
  - **Legal Department**
- **Marketing & Sales Department**
- **IT & Digital Management Department**

2.4. Advantages of the Organizational Structure

- Clear chain of command – roles and authority are well-defined and logically distributed
- Technological departments – function independently, but remain integrated with central operations
- Sales and digital systems – operate under direct and responsive management
- HR, finance, and legal services – are managed in a centralized manner for efficiency and consistency

2.5 International Benchmarking: Alignment with UNIDO Models

According to UNIDO recommendations for the cement industry:

- Sales and digital systems should operate directly under executive control, rather than being centralized
- Energy and technical services should be handled as independent modules integrated across production
- The current organizational structure of Bukhara Euro Cement fully complies with these international standards

3. Departmental and Role-Based Structural Distribution

3.1. Production & Technology Department

Total: 46 employees, operating in a 3-shift schedule

Position	Shift |	Coefficient	Headcount	Function
Mill Operator	3	1.33	3	Raw material grinding and continuous supply
Kiln Operator	3	1.33	3	Control of the firing process

Dosing Operator	3	1.33	8	Precise dosing of materials
Packaging Operator	3	1.33	12	Packaging of finished cement
Dust Collection (Aspiration) Operator	3	1.33	8	Dust removal and air control
Shift Supervisor	3	1.33	4	Supervision of processes
Assistant Operator	3	1.33	8	Auxiliary functions

3.2 – Technical Services and Energy Department

Total: 16 employees

Position	Shift |	Coefficient	Headcount	Function
Electrician	3	1.33	4	Energy supply and maintenance
Mechanic	3	1.33	8	Mechanical system servicing
Pump Operator	3	1.33	4	Water and air system operations

3.3 – Laboratory and Quality Control

Total: 7 employees

Position	Shift |	Coefficient	Headcount	Function
Chief Technologist	1	1.00	1	Quality and technological compliance control

Head of Laboratory	1	1.00	1	Testing process supervision
Laboratory Technician	3	1.00	5	Physical and chemical analysis

3.4 – Administrative and Management Staff (AMS)

Total: 8 employees

Position	Shift |	Coefficient	Headcount	Function
General Director	1	1.00	1	Strategic Management
Chief Engineer	1	1.00	1	Head of Technological Divisions
Finance Director	1	1.00	1	Financial Management
Accountant	1	1.00	3	Reporting and Control
HR Specialist	1	1.00	1	Human Resources and Payroll
Legal Advisor	1	1.00	1	Contracts and Legal Affairs

3.5 – Marketing and Sales Department

Total: 5 employees

Position	Shift |	Coefficient	Headcount	Function
Head of Marketing (CMO)	1	1.00	1	Strategic branding and positioning
Export Manager	1	1.00	1	Communication with foreign markets

Domestic Market Sales Agent	1	1.00	1	Collaboration with local dealers
CRM Specialist	1	1.00	1	Customer relations and database management
Pricing Specialist	1	1.00	1	Pricing policy and sales strategy

3.6 – Maintenance and Infrastructure Services Department

Total: 14 employees

Position	Shift |	Coefficient	Headcount	Function
Cook	1	1.00	2	Meal preparation for workers
Kitchen Assistants	1	1.00	2	Washing, cleaning, and preparation
Cleaning Staff	1	1.00	5	Building and site hygiene
Infrastructure Technicians	1	1.00	2	Water, heating, and sewage systems
Auxiliary Services	1	1.00	3	Multi-purpose service and backup

3.7 – Safety and Occupational Health Department

Total: 10 employees

Position	Shift |	Coefficient	Headcount	Function
Internal Compliance Officer	3	1.33	4	Entrance-exit control and

				video surveillance
Occupational Safety Engineer	1	1.00	2	Safety instructions and compliance monitoring
Fire Safety Officer	1	1.00	2	Fire prevention and evacuation oversight
Night Shift Supervisor	3	1.33	2	General security during night shifts

3.8 – IT and Digital Management Department

Total: 2 employees

Position	Shift |	Coefficient	Headcount	Function
IT Systems Administrator	1	1.00	1	ERP, server, and user support
Digital Monitoring Specialist	1	1.00	1	Sensor and industrial monitoring

4.Shift Model and Workload Analysis

4.1. Bukhara Euro Cement LLC operates on a modern technological foundation, where production processes run continuously in a 24/7 mode. As a result, the shift-based labor model is one of the core systems determining the company's operational efficiency.

This section analyzes the shift workload, staffing coefficients, and resource allocation for each department, position, and function. The assessment is conducted based on international labor management standards from ILO (International Labour Organization) and UNIDO (United Nations Industrial Development Organization) principles.

4.2 Descriptions of Shift models

Model Type |	Work Schedule	Daily Hours	Weekly Hours
1 shift	day	Daily Hours	40
2 shift	Day + night	8×2	80
3 shift	24/7	8×3	168

4.3 Shift Load and Coefficients

Shift model	Coefficient	Weekly hours	Impact on Labor Fund
1 shift	1.00	40	Standard Load
2 shift	1.15	80	Overload
3 shift	1.33	168	Maximum Load

4. 4. Shift model distribution by departments

Department	Primary shift	Coefficient	Positions(%)
Production & Technology	3shift	1.33	100%
Technical Services and Energy	3shift	1.33	100%
Laboratory and Quality Control	1shift	1.00	100%
Administrative and Management Staff (AMS)	1shift	1.00	100%
Marketing and Sales	1shift	1.00	100%
Maintenance and Infrastructure Services	1shift	1.00	100%
Safety and Occupational Health	3shift	1.33	60%; 1 смена – 40%
IT and Digital Systems	1shift	1.00	100%

4.5. Conclusion

– In a production environment that is not fully automated, the 3-shift model is considered the most effective approach. It ensures both operational continuity and compliance with technical safety standards.

– For each 3-shift position, it is recommended to assign 3 active employees plus 1 reserve/backup staff member to ensure full coverage and flexibility.

– Over 70% of the total labor fund is allocated to positions operating under the 3-shift model.

– For single-shift (1-shift) roles, a coefficient of 1.00 is applied, reflecting the standard workload level.

5. Salaries, Labor Fund, and Analytical Allocation

5.1 Introduction

This section provides a detailed calculation of the monthly and annual labor fund for Bukhara Euro Cement LLC, based on employee grades, shift coefficients, and salary levels. All calculations are grounded in the official staff list prepared by the company's Chief Engineer and the approved salary levels.

Each position includes: Monthly salary,Number of employees,Shift model coefficient, Monthly and annual labor fund

5.2 Calculation Formulas

– Monthly Labor Fund = Monthly Salary × Coefficient × Number of Employees
– Annual Labor Fund = Monthly Labor Fund × 12

5.3 Position-Based Wage and Labor Fund

Detailed financial calculations by position are provided in the financial section of the business plan.

5.4 Summary of Annual Labor Fund

Total Monthly Labor Fund: $49,135.61

Total Annual Labor Fund: $589,627.27

5.5 Analytical Allocation by Departments

- 65–70% of the labor fund is allocated to production and technical service departments
- 20% is allocated to marketing, management, and laboratory units
- The remaining 10–15% is distributed among support services, IT, and security departments

5.6 Conclusion

- Due to the higher shift coefficients in production activities, these roles dominate the labor fund
- It is recommended to assign reserve staff for shift-based roles
- Salaries should be re-evaluated based on employee qualifications
- Digital management and automation will help optimize labor fund usage in the future

5.7 Commentary and Conclusion on Corporate Governance

At present, the enterprise operates based on a management structure formed in accordance with the current legislation of the Republic of Uzbekistan and internal regulatory documents. At the same time, concrete plans have been developed to gradually improve governance efficiency in line with the anticipated expectations of international investors.

In particular, the enterprise plans to become a member of the Uzbekistan Economic Assembly in the fourth quarter of 2025. This prestigious platform unites 45 sectoral associations and representative offices in 20 countries, creating significant opportunities for integration with international practices in

corporate governance, audit, and ESG (Environmental, Social, and Governance) systems.

Through membership, the enterprise aims to introduce independent directors, strengthen the activities of the supervisory board, establish audit and ESG committees, and move closer to international transparency standards.

The management of the enterprise considers all recommendations in this area to be of practical value and is taking steps to implement them gradually.

9. LEGAL FOYNDATIONS AND INCENTIVES

9.1 – Licenses, Permits, and Legal Status

Bukhara Euro Cement LLC is officially registered with the Ministry of Justice of the Republic of Uzbekistan as a legal entity.

All public and verified legal information about the company is available at the following address (certificate attached):

https://www.orginfo.uz

Through this portal, users can access the company's official name, TIN (Taxpayer Identification Number), date of establishment, founders, type of activity, and other legal details. Simply enter the company name into the search bar and click the search button to retrieve the information.

B.Existing Licenses, Certificates, and Permits

1. License for Quarry Operations

Issuing Authority: State Committee of the Republic of Uzbekistan for Geology and Mineral Resources (supporting documents attached)

- Primary Purpose: Extraction of limestone, diabase, and other natural raw materials
- Legal Basis: Law of the Republic of Uzbekistan "On Subsoil"

- Article 11: “Use of subsoil plots shall be carried out based on a special permit (license).”
  (https://lex.uz/docs/111463)

2. Product Compliance Certificate

• Certificate Number: UZ.SMT.01.0031.116029895

• Issue Date: 2024-йил

• Products Covered: Portland cement M400, M500, sulfate-resistant cement

• egulatory Standards: O‘zDSt 1025:2002, ГОСТ 31108-2020, EN 197-1

• Legal Basis:

Law of the Republic of Uzbekistan "On Certification of Products, Works, and Services”, article 6: “Certification ensures compliance with state standards, product safety, and provides consumer trust assurance.” (https://lex.uz/docs/142922)

3. Sanitary-Epidemiological Conclusion (SEC)

• Issue Date: 12.08.2024

• Issuing Authority: Sanitary-Epidemiological Service of Uzbekistan

• Summary: “Cement products are safe for human health and the environment.”

• Legal Basis:

Law of the Republic of Uzbekistan “On the Sanitary and Epidemiological Well-Being of the Population” Article 18: “Enterprises must obtain a sanitary-epidemiological conclusion in order to carry out operations safely.” (https://lex.uz/docs/1161659)

9.2 – Tax, Customs, and Investment Incentives

A. Tax Incentives

Bukhara Euro Cement LLC is classified as a large-scale production enterprise under a state-supported investment project. The following incentives are provided under current legislation and confirmed by official documents:

1. Exemption from Profit Tax

Legal Basis: Presidential Decree No. PQ–4512 (dated 29.11.2019), Clause 3

"Participants of strategic investment projects shall be exempt from profit tax for a period of 3 years."

(https://lex.uz/docs/4602781)

2. VAT – 0% Rate for Exports

Legal Basis: Tax Code of the Republic of Uzbekistan, Article 242

"A value-added tax rate of 0 percent shall be applied to goods being exported."
(https://lex.uz/docs/4674893#242)

3. Exemption from Property and Land Tax

Legal Basis: Presidential Decree No. PQ–5611 (dated 27.10.2020), Clause 5

"New industrial enterprises shall be exempt from property and land taxes for a period of 3 years."

(https://lex.uz/docs/5069071)

B. Customs Incentives

1. Exemption from Customs Duty for Technological Equipment

Legal Basis: Presidential Decree No. PQ–1873 (dated 26.12.2012), Clause 2

"Technological equipment imported within the framework of investment projects shall be exempt from customs duties."

(https://lex.uz/docs/2126791)

2. VAT Exemption for New Technologies

Legal Basis: Presidential Decree No. PQ–6019 (dated 12.07.2020), Clause 3

"Equipment imported on the basis of new technologies shall be exempt from value-added tax (VAT)."

C. Guarantees for Investment Activity

1. Protection Against Changes in Tax Policy

Legal Basis: Presidential Decree No. PF–101 (dated 09.06.2022), Clause 5

"If tax or customs incentives are amended, investors shall retain the previously granted conditions for a period of 10 years." (https://lex.uz/docs/6032127)

2. State Reimbursement of Loan Interest

Legal Basis: Presidential Decree No. PQ–6079 (dated 22.10.2020), Clause 6

"Up to 50% of interest expenses on loans obtained for investment projects shall be reimbursed by the state."

(https://lex.uz/docs/5078022)

3. Insurance of Export-Import Operations

Legal Basis: Presidential Decree No. PQ–5286 (dated 04.12.2021), Clause 4

"Export-import operations shall be insured through Uzbekinvest, providing full coverage guarantees."

(https://lex.uz/docs/5282054)

D. Additional Incentives

1. Freedom for Currency Operations

Legal Basis: Law of the Republic of Uzbekistan "On Currency Regulation,"

Article 9, "Residents and non-residents have the right to conduct currency operations through banks without restrictions."

(https://lex.uz/docs/3819273)

2. Reimbursement of Infrastructure Costs by the State

Legal Basis: Presidential Decree No. PQ–4449 (dated 10.09.2019)

"Infrastructure costs – including electricity, gas, road, and water supply – may be partially reimbursed from state funds."

(https://lex.uz/docs/4483489)

3. Protection via the Business Ombudsman

Legal Basis: Presidential Decree No. PF–5490 (dated 01.08.2018)

"Through the Business Ombudsman, investors receive direct state protection in case of legal disputes or challenges."

(https://lex.uz/docs/3846709)

4. Subsidies for Import-Substituting Projects

Legal Basis: Presidential Decree No. PQ–4412 (dated 17.08.2019), Clause 4

"Enterprises engaged in the production of import-substituting goods may be granted state subsidies."

(https://lex.uz/docs/4473310)

5. Incentives for Subcontractors

Legal Basis: Presidential Decree No. PQ–5177 (dated 24.07.2021)

"When cooperating with small business entities, subcontractors may also benefit from the special tax regime."

(https://lex.uz/docs/5113304)

9.3 – State Guarantees and Investment Protection

A. Legislative Guarantee – Tax and Legal Stability

One of the most critical guarantees for investors is the legal stability of the investment environment. In Uzbekistan, investor rights are protected by law:

Legal Basis: Presidential Decree No. PF–101 (dated 09.06.2022), Clause 5

"If changes are made to legislation regarding tax and customs benefits, the investor has the right, at their discretion, to operate under the previous conditions for up to 10 years."

(https://lex.uz/docs/6032127)

B. Currency and Dividend Guarantees

Uzbek legislation provides legal guarantees for investors to freely repatriate dividends, conduct currency operations, and transfer capital abroad:

Legal Basis: Law of the Republic of Uzbekistan "On Currency Regulation," Article 9

"Residents and non-residents have the right to conduct currency operations and to repatriate profits, dividends, and other income without restrictions." (https://lex.uz/docs/3819273)

C. International Arbitration Protection

Uzbekistan, as part of its international obligations, legally guarantees the protection of investors' rights through arbitration mechanisms:

Legal Basis: New York Convention (1958) and Vienna Convention (1980), both ratified by Uzbekistan

Jurisdictions: Recognized arbitration centers include Geneva, London, Paris, Singapore, and Istanbul

National Legislation: Law of the Republic of Uzbekistan "On International Arbitration," Article 3

(https://lex.uz/docs/4973122)

D. Financial Guarantees and Insurance Mechanisms

1. State Guarantees for Credit Financing

Legal Basis: Presidential Decree No. PQ–6079 (dated 22.10.2020)

"Up to 50% of interest payments on loans allocated through commercial banks shall be reimbursed by the state."
(https://lex.uz/docs/5078022)

2. Insurance for Export-Import Operations

Legal Basis: Presidential Decree No. PQ–5286 (dated 04.12.2021)

"Foreign economic operations (exports and imports) are insured through Uzbekinvest, providing coverage guarantees."
(https://lex.uz/docs/5282054)

3. Infrastructure Reimbursement and Collateral Guarantees

Legal Basis: Presidential Decree No. PQ–4449 (dated 10.09.2019)

"A reimbursement mechanism shall be introduced to cover infrastructure expenses (gas, electricity, water, roads) for capital investment projects through state funding."
(https://lex.uz/docs/4483489)

E. Additional Guarantees

1. Equal Rights Principle for Investors

Legal Basis: Law of the Republic of Uzbekistan "On Foreign Investments," Article 4

"Foreign and local investors shall have equal rights and obligations."
(https://lex.uz/docs/31416)

2. Exclusive Guarantees Granted Through Investment Agreements

If the project is implemented under a formal investment agreement with the state, the following exclusive guarantees may be provided:

- Long-term lease of land plots
- Guaranteed access to energy infrastructure
- Individual extension of VAT and customs duty exemptions

3. State Support for Social-Investment Commitments

- When the enterprise undertakes construction of public infrastructure for the local population (e.g., roads, water systems, schools, clinics):
- The state guarantees the provision of land and infrastructure on equal terms
- Cooperation with local authorities and community councils (mahallas) is formally established

4. Local Workforce Development and Job Creation

- If the enterprise initiates vocational training centers or creates apprenticeship programs for local labor,
- The government encourages and supports such initiatives through incentives and partnership mechanisms

F. Conclusion

- The rights granted to investors are fully guaranteed by Uzbekistan's national legislation and international norms.
- Stability in tax, customs, credit, and currency policy significantly reduces investment risk.
- International arbitration access, state guarantees, and public-private partnerships enhance confidence in the project and its long-term success.

9.4 – Conclusions

A. Strategic Summary

- The cement production project implemented by Bukhara Euro Cement LLC is considered a strategically significant initiative due to the following key factors:
- Regional advantage – the only large-scale cement plant in Bukhara region
- Raw material stability – secure sources including limestone quarries, gypsum, ash, and diabase
- Legal guarantees and state-provided incentives
- Reliable access to energy and infrastructure networks
- Strong export potential and high domestic demand
- Production capacity reaching 612,000 tons per year
- Active support from the state's investment policy

B. Key Investment Arguments

- The attractiveness of this project for investors is demonstrated through the following well-grounded factors:
- State-provided incentives, including tax, customs, infrastructure, and insurance benefits
- Full freedom in currency operations and profit repatriation
- International arbitration rights and legal stability guarantees
- State-subsidized interest payments on loan financing
- Ownership-secured raw material base, including a private limestone quarry
- Legally documented access to land plots and utility networks
- High product competitiveness in both domestic and export markets

10. SOCIO-ECONOMIS IMPACT

10.1 – Job Creation

The Bukhara Euro Cement LLC project will provide direct and indirect employment to over 200 people. According to Section 8, the company's permanent staff will consist of 108 employees:

46 workers engaged in 24/7 production across 3 shifts

The remainder distributed across technical, laboratory, administrative, and service departments

Additionally, the project will indirectly generate 50–60 support jobs, including

- Raw material transportation by logistics firms
- Maintenance and technical service teams
- Clean water and food supply providers

In total, the project will contribute to approximately 250 jobs, significantly impacting local employment.

10.2 – Impact on Local Economic Growth

The Bukhara Euro Cement LLC project contributes not only to direct job creation, but also significantly enhances the overall economic environment of Qorovulbozor district and Bukhara region. The local economic growth impact is reflected in several key areas:

A. Localization of Economic Activity

The implementation of the project opens up broad opportunities for local businesses. Small enterprises in Qorovulbozor will be engaged across multiple support sectors:

- Transport of raw materials and finished goods via local logistics providers
- Fuel supply contracts with regional distributors
- Growth in catering and potable water services for employees
- Increased demand for repair workshops and spare parts suppliers

B. Multiplier Effect within the Production Chain

Cement production is a multi-stage and highly integrated process that stimulates growth across numerous auxiliary sectors. Within this project's scope, the following multiplier effects are expected:

- Ongoing cooperation with construction firms for infrastructure and expansion
- Development of packaging, palletizing, and auxiliary wrapping workshops
- Rising demand for vehicle repair and spare parts services
- Increased consumption of electricity and technical water, leading to infrastructure investments

C. Tax Revenues and Contribution to Local Budgets

The company's operations will directly contribute to the local tax base in several areas:

- Personal income tax (PIT) from the labor compensation fund
- Property and land tax (after the incentive period ends)
- VAT and profit tax from local service-providing legal entities

10.3 – External Social and Environmental Impacts

Cement manufacturing is a large-scale industrial activity that has the potential to affect both the environment and the local community. Bukhara Euro Cement LLC is committed to minimizing negative impacts and enhancing positive outcomes by complying with international environmental and social standards.

A. Environmental Monitoring and Sustainability

The company has installed modern filtration and control systems, ensuring that harmful gas emissions remain well below permissible limits. Waste is managed through a closed-loop recycling system, including:

- Dust collection systems redirecting cement particles back into production
- Waste heat recovery systems reintegrating thermal energy into the process
- Industrial by-products planned for reuse in local secondary applications

B. Energy Efficiency and Alternatives

Cement production consumes significant amounts of electricity and fuel. To ensure energy efficiency, the following measures are in place:

- Automated control systems integrated into production equipment
- Thermal insulation and heat flow optimization throughout facilities
- Real-time power usage monitors tied to production indicators
- Future integration of solar panels for supplementary energy supply is under consideration

C. Community Engagement and Social Projects

The company aligns its operations with the interests of local residents, implementing social partnership initiatives such as:

- Repairing regional roads and restoring shared logistics access
- Sponsorship support for local schools and kindergartens
- Medical checkups for employees and their families
- Contributions to public safety and fire protection infrastructure

D. Workforce and Ethical Standards

As a responsible and sustainable employer, the company adheres to the following principles:

- Workplace safety and adherence to international ISO labor standards
- Zero tolerance for discrimination based on gender, age, or ethnicity
- Promotion of social equity and professional development

- Internship and upskilling programs for youth, women, and local community members

11. PROJECT RISKS, INSURANCE, AND MONITORING STRATEGY

1. Introduction

Any large-scale industrial project, particularly those with high capital intensity such as cement production, inherently carries substantial risks. The project implemented by Bukhara EURO Cement LLC is not only an economically promising initiative but also a strategic industrial project for regional development.

This document identifies the key risk factors within the project, evaluates them, develops appropriate management strategies, defines financial protection tools, and establishes a monitoring system. It has been prepared in alignment with the standards of UNIDO (United Nations Industrial Development Organization), ISO 31000 (Risk Management), and IFC (International Finance Corporation) Environmental & Social Performance Standards.

2. Types of Risks and Their Management Strategies

To ensure the successful implementation of the project, an in-depth analysis of the main risk categories has been conducted. Each type of risk was assessed based on its probability of occurrence, economic and operational impact, potential consequences, and the preventive or mitigating measures that can be taken. The main risk categories and management strategies are outlined below:

2.1 Market Risk

This includes competition in the cement market, fluctuations in demand and prices, currency exchange rate volatility, and export restrictions. A decline in product demand or price reductions would directly affect the project's profitability.

Management Strategy:

The Marketing Department will monitor market dynamics on a monthly basis. Key measures include continuous market segmentation, advertising, competitor analysis, and a pre-order sales strategy. In addition, diversification of sales directions to markets such as Russia, Afghanistan, and Uzbekistan is strongly recommended.

2.2 Financial Risks

Risks in this category include delays in loan repayments, disruptions in cash flow, interest rate volatility, and failure to meet investor obligations. A low DSCR (Debt Service Coverage Ratio) can raise concerns among banks and investors.

Management Strategy:

Quarterly monitoring of the DSCR will be implemented. The Financial Director will oversee Cash Flow analysis. Currency risks will be managed through hedging mechanisms, and monthly reviews of the expense and loan repayment schedules will be conducted.

2.3 Technological Risks

The integration of Chinese and European technologies requires uninterrupted production. Any technical malfunction could halt operations, resulting in financial losses.

Management Strategy:

Technical services will operate on a 24/7 basis. Equipment equipped with SCADA and IoT systems will allow real-time reliability monitoring. Backup generators, spare parts, and external service contracts are considered mandatory components of the operation.

2.4 Legal and Regulatory Risks

Changes in tax legislation, failure to renew licenses, and issues with environmental permits can lead to major sanctions or even the suspension of operations.

Management Strategy:

An annual external legal audit will be conducted. The Legal Department will prepare a quarterly legal update. An ERP-based monitoring system will track license and permit expiry dates.

2.5 Environmental Risks

Atmospheric dust, wastewater contamination, impact on groundwater, and public dissatisfaction pose threats to environmental and social stability.

ESIA Status:

Although a full Environmental and Social Impact Assessment (ESIA) aligned with IFC Performance Standards 1–4 has not yet been developed, the project has fully complied with the national legislation of the Republic of Uzbekistan. The State Committee for Ecology and Environmental Protection has issued a positive conclusion, confirming that the project does not pose any adverse environmental impact.

This official approval serves as the legal basis for proceeding.

CO_2 Emissions Reduction Plan:

The project's environmental infrastructure — including dust and gas filtration systems — is already fully financed and is being installed in phases. Prior to production start-up, all systems will be fully operational. Subsequently, a roadmap to reduce CO_2 emissions to 0.6 tons per ton of clinker by 2030 will be developed and published. This aligns with international investor requirements and Uzbekistan's national environmental strategy.

Environmental Monitoring and Control:

It is important to note that the project's environmental conditions will be regularly monitored by state authorities. Periodic inspections and monitoring will be conducted by regional divisions of the State Committee for Ecology, ensuring that all production activities remain under constant supervision.

Next Steps:

The company plans to engage internationally qualified environmental experts to prepare a full ESIA report in accordance with IFC standards. This document is expected to be completed within 90 to 120 days, depending on the launch status of the primary environmental infrastructure.

Management Strategy:

An Environmental Management System (EMS) will be implemented in accordance with ISO 14001:2015. A daily-operating monitoring system with PM-10 and PM-2.5 particle sensors will be activated. In addition to environmental permits, all data will be publicly accessible to nearby residents.

3. Insurance Strategy

Due to the scale and sensitivity of the cement production project, comprehensive financial insurance coverage is necessary. The following types of internationally recognized insurance policies are recommended:

Property All-Risk Insurance – for main production facilities

Machinery Breakdown Insurance – for equipment malfunctions

Employer Liability Insurance – for workforce-related incidents

Product Liability Insurance – for product-related damages

Natural Catastrophe Insurance – for fire, earthquakes, and other natural disasters

Marine Cargo Insurance – for transportation risks

Other insurance providers may be involved as needed during the implementation phase.

4. Monitoring Strategy

The monitoring strategy is designed to provide real-time observation, assessment, and analysis of risk mitigation actions. For each type of risk, a responsible department, monitoring frequency, tools, and reporting formats have been defined.

5. Conclusion

Each of the main project risks has been identified, and corresponding mitigation and elimination strategies have been developed. The selected insurance and monitoring mechanisms are based on international best practices, enhancing the investment appeal of the project and ensuring its stable long-term performance.

12. CONCLUSION

According to UNIDO methodology, the implementation of such an industrial project hinges on three key factors — supply stability, market proximity, and energy efficiency. In Bukhara region, there are currently no other major cement production facilities operating in the target district. This creates a logistical advantage, offering the potential to reduce transportation costs by 20–30%.

Additionally, the project plans to incorporate modern energy-efficient technologies, aligning with international ecological sustainability standards.

When analyzed through the BCG Growth-Share Matrix, the project falls into the "High Growth – Low Competition" quadrant — indicating a high market growth rate with limited existing competition. This presents an opportunity for rapid market penetration and early dominance.

In summary, this project:

- Eliminates current cement shortages in the domestic market;
- Establishes import-substituting and export-oriented production in Bukhara region;
- Creates up to 108 direct jobs, with additional indirect employment;
- Represents a highly profitable investment, with a $25 million input returning in just 4.2 years.

All these factors confirm that the project is economically viable, ecologically responsible, and strategically justified for successful implementation.

FINANCIAL CALCULATIONS
(APPENDICES No. 1 – 32)

PROJECT INITIAL AND DEFINED INDICATORS

Project currency and equalents Exchange rate	1 USD=	13 000 сўм
	1 EUR=	15 000 сўм

Total Investment	USD	25000 000,00

Tax Rates(Under General Regime)		
Type of Tax and Contributions	**Tax Rates**	
Corporative income		12%
Property tax		1,50%
Value Added Tax (VAT)		Exempt
Land Tax		Based on district-specific rates
Unified Social Payments		12%

RATES

Type	**Rate (UZS)**	**Rate (USD**
Electricity (1kWh)	450	0,0769
Cold water and sewage services	6400	0,56
Natural Gas, m3	1860	0,14
Coal, 1 ton	1014000	78

COSTS AND STANDARD ITEMS

Expense name	**Consumption norm**	**Base**
Transport costs	3,00%	Based on raw material purchase costs
Current repairs and Preventives	10,00%	Based on equipment depreciation charges
Spare parts	2,00%	Based on equipment purchase cost
Other administrative Expenses	0,30%	Based on raw materials purchase cost
Sales and Marketing Expenses	0,20%	Based on sales value
Bank service charges	0,20%	Based on total expeditures

FINANCIAL PLAN

In USD

Description	In National Currency	In USD	Total	Structure%	Share %
From own funds					
For fixed capital	12219 823		12219 823,00	93,6	
For working capital	300 000,00		300 000,00	2,3	
Financial expenses	533 340		533 340,00	4,1	
Total Own Funds	**13053 163,00**		13053 163,00	100,0	34,3
From Planned Investment Funds					
For Fixed Capital		5000 000	5000 000,00	20,0	
To Increase Liquidity (for full repayment of previous loan at 12% annual interest)		20000 000	20000 000,00	80,0	
Total Invesment Funds		**25000 000,00**	25000 000,00	100,0	65,7
Total Financing	**13053 163,00**	**25000 000,00**	**38053 163,00**		

PROJECT PARTICIPANTS' CONTRIBUTION STRUCTURE

in USD

№	Indicators	Own funds	Investment funds	Total project cost	Share in Project (%)
	Construction of buildings and structures	12019823	3400000	15419823	40,5
	Purchase, delivery and commissioning of production equipment	200000	16620000	16820000	44,2
1	**Total capiital expenditures**	**12219 823,00**	**20020000**	**32239 823,00**	84,7
2	**WORKING CAPITAL**	**300000**	**4980000**	**5280000**	13,9
	Liquidity Improvement (loan repayment)		4980000	**4980000**	13,1
3	**FINANCIAL EXPENSES**	**533340**		**533340**	1,4
	Custom clearance fees 0,2%	27239,646		**27239,646**	0,1
	Expenses for setting u operations during investment period	506100,354		**506100,354**	1,3
4	**TOTAL EXPENSES**	**13053 163,00**	**25000000**	**38053163**	100

	TOTAL INITIAL INVESTMENT COST	**13053 163,00**	**25000000**	**38053 163,00**
	PARTICIPANTS' SHARE (%)	**34**	**66**	**100**

TOTAL COST OF PROJECT	*38053 163,00*	*USD*
INVESTMENT FUND	*25000000*	*USD*
OWN FUND	*13053 163,00*	*USD*

STRUCTURE OF INVESTMENTS AND COMPANY'S OWN FUNDS EXPENDITURE

in US dollars

No.	Description	Description	Description	Unit price	Total
From investment funds					
1	Purchase of production equipment	***Based on contract – Annex attached***			16620 000,00
2	Construction of facilities	***clinker line construction) (Based on estimate documents – Annex attached)***			3400 000,00
3	Liquidity enhancement	***Allocation schedule will be attached***			4980 000,00
	Total from credit resources				25000 000,00
From own funds					
1	Reserve of raw materials and supplies	conditional	1	300 000,00	300 000,00
2	Construction works of production buildings and engineering networks	***Based on estimate documents – Annex attached***			12019 823,00
3	Costs for transportation, installation, and commissioning of equipment	conditional	1	200 000,00	200 000,00
4	Customs procedures payment (0.2%)	conditional	1	27 239,65	27 239,65
5	Expenses related to organizing activities during the investment period	conditional	1	506100,354	506 100,35
	Total from founders' and own funds				**13053 163,00**
TOTAL INITIAL INVESTMENT COST FOR THE PROJECT					**38053 163,00**

PLANNED PURCHASE OF FIXED ASSETS TO BE FINANCED THROUGH INVESTMENTS

Essential assets required for production operations

№	Name and model	Unit of measurement	Quantity	Unit price, USD	Total, USD	Source of financing
1	Purchase of cement production line: acquisition of the clinker line	комплект	1	1600000	1600000	From investment funds
2	Construction of the clinker line, cement plant kilns, and other operational units	дона	1	3400 000	3400000	
3	Liquidity improvement, including full repayment of the 12% annual interest loan to Aloqabank and financial stabilization of the enterprise	дона	1	20000000	20000000	
Delivery terms based on Incoterms 2020					**25000000**	

Planned construction of plant buildings and structures through investment funds

According to the cost estimate documents (attached) *In US dollars*

№	Name and Model	Base	Total (thousand UZS)	In USD
1	Raw Material Warehouse	**based on the estimate, including VAT*	14390024 211	1106 925
2	Large Silo	**based on the estimate, including VAT*	7789700 513	599 208
3	Small Silo	**based on the estimate, including VAT*	6992282 411	537 868
4	Cooling System	**based on the estimate, including VAT*	1247000 000,00	95 923
5	Large Silo Elevator	**based on the estimate, including VAT*	260094 608,00	20 007
6	Tunnel	**based on the estimate, including VAT*	150000 000,00	11 538
7	Kiln	**based on the estimate, including VAT*	1300000 000,00	100 000
8	Mill	**based on the estimate, including VAT*	514508 020,00	39 578
9	Heat Exchange Equipment	**based on the estimate, including VAT*	11556390 237,00	888 953
	Total		**44200000 000**	**3400 000**

EQUIPMENT TO BE PURCHASED UNDER INVESTMENT

Based on Contract No. GY20240124

№	Name and Model	Unit	Quantity	Unit Price (USD)	Total Price (USD)	H.S. code
1	Dust collection fans (for kiln and cooler)	*set*	1	390 000	390000	8474200008
2	Separator and accessories for raw mill	*set*	1	76 000	76000	
3	Rail loader for raw material warehouse	*set*	1	235 000	235000	
4	Konveyors (for mill, crusher and warehouse)	*set*	1	122 000	122000	
5	Elevators (for mill and silos)	*set*	1	115 000	115000	
6	Dust cleaning system (for mill, coal and silos)	*set*	1	144 000	144000	
7	Coal powder dosing and conveying system	*set*	1	170 000	170000	
8	Compressor station	*set*	1	103 000	103000	
9	Electrical system and automation system	*set*	1	65 000	65000	
10	Water cooling device (cooling tower for water system)	*set*	1	40 000	40000	
11	Gas furnace	*set*	1	130000	130000	
12	Welding wire roll	ton	10	1000	10000	
	Жами				**1600000**	

PROJECTED FUNDS UTILIZATION SCHEDULE IN THE PROJECT

Note:

Investor funds
Joint funds
Enterprise funds

№	Name of Required Works and Investments	Unit	Investments in Year						Total in Year
			1-month	2-month	3-month	4-month	5-month	6-month	
1	Construction of production buildings and facilities	USD	12019 823	1400 000	1000 000	1000 000			15419 823
2	Purchase of production equipment	USD		15500 000			1120 000		16620 000
3	Expenses to improve liquidity	USD		4980 000					4980 000
4	Installation and commissioning of equipment	USD	200 000						200 000
5	Customs process fee (0.2%)	USD	24 040				3 200		27 240
6	Formation of raw material and stock reserves	USD	300 000						300 000
7	Operating costs during the investment period	USD	84 350	84 350	84 350	84 350	84 350	84 350	506 100
	Total		**12628 213**	**21964 350**	**1084 350**	**1084 350**	**1207 550**	**84 350**	**38053 163**

ANNUAL FULL-CAPACITY PRODUCTION PLAN OF THE ENTERPRISE

in physical terms

№	Product Name	Unit of Measure	Production Volume				
			per Shift (8 hours)	per Day (3 Shifts)	per Month (25 Days)	per Quarter (75 Days)	per Year (300 Days)
	Cement Production	**tons**	**680**	**2040**	**51 000**	**153 000**	**612 000**
1	SEM P/B-K(P-Z-I) 32.5 N Portland Cement	**tons**	340	**1020**	**25 500**	**76 500**	**306 000**
2	SEM P/A-K(P-Z-I) 42.5 N Portland Cement	**tons**	340	**1020**	**25 500**	**76 500**	**306 000**

PLANNED ANNUAL PRODUCTION AND SALES VOLUME DURING THE PROJECT PERIOD

№	Years Production capacity	Unit of Measure	Year 1 85%	Year 2 90%	Year 3 95%	Year 4 98%	Year 5 100%	Year 6 100%	Year 7 100%	Year 8 100%	Year 9 100%	Year 10 100%	Total
Planned production volume of goods													
1	SEM P/B-K(P-Z-I) 32.5 N Portland Cement	тонна	260 100	275 400	290 700	299 880	306 000	306 000	306 000	306 000	306 000	306 000	2962 080
2	SEM P/A-K(P-Z-I) 42.5 N Portland Cement	тонна	260 100	275 400	290 700	299 880	306 000	306 000	306 000	306 000	306 000	306 000	2962 080

SALES PLAN FOR DOMESTIC AND EXPORT MARKETS DURING THE PROJECT PERIOD

Product Sales to the Domestic Market (in physical terms)

Product Name	Unit of Measure	Total Sales Volume to the Domestic Market										
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total for Project Period
SEM П/В-К(П-3-И) 32,5 Н ПОРТЛАНДЦЕМЕНТ	тонна	260 100,00	275 400,00	290 700,00	299 880,00	306 000,00	306 000,00	306 000,00	306 000,00	306 000,00	306 000,00	2962 080,00
SEM П/А-К(П-3-И) 42,5 Н ПОРТЛАНДЦЕМЕНТ	тонна	260 100,00	275 400,00	290 700,00	299 880,00	306 000,00	306 000,00	306 000,00	306 000,00	306 000,00	306 000,00	2962 080,00
Total		**520 200,00**	**550 800,00**	**581 400,00**	**599 760,00**	**612 000,00**	**612 000,00**	**612 000,00**	**612 000,00**	**612 000,00**	**612 000,00**	**5924 160,00**

ANNUAL RAW MATERIAL COSTS AT FULL PRODUCTION CAPACITY

in USD

№	*Name of Product*	Production Volume at 100% Capacity (tons)	Raw Material	Unit of Measure	Raw Material Share per Unit (%)	at Full Capacity		
						Annual Requirement	Unit Purchase Price of Raw Material	Total Annual Raw Material Cost
1	SEM P/B-K(P-Z-I) 32.5 N Portland Cement	306 000	Clinker (purchased)	tons	34,5	105 570	34,62	3654 346,2
			Clinker (produced in-house)	tons	34,5	105 570	28,03	2959 299,8
			Gypsum	tons	6	18 360	4,12	75 659,3
			Diabase	tons	10	30 600	6,21	189 989,0
			Fly Ash / Slag	tons	4	12 240	9,27	113 489,0
			Limestone	tons	11	33 660	1,50	50 490,0
	Total					**x**	**x**	**7043 273,3**
1	SEM P/A-K(P-Z-I) 42.5 N Portland Cement	306 000	Clinker (purchased)	тонна	39,5	120 870	34,62	4183 961,5
			Clinker (produced in-house)	тонна	39,5	120 870	28,03	3388 183,9
			Gypsum	тонна	6	18 360	4,12	75 659,3
			Diabase	тонна	6	18 360	6,21	113 993,4
			Fly Ash / Slag	тонна	4	12 240	9,27	113 489,0
			Limestone	тонна	5	15 300	1,50	22 950,0
	Total					**x**	**x**	**7898 237,1**
	Summary							**14941 510,5**

PROJECT PERIOD SALES AND REVENUE PLAN FROM PRODUCT DELIVERIES

Gross revenue from domestic market sales (in monetary terms)

in USD

Product Name	**Unit of Measure**	**Gross Revenue from Domestic and Export Sales**										**Total Over Project Period**
		Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**	
Domestic sales share (the remainder is exported)	**%**	**80%**	**78%**	**76%**	**74%**	**72%**	**70%**	**68%**	**67%**	**66%**	**64%**	**71,50%**
Gross revenue plan from domestic sales of manufactured products	АҚШ доллари	21135 120	21818 904	22440 525	22539 984	22378 363	21756 741	21135 120	20824 310	20513 499	19891 878	240691 723
Gross revenue plan from export sales of manufactured products	АҚШ доллари	5283 780	6154 050	7086 482	7919 454	8702 697	9324 318	9945 939	10256 750	10567 560	11189 181	60172 931
Total		**26418 900,33**	**27972 953,29**	**29527 006,25**	**30459 438,03**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**300864 653,17**

GROSS REVENUE PLAN FROM DOMESTIC SALES DURING THE PROJECT PERIOD

Gross revenue from product sales (in monetary terms) — USD

Product Name	Unit of Measurement	Unit Sale Price (incl. VAT)	Gross Revenue from Domestic Sales										Total Over Project Period
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
SEM P/B-K(P-Z-I) 32.5 N Portland Cement	tons	49,2	12793 766,8	13546 341,3	14298 915,8	14750 460,5	15051 490,3	15051 490,3	15051 490,3	15051 490,3	15051 490,3	15051 490,3	145698 426,2
SEM P/A-K(P-Z-I) 42.5 N Portland Cement	tons	52,4	13625 133,6	14426 612,0	15228 090,5	15708 977,5	16029 568,9	16029 568,9	16029 568,9	16029 568,9	16029 568,9	16029 568,9	155166 227,0
Жами			**26418 900,3**	**27972 953,3**	**29527 006,3**	**30459 438,0**	**31081 059,2**	**31081 059,2**	**31081 059,2**	**31081 059,2**	**31081 059,2**	**31081 059,2**	**300864 653,2**

RAW MATERIAL AND MATERIAL EXPENDITURE PLAN DURING THE PROJECT PERIOD

Planned raw material and auxiliary material consumption during the project period (in physical terms)

№	Name	Unit of Measure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Over Project Period
Production Capacity			85%	90%	95%	98%	100%	100%	100%	100%	100%	100%	
1	Clinker (purchased)	тонна	192 474,0	203 796,0	215 118,0	221 911,2	226 440,0	226 440,0	226 440,0	226 440,0	226 440,0	226 440,0	2191 939,2
2	Clinker (produced in-house)	тонна	192 474,0	203 796,0	215 118,0	221 911,2	226 440,0	226 440,0	226 440,0	226 440,0	226 440,0	226 440,0	2191 939,2
3	Gypsum	тонна	31 212,0	33 048,0	34 884,0	35 985,6	36 720,0	36 720,0	36 720,0	36 720,0	36 720,0	36 720,0	355 449,6
4	Diabase	тонна	41 616,0	44 064,0	46 512,0	47 980,8	48 960,0	48 960,0	48 960,0	48 960,0	48 960,0	48 960,0	473 932,8
5	Fly Ash / Slag	тонна	20 808,0	22 032,0	23 256,0	23 990,4	24 480,0	24 480,0	24 480,0	24 480,0	24 480,0	24 480,0	236 966,4
6	Limestone	тонна	41 616,0	44 064,0	46 512,0	47 980,8	48 960,0	48 960,0	48 960,0	48 960,0	48 960,0	48 960,0	473 932,8

Planned raw material and auxiliary material consumption during the project period (in monetary terms)USD

№	Name	Unit purchase price of raw materials, including VAT	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Over Project Period
1	Clinker (purchased)	34,62	6662 561,54	7054 476,92	7446 392,31	7681 541,54	7838 307,69	7838 307,69	7838 307,69	7838 307,69	7838 307,69	7838 307,69	75874 818,46
2	Clinker (produced in-house)	28,03	5395 361,14	5712 735,32	6030 109,51	6220 534,02	6347 483,69	6347 483,69	6347 483,69	6347 483,69	6347 483,69	6347 483,69	61443 642,13
3	Gypsum	4,12	128 620,86	136 186,79	143 752,72	148 292,28	151 318,66	151 318,66	151 318,66	151 318,66	151 318,66	151 318,66	1464 764,60
4	Diabase	6,21	258 385,07	273 584,19	288 783,31	297 902,79	303 982,43	303 982,43	303 982,43	303 982,43	303 982,43	303 982,43	2942 549,96
5	Fly Ash / Slag	9,27	192 931,31	204 280,21	215 629,11	222 438,45	226 978,01	226 978,01	226 978,01	226 978,01	226 978,01	226 978,01	2197 147,17
6	Limestone	1,50	62 424,00	66 096,00	69 768,00	71 971,20	73 440,00	73 440,00	73 440,00	73 440,00	73 440,00	73 440,00	710 899,20
Total direct costs			**12700 283,91**	**13447 359,44**	**14194 434,96**	**14642 680,28**	**14941 510,49**	**14941 510,49**	**14941 510,49**	**14941 510,49**	**14941 510,49**	**14941 510,49**	**144633 821,52**

Share of raw and auxiliary materials in products sold on domestic and international markets during the project period (in monetary terms)

№	Name	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Over Project Period
1	For Export	USD	2540 056,78	2958 419,08	3406 664,39	3807 096,87	4183 622,94	4482 453,15	4781 283,36	4930 698,46	5080 113,57	5378 943,78	41549 352,36
2	For Domestic market	USD	10160 227,13	10488 940,36	10787 770,57	10835 583,41	10757 887,55	10459 057,34	10160 227,13	10010 812,03	9861 396,92	9562 566,71	103084 469,16

OPERATING EXPENSES

Electricity Consumption and Cost Calculation

№	Name	Unit of Measurement	Daily Consumption (24h)	Monthly Norm (25 days)	Annual Norm (300 days)	Unit Price incl. VAT (USD)	Total Annual Cost incl. VAT (USD)
1	Active electricity consumption for production	kW	124 440,00	3111 000,0	37332 000,0	0,0769	2871 692,3
2	Reactive electricity consumption for production	kW	42 442,08	1061 052,0	12732 624,3	0,004	48 971,63
3	Electricity used for lighting and communal purposes	kW	1600	40 000,0	480 000,0	0,0769	36 923,08
	Total						**2957 587,02**

Natural gas consumption and expense plan

№	Name	Unit of Measurement	Daily Consumption (24h)	Monthly Norm (25 days)	Annual Norm (300 days)	Unit Price incl. VAT (USD)	Total Annual Cost incl. VAT (USD)
1	Gas consumption for communal purposes	m3	625	15 621,67	187 460,00	0,14	25 956,00
	Total		**180**	**1 440,00**	**4 320,00**	**108 000,00**	**25 956,00**

Coal consumption and expense plan

№	Name	Unit of Measurement	Daily Consumption (24h)	Monthly Norm (25 days)	Annual Norm (300 days)	Unit Price incl. VAT (USD)	Total Annual Cost incl. VAT (USD)
1	Coal used in production	tons	144,84	300	43 452,00	78	3389 256,00
	Total		**180**	**1 440,00**	**4 320,00**	**108 000,00**	**3389 256,00**

Cold and wastewater consumption and expenses plan

№	Name	Unit of Measurement	Daily Consumption (24h)	Monthly Norm (25 days)	Annual Norm (300 days)	Unit Price incl. VAT (USD)	Total Annual Cost incl. VAT (USD)
2	Cold and wastewater	tons	1,2	30,00	360,00	6,92	2 492,31
	Жами		**135**	**3 375,00**	**40 500,00**	**0,56**	**2 492,31**

Fuel and lubricant expenses

№	Name	Unit of measurement	Daily Consumption (24h)	Monthly norm(25 days)	Annual norm (300 days)	Unit Price incl VAT (usd)	Total Annual Cost inc VAT (usd)
1	Hydraulic and engine oils	kg	2,2	54,17	650,00	4,6	3 000,00
2	Transmission oils	kg	3,2	80,00	960,00	6,2	5 907,69
3	High-temperature resistant oils	kg	1,1	26,67	320,00	5,8	1 846,15
4	Compressor oils	kg	1,8	45,83	550,00	3,5	1 903,85
5	Greases	kg	0,6	15,00	180,00	7,7	1 384,62
6	Instrument lubrication oils	kg	0,3	7,50	90,00	9,2	830,77
	Total						**14 873,08**

Employee social protection expenses ***in USD***

№	Name	Unit of Measurement	Number of employees	Annual cycle	Unit Price incl. VAT (USD)	Total Annual Cost incl. VAT (USD)
1	Meals	pcs	108,0	12,00	38,38	49 746,46
2	Workwear	set	108,0	2,00	46,15	9 969,23
3	Medical examination	usd	108,0	4,00	7,69	3 323,08
4	Employee transport	abon	108,0	300,00	0,31	9 969,23
	Total					**73 008,00**

Repairs and technical maintenance, spare parts ***in USD***

№	Name	Unit of measurement	Daily Consumption (24h)	Monthly norm(25 days)	Annual norm (300 days)	Unit Price incl VAT (usd)	Total Annual Cost inc VAT (usd)
1	Spare parts	сум	250,3	6 258,33	75 100,00	75100,0	
2	Transformer substation and power lines expenses	сум	12,0	300,00	3 600,00	3600,0	
	Total						**78 700,00**

Other expenses ***in USD***

№	Name	Unit of measurement	Daily Consumption (24h)	Monthly norm(25 days)	Annual norm (300 days)	Unit Price incl VAT (usd)	Total Annual Cost inc VAT (usd)
1	WIFI	ойлик	1,8	46,15	553,85	553,8	
2	Telephone communication costs	ойлик	3,1	76,92	923,08	923,1	
3	Stationery and office services	ойлик	1,2	30,77	369,23	369,2	
4	Waste disposal fees	ойлик	3,1	76,92	923,08	923,1	
	Total						**2 769,23**

Packaging materials used in production

№	Name	Unit of Measurement	Daily Consumption (24h)	Monthly Norm (25 days)	Annual Norm (300 days)	Unit Price incl. VAT (USD)	Total Annual Cost incl. VAT (USD)
1	50 kg special cement bags for packaging (20%)	pcs	8160	204 000,00	2448 000,00	0,15	367 200,00
	Жами		**180**	**1 440,00**	**4 320,00**	**108 000,00**	**367 200,00**

TOTAL OPERATING EXPENSES

№	Name	Value
1	***Electricity Consumption and Cost Calculation***	**2957 587**
2	***Natural gas consumption and expense plan***	**25 956**
3	***Coal consumption and expense plan***	**3389 256**
4	***Cold and wastewater consumption and expenses plan***	**2 492**
5	***Fuel and lubricant expenses***	**14 873**
6	***Employee social protection expenses***	**73 008**
7	***Repairs and technical maintenance, spare parts***	**78 700**
8	***Other expenses***	**2 769**
9	***Packaging materials used in production***	**367 200**
	Total	**6911 842**

CALCULATION OF OPERATIONAL EXPENSES DURING THE PROJECT PERIOD

in USD

№	Name	Unit of measurement	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Over Project Period
			Production capacity										
			85%	90%	95%	98%	100%	100%	100%	100%	100%	100%	97%
1	Electricity Consumption and Cost Calculation	USD	2513949	2661828	2809708	2898435	2957587	2957587	2957587	2957587	2957587	2957587	**28629 442,32**
2	Natural gas consumption and expense plan	USD	22 063	23 360	24 658	25 437	25 956	25 956	25 956	25 956	25956	25956	**251 254,08**
3	Coal consumption and expense plan	USD	2880 868	3050 330	3219 793	3321 471	3389 256	3389 256	3389 256	3389 256	3389 256	3389 256	**32807 998,08**
4	Cold and wastewater consumption and expenses plan	USD	2 118	2 243	2 368	2 442	2 492	2 492	2 492	2 492	2 492	2 492	**24 125,54**
5	Fuel and lubricant expenses	USD	12 642	13 386	14 129	14 576	14 873	14 873	14 873	14 873	14 873	14 873	**143 971,38**
6	Employee social protection expenses	USD	62 057	65 707	69 358	71 548	73 008	73 008	73 008	73 008	73 008	73 008	**706 717,44**
7	Repairs and technical maintenance, spare parts	USD	66 895	70 830	74 765	77 126	78 700	78 700	78 700	78 700	78 700	78 700	**761 816,00**
8	Other expenses	USD	2 354	2 492	2 631	2 714	2 769	2 769	2 769	2 769	2 769	2 769	**26 806,15**
9	Packaging materials used in production	USD	312 120	330 480	348 840	359 856	367 200	367 200	367 200	367 200	367 200	367 200	**3554 496,00**
	Total	USD	**5875 065**	**6220 657**	**6566 250**	**6773 605**	**6911 842**	**6911 842**	**6911 842**	**6911 842**	**6911 842**	**6911 842**	**66906 627**

SEM P/B-K(P-Z-I) 32.5 N Portland Cement

Calculation of production cost (expenses)

№	Cost Item	Unit of Measurement	Quantity	Unit Purchase Price (USD)	Total Amount (USD)	Raw Material Consumption per Unit of Product (Quantity)	Raw Material Cost per Unit of Product (USD)	Share in Cost Price (%)
	100% production volume at full capacity	**tons**	**306 000**					
1	**Raw materials and components**							
	Import (a)							
1		kg	0		-			
	Total (a)				**-**			
	Local (b)							
	purchased clinker	**tons**	105 570	**34,62**	3654 346,15	**0,345**	11,9	29,4%
	produced clinker	**tons**	105 570	**28,03**	2959 299,83	**0,345**	9,7	23,8%
	gypsum	**tons**	18 360	**4,12**	75 659,33	**0,060**	0,2	0,6%
	diabase	**tons**	30 600	**6,21**	189 989,02	**0,100**	0,6	1,5%
	fly ash	**tons**	12 240	**9,27**	113 489,01	**0,040**	0,4	0,9%
	limestone	**tons**	33 660	**1,50**	50 490,00	**0,110**	0,2	0,4%
	Total (b							
	Total (a + b)				**7043 273,34**		**23,0**	56,7%
3	**Operational costs (based on 612,000 tons of production for 2 types of products)**	**USD**			**6911 842**		**11,29**	27,8%
4	**Other production costs**							
	Production personnel wages including unified social payment	USD			534 833,43		0,87	2,2%
	Depreciation	USD			3293 991,15		5,38	13,3%
	Total				**3828 824,58**		**6,26**	15,4%
5	**Production cost**	USD			**17783 939,55**		**40,57**	100,0%
6	**Period costs, including:**							
	Management personnel wages including unified social payment	USD			54 793,85		0,09	
	Unforeseen expenses	USD			5 000,00		0,01	
	Bank service fees (0.04% of expenses)	USD			59 766,04		0,10	
	Total	**USD**			**119 559,89**		**0,20**	
7	**Total product cost**	**USD**			**17903 499,44**		**40,76**	

8	Enterprise profit margin	USD			2685 524,92	15%	**4,39**	
10	**Product selling price (excluding VAT)**	**USD**			**20589 024,35**			
11	**VAT**	USD			2470 682,92	12%	**4,04**	
12	**Product selling price (including VAT)**	**USD**			**23059 707,27**		**49,19**	

Imported raw materials		**0**	**usd**
Cost of production		**40,57**	**USD**
Localization rate		**100**	**%**

SEM P/A-K(P-Z-I) 42.5 N Portland Cement

Calculation of production cost (expenses)

№	Cost Item	Unit of Measurement	Quantity	Unit Purchase Price (USD)	Total Amount (USD)	Raw Material Consumption per Unit of Product (Quantity)	Raw Material Cost per Unit of Product (USD)	Share in Cost Price (%)
	100% production volume at full capacity	**tons**	**306 000**					
1	**Raw materials and components**							
	Import (a)							
1		kg	0		-			
	Total (a)				-			
	Local (b)							
	purchased clinker	**tons**	120 870	**34,62**	4183 961,54	**0,395**	13,7	31,5%
	produced clinker	**tons**	120 870	**28,03**	3388 183,86	**0,395**	11,1	25,5%
	gypsum	**tons**	18 360	**4,12**	75 659,33	**0,060**	0,2	0,6%
	diabase	**tons**	18 360	**6,21**	113 993,41	**0,060**	0,4	0,9%
	fly ash	**tons**	12 240	**9,27**	113 489,01	**0,040**	0,4	0,9%
	limestone	**tons**	15 300	**1,50**	22 950,00	**0,050**	0,1	0,2%
	Total (b							
	Total (a + b)				**7898 237,15**		**25,8**	**59,5%**
3	**Operational costs (based on 612,000 tons of production for 2 types of products)**	**USD**			**6911 842**		**11,29**	**26,0%**
4	**Other production costs**							
	Production personnel wages including unified social payment	USD			534 833,43		0,87	2,0%
	Depreciation	USD			3293 991,15		5,38	12,4%
	Total				**3828 824,58**		**6,26**	**14,4%**
5	**Production cost**	USD			**18638 903,36**		**43,36**	100,0%

6	**Period costs, including:**							
	Management personnel wages including unified social payment	USD			54 793,85		0,09	
	Unforeseen expenses	USD			5 000,00		0,01	
	Bank service fees (0.04% of expenses)	USD			59 766,04		0,10	
	Total	**USD**			**119 559,89**		**0,20**	
7	**Total product cost**	**USD**			**18758 463,25**		**43,56**	
8	Enterprise profit margin	USD			2813 769,49	15%	**4,60**	
10	**Product selling price (excluding VAT)**	**USD**			**21572 232,73**			
11	**VAT**	USD			2588 667,93	12%	**4,23**	
12	**Product selling price (including VAT)**	**USD**			**24160 900,66**		**52,38**	

Imported raw materials		**0**	**usd**
Cost of production		**43,36**	**USD**
Localization rate		**100**	**%**

DEPRECIATION EXPENSES

in USD

Item Name	Depreciation % Rate	Residual Asset Value	Depreciation Amount										Total Over Project Period
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Fixed Assets Planned for Construction and Installation During the Project Period													
Buildings and structures	5%	15419 823	770 991	770 991	770 991	770 991	770 991	770 991	770 991	770 991	770 991	770 991	7709 912
Production equipment line	15%	16820 000	2523 000	2523 000	2523 000	2523 000	2523 000	2523 000	1682 000				16820 000
Auxiliary equipment	15%	-	-	-	-	-	-	-	-	-	-	-	-
Total		**32239 823**	**3293 991**	**3293 991**	**3293 991**	**3293 991**	**3293 991**	**3293 991**	**2452 991**	**770 991**	**770 991**	**770 991**	**24529 912**
Accumulated depreciation			**3293 991**	**6587 982**	**9881 973**	**13175 965**	**16469 956**	**19763 947**	**22216 938**	**22987 929**	**23758 920**	**24529 912**	

TAX CALCULATION SUMMARY

in USD

Type of Tax and Contribution	Rate (%)	Tax Base	year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10	Total Over Project Period
Total Revenue from Sales			**26418 900**	**27972 953**	**29527 006**	**30459 438**	**31081 059**	**31081 059**	**31081 059**	**31081 059**	**31081 059**	**31081 059**	**300864 653**
Including from Exports			5283 780	6154 050	7086 482	7919 454	8702 697	9324 318	9945 939	10256 750	10567 560	11189 181	60172 931
From Domestic Market Sales			21135 120	21818 904	22440 525	22539 984	22378 363	21756 741	21135 120	20824 310	20513 499	19891 878	240691 723
Cost of Goods Sold (COGS)			**23666 028**	**24693 244**	**25665 078**	**26199 845**	**26516 079**	**26395 246**	**25433 412**	**23630 579**	**23509 746**	**23388 912**	**249098 169**
Gross Profit			**2752 873**	**3279 709**	**3861 928**	**4259 593**	**4564 980**	**4685 814**	**5647 647**	**7450 480**	**7571 314**	**7692 147**	**51766 484**
VAT Calculated on Domestic Sales:	12%		2264 477	2337 740	2404 342	2414 998	2397 682	2331 079	2264 477	2231 176	2197 875	2131 273	22975 119
VAT Payable After Deductions			**274 261**	**230 452**	**179 983**	**120 396**	**56 251**	**-10 351**	**-76 953**	**-110 255**	**-143 556**	**-210 158**	**310 071**
Property Tax (only from buildings – based on actual data, to be attached)			**50 749**	**50 749**	**50 749**	**50 749**	**50 749**	**50 749**	**50 749**	**50 749**	**50 749**	**50 749**	**507 488**
Land Tax (based on actual data, to be attached)			**69 044**	**69 044**	**69 044**	**69 044**	**69 044**	**69 044**	**69 044**	**69 044**	**69 044**	**69 044**	**690 441**
Pre-Tax Profit			2358 819	2929 464	3562 152	4019 403	4388 936	4576 372	5604 807	7440 942	7595 076	7782 512	**50258 484**
Profit Tax	**15%**	**Pre-Tax Profit**	**353 823**	**439 420**	**534 323**	**602 911**	**658 340**	**686 456**	**840 721**	**1116 141**	**1139 261**	**1167 377**	**7538 773**
Total Estimated Tax Payments			**473 616**	**559 213**	**654 116**	**722 703**	**778 133**	**806 249**	**960 514**	**1235 934**	**1259 054**	**1287 170**	**8736 702**

ENTERPRISE STAFF TABLE AND MONTHLY SALARY CALCULATION

№	Position Title	Staff Count	Average Monthly Salary (UZS)	ILO Coefficient .	Monthly Fund (UZS)	*In USD*			
						Monthly Fund (USD)	Social Insurance Contributions (12%)	Total Monthly Salary Expenses	Total Annual Salary Expenses
Administrative and Management Department									
1	General Director	1	12000 000	1	12000 000	923,1	111	1033,8	12 406,15
2	Chief Engineer	1	10000 000	1	10000 000	769,2	92	861,5	10 338,46
3	Finance Director	1	9000 000	1	9000 000	692,3	83	775,4	9 304,62
4	Accountant	3	4500 000	1	13500 000	1038,5	125	1163,1	13 956,92
5	HR Specialist	1	4000 000	1	4000 000	307,7	37	344,6	4 135,38
6	Legal Advisor	1	4500 000	1	4500 000	346,2	42	387,7	4 652,31
Laboratory and Quality Control Department									
7	Chief Technologist	1	8000 000	1	8000 000	615,4	74	689,2	8 270,77
8	Head of Laboratory	1	6000 000	1	6000 000	461,5	55	516,9	6 203,08
9	Laboratory Technician	5	3500 000	1	17500 000	1346,2	162	1507,7	18 092,31
Marketing and Sales Department									
10	Marketing Director (CMO)	1	6000 000	1	6000 000	461,5	55	516,9	6 203,08
11	Export Manager	1	5600 000	1	5600 000	430,8	52	482,5	5 789,54
12	Domestic Market Sales Agent	1	5600 000	1	5600 000	430,8	52	482,5	5 789,54
13	CRM Specialist	1	5600 000	1	5600 000	430,8	52	482,5	5 789,54
14	Pricing Specialist	1	5600 000	1	5600 000	430,8	52	482,5	5 789,54
Technical Service and Energy Department									
15	Mechanic	8	4300 000	1,33	45752 000	3519,4	422	3941,7	47 300,53
16	Electrician	4	4300 000	1,33	22876 000	1759,7	211	1970,9	23 650,26
17	Pump Operator	4	4000 000	1,33	21280 000	1636,9	196	1833,4	22 000,25
Production Technology Department									

18	Packaging Operator	12	3600 000	1,33	57456 000	4419,7	530	4950,1	59 400,66
19	Aspiration Operator	8	3800 000	1,33	40432 000	3110,2	373	3483,4	41 800,47
20	Dosing Unit Worker	8	4200 000	1,33	44688 000	3437,5	413	3850,0	46 200,52
21	Kiln Operator	3	5000 000	1,33	19950 000	1534,6	184	1718,8	20 625,23
22	Mill Operator	3	4500 000	1,33	17955 000	1381,2	166	1546,9	18 562,71
23	Shift Supervisor	4	5000 000	1,33	26600 000	2046,2	246	2291,7	27 500,31
24	Assistant Operator	8	4000 000	1,33	42560 000	3273,8	393	3666,7	44 000,49
Service and Infrastructure Department									
25	Chef	2	3500 000	1,15	8050 000	619,2	74	693,5	8 322,46
26	Kitchen Assistants	2	2800 000	1,15	6440 000	495,4	59	554,8	6 657,97
27	Cleaning Staff	5	3500 000	1,15	20125 000	1548,1	186	1733,8	20 806,15
28	Infrastructure Technicians	2	3500 000	1,15	8050 000	619,2	74	693,5	8 322,46
29	General Service Workers	3	3000 000	1,15	10350 000	796,2	96	891,7	10 700,31
Security and Occupational Safety Department									
30	Internal Control Officer	4	4500 000	1,33	23940 000	1841,5	221	2062,5	24 750,28
31	Occupational Safety Engineer	2	4500 000	1,33	11970 000	920,8	110	1031,3	12 375,14
32	Fire Safety Officer	2	4500 000	1,33	11970 000	920,8	110	1031,3	12 375,14
33	Night Shift Guard	2	3000 000	1,33	7980 000	613,8	74	687,5	8 250,09
IT and Digital Management Department									
34	IT System Administrator	1	4500 000	1	4500 000	346,2	42	387,7	4 652,31
35	Digital Monitoring Specialist	1	4500 000	1	4500 000	346,2	42	387,7	4 652,31
	TOTAL	**108**				**43 871,08**	**5 264,53**	**49 135,61**	**589 627,27**

VAT

in USD

Indicators	Share, %	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Over Project Period
Total Revenue from Sales		**26418 900**	**27972 953**	**29527 006**	**30459 438**	**31081 059**	**31081 059**	**31081 059**	**31081 059**	**31081 059**	**31081 059**	**300864 653**
Export		5283 780	6154 050	7086 482	7919 454	8702 697	9324 318	9945 939	10256 750	10567 560	11189 181	**86430 209**
Domestic Market		21135 120	21818 904	22440 525	22539 984	22378 363	21756 741	21135 120	20824 310	20513 499	19891 878	**214434 444**
Product Raw Material Purchase Costs		12700 284	13447 359	14194 435	14642 680	14941 510	14941 510	14941 510	14941 510	14941 510	14941 510	**144633 822**
Operational Expenses		5875 065	6220 657	6566 250	6773 605	6911 842	6911 842	6911 842	6911 842	6911 842	6911 842	**66906 627**
Total Resource Purchase Costs		***18575 349***	***19668 017***	***20760 685***	***21416 285***	***21853 352***	***21853 352***	***21853 352***	***21853 352***	***21853 352***	***21853 352***	**211540 449**
Including VAT (Paid)	***12%***	***1990 216***	***2107 288***	***2224 359***	***2294 602***	***2341 431***	***2341 431***	***2341 431***	***2341 431***	***2341 431***	***2341 431***	**22665 048**
Total VAT Paid on Resource Purchases		1990 216	2107 288	2224 359	2294 602	2341 431	2341 431	2341 431	2341 431	2341 431	2341 431	**22665 048**
VAT Calculated from Domestic Market Sales		2264 477	2337 740	2404 342	2414 998	2397 682	2331 079	2264 477	2231 176	2197 875	2131 273	**22975 119**
Refundable VAT from Exported Product Raw Materials		272 149	316 973	365 000	407 903	448 245	480 263	512 280	528 289	544 298	576 315	**4451 716**
VAT Payable or Subject to Compensation by the Company		**274 261**	**230 452**	**179 983**	**120 396**	**56 251**	**-10 351**	**-76 953**	**-110 255**	**-143 556**	**-210 158**	**310 071**

LOAN REPAYMENT SCHEDULE

Bank Loan (USD)	25000000
Annual Interest Rate	4,35%
Payment Frequency	Monthly
Loan Term (months)	120
Grace Period (months)	12

Loan Term	Principal Repayment	Remaining Balance	Interest Payment	Total Payment
1		25000000	90625	90625
2		25000000	90625	90625
3		25000000	90625	90625
4		25000000	90625	90625
5		25000000	90625	90625
6		25000000	90625	90625
7		25000000	90625	90625
8		25000000	90625	90625
9		25000000	90625	90625
10		25000000	90625	90625
11		25000000	90625	90625
12		25000000	90625	90625
Total			**1087500**	**1087500**
13	231481	24768519	89786	321267
14	231481	24537037	88947	320428
15	231481	24305556	88108	319589
16	231481	24074074	87269	318750
17	231481	23842593	86429	317911
18	231481	23611111	85590	317072
19	231481	23379630	84751	316233
20	231481	23148148	83912	315394
21	231481	22916667	83073	314554
22	231481	22685185	82234	313715
23	231481	22453704	81395	312876
24	231481	22222222	80556	312037
Total	**2777778**		**1022049**	**3799826**
25	231481	21990741	79716	311198
26	231481	21759259	78877	310359
27	231481	21527778	78038	309520
28	231481	21296296	77199	308681
29	231481	21064815	76360	307841
30	231481	20833333	75521	307002
31	231481	20601852	74682	306163
32	231481	20370370	73843	305324
33	231481	20138889	73003	304485
34	231481	19907407	72164	303646
35	231481	19675926	71325	302807
36	231481	19444444	70486	301968
Total	**2777778**		**901215**	**3678993**
37	231481	19212963	69647	301128
38	231481	18981481	68808	300289

39	231481	18750000	67969	299450
40	231481	18518519	67130	298611
41	231481	18287037	66291	297772
42	231481	18055556	65451	296933
43	231481	17824074	64612	296094
44	231481	17592593	63773	295255
45	231481	17361111	62934	294416
46	231481	17129630	62095	293576
47	231481	16898148	61256	292737
48	231481	16666667	60417	291898
Total	**2777778**		**780382**	**3558160**
49	231481	16435185	59578	291059
50	231481	16203704	58738	290220
51	231481	15972222	57899	289381
52	231481	15740741	57060	288542
53	231481	15509259	56221	287703
54	231481	15277778	55382	286863
55	231481	15046296	54543	286024
56	231481	14814815	53704	285185
57	231481	14583333	52865	284346
58	231481	14351852	52025	283507
59	231481	14120370	51186	282668
60	231481	13888889	50347	281829
Total	**2777778**		**659549**	**3437326**
61	231481	13657407	49508	280990
62	231481	13425926	48669	280150
63	231481	13194444	47830	279311
64	231481	12962963	46991	278472
65	231481	12731481	46152	277633
66	231481	12500000	45313	276794
67	231481	12268519	44473	275955
68	231481	12037037	43634	275116
69	231481	11805556	42795	274277
70	231481	11574074	41956	273438
71	231481	11342593	41117	272598
72	231481	11111111	40278	271759
Total	**2777778**		**538715**	**3316493**
73	231481	10879630	39439	270920
74	231481	10648148	38600	270081
75	231481	10416667	37760	269242
76	231481	10185185	36921	268403
77	231481	9953704	36082	267564
78	231481	9722222	35243	266725
79	231481	9490741	34404	265885
80	231481	9259259	33565	265046
81	231481	9027778	32726	264207
82	231481	8796296	31887	263368
83	231481	8564815	31047	262529
84	231481	8333333	30208	261690
Total	**2777778**		**417882**	**3195660**
85	231481	8101852	29369	260851
86	231481	7870370	28530	260012

87	231481	7638889	27691	259172
88	231481	7407407	26852	258333
89	231481	7175926	26013	257494
90	231481	6944444	25174	256655
91	231481	6712963	24334	255816
92	231481	6481481	23495	254977
93	231481	6250000	22656	254138
94	231481	6018519	21817	253299
95	231481	5787037	20978	252459
96	231481	5555556	20139	251620
Total	**2777778**		**297049**	**3074826**
97	231481	5324074	19300	250781
98	231481	5092593	18461	249942
99	231481	4861111	17622	249103
100	231481	4629630	16782	248264
101	231481	4398148	15943	247425
102	231481	4166667	15104	246586
103	231481	3935185	14265	245747
104	231481	3703704	13426	244907
105	231481	3472222	12587	244068
106	231481	3240741	11748	243229
107	231481	3009259	10909	242390
108	231481	2777778	10069	241551
Total	**2777778**		**176215**	**2953993**
109	231481	2546296	9230	240712
110	231481	2314815	8391	239873
111	231481	2083333	7552	239034
112	231481	1851852	6713	238194
113	231481	1620370	5874	237355
114	231481	1388889	5035	236516
115	231481	1157407	4196	235677
116	231481	925926	3356	234838
117	231481	694444	2517	233999
118	231481	462963	1678	233160
119	231481	231481	839	232321
120	231481	0	0	231481
Total	**2777778**		**55382**	**2833160**

COST OF GOODS SOLD DURING THE PROJECT PERIOD

in USD

Cost Item Names	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Over Project Period
Raw materials and supplies expense	12700 284	13447 359	14194 435	14642 680	14941 510	14941 510	14941 510	14941 510	14941 510	14941 510	144633 822
Operational expenses (direct)	5875 065	6220 657	6566 250	6773 605	6911 842	6911 842	6911 842	6911 842	6911 842	6911 842	66906 627
Total direct expenses	**18575 349**	**19668 017**	**20760 685**	**21416 285**	**21853 352**	**21853 352**	**21853 352**	**21853 352**	**21853 352**	**21853 352**	211540 449
Workers' wages and social insurance contributions	589 627	589 627	589 627	589 627	589 627	589 627	589 627	589 627	589 627	589 627	5896 273
Depreciation	3293 991	3293 991	3293 991	3293 991	3293 991	3293 991	2452 991	770 991	770 991	770 991	24529 912
Total gross expenses	**22458 968**	**23551 635**	**24644 303**	**25299 904**	**25736 971**	**25736 971**	**24895 971**	**23213 971**	**23213 971**	**23213 971**	**241966 633**
Contingency expenses	5 000	5 000	5 000	5 000	5 000	5 000	5 000	5 000	5 000	5 000	**50 000**
Bank service fees	59 766	59 766	59 766	59 766	59 766	59 766	59 766	59 766	59 766	59 766	**597 660**
Administrative staff salaries and social insurance contributions	54 794	54 794	54 794	54 794	54 794	54 794	54 794	54 794	54 794	54 794	547 938
Period expenses	**119 560**	**119 560**	**119 560**	**119 560**	**119 560**	**119 560**	**119 560**	**119 560**	**119 560**	**119 560**	**1195 599**
Operating expenses	**22578 528**	**23671 195**	**24763 863**	**25419 463**	**25856 530**	**25856 530**	**25015 530**	**23333 530**	**23333 530**	**23333 530**	**243162 232**
Planned loan interest payments	1087 500	1022 049	901 215	780 382	659 549	538 715	417 882	297 049	176 215	55 382	5935 938
Financing expenses	**1087 500**	**1022 049**	**901 215**	**780 382**	**659 549**	**538 715**	**417 882**	**297 049**	**176 215**	**55 382**	**5935 938**
Cost of goods sold (COGS)	**23666 028**	**24693 244**	**25665 078**	**26199 845**	**26516 079**	**26395 246**	**25433 412**	**23630 579**	**23509 746**	**23388 912**	**249098 169**

PROJECTED PROFIT AND EXPENSE CALCULATION FOR THE PROJECT PERIOD

in USD

Name	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Over Project Period
Revenue from Sales	**26418 900,33**	**27972 953,29**	**29527 006,25**	**30459 438,03**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**300864 653,17**
Value-Added Tax (VAT) Payment	274 261,17	230 452,14	179 982,88	120 396,33	56 251,13	-10 351,14	-76 953,41	-110 254,55	-143 555,68	-210 157,95	310 070,91
Total Expenses	22458 967,73	23551 635,33	24644 302,94	25299 903,50	25736 970,54	25736 970,54	24895 970,54	23213 970,54	23213 970,54	23213 970,54	241966 632,76
Gross Profit	**3685 671,43**	**4190 865,82**	**4702 720,43**	**5039 138,20**	**5287 837,54**	**5354 439,81**	**6262 042,08**	**7977 343,22**	**8010 644,35**	**8077 246,62**	**58587 949,50**
Period Expenses	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	1195 598,88
Operating Profit	**3566 111,54**	**4071 305,93**	**4583 160,54**	**4919 578,31**	**5168 277,65**	**5234 879,92**	**6142 482,19**	**7857 783,33**	**7891 084,46**	**7957 686,73**	**57392 350,62**
Financing Costs	1087 500,00	1022 048,61	901 215,28	780 381,94	659 548,61	538 715,28	417 881,94	297 048,61	176 215,28	55 381,94	5935 937,50
Total Costs	**23666 027,61**	**24693 243,83**	**25665 078,10**	**26199 845,33**	**26516 079,04**	**26395 245,71**	**25433 412,38**	**23630 579,04**	**23509 745,71**	**23388 912,38**	**249098 169,14**
Pre-Tax Profit	2358 818,65	2929 464,43	3562 152,37	4019 403,47	4388 936,15	4576 371,75	5604 807,36	7440 941,82	7595 076,29	7782 511,90	50258 484,19
Profit Tax	353822,80	439419,66	534322,86	602910,52	658340,42	686455,76	840721,10	1116141,27	1139261,44	1167376,78	7538 772,63
Undistributed Net Profit	**2004 995,85**	**2490 044,76**	**3027 829,52**	**3416 492,95**	**3730 595,73**	**3889 915,99**	**4764 086,25**	**6324 800,55**	**6455 814,85**	**6615 135,11**	**42719 711,56**
Cumulative Net Profit	**2004 995,85**	**4495 040,61**	**7522 870,13**	**10939 363,08**	**14669 958,81**	**18559 874,80**	**23323 961,05**	**29648 761,60**	**36104 576,45**	**42719 711,56**	
EBIT and EBITDA Indicators											
Annual EBIT by Project Year	3566 111,54	4071 305,93	4583 160,54	4919 578,31	5168 277,65	5234 879,92	6142 482,19	7857 783,33	7891 084,46	7957 686,73	**57392 350,62**
Annual EBITDA by Project Year	6860 102,69	7365 297,08	7877 151,69	8213 569,46	8462 268,80	8528 871,07	8595 473,34	8628 774,48	8662 075,61	8728 677,88	**81922 262,12**
Profitability Indicators, %											
Gross Profit Margin	13,95%	14,98%	15,93%	16,54%	17,01%	17,23%	20,15%	25,67%	25,77%	25,99%	19,47%
Net Profit Margin	7,59%	8,90%	10,25%	11,22%	12,00%	12,52%	15,33%	20,35%	20,77%	21,28%	14,20%

WORKING CAPITAL REQUIREMENT

Indicator	Coverage Days		Turnover Ratio (365 / Days)	Remarks
Accounts Receivable	45	days	8,1	Total sales / turnover
Raw Materials & Supplies Inventory	60	days	6,1	Raw materials / turnover
Spare Parts Inventory	60	days	6,1	Spare parts / turnover
Accounts Payable	45	days	8,1	Includes fuel & lubricants, employee social benefits, deferred raw material expenses, and other delayed payments

in USD

Name	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Accounts Receivable from Sold Products	-	3261 592,63	3453 451,02	3645 309,41	3760 424,45	3837 167,80	3837 167,80	3837 167,80	3837 167,80	3837 167,80	3837 167,80
Raw Materials and Supplies Inventory	300 000,00	2082 013,76	2204 485,15	2326 956,55	2400 439,39	2449 427,95	2449 427,95	2449 427,95	2449 427,95	2449 427,95	2449 427,95
Spare Parts Inventory		12311,48	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48
Total Current Assets	**300 000,00**	**5355 917,87**	**5670 247,65**	**5984 577,44**	**6173 175,31**	**6298 907,23**	**6298 907,23**	**6298 907,23**	**6298 907,23**	**6298 907,23**	**6298 907,23**
Accounts Payable		2029 750,27	4828 701,80	4803 799,94	4752 171,24	4687 179,12	4594 461,12	4627 893,13	4782 479,97	4684 766,80	4592 048,81
Current Liabilities		**2029 750,27**	**4828 701,80**	**4803 799,94**	**4752 171,24**	**4687 179,12**	**4594 461,12**	**4627 893,13**	**4782 479,97**	**4684 766,80**	**4592 048,81**
Net Working Capital	**300 000,00**	**3326 167,60**	**841 545,85**	**1180 777,50**	**1421 004,08**	**1611 728,11**	**1704 446,11**	**1671 014,10**	**1516 427,26**	**1614 140,42**	**1706 858,42**
Changes in Net Working Capital	**300 000,00**	**3026 167,60**	**-2484 621,75**	**339 231,65**	**240 226,57**	**190 724,04**	**92 717,99**	**-33 432,01**	**-154 586,84**	**97 713,16**	**92 717,99**

CASH FLOW

in USD

Name	year 0	year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Gross revenue from sales		**26418 900,33**	**27972 953,29**	**29527 006,25**	**30459 438,03**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**	**31081 059,21**
Value-added tax (VAT) payments		274 261,17	230 452,14	179 982,88	120 396,33	56 251,13	-10 351,14	-76 953,41	-110 254,55	-143 555,68	-210 157,95
Changes in working capital	300 000,00	3026 167,60	-2484 621,75	339 231,65	240 226,57	190 724,04	92 717,99	-33 432,01	-154 586,84	97 713,16	92 717,99
Depreciation		3293 991,15	6587 982,30	9881 973,45	13175 964,60	16469 955,75	19763 946,90	22216 938,05	22987 929,20	23758 920,35	24529 911,50
Total expenses		22458 967,73	23551 635,33	24644 302,94	25299 903,50	25736 970,54	25736 970,54	24895 970,54	23213 970,54	23213 970,54	23213 970,54
Gross cash flow	**-300 000,00**	**3953 494,98**	**13263 469,86**	**14245 462,23**	**17974 876,22**	**21567 069,26**	**25025 668,72**	**28512 412,14**	**31119 859,25**	**31671 851,54**	**32514 440,13**
Period expenses		119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89	119 559,89
Operating cash flow	**-300 000,00**	**3833 935,09**	**13143 909,97**	**14125 902,34**	**17855 316,34**	**21447 509,37**	**24906 108,83**	**28392 852,25**	**31000 299,37**	**31552 291,65**	**32394 880,24**
Own funds	13053 163,00										
Investment in fixed capital	32239 823,00										
Financial expenses	533 340,00										
Loan interest and principal payments		1087 500,00	1022 048,61	901 215,28	780 381,94	659 548,61	538715	417882	297049	176215	55382
Profit tax		353 822,80	439 419,66	534 322,86	602 910,52	658 340,42	686 455,76	840 721,10	1116 141,27	1139 261,44	1167 376,78
Net cash flow	**-25000 000,00**	**2392 612,30**	**11682 441,70**	**12690 364,21**	**16472 023,87**	**20129 620,33**	**23680 937,79**	**27134 249,20**	**29587 109,48**	**30236 814,93**	**31172 121,51**
Principal loan repayments			2777 777,78	2777 777,78	2777 777,78	2777 777,78	2777 777,78	2777 777,78	2777 777,78	2777 777,78	2777 777,78
Post-debt service cash flow	-25000 000,00	2392 612,30	8904 663,92	9912 586,43	13694 246,09	17351 842,56	20903 160,01	24356 471,42	26809 331,70	27459 037,15	28394 343,73
Financial requirements	25000 000,00										
CASH FLOW		**2392 612**	**8904 664**	**9912 586**	**13694 246**	**17351 843**	**20903 160**	**24356 471**	**26809 332**	**27459 037**	**28394 344**

Cash inflow from sales		**2392 612**	**11297 276**	**21209 863**	**34904 109**	**52255 951**	**73159 111**	**97515 583**	**124324 914**	**151783 952**	**180178 295**
Key indicators											
DISCOUNT RATE	10%	0,9091	0,8264	0,7513	0,683	0,6209	0,5645	0,5132	0,4665	0,4241	0,3855
DISCOUNTED CASH FLOW		2175123,8	9336069,1	15934969,8	23839506,3	32445720,2	41298318,3	50044997,1	57997572,6	64371573,9	69458732,8
IRR		-98,9	-57,4	-25,5	-5,3	7,2	15,3	20,7	24,2	26,5	28,1
NPV		-35878060,9	-28518834,5	-21071361,6	-11718007,3	-943878,2	10855410,6	23354131,7	35860882,8	47506195,0	58453443,7
PI		0,01	0,16	0,36	0,06	0,91	1,22	1,55	1,88	2,22	2,48
PP	years	5,00	4,70	4,23	4,18						
DSCR		6,31	1,94	2,14	2,31	2,46	2,57	2,69	2,81	2,93	3,08

ANALYSIS OF THE PROJECT'S FINANCIAL PERFORMANCE INDICATORS

№	Name	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Accounts Receivable Turnover	коэф.	45	45	45	45	45	45	45	45	45	45
5	Net Working Capital	USD	3326 168	841 546	1180 778	1421 004	1611 728	1704 446	1671 014	1516 427	1614 140	1706 858
6	Current Ratio	коэф.	2,6	1,2	1,2	1,3	1,3	1,4	1,4	1,3	1,3	1,4
8	Financial Leverage	коэф.	6,3	5,6	5,0	4,7	4,6	4,6	4,6	4,5	4,4	4,4
9	Equity Ratio (Autonomy Coefficient)	%	16%	18%	20%	21%	22%	22%	22%	22%	23%	23%
10	Total Debt (Investor's Capital) (TD)	USD	25000 000	22222 222	19444 444	16666 667	13888 889	11111 111	8333 333	5555 556	2777 778	0,0
11	TD / EBITDA	коэф.	3,6	3,0	2,5	2,0	1,6	1,3	1,0	0,6	0,3	0,00
12	Sales Profitability	%	7,59%	8,90%	10,25%	11,22%	12,00%	12,52%	15,33%	20,35%	20,77%	21,28%
13	EBITDA Margin	%	26,0%	26,3%	26,678%	27,0%	27,2%	27,4%	27,7%	27,8%	27,9%	28,1%
14	Return on Assets (ROA)	%	6,70%	7,42%	8,03%	7,87%	7,35%	6,53%	6,75%	7,57%	6,66%	5,97%
15	Return on Equity (ROE)	%	21,01%	20,69%	20,10%	18,49%	16,80%	14,90%	15,44%	17,01%	14,79%	13,16%
16	DSCR	коэф.	6,31	1,94	2,14	2,31	2,46	2,57	2,69	2,81	2,93	3,08

17	ROI	%	17,09%
18	DSCR	%	2,65

PROJECTED BALANCE SHEET FOR THE ENTERPRISE UNDER THE PROJECT

In USD

Name	Project Commencement	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Cash Flow from Sales	-	2392 612	11297 276	21209 863	34904 109	52255 951	73159 111	97515 583	124324 914	151783 952	180178 295
Revenue from Domestic Sales	-	21135 120	21818 904	22440 525	22539 984	22378 363	21756 741	21135 120	20824 310	20513 499	19891 878
Revenue from Export		5283 780	6154 050	7086 482	7919 454	8702 697	9324 318	9945 939	10256 750	10567 560	11189 181
Raw Materials and Supplies Inventory	300 000	2082 014	2204 485	2326 957	2400 439	2449 428	2449 428	2449 428	2449 428	2449 428	2449 428
Spare Parts Inventory	-	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48	12311,48
Current Assets	**300 000**	**30905 838**	**41487 026**	**53076 137**	**67776 298**	**85798 750**	**106701 910**	**131058 381**	**157867 713**	**185326 750**	**213721 094**
Investments in Fixed Assets	32239 823	32239 823	32239 823	32239 823	32239 823	32239 823	32239 823	32239 823	32239 823	32239 823	32239 823
Accumulated Depreciation		3293 991	6587 982	9881 973	13175 965	16469 956	19763 947	22216 938	22987 929	23758 920	24529 912
Net Fixed Assets	**32239 823**	**28945 832**	**25651 841**	**22357 850**	**19063 858**	**15769 867**	**12475 876**	**10022 885**	**9251 894**	**8480 903**	**7709 912**
Total Assets	**32539 823**	**59851 670**	**67138 867**	**75433 986**	**86840 156**	**101568 617**	**119177 786**	**141081 266**	**167119 607**	**193807 653**	**221431 005**
Accounts Payable for Raw Materials	-	2029 750	4828 702	4803 800	4752 171	4687 179	4594 461	4627 893	4782 480	4684 767	4592 049
Current Liabilities	-	2029 750	4828 702	4803 800	4752 171	4687 179	4594 461	4627 893	4782 480	4684 767	4592 049
Enterprise Loans	25000 000	25000 000	22222 222	19444 444	16666 667	13888 889	11111 111	8333 333	5555 556	2777 778	0
Capital											
Retained Earnings		2004 996	2490 045	3027 830	3416 493	3730 596	3889 916	4764 086	6324 801	6455 815	6615 135
Equity / Own Funds	7539 823	9544 819	12034 864	15062 693	18479 186	22209 782	26099 698	30863 784	37188 585	43644 399	50259 535
Total Liabilities and Equity	**32539 823**	**59851 670**	**67138 867**	**75433 986**	**86840 156**	**101568 617**	**119177 786**	**141081 266**	**167119 607**	**193807 653**	**221431 005**
Total Loans / Total Liabilities		41,77%	33,10%	25,78%	19,19%	13,67%	9,32%	5,91%	3,32%	1,43%	0,00%

BREAKEVEN ANALYSIS TABLE AT 100% PRODUCTION CAPACITY

in USD

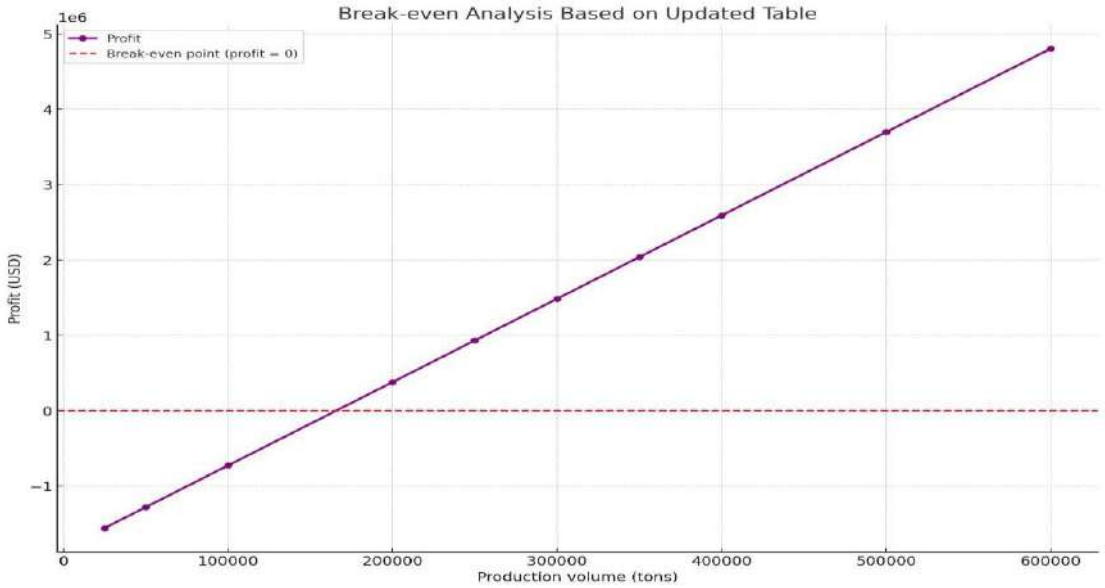
Cost Items	Total Costs	Fixed costs		Variable Costs	
		Summary	Share,%	Summary	Share,%
Raw materials and supplies	14941 510,49		0%	14941 510,49	100%
Direct operating costs	6911 841,63		0%	6911 841,63	100%
Depreciation	3293 991,15	3293 991,15	100%		0%
Salaries and social contributions (core and support staff)	534 833,43		0%	534 833,43	100%
Unexpected expenses	5 000,00	1 500,00	30%	3 500,00	70%
Bank service charges	59 766,04	11 953,21	20%	47 812,83	80%
Salaries and social contributions (administrative/management staff)	54 793,85	54 793,85	100%		0%
Profit tax	1167 376,78		0%	1167 376,78	100%
Total Expenses	**26969 113,37**	1618 146,80	6%	25350 966,57	94%
Full-capacity product sales revenue					**31081 059,21**
REAKEVEN POINT, %:					**28,24%**
BREAKEVEN POINT, USD					**8777 121,02**

BREAKEVEN ANALYSIS

KEY INDICATORS	USD
Average selling price of products	50,79
Average cost of production per unit	41,96
Gross revenue from sales	31081 059,21
Variable costs	25350 966,57
Fixed costs	1618 146,80

BREAKEVEN POINT CALCULATION

Physical equivalent (Natural units)	172 825,45
Monetary equivalent (USD)	8777 121,02



Product output (tons)	25 000	50 000	100 000	200 000	250 000	300 000	350 000	400 000	500 000	600 000
Gross income (USD)	**1269 651**	**2539 302**	**5078 604**	**10157 209**	**12696 511**	**15235 813**	**17775 116**	**20314 418**	**25393 022**	**30471 627**
Total expenses (USD)	**2653 726**	**3689 304**	**5760 462**	**9902 776**	**11973 934**	**14045 091**	**16116 249**	**18187 406**	**22329 721**	**26472 036**
Variable expenses (USD)	*1035 579*	*2071 157*	*4142 315*	*8284 630*	*10355 787*	*12426 944*	*14498 102*	*16569 259*	*20711 574*	*24853 889*
Fixed expenses (USD)	*1618 147*	*1618 147*	*1618 147*	*1618 147*	*1618 147*	*1618 147*	*1618 147*	*1618 147*	*1618 147*	*1618 147*
Profit (USD	**-1384 074**	**-1150 002**	**-681 857**	**254 432**	**722 577**	**1190 722**	**1658 867**	**2127 012**	**3063 301**	**3999 591**