BUSINESS PLAN

Tea-weaving factory in the Kamashi district

June, 2023.

1. Table of contents

1. Table of contents 2
2. Appendices (diagrams, charts, drawings) 4
3. Appendices (tables) 5
4. PROJECT SUMMARY 6
5. ESSENCE OF THE PROPOSED PROJECT 10
5.1 General description of the project 10
5.2 Description of the products to be produced and packaging options 10
5.3 Project Location 12
6. MARKETING PLAN 16
6.1 Consumer analysis. Consumer segmentation 23
6.2 Product pricing 25
7. ORGANIZATIONAL PLAN 26
7.1 Personnel plan 26
7.2 Work schedule for the project 27
7.3 Sources, forms and conditions of financing 29
7.4 Product quality control 32
7.5 Required approvals and certificates 34
7.6 Product realization scheme 35
8. PRODUCTION PLAN 36
8.1 Description of buildings and premises 36
8.2 Description of the production equipment and its suppliers 36
8.3 Technology of packing and packaging of tea 50
8.4 Other technological issues 52
8.5 Raw materials and components 52
9. FINANCIAL PLAN 54
9.1 Initial data and assumptions 54
9.2 Nomenclature and prices 56
9.3 Investment costs 56
9.4 Operating costs (fixed and variable) 60
9.5 Sales target 63

9.6 Revenue calculation....64
9.7 Profit and loss forecast....65
9.8 Cash flow forecast....66
9.9 Analysis of project efficiency....67
9.9.1 Methodology for assessing the effectiveness of the project....67
9.9.2 Project performance indicators....69
10. PROJECT RISK ANALYSIS....71
10.1 Quantitative risk analysis....71
10.2 Qualitative risk analysis....71
10.3 Project break-even point....73
10.4 Statement of cash flows (by month), th....75
11. Methodological comments on the business plan....86
12. Information about the performer of the project....88

2. Appendices (diagrams, charts, drawings)

Figure 1.1 Required amount of investment 7

Figure 1.2 Graph of the NPV of the project 9

Figure 2.1. Appearance of bagged tea 11

Figure 2.2. Example of weight tea packaging 11

Figure 2.4. Location of the selected site .....

Figure 3.1. Structure of tea imports by country of origin 16

Figure 3.2. Structure of import supplies of tea by type in physical terms, % .....

Figure 3.3 Structure of consumption by type of tea in .....

Figure 3.4.Consumer preferences by types of packaging, % 23

Figure 3.5. Places to buy tea, % 24

Figure 3.6. Main criteria of choice of tea by end users, % 24

Figure 3.8. Structure of tea consumption by price segments in real terms, % 25

Figure 4.1. Project implementation schedule 28

Figure 4.2. Project financing structure, % 29

Figure 4.3. Scheme of the sale of products by a tea-weaving factory 35

Figure 5.1. Equipment block diagram 37

Figure 5.2. Automatic machine for packing tea in two-chamber bags, model PT 21.1 39.

Figure 5.3. Metronic Alpha Jet Mondo ink jet printer 40

Figure 5.4. SOLLAS SE40 dispenser 43

Figure 5.5. SOLLAS SC2 45

Figure 5.6. Yamato Dataweigh ADW-A-0310S ALPHA ADVANCE weight dispenser 46

Figure 5.2. Scheme of production 50

Figure 6.1. Structure of investment costs of the project, % 57

Figure 6.2. Planned attainment of design capacity 63

Figure 6.3 Graph of the NPV of the project 70

Figure 7.1 Break-even point chart 74

3. Appendixes (tables)

Table 1.2 Project implementation schedule 6
Table 1.3. Project baselines 7
Table 1.4 Key financial indicators 8
Table 2.1. Company's product range and production volumes 11
Table 4.1. Formation of payroll and staff schedule of the enterprise, thous. 26
Table 4.2 Project implementation schedule 27
Table 4.3. Structure of investments of own funds, thous. 29
Table 4.4. Credit payment schedule 30
Table 5.1. Technical characteristics of the PT 21.1 40
Table 5.2. Specifications of the Metronic Alpha Jet Mondo printer 41
Table 5.3. Technical characteristics of the SOLLAS SE40 44
Table 5.4. Technical characteristics of SOLLAS SC2 45
Table 5.5. Procurement plan for main process equipment 47
Table 5.2. List and cost of additional equipment 52
Table 5.3. Raw materials, materials and components 52
Table 6.1. Determination of the cost of equity 54
Table 6.2. Determination of the discount rate 55
Table 6.3. Nomenclature and price of the company's products 56
Table 6.4 Investment costs of the project, thousand dollars 56
Table 6.7 Tax and other payments, thous. 59
Table 6.8 Fixed costs, thousand dollars 60
Table 6.9 Variable costs, thous. 61
Table 6.10. Production and Sales Plan, packs 64
Table 6.11 Revenue plan per thousand dollars 64
Table 6.12 Profit and loss statement, thous. 65
Table 6.13 Cash Flow Forecast, thousand USD 66
Table 6.14 Investment Performance Indicators 69
Table 7.1 Sensitivity analysis 71

PROJECT SUMMARY

Project name

Business plan for the production of pre-packaged black tea under the brand name "Kamashinsky tea" in Kamashinskoy area.

The initiator of the project is Initiator LLC.

Project Location

Kamashi district, Kashkadarya region.

The essence of the project

As part of the proposed project, it is planned to build a tea-weaving factory in the Kamashi district. The product of the company will be black tea (blend of imported and Abkhazian varieties) in two packaging options: bagged and by weight. The production capacity of the enterprise is designed to produce 100 tons of products per month.

Sales market

Sales of products are planned in the territory of the Republic of Uzbekistan through large retail chains and distribution companies. According to the study (Chapter 3), the volume of the Uzbek tea market in 2023 is 45,000 tons. Thus, the project initiator plans to take 3% of the Uzbek tea market, which is an achievable result.

Socio-economic aspect of the project

An important social aspect of this project is the creation of new jobs. It is planned to provide jobs for 108 residents of the district. The total payroll will be $0.02665 million per month.

Type of project - new construction.

Terms and stages of the project, including the work performed on the project

The estimated part of the project is calculated for 11 years. Production of the first batches is scheduled to start in February 2025, and the design capacity will be reached by 2032.

The stages of project implementation are shown in the table:

Table 3.1 Project Implementation Schedule

Project Stage	Beginning works	Duration, days	End works
Rationale for the effectiveness of the project	01.04.2024	24	25.04.2024
Attracting financing	25.04.2024	36	31.05.2024
Construction and installation works at	01.06.2024	213	31.12.2024

construction of industrial buildings and facilities			
Acquisition and supply of production equipment (1st stage)	01.06.2024	213	31.12.2024
Development of packaging, logo, trademark	01.09.2024	121	31.12.2024
Attracting staff	01.10.2024	91	31.12.2024
Procurement of raw materials and components for the production of the first batch	01.12.2024	30	31.12.2024
Pre-commissioning commissioning, training of personnel	01.01.2025	30	31.01.2025
Start of production	01.02.2025	27	28.02.2025

** Dates are approximate and may be changed during the course of the Bank's decision.*

Source: Global Innovation Trade analysis and calculations

Baselines for the project

Table 3.2. Baselines for the project

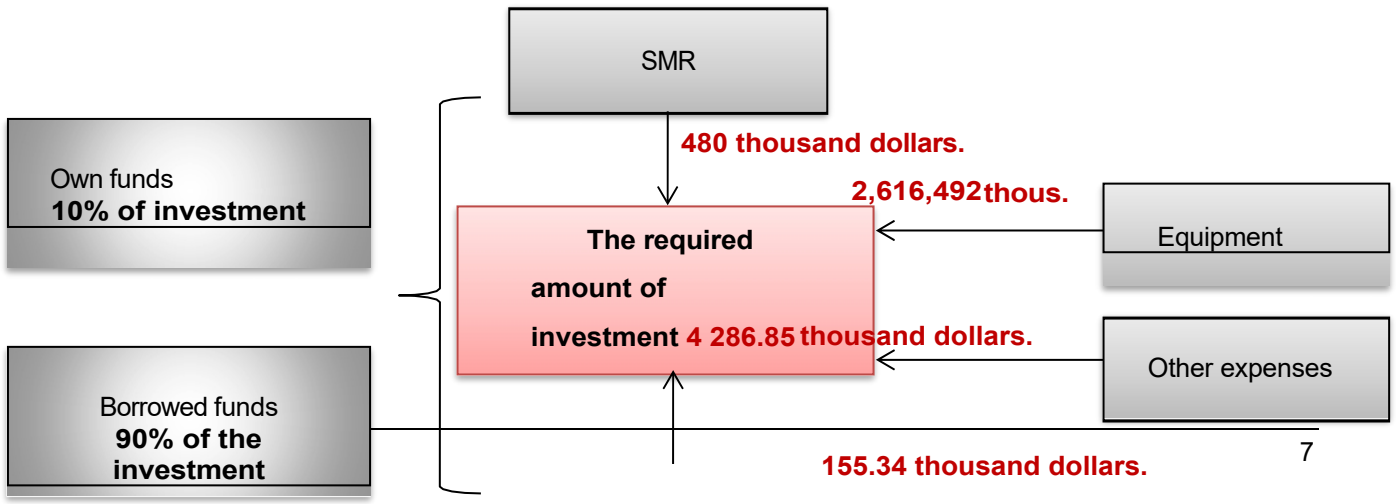
Indicator name	Value
Project start date	since funding
Planning horizon	11 years.
Planning Step	1 month
The main currency of settlement	thousand dollars.
Exchange rate USD/EUR	74.70 +5% (as of April 23, 2024)
Exchange rate USD/USD. U.S.	66.22 +5% (as of April 23, 2024)
Investor's investment (percentage of total investment amount)	10%
Borrowed funds (percentage of total investment amount)	90%

Source: Global Innovation Trade analysis and calculations

Investment in the project

The amount of capital expenditures for the implementation of the project is 4286.85 thousand dollars. Payback period of the project under consideration is about 6.6 years, taking into account discounting.

Figure 3.1 Required amount of investment



1,035,012 thousand dollars.

Coverage of the cache-flo deficit

Source: Global Innovation Trade calculations

Financing scheme

Financing for the project will be provided by 10% of its own funds or funds from a third-party investor, the remaining 90% of the amount will be borrowed at 10% per annum.

Borrowing is planned under the following assumed conditions:

- the amount of the loan agreement - $3,857.32 thousand;
- the lending rate is 10%;
- the term of the loan agreement is 9.0 years;
- deferral of interest payment - 20 months from the start of production;
- Deferral of payment of the principal amount - 36 months from the start of production.

The initiators of the project can also offer as collateral in the form of a production building and equipment.

Project performance indicators

The main financial indicators of the project are presented in the table: Table 3.3

Main financial indicators

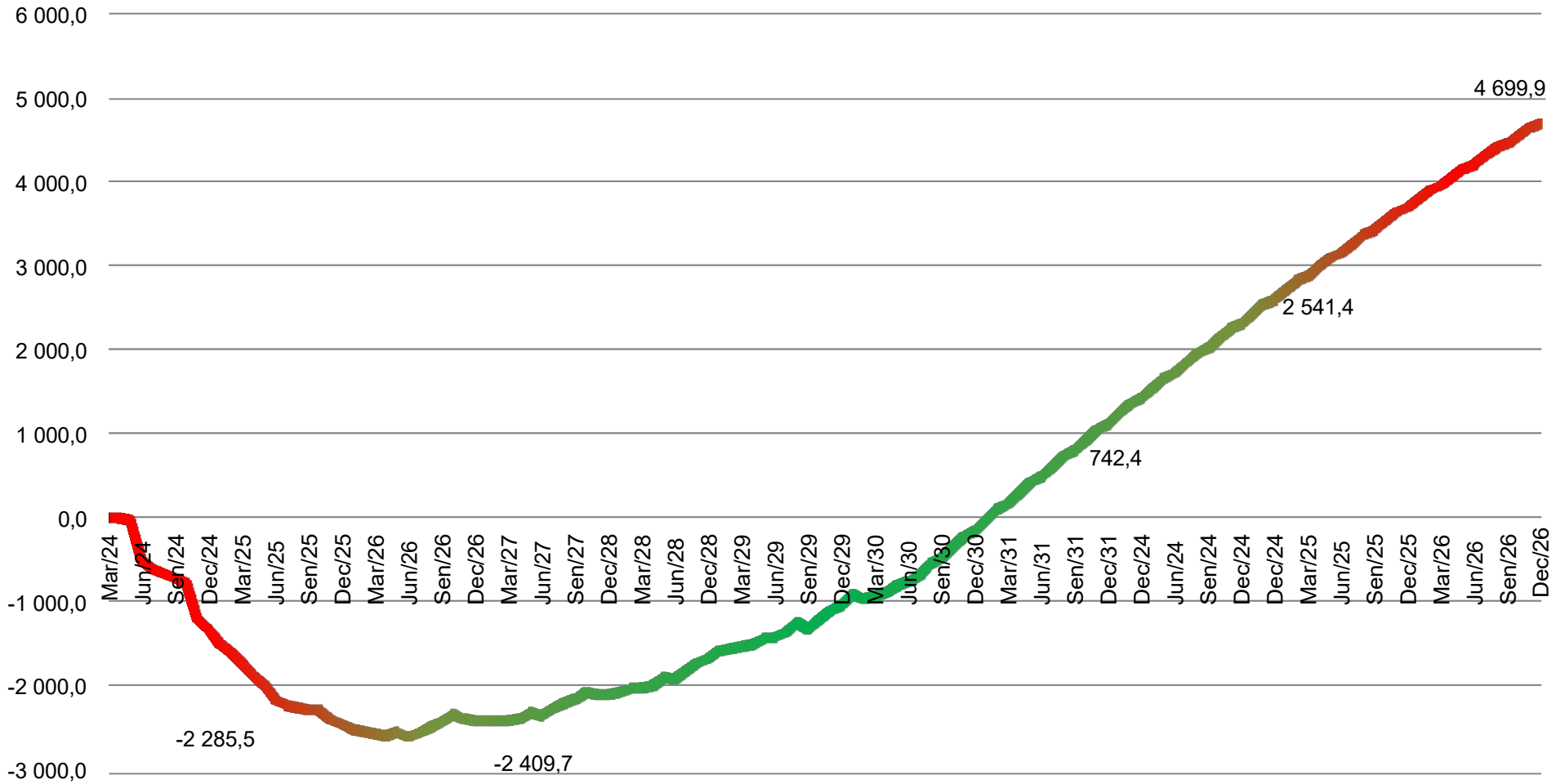
Investment performance indicators	Value
Calculation period (planning horizon), months.	132
Net income (NV), thousand dollars.	11 522
Net discounted income (NPV), thousand dollars.	4 700
Internal rate of return (IRR), % per year	29%
Profitability index (PI), units.	2,10
Payback period (PB), months.	73
Discounted payback period (DPB), months.	79
Investments in the project, thousand dollars.	4 287
Average return on sales for the project, %	24%
Net income (cumulative), thousand dollars.	13 697
Discount rate, %	9,22%

Source: Global Innovation Trade calculations

Figure 1.2 shows the graph NPV of the project by years of its implementation. The NPV graph shows an increase in the net present value of the project by years.

According to the study, it is clear that the project is profitable. The net discounted income of the project **in 2032 will be 4 699,88 thousand dollars.**

Figure 3.2 Graph of the NPV of the project



Source: Global Innovation Trade calculations

4. ESSENCE OF THE PROPOSED PROJECT

4.1 General description of the project

As part of this project it is planned to organize the production of packed tea under the brand name "Kamashinsky Tea".

Sales of products are planned in the territory of the Republic of Uzbekistan through distributors and through large retail chains.

The main production equipment of the tea-packing factory is a production line for packing tea of the German company Peter Binder GmbH at a total cost of $2,452,32 thousand. It is planned to equip the factory gradually over a six-year period as the brand awareness increases and the demand for the products grows.

4.2 Description of the products to be produced and packaging options

Home to Southwest China, Vietnam, Burma (Myanmar).

The word "tea" is of Chinese origin (from the Chinese "cha" - tea (drink), "chaye" - (in leaves) - and hence the Chinese name for tea - cha, and then the modern name of the ancestor country of tea in English - China, China.

Tea is an evergreen tree (or in culture, a shrub because of the constant plucking of young short shoots) that is sometimes referred to the genus Camellia.

Tea leaves are simple, entire, 5 to 15 cm long, alternate, oblong-elliptic, acuminate. Flowers large, up to 4 cm in diameter, white or yellowish, faintly scented, single or in groups of 2-3.

Tea is a heat and moisture-loving plant, but it can withstand short-term frosts even down to -12°C without snow cover.

Products offered for production

This project involves the production of bagged and weight black tea, which is a blend of imported varieties. The nomenclature of the manufactured products is presented in the table:

Table 4.1. The company's product range and production volumes

Company products	Packaging	Volumes production and month
Black tea bag	50 g (25 sachets of 2 g)	55t or 1,100,000 packs
Black tea by weight	100 г	45t or 450,000 packs

Source: Global Innovation Trade data

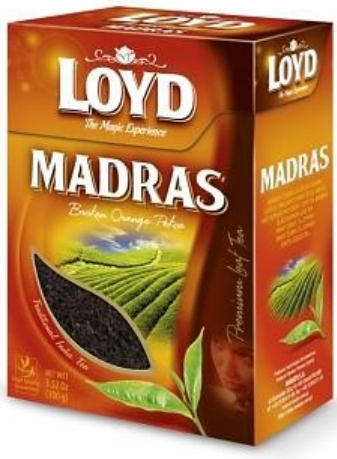
Bagged black tea is a small fraction of the tea leaf, packaged in bags of 2 grams, with a string and a label. One bag of bagged tea consists of 25 tea bags.

Figure 4.1. Appearance of bagged tea

Source: Global Innovation Trade data

Weighted black tea consists of large and medium-sized tea leaves, which are packed in bags of 100 grams. Each bag is packed in an individual cardboard box.

Figure 4.2. Example of weight tea packaging



Source: Google Images

Both teas are packed in cellophane film and placed in a corrugated box for transportation.

4.3 Project Location

The production site is located in Kashkadarya region, Kamashi district, Navoi village.

The district occupies an area of more than 2.66 thousand square kilometers. It is located 60 kilometers from Karshi city and 485 kilometers from Tashkent.

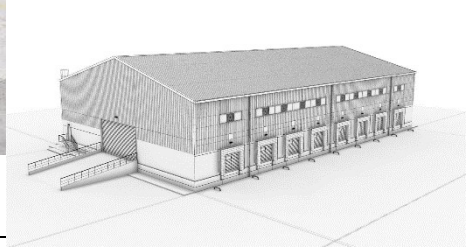
The district is connected to Karshi city by a road.

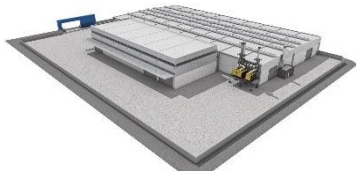
The population of the Kashkadarya region as of 2023 is 3.5 million people, and the population of the Kamashi region itself is 286,000.

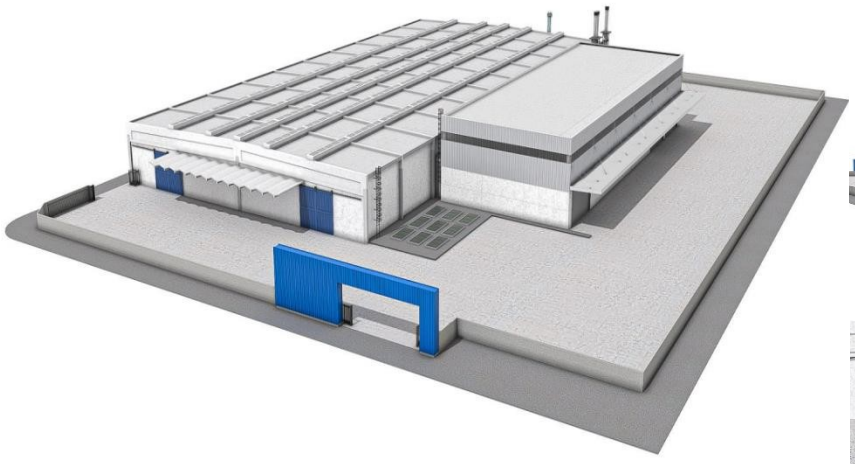
Figure 1 Project location

Figure 1 Production area

Production building







5. MARKETING PLAN

The culture and rules of tea drinking. Local tea traditions and customs

Tea in Central Asia is more than just a thirst-quenching beverage. It is an "item" of prime necessity! Tea is used to open and end any meal, to welcome guests, during the day and between meals, tea can be served as a "separate dish," and it is always brewed fresh each time. "Brewed once, thickly and for a whole week, adding only boiling water" is not about Central Asia, they just don't understand HOW you can live like that. There is not a day that passes in a Central Asian family without tea (if it is the days of Lent, the consumption of tea is more than made up for at night).

Tea is drunk from the national dish - pila (emphasis on the last syllable and never "pialushka" or "piala").

It is customary to treat every guest with tea. Almost every native inhabitant of Central Asia, even regardless of nationality, has it in the blood: the guest came and immediately put a freshly brewed kettle of tea and a bowl (piala) in front of him. It is also considered impolite to refuse tea. One more tea caddy than the number of guests is served together with the teapot. The extra pile is used for kaitar. Kaitar (from the verb "kaitmok" -

"The tea is poured into the teapot and then poured back into the teapot, three times in succession. The stirring is very effective. To the tea serve a variety of colorful oriental sweets, fruits and, of course, tortillas.

If you come to a guest and you are served a cup with a little less than half of tea in it, do not be surprised and do not think that the host is being greedy - it is supposed to be so that the guest can drink hot tea and not burn himself all the time during the conversation. You will agree that during the conversation the tea in the cup cools down quickly and becomes rather unlovely, but according to etiquette you have to finish it. And this is convenient: the conversation is not

The tea is always hot, so your lips don't get burned by too much boiling water. So if you happen to be a tea man (someone who pours tea bowls), remember this obligatory rule of tea drinking - pour no more than half a bowl of tea (it is called "with respect" by the people). If you suddenly pour a full bowl of scalding tea, the person may be offended. The teahousekeeper takes each pialla in his hands,

fills it and serves it to the guest. There are no special rules for holding a tea bowl, so you can drink as your hand and your soul desire. When guests come, tea is poured by the daughter-in-law or the hostess (if there is no daughter-in-law) - if it is a woman's tea party. In a gathering of men, tea is poured by the master of the house, but in a teahouse, tea should be poured by the youngest in the company.

Different regions of Central Asia like different teas. For example, in Tashkent people drink mostly green tea, while in Almaty they prefer black tea with milk. There are many more nuances of this kind in hot Asia, but one thing is constant: tea is a favorite drink here!

Tea drinking during chilli is especially relevant. Chilli´s are the 40 hottest days of summer, from late June to August 5-10. These are the days when the thermometer easily flies over the +40 ° C mark and bravely strives further upwards. For a person unaccustomed to it it is quite difficult to bear.

Therefore, it is advisable to avoid going outside in the afternoon and drink as much hot green tea as possible.

Tea has been a favorite beverage in the East since ancient times. It was transported along the Great Silk Road, and given that the delivery of such valuable tea took a long time, the price for many varieties was enormous. As an alternative to natural tea, people had dried herbs, various roots and leaves in loose and compressed (brick tea) form.

Global tea history reforms in Central Asia began in the second half of the nineteenth century (after 1865) - after the formation of the Turkestan Governorate General and colonization of Central Asia. The Russian Empire had its own economic plans in these territories, so for most countries that exported tea to Central Asia, especially Indian tea, the conditions were as tight as possible. It is also interesting that those varieties of tea which were consumed in Central Asia were not known or consumed in Russia before the colonization of the Turkestan region. Basically, it was Chinese, Indian green tea and Indian black tea, while in Russia the Slavs have been using Ivan-tea since ancient times. Most of all green tea "took root", it was available to any segment of the population. For example, a copper jug of green tea at the end of In the 19th century, it cost one kopek. Green tea was good in the heat, so it took its rightful place as the national drink in Central Asia.

Tea in all countries of the world has had a long history of development. The ways of growing and drying, the development of varieties, the technologies of brewing tea - everything is gradually changing with the course of progress and time.

The main place for resting and drinking tea in Central Asia has been the teahouse since ancient times. Sanitary control legalized the prohibition of reuse of brewed tea, so tea in a teahouse was and is served only fresh.

The way tea was brewed in past centuries is also curious. Tea was boiled directly in teapots or cauldrons, milk and butter were added, and salt and pepper were seasoned with it all. Given that it was crawling with visitors all year round, it must have been quite tasty. Various sweets and cakes were served with the tea. Dear guests of Central Asia! Make sure to visit our authentic teahouse where you can not only sit on a stomping ground at dastarkhan with oriental sweets, gifts of nature and a small bowl of hot green tea, but also understand the true meaning of the tradition of leisurely tea drinking in the East! Just over a cup of hot tea it is better to have a long heart-to-heart talk and solve the main issues of life.

Import

In January-September 2022, Uzbekistan imported 23.6 thousand tons of tea from 24 foreign countries for $ 31.9 million.

Imports of tea decreased by 8.6 thousand tons compared to the corresponding period of 2021.

Countries to which Uzbekistan imported the most tea in 9 months of 2022:

China - 19,700 tons

Kenya - 1,200 tons

Iran - 614 tons India - 439 tons

Indonesia - 378 tons

Sri Lanka - 334 tons

Russia - 258 tons

UAE - 190 tons

All tea consumed in Uzbekistan is imported. The main suppliers of tea to Uzbekistan are: China, Georgia, Sri Lanka, Iran, and the Russian Federation. The most powerful tea factories and offices of the largest tea suppliers to Uzbekistan are located in Tashkent and Samarkand; regional companies located in large cities are distributors of well-known firms. More than 200 varieties and brands of tea are present in the local market. The leading positions in the Uzbek tea market are now occupied by such brands as Ahmad, Impra, Alokozai-ti, Beta, Beta, Weston and Tashkent (the last three brands are packaged in Uzbekistan).

Доля в экспорте 2021	Доля в импорте 2021	Объем экспорта 2021	Объем импорта 2021
0.00% Rank 96	0.61% Rank 37	45.77K KGs 1Y -65.84%	2.99M KGs 1Y -90.49%

Общая информация | Поиск источников поставок | Новости и инсайты | Аналитика и отчеты | Справочники Tridge | Данные по ценам | Данные по э

Травяной чай (Узбекистан): общая информация по рынку

Травяной чай (Узбекистан): общий стоимостной объём импорта/экспорта и обзор данных по ценам и производству.

Изменение оптовых цен	Общая стоимость экспорта	Общая стоимость импорта	Общий объем производства
-	в 2021 г. +286.30K USD Занимает 0th-е место по экспорту в мире с долей 0% 1Y +45.37% 3Y +451.56% 5Y +587.27%	в 2021 г. +43.03M USD Занимает 0th-е место по импорту в мире с долей 0% 1Y +1.46% 3Y -10.10% 5Y -4.00%	в 2020 г. -

Травяной чай: экспорт из страны Узбекистан

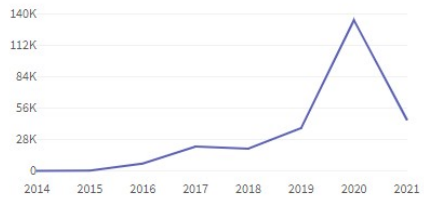
Знакомьтесь с данными по экспорту товара «Травяной чай» (страна-экспортёр — Узбекистан): стоимостной и физический объём экспорта, данные по ценам, тенденции и многое другое. Нижеприведённая информация подобрана на основе кода ГС 0902 (Tea).

Стоимость экспорта in 2021

$286.3K
USD
1Y +45.37%
3Y +451.56%
5Y +587.27%

Объем экспорта in 2021

45.8K
KGs
1Y -65.84%
3Y +129.92%
5Y +585.53%

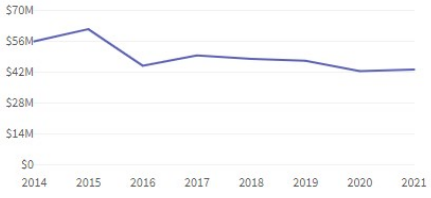


Травяной чай: импорт в страну Узбекистан

Знакомьтесь с данными по импорту товара «Травяной чай» (страна-импортёр — Узбекистан): стоимостной и физический объём импорта, данные по ценам, тенденции и многое другое. Нижеприведённая информация подобрана на основе кода ГС 0902 (Tea).

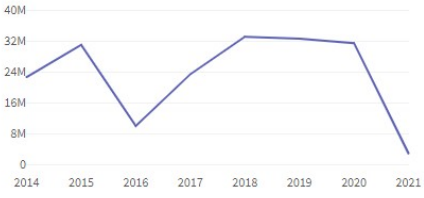
Стоимость импорта in 2021

$43.0M
USD
1Y +1.46%
3Y -10.10%
5Y -4.00%



Объем импорта in 2021

3.0M
KGs
1Y -90.49%
3Y -90.96%
5Y -70.28%



Зеленый чай (рассыпной) (Узбекистан): общая информация по рынку

Зеленый чай (рассыпной) (Узбекистан): общий стоимостной объём импорта/экспорта и обзор данных по ценам и производству.

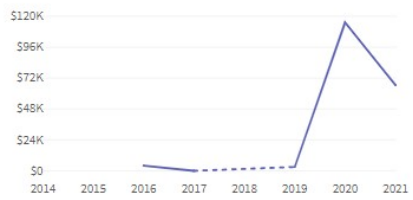
Изменение оптовых цен	Общая стоимость экспорта	Общая стоимость импорта	Общий объем производства
-	в 2021 г. **+66.41K** USD Занимает 0th-е место по экспорту в мире с долей 0% 1Y -42.15% 3Y - 5Y +1576.99%	в 2021 г. **+28.96M** USD Занимает 0th-е место по импорту в мире с долей 0% 1Y +6.07% 3Y -16.74% 5Y -6.44%	в 2020 г. -

Зеленый чай (рассыпной): экспорт из страны Узбекистан

Знакомьтесь с данными по экспорту товара «Зеленый чай (рассыпной)» (страна-экспортёр — Узбекистан): стоимостной и физический объём экспорта, данные по ценам, тенденции и многое другое. Нижеприведённая информация подобрана на основе кода ГС 090220 (Tea, green; (not fermented), in immediate packings of a content exceeding 3kg).

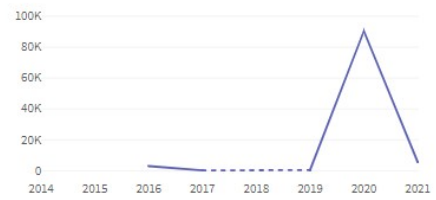
Стоимость экспорта in 2021

$66.4K
USD
1Y -42.15%
3Y -
5Y +1576.99%



Объем экспорта in 2021

5.7K
KGs
1Y -93.65%
3Y -
5Y +84.74%



Зеленый чай (рассыпной): импорт в страну Узбекистан

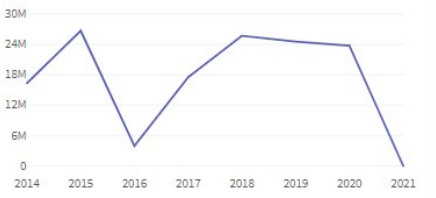
Знакомьтесь с данными по импорту товара «Зеленый чай (рассыпной)» (страна-импортёр — Узбекистан): стоимостной и физический объём импорта, данные по ценам, тенденции и многое другое. Нижеприведённая информация подобрана на основе кода ГС 090220 (Tea, green; (not fermented), in immediate packings of a content exceeding 3kg).

Стоимость импорта in 2021

$29.0M
USD
1Y +6.07%
3Y -16.74%
5Y -6.44%

Объем импорта in 2021

19.2K
KGs
1Y -99.92%
3Y -99.92%
5Y -99.51%



According to preliminary data of the Uzbek Statistics Agency, in January-February, Uzbekistan imported 6.7 thousand tons of tea from 23 countries worth $9.8 million.

The main supplier of brew to the Uzbek market is China, from which 5 thousand tons have been received since the beginning of the year. The second and third largest importers are Iran (568.7 tons) and Kenya (490 tons). As for the beloved by many Indian tea, only 221 tons were imported to the local market. The invigorating fragrant drink in the country is being drunk more and more, as evidenced by increasing imports. This year they increased by 1.6 thousand tons against last year's figures.

Industry outlook

In four regions of the country - Navoi, Tashkent, Jizzakh and Surkhandarya will be created industrial plantations for the cultivation of tea with a total area of 283 hectares, which by 2025 will produce 189 tons of tea annually.

To organize this work in the country, a Scientific and Production Center for the development of tea production will be created. Its founders will be Uzbekozikovkatholding, Vau Tea Group, BMV Trade Group, as well as farmers engaged in tea production.

This structure will organize the procurement of seeds and seedlings of tea, providing them to farms and entrepreneurs, the development of cultivation technology of this culture, taking into account climatic and other conditions of the republic, the creation of industrial tea plantations, a consistent increase in the harvest of tea products.

In addition, it will be responsible for introducing modern lines of industrial processing and packaging of tea products, developing systems to maintain high quality products and marketing to bring them to foreign markets, maintaining contacts with global tea producers to share experiences and attract modern proven technologies of tea and tea products.

Among the first steps of the new center is the creation, together with "Uzbekozikovkatholding" enterprise for the production of tea and tea products in the Zaamin district of Jizzakh region.

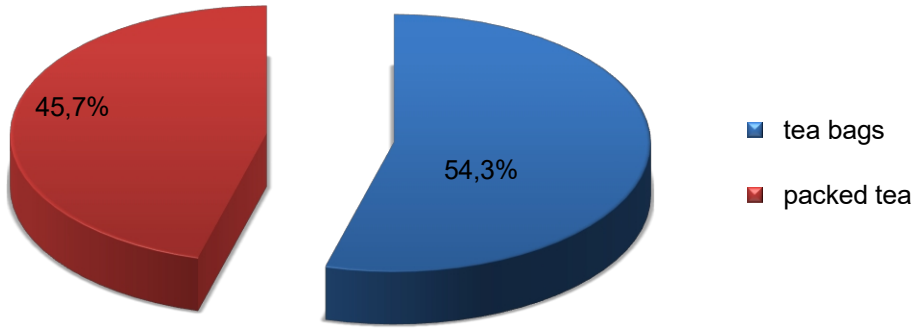
5.1 Consumer analysis. Consumer segmentation

Consumer preferences have changed little over the past 5-7 years.

According to the study, the share of tea consumers in Uzbekistan over the past few years has remained stable at 93-94%. The undisputed leader is green tea (86% of Uzbeks drink it). About one in ten Uzbeks drinks green tea more often, and it is more typical for people with higher education or academic degrees, as well as for women. Herbal teas are less preferred by Uzbeks - only 1% of category consumers choose them.

The most preferred in terms of packaging for the consumer is bagged tea - it is chosen by 54.3%.

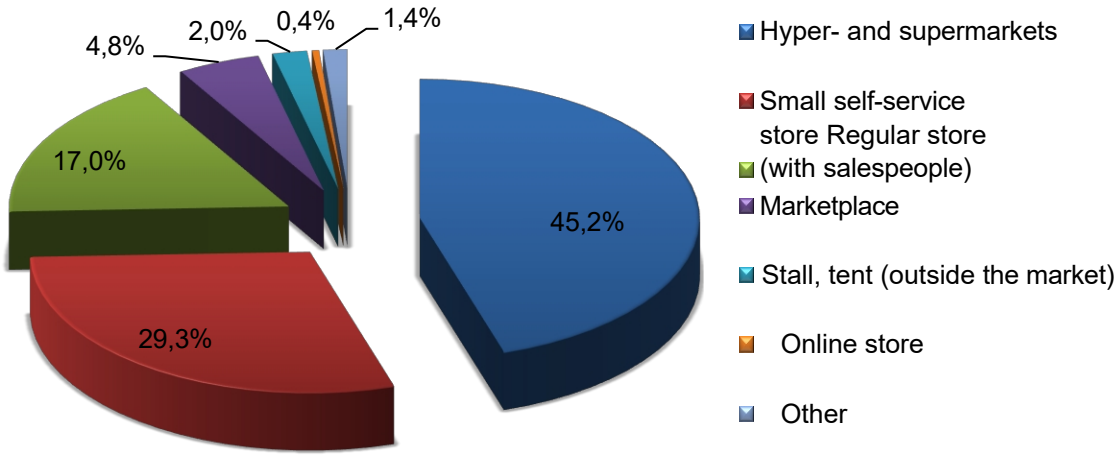
Figure 5.1. Consumer preferences by types of packaging, %



Source: Global Innovation Trade data

As a place of purchase, the largest share belongs to hypermarkets/supermarkets, and this share has been consistently increasing over the past five years (which, however, is typical for most products). The share of other places of purchase is gradually decreasing. Only 0.4% of the population buys tea on the Internet.

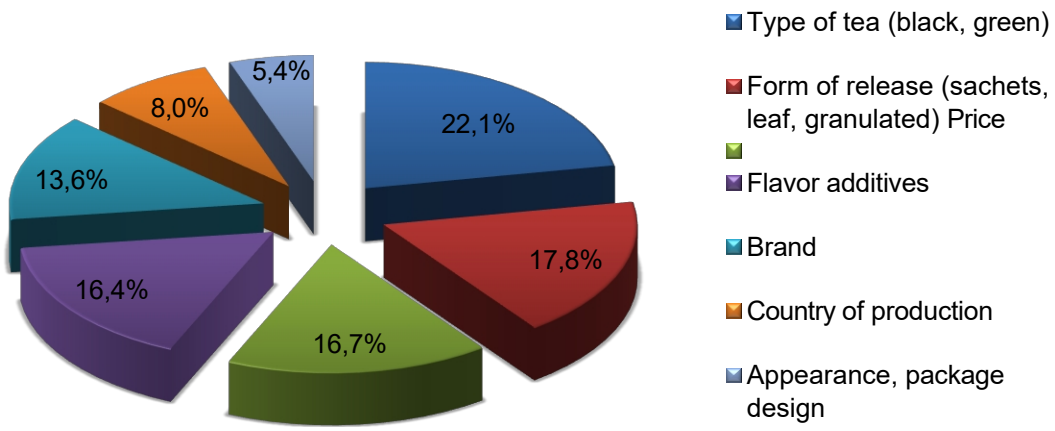
Figure 5.2. Places to buy tea, %



Among the main criteria for the choice of tea buyers were the following:

- Type of tea: black, green;
- Form of release: sachets, leaf, granulated;
- Price;
- Flavor additives;
- Brand;
- Country of manufacture;
- Appearance, package design.

Figure 5.3. Main criteria of tea choice by end consumers, %



Among the tea selection criteria that consumers cite as the most important, the type of tea, the form of release, and the price are the most important. These are closely followed by the availability of flavors and the brand of tea. The country of manufacture and packaging design are not as important in the choice.

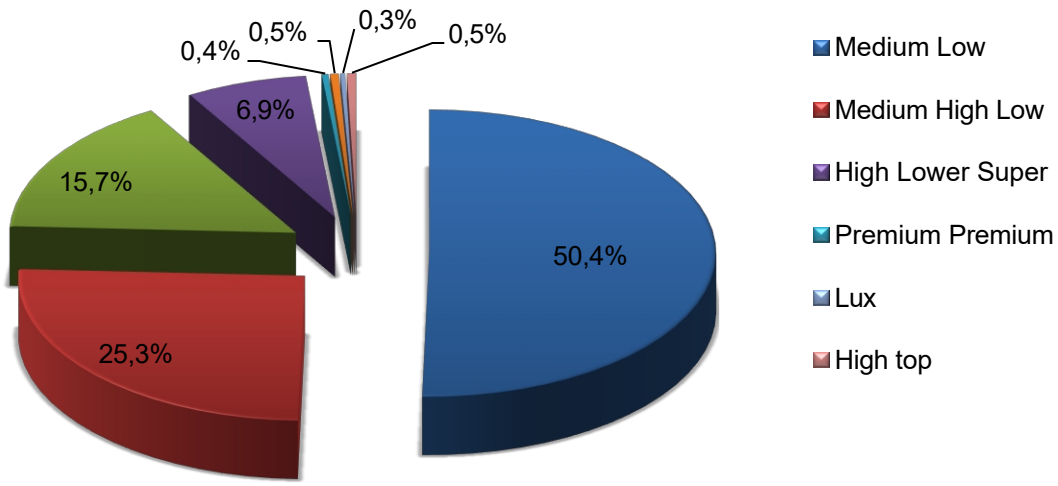
5.2 Product pricing

There are eight price segments in the tea market (meaning retail prices):

1. Low: $150-500/kg;
2. Average Lower: $500-1,000/kg;
3. Medium High: $1,000-1,500/kg;
4. High bottom: $1,500-2,000/kg;
5. High top: $2,000-2,500/kg;
6. Lux: $2,500-3,000/kg;
7. Premium: $3,000-3,500/kg;
8. Superpremium: $3,500/kg and up.

The shares in retail sales of tea of different price segments are presented in the table:

Figure 5.4. Structure of tea consumption by price segments in physical terms, %



Source: competitive intelligence

Thus, the greatest demand is for tea from the average lower price segment ($500-$1,000/kg).

Distribution of tea brands by price segment is presented in Annexes 9.1.

6. ORGANIZATIONAL PLAN

6.1 Personnel plan

To form a staffing schedule of the tea-sanding factory the following parameters were analyzed: the concept of the project, anticipated production volumes, basic and auxiliary operations and business processes. As a result, the following structural units were formed in the staffing table:

- Administrative and managerial staff;
- Production shift;
- Warehouse Staff;
- Additional employees.

In the calculation part of the business plan was formed by the plan FTE based on the condition of the departments belonging to the above-mentioned structural units.

Table 6.1. Formation of payroll and staff schedule of the enterprise, thous.

№	Job title	Quantity	Salary of one employee, thous. USD/month	Total payroll labor(months), thousand dollars.
1	**Administrative staff**	**15**	**0,0**	**5,7**
1.1	Director	1	0,7	0,7
1.2	Chief Accountant	1	0,5	0,5
1.3	Specialist in preparation of primary documents	4	0,2	1,0
1.4	Purchasing Manager	2	0,4	0,8
1.5	Logistics Manager	2	0,4	0,8
1.6	Head of Sales	1	0,6	0,6
1.7	Sales Manager	4	0,3	1,2
2	**Production shift**	**40**	**0,0**	**10,7**
2.1	Head of Production	1	0,4	0,4
2.2	Technologist	3	0,4	1,3
2.3	Laboratory Technician	6	0,3	1,8
2.4	Packers (before the purchase of the automatic line)	18	0,2	4,3
2.5	Handymen (loaders)	12	0,2	2,9
3	**Personnel at the warehouse of raw materials and components**	**15**	**0,0**	**3,3**
3.1	Warehouse manager	2	0,3	0,6
3.2	Carpenter	5	0,2	1,0
3.3	Loader	8	0,2	1,6
4	**Personnel at the finished product warehouse**	**16**	**0,0**	**3,4**
4.1	Warehouse manager	1	0,3	0,3
4.2	Carrier/loader	5	0,2	1,0
4.3	Loader	10	0,2	2,0
5	**Additional employees**	**22**	**0,0**	**3,7**

5.1	The Mechanic	4	0,2	1,0
5.2	Cleaner of office and common premises	9	0,1	1,1
5.3	Security Guard	9	0,2	1,6
Total		**108**	**0,0**	**26,7**

Source: Global Innovation Trade analysis and calculations

Thus, with the total staff of the organization 108 people, the monthly payroll turned out to be equal to **26.7 thousand dollars.** Production will be organized in 3 shifts.

6.2 Work schedule for the project

The stages of project implementation are shown in the table:

Table 6.2 Project Implementation Schedule

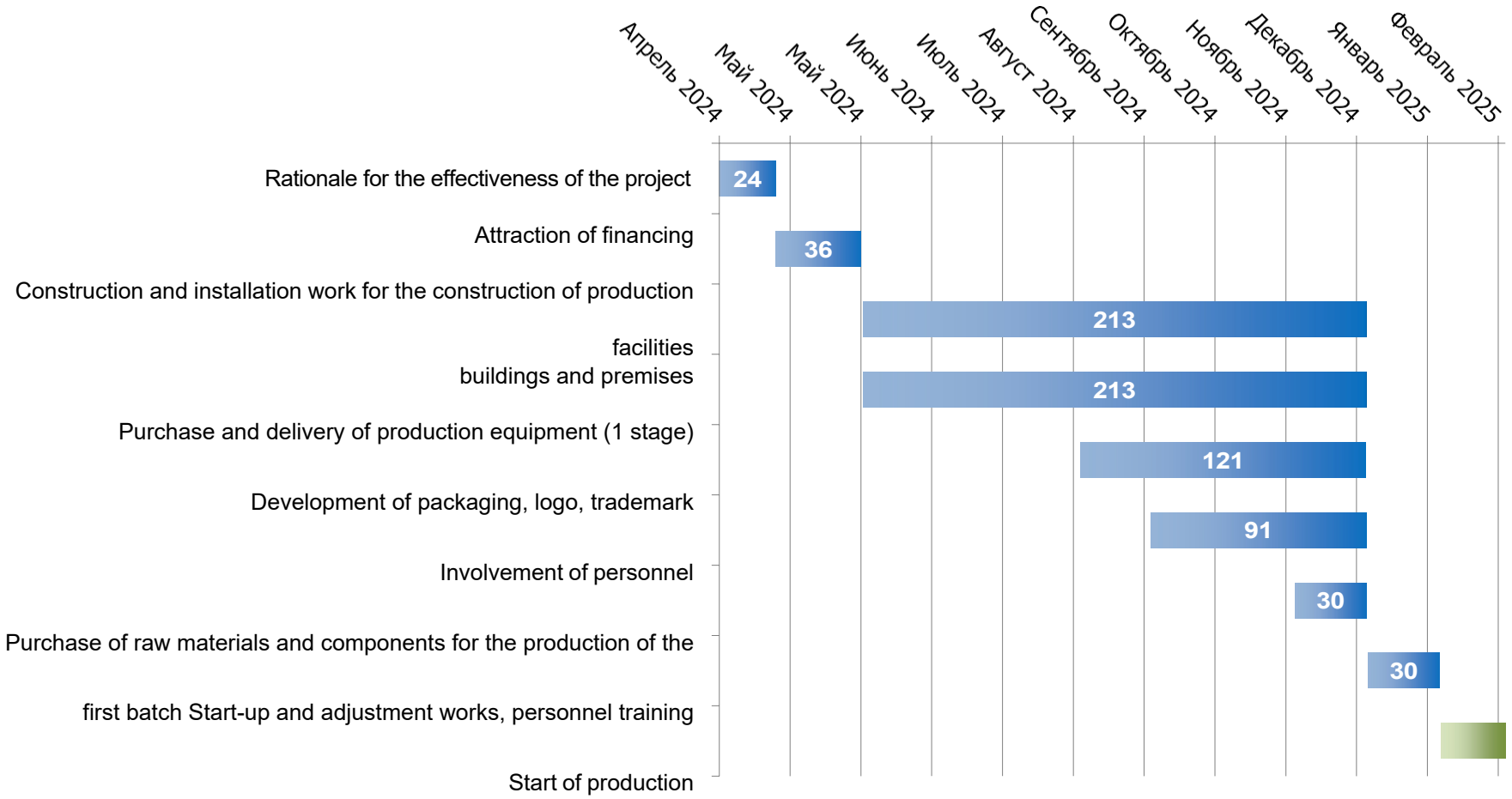
Project Stage	Beginning works	Duration, days	End works
Rationale for the effectiveness of the project	01.04.2024	24	25.04.2024
Attracting financing	25.04.2024	36	31.05.2024
Construction and installation work on construction of industrial buildings and facilities	01.06.2024	213	31.12.2024
Acquisition and delivery of production equipment (1st stage)	01.06.2024	213	31.12.2024
Development of packaging, logo, trademark	01.09.2024	121	31.12.2024
Attracting staff	01.10.2024	91	31.12.2024
Purchase of raw materials and components for the production of the first batch	01.12.2024	30	31.12.2024
Pre-commissioning, personnel training	01.01.2025	30	31.01.2025
Start of production	01.02.2025	27	28.02.2025

** Dates are approximate and may be changed during the course of the Bank's decision.*

Source: Global Innovation Trade analysis and calculations

The project implementation schedule in graphical form is shown in the figure:

Figure 6.1. Project implementation schedule



Thus, the start of operation of the tea-weaving factory is scheduled for February 2017.

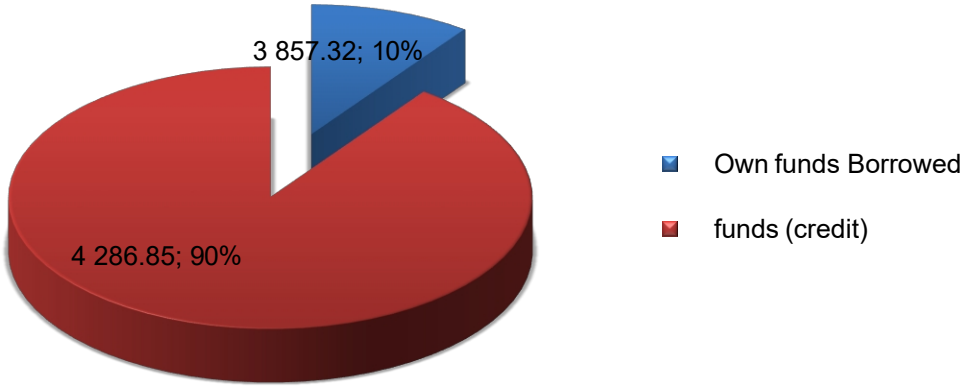
6.3 Sources, forms and conditions of financing

The capital costs of the project will be **$4,286,85 thousand.**

The project is financed by own and borrowed funds. Own funds make up 10% of investments, to the amount of 429.51 thousand dollars. The amount of borrowed funds is 90% of investments or $3,857.32 thou.

Below is the structure of project financing: Figure 6.2.

Structure of project financing, %



Source: Global Innovation Trade analysis and calculations

Own funds will be used to cover the following investment costs: Table 6.3. Structure of investment of own funds, thous.

Structure of investment of own funds	**Amount, Thousands dollars.**
Justification of project financial efficiency, preparation of a business plan	1,2
Project works	60
Construction and installation work	12
Initial purchase of raw materials (including delivery)	29,58
Initial purchase of components (including delivery)	9,36
Website development	1,2
Initial marketing costs (development of packaging, logo, trademark)	24
Office equipment (furniture, office equipment)	30
Procurement of raw materials with a 14% stake through April 2018.	262,176
Total	**429,516**

Source: Global Innovation Trade analysis and calculations

The interest rate on the loan is 10.00%. Borrowed funds are a 9-year credit line with a deferred interest payment for 20 months after production start-up and the debt body for 36 months after production start-up.

Table 6.4. Schedule of credit payments

Indicator	2026											
	Jan.26	Feb.26	mar.26	Apr.26	May.26	Jun 26	July 26.	Aug 26	sen.26	Oct. 26	Nov. 26	Dec. 26
Payment of interest on the loan											31,60	31,31
Payment of the main body of the debt												
Total loan payment											**31,60**	**31,31**

Indicator	2027											
	Jan.27	fev.27	mar.27	Apr.27	May.27	Jun.27	July 27.	Aug. 27	sen.27	Oct. 27	Nov.27	Dec. 27
Payment of interest on the loan	31,03	30,74	30,45	30,15	29,86	29,56	29,26	28,95	28,65	28,34	28,03	27,71
Payment of the main body of the debt												
Total loan payment	**31,03**	**30,74**	**30,45**	**30,15**	**29,86**	**29,56**	**29,26**	**28,95**	**28,65**	**28,34**	**28,03**	**27,71**

Indicator	2028											
	Jan.28	Feb.28	mar.28	Apr.28	May.28	Jun.28	July 28.	Aug.28	sen.28	Oct. 28	Nov.28	Dec. 28
Payment of interest on the loan	27,39	27,08	26,75	26,43	26,10	25,77	25,44	25,10	24,76	24,42	24,08	23,73
Payment of the main body of the debt		77,37	45,87	46,25	46,63	47,02	47,41	47,81	48,21	48,61	49,01	49,42
Total loan payment	**27,39**	**104,44**	**72,62**	**72,68**	**72,73**	**72,79**	**72,85**	**72,91**	**72,97**	**73,03**	**73,09**	**73,15**

Indicator	2029											
	Jan.29	fev.29	mar.29	Apr.29	May.29	June 29	July 29.	Aug. 29	sen.29	Oct. 29	Nov. 29	Dec. 29
Payment of interest on the loan	23,38	23,03	22,67	22,32	21,95	21,59	21,22	20,85	20,48	20,10	19,72	19,34
Payment of the main body of the debt	49,83	50,25	50,67	51,09	51,52	51,95	52,38	52,81	53,25	53,70	54,15	54,60
Total loan payment	**73,22**	**73,28**	**73,34**	**73,41**	**73,47**	**73,53**	**73,60**	**73,67**	**73,73**	**73,80**	**73,87**	**73,93**

Indicator	2030											
	Jan.30	fev.30	mar.30	Apr.30	May.30	Jun 30	July 30	Aug 30	sen.30	Oct. 30	Nov. 30	Dec. 30
Payment of interest on the loan	18,95	18,56	18,17	17,77	17,37	16,97	16,56	16,15	15,74	15,32	14,90	14,48
Payment of the main body of the debt	55,05	55,51	55,97	56,44	56,91	57,38	57,86	58,35	58,83	59,32	59,82	60,31
Total loan payment	**74,00**	**74,07**	**74,14**	**74,21**	**74,28**	**74,35**	**74,43**	**74,50**	**74,57**	**74,65**	**74,72**	**74,80**

Indicator	2031											
	Jan.31	Feb.31	mar.31	Apr.31	May.31	Jun.31	July 31	Aug. 31	sen.31	Oct.31	Nov.31	Dec. 31
Payment of interest on the loan	14,05	13,62	13,19	12,75	12,31	11,87	11,42	10,97	10,51	10,05	9,59	9,12
Payment of the main body of the debt	60,82	61,32	61,83	62,35	62,87	63,39	63,92	64,45	64,99	65,53	66,08	66,63
Total loan payment	**74,87**	**74,95**	**75,03**	**75,10**	**75,18**	**75,26**	**75,34**	**75,42**	**75,50**	**75,58**	**75,66**	**75,75**

Indicator	2032											
	Jan.32	fev.32	mar.32	Apr.32	May.32	Jun.32	July 32	Aug.32	sen.32	Oct. 32	Nov.32	Dec. 32
Payment of interest on the loan	8,65	8,17	7,69	7,21	6,72	6,23	5,73	5,23	4,73	4,22	3,71	3,19
Payment of the main body of the debt	67,19	67,75	68,31	68,88	69,45	70,03	70,62	71,20	71,80	72,40	73,00	73,61
Total loan payment	**75,83**	**75,92**	**76,00**	**76,09**	**76,17**	**76,26**	**76,35**	**76,44**	**76,53**	**76,62**	**76,71**	**76,80**

Indicator	2033											
	Jan.33	Feb.33	mar.33	Apr.33	May.33	June 33	July 33	Aug.33	sen.33	Oct. 33	Nov.33	Dec. 33
Payment of interest on the loan	2,67	2,15	1,62	1,08	0,54							
Payment of the main body of the debt	74,22	74,84	75,46	76,09	76,73							
Total loan payment	**76,89**	**76,98**	**77,08**	**77,17**	**77,27**							

Source: Global Innovation Trade analysis and calculations

6.4 Product quality control

The quality of tea to a large extent depends on how well the titrer of the tea mixing factory chooses the quality indices of the individual tea components intended for inclusion in the commercial mixture. In order to comprehensively take into account all features of tea quality, the factory titrer checks the quality of each brand separately, assessing by tasting its qualitative indicators according to the following indicators:

- organoleptic;
- physical and chemical;
- safety;
- microbiological.

Organoleptic indicators of tea quality include: appearance (cleaning), brightness, transparency and intensity of infusion, taste and aroma, color of brewed leaf.

Organoleptic indicators are the most important in determining the commercial grade of tea. On the basis of their analysis you can judge the origin of tea, the quality of raw materials, compliance with production technology and storage.

Physico-chemical indicators of tea quality include the following:

- mass fraction of moisture;
- mass fraction of water-soluble extractive substances;
- mass fraction of metallomagnetic impurity;
- mass fraction of total ash;
- mass fraction of water-soluble ash;
- mass fraction of crude fiber;
- mass fraction of fines.

Tea is a hygroscopic food product, that is why its mass fraction of moisture is regulated. Its content depends on the type of tea packaging: in non-packaged tea the amount of moisture should be less than in packaged tea and should not exceed 7%.

Extractive substances are an important indicator of tea quality. They include water-soluble components of tea - caffeine, tannins, nitrogenous substances, carbohydrates, minerals. Mass fraction of extractive substances depends on the commercial grade of tea: the higher the grade, the higher their content.

The mass fraction of total ash as well as water-soluble ash characterizes the amount of minerals in tea and does not depend on the commercial grade of tea, but is determined by the quality of raw materials.

Mass fraction of crude fiber also characterizes the quality of raw materials used. It also depends on the variety, but it is set to a maximum content of 19% for both prepackaged and loose black tea.

Safety indicators. From the indicators of safety the content of toxic elements - lead, arsenic, cadmium, copper, radionuclides - cesium-137 and strontium-90, as well a s microbiological indicators - mold is normalized in tea.

Tea quality assessment

Even by the appearance of the tea one can judge its quality to a certain extent. This indicator is taken into account by titters along with taste, aroma, and color of the brewed leaf.

If the organoleptic properties of tea correspond to a certain level of quality (grade), the study of physical and chemical parameters is not necessary. However, in the case of disagreement with the supplier in assessing the quality (grade), and, accordingly, the price, such research is necessary.

During the organoleptic analysis of the average tea sample is taken from a sample of 100 grams and poured a thin layer on a sheet of white paper.

The appearance (cleaning) of dry tea is determined by examining it under daylight diffused light or bright artificial light.

When determining the appearance of dry tea, attention is paid to the color, evenness, uniformity and curl of teas. For example, when analyzing loose tea, you should pay attention to the content of golden hairs of the wood, uncurled leaf blades and other inclusions. The presence of gold and silver tips indicates that the tea is made from delicate, high-quality raw materials. When properly processed, the unopened buds of the tea plant turn a light golden color when dried. The presence of petioles (red stems) or wood fibers in the tea indicates that the tea is made from bad raw material and is poorly sorted. The more stalks or wood fibers, the lower the quality.

No extraneous impurities are allowed in the tea: products clogged with extraneous ingredients are considered defective.

Scale of evaluation of organoleptic properties of tea

Organoleptic properties of tea are determined by experts in the field of tasting assessment - titetasters, using a 10-point scale. On this scale, the lowest-grade teas are rated at 1.5 points and the highest-grade ones at 5.5 points and higher. A rating of 9 to 10 is still considered unattainable. The highest quality teas, called Unique, such as the best varieties of Indian Darjeeling or Ceylon Nur Eli, are rarely given a score of 8 for their unique flavor characteristics. In contrast, the ordinary superior factory teas score much lower at 5.25-6.25.

6.5 Required approvals and certificates

In the standardization system, the term tea refers to the products used in the process of making a beverage. Such a product is made from the leaves of the tea bush, which are grown on special plantations.

According to a special government decree, tea is included in the list of products that are subject to mandatory declaration of conformity. In cases where an organization carries out only packaging of finished tea, the obligation of certification of products lies with the producer. If, on the other hand, the organization exposes raw materials to some technological actions or blending before packing, it draws up a special certificate of conformity for tea and all the documents for this product.

Standards

Since tea belongs to the category of foodstuffs, there is a strict control procedure for it.

Sanitary and epidemiological conclusion

For all these types and varieties of tea, it is mandatory to issue a hygienic certificate for tea - the sanitary-epidemiological certificate (SEZ). sanitary-epidemiological certificates for products are abolished, and instead they are introduced a certificate of state registration of products.

Voluntary certificate

Voluntary certificate for tea is a permissive document, which guarantees that the products fully meet all the requirements and standards that are in force on the territory of the UZR. The control procedure is regulated by the legal framework of our country.

The manufacturer or seller can issue a certificate on a voluntary basis. The value of this authorization document is that it expands the information about the quality and safety of this product. As a result of certification, the confidence of buyers in the product increases, and thus its competitiveness.

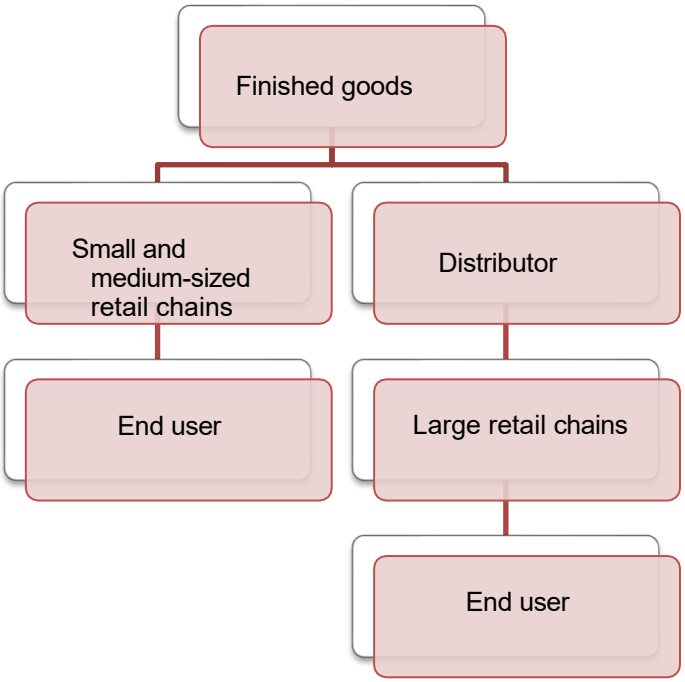
Certificate of state registration of products

For all food products, as well as for tea, the legislation provides for mandatory state registration procedure. Such control is carried out in bodies having accreditation. The state registration certificate guarantees compliance of products with sanitary and epidemiological norms.

6.6 Product realization scheme

The company plans to use indirect distribution channels, i.e. sales of products are planned through secondary distribution channels. Russian distributors and retail chains will be the main intermediaries of the tea factory.

Figure 6.3. Scheme of product sales by the tea packing factory



Source: Global Innovation Trade analysis

Due to the wide popularity of hyper- and supermarkets among the population to make purchases the main channel of sales of manufactured tea is chosen the largest retail grocery chains in Uzbekistan.

7. WORK PLAN

7.1 Description of buildings and premises

For the organization of the tea-weaving factory is planned to build the following production buildings and facilities:

- Warehouse of raw materials;
- Warehouse auxiliary materials;
- Production;
- GP Warehouse;
- Changing rooms;
- Office;
- Domestic premises.

The total amount of construction and installation work is $ 40,000 thousand.

7.2 Description of the production equipment and its suppliers

The main production equipment of the tea packaging plant is a production line for tea packaging of the German company Peter Binder GmbH.

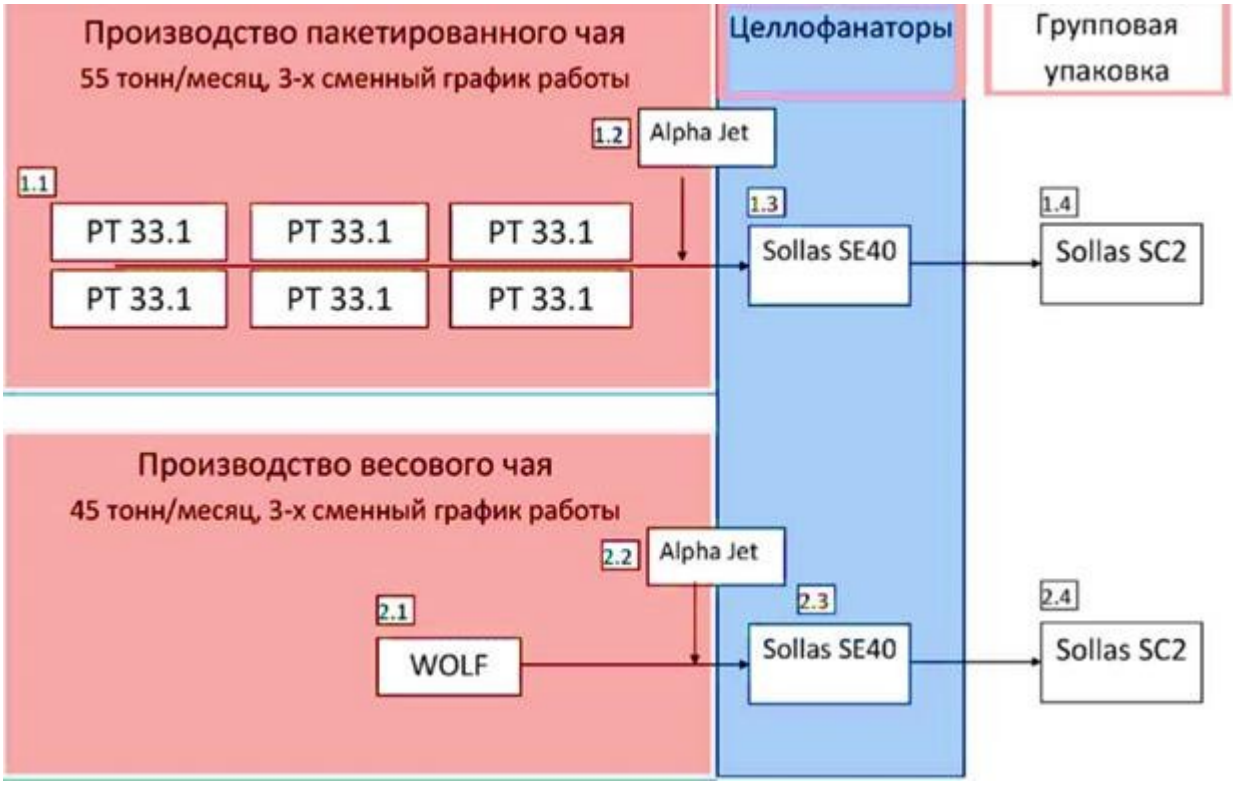
Peter Binder GmbH is a permanent representative of a number of leading world companies on the market of Uzbekistan and other CIS countries. The equipment supplied by this company is used in pharmaceutical, food, processing, cosmetic and chemical industries. Peter Binder GmbH has established an excellent reputation in Uzbekistan and the CIS, where there are already more than 350 technological lines and individual machines supplied by this company. For more than 34 years already Peter Binder GmbH has been active in the markets of Russia, Ukraine, Belarus, Kazakhstan and other CIS countries in the field of supply of packaging equipment.

Peter Binder GmbH also offers its customers a number of additional services:

- full service in warranty and post-warranty period;
- equipment adjustment by Russian-speaking specialists;
- The possibility of training and staff development on the machines and lines of the manufacturer;

- assistance in preparing technical documentation in Russian, as well as support in the process of certification of equipment and the entire production process.[2]

Figure 7.1. Equipment block diagram



Source: Commercial offer from Peter Binder GmbH

a. The production line includes the following elements (Fully automatic vertical carton line for WOLF bag-in-box packaging;

b. Metronic Alpha Jet Mondo ink jet printer for marking;

c. Automatic machine for the deandering of cardboard boxes into heat sealable film SOLLAS SE40;

d. Automatic group packaging machine cartons into corrugated cartons, SOLLAS SC2.

2. For packing bagged tea:

a. Automatic double-chamber tea bagging machine, model PT 33.1;

b. Metronic Alpha Jet Mondo ink jet printer for marking;

c. Automatic machine for cladding cardboard boxes into a SOLLAS SE40 heat sealable film;

d. Automatic machine group for packaging cardboard boxes into corrugated cartons, SOLLAS SC2.

3. For packing tea by weight:

a. Fully automatic vertical carton line for WOLF bag-in-box packaging;

b. Metronic Alpha Jet Mondo ink jet printer for marking;

c. Automatic machine for cladding cardboard boxes into a SOLLAS SE40 heat sealable film;

d. Automatic machine group for packaging cardboard boxes into corrugated cartons, SOLLAS SC2.

Below is a description of the equipment.

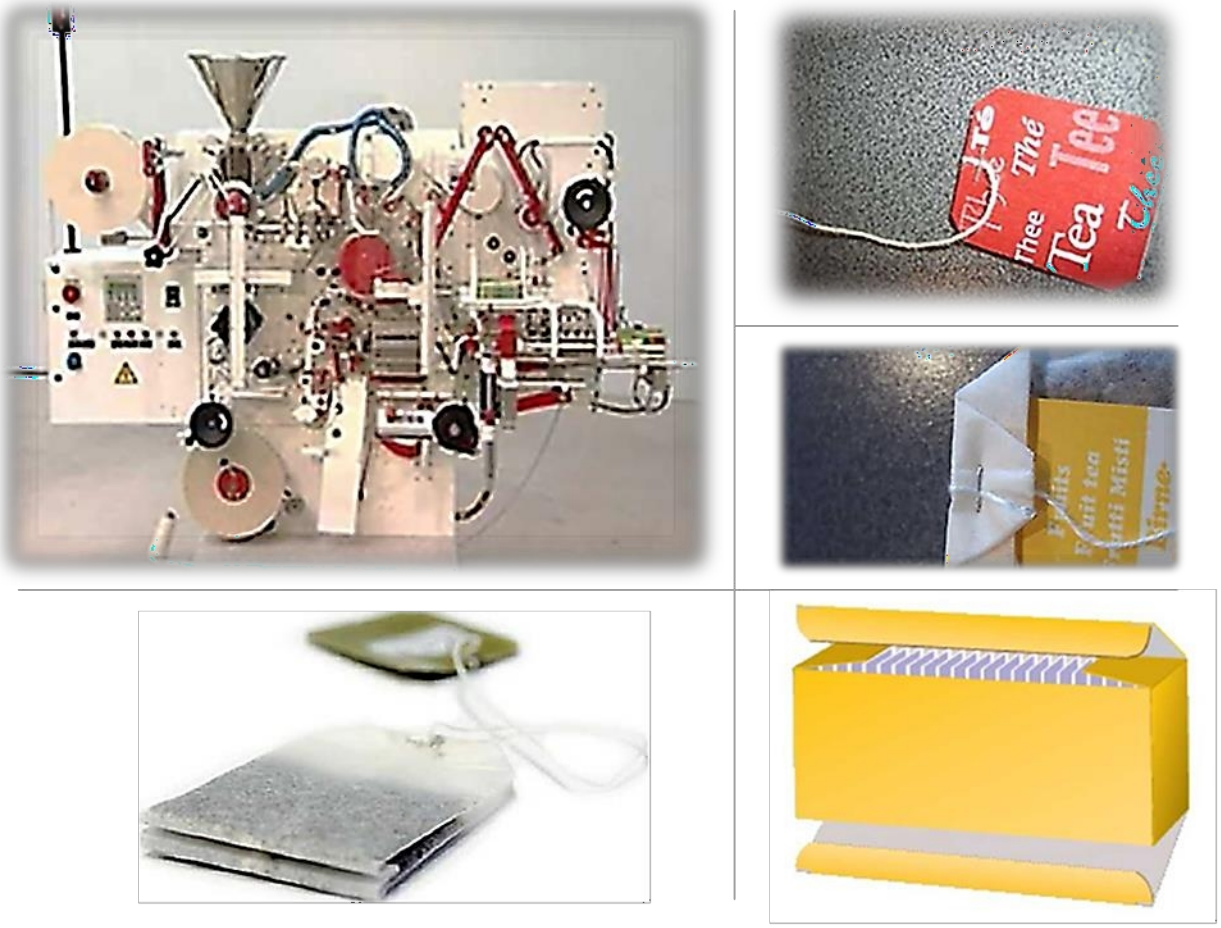
6 automatic machines for packing tea in two-chamber bags, model PT 21.1

The machine produces two-chamber bags with a string and a rigid label. The machine volumetric dispenser is used. Tea is fed into the hopper of the dispenser in one of two ways: with a vacuum loader (optional directly from a bag or another hopper from the same level (floor where the machine is installed, or from the upper level (floor. Then the tea enters the cells of the dispenser. The dosage is adjusted by the moving bottom of the dispenser cells.

The longitudinal seam of the bag is formed mechanically (without the use of heat-welded filter paper. This is very important when packing medicinal teas, because with a heat-welded bag, the whole factor of environmental friendliness of the package initially loses its meaning. Next, the sleeve of the filter paper is cut into equal parts and smoothed into a two-chamber bag. Closing the top of the bag is done in the shape of an envelope. The pouch is fastened and the string is attached with an aluminum staple.

Finished pouches are automatically formed into a group with a specified number of pouches and placed in a cardboard box.

Figure 7.2. Automatic machine for packing tea in two-chamber bags, model PT 21.1



Source: Commercial offers from Peter Binder GmbH

Equipment options:

- Printer for printing the date on boxes (hot or cold embossed).
- Scales to control the weight of the final product with a rejection device. This allows the process to be fully automated, eliminating the need for human supervision of

  the operation of the machine.
- Format parts for changing to a different number of pouches in the box. The advantage of this carton unit is that the box length can be easily adjusted.
- The length adjustment allows you to pack 10 to 30 bags in a box on one machine.
- Formatting parts to switch to hand packing in boxes.
- Dust collection equipment.
- Industrial vacuum cleaner.
- Vacuum product loader in the hopper of the dispenser.

- Special product tedder. Installed in the dispenser and serves to stabilize the weight when working with light teas, herbs.

- Tea unloading equipment

Table 7.1. Technical characteristics of the PT 21.1

Features	Option "B"	Option "A"	Option "C"	Option "D"
Package size, mm	40 x 60	44 x 64	59 x 80	44 x 60
Label size, mm	23 x 28 or 28 x 32 or 26 x 32			
Max. weight product and one sachet, g	2,5	3,5	7	3
Max. sachet volume, ml	6	10	15	8
Max capacity, rpm	175		100	175
Power consumption, kW	1		1,5	1
Compressed air, bar	4 - 6			
Dimensions, mm	2550 X 900 X 1950			
Weight, kg	900		1000	900

Source: Commercial offers from Peter Binder GmbH

Metronic Alpha Jet Mondo ink jet printer

Below is a general view of the printer (Fig. 5.3): Figure 7.3.

Metronic Alpha Jet Mondo Ink Jet Printer

Source: Commercial offers from Peter Binder GmbH

Table 7.2. Specifications of the Metronic Alpha Jet Mondo printer

Parameter	**Description**
Display	8.4" TFT not removable Outputs data about printer operation Indicates ink/solvent residual quantity, printing errors Touch control. Printer information, document loading, job assignment
Nozzle size	62 ts
Non-pigmented ink	+
Pigmented inks	-
Temperature range	From +5 to +45°C
Humidity	10 to 90% non-condensing
Print speed	Up to 2800 characters/sec.
Max. Print resolution	5 lines/32 pixels (5x5 matrix)
Textual design:	automatic time and date function, current numbering, Barawi, logos, True Type fonts, as well as selecting the desired font style.
Character height (depending on material)	2 to 15 mm
Hose length to printhead	3 м
Ink supply system	1-Liter ink and solvent bottles. Easily replaceable. Automatic ink flow control Unique printhead flushing feature
Material	Stainless steel IP 65 (dust-tight)
Enclosure dimensions	340x270x550mm
Print head size	40x40x145 (LxWxH)
Features:	automatic ink viscosity control, automatic diagnosis and electronic control of

	The electronics unit is closed off from the ink supply system, preventing the ink from flowing. The electronics unit is closed off from the ink supply system, which prevents accidental ingestion of ink on electronics.
Software:	**Graphic editor:** Built-in function for loading images directly and instantly correcting data. **Remote control of one or more printers:** built-in Ethernet, RS232 and USB interfaces to connect to a local network, to connect additional equipment and to exchange printer settings. **On-line display mode of the printer screen:** displaying and editing the workflow printer in online mode.

Source: Commercial offers from Peter Binder GmbH

SOLLAS SE40 automatic carton wrapping machine for thermo-weldable film

The appropriate length of film is cut from the bale and placed vertically in front of the product. The product is then pushed into the wrapping unit. The film is wrapped around the product, the lower and upper edge of the film is folded and the longitudinal seam is sealed.

The advantage of the method used on the Sollas SE40 is that the longitudinal seam is sealed before the product advances into the machine. The film is held taut at all times until the longitudinal seam is welded.

The physical properties of cardboard are such that sealing the longitudinal seam on the side of the cardboard box (the smallest side of the box) is the most suitable for forming a longitudinal seam. Larger surfaces, such as the bottom, are usually subject to deformation (bending, etc.), making it impossible to form an even longitudinal seam.

Figure 7.4. SOLLAS SE40 dispenser

Source: Commercial offers from Peter Binder GmbH

Main advantages:

- Great wrapping of the package;
- Quick format change (approx. 15 minutes);
- Performance up to 40 boxes per minute;
- Single-level system. Easy access to the film reel;

- Reduced number of format parts (no elevator);
- Rugged and reliable design;
- PLC, touch control panel;
- Automatic film length adjustment (servo motor);
- Ease of operation;
- Low maintenance and start-up costs;
- Timely delivery of spare parts;
- Service and warranty service in Russia.

Table 7.3. Technical characteristics of the SOLLAS SE40

Features	**Description**	
Size range:	Box length, mm	45 - 300
	Box width, mm	40 - 200
	Box height, mm	16 - 96
Packaging material:	PP, recommended 30 microns	
Product serving:	At right angles to the left in relation to the machine	
Inlet conveyor height, mm	880 - 920	
Electrical data:	3 x400V, 50 Hz, neutral, ground. Consumption 2.5 kWh	
Pneumatics	6 bar, clean dry air. Consumption 4 nl/stroke	
Performance:	max. 40 boxes в per minute (final performance is determined after testing on the boxes and the customer's material)	

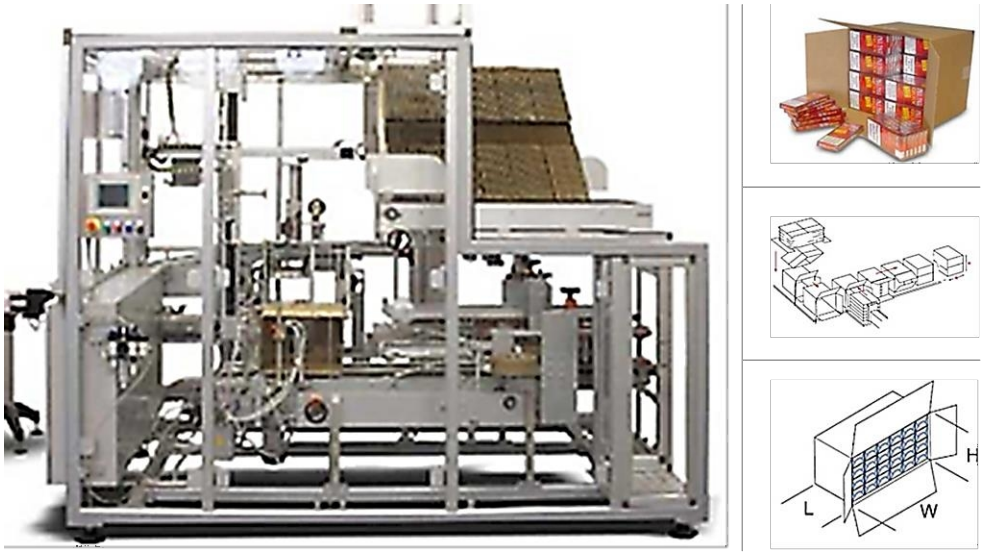
Source: Commercial offers from Peter Binder GmbH

Automatic batch packaging machine for cartons into corrugated boxes, SOLLAS SC2 (Netherlands)

Sollas SC2 is a machine for forming a specific group of products, with a given number of boxes in width, height and length, and packing the group in a corrugated box of FEFCO 0201 standard.

The corrugated carton blank is grabbed from the magazine and placed in front of the stacker. The product enters the machine one box at a time and is formed into a group with a specified number of pieces in width, height and length. The fully formed group is loaded into the box. The box is sealed with adhesive tape.

Figure 7.5. SOLLAS SC2 dispenser



Source: Commercial offers from Peter Binder GmbH

The main advantages of the model:

- High efficiency and reliability of the equipment;
- Compact design;
- Ability to reconfigure the product format;
- Quick format change;
- PLC, touch control panel;
- Covering the box with adhesive tape (hot glue on request);
- The box magazine is integrated into the machine.

Table 7.4. Technical characteristics of the SOLLAS SC2

Parameter	**Value**	
Performance:	max. 12 boxes per minute (final capacity defined by after after tests on of the customer's material)	
Size range:	Box length, mm	120 - 400
	Box width, mm	200 - 600
	Box height, mm	160 - 400
Electrical data:	3 x400V, 50 Hz, neutral, ground.	
Pneumatics	6 bar, clean dry air.	

Source: Commercial offers from Peter Binder GmbH

Yamato Dataweigh ADW-A-0310S ALPHA ADVANCE, 10 cells

Below is information about the equipment.

Figure 7.6. Yamato Dataweigh ADW-A-0310S ALPHA ADVANCE weight dispenser

Source: Commercial offers from Peter Binder GmbH

Number of weighing cells: 14

- Dosing range: 8 - 1000 g per unloading;
- Max. dispensing volume: 3000 ^{cm3} per discharge;
- Max. length of the piece product (tea pots): 80 mm;
- Power supply: 230 V, 1 phase, 50 Hz, 1.0 kW;
- Compressed air: not required;
- Control module: RCU 900, touch panel.

It is planned to equip production gradually over a 6-year period.

The plan for purchasing equipment for the main production line is shown in the table:

Table 7.5. Procurement plan for main process equipment

№	Equipment	Quantity	Price, Euro	2024	2025	2026	2027	2028	2029
1.1.	Automat PT33.1, according to description, at conditions FCA Germany (INCOterms 2010).	6	19 117,80	3 186,30	3 186,30	3 186,30	3 186,30	3 186,30	3 186,30
	The cost of export packaging	6	144,00	24,00	24,00	24,00	24,00	24,00	24,00
	Dust collection equipment	6	93,60	15,60	15,60	15,60	15,60	15,60	15,60
	Industrial vacuum cleaner	3	176,40	58,80	58,80	58,80	0	0	0
	Recommended spare parts kit	6	432,00	72,00	72,00	72,00	72,00	72,00	72,00
	Ravenizer (recommended for light and herbal teas)	3	136,80	45,60	45,60	45,60	0	0	0
	Tea unloading equipment	1	3,84	3,84	0	0	0	0	0
	Option weighing and automatic rejection	6	648,00	108,00	108,00	108,00	108,00	108,00	108,00
1.2.	Alpha Jet Mondo ink jet printer, as described, FCA Germany (INCO-terms 2010).	1	60,00	60,00	0	0	0	0	0
	The cost of export packaging	1	6	6	0	0	0	0	0
1.3.	Sollas SE40 automatic machine, as described, FCA Netherlands (INCO-terms 2010).	1	600,00	600,00	0	0	0	0	0
	The cost of export packaging	1	25,20	25,20	0	0	0	0	0
	Taping device for easy tampering	1	74,40	74,40	0	0	0	0	0

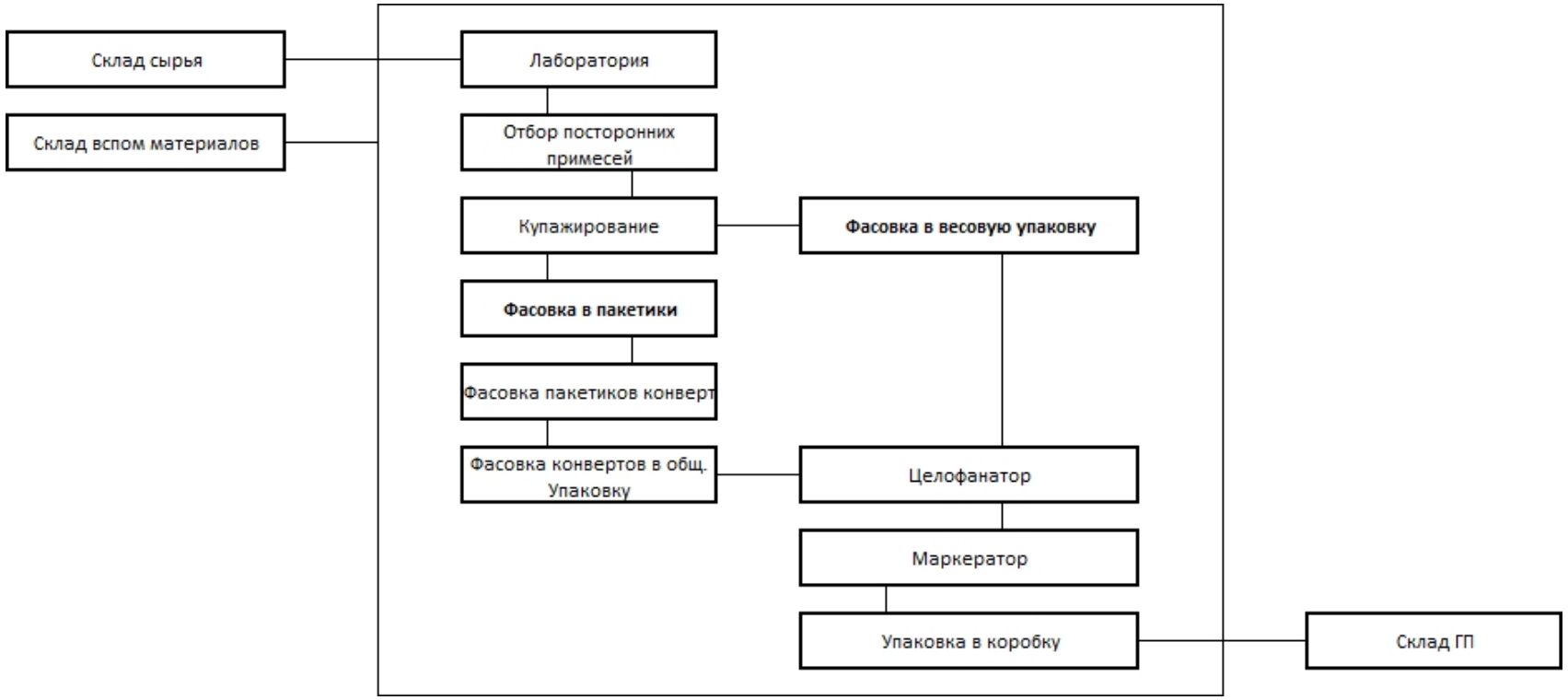
	Modem for "online" monitoring of the machine's operation	1	19,92	19,92	0	0	0	0	0
	Protection against power surges	1	12,84	12,84	0	0	0	0	0
	Standard spare parts kit	1	12,84	12,84	0	0	0	0	0
1.4.	Sollas SC2 machine, as described, FCA Netherlands (INCO-terms 2010).	1	1 800,00	0	0	0	0	0	1 800,00
	The cost of export packaging	1	37,20	0	0	0	0	0	37,20
	Dater, ink-roller system	1	54,60	0	0	0	0	0	54,60
Subtotal (equipment for bagged tea)			**23 455,44**	**4 325,34**	**3 510,30**	**3 510,30**	**3 405,90**	**3 405,90**	**5 297,70**
2.1.	Fully WOLF automatic vertical carton line for bag-in-box packaging	1	5 124,00	5 124,00	0	0	0	0	0
2.2.	Alpha Jet Mondo ink jet printer, as described, FCA Germany (INCO-terms 2010).	1	60,00	60,00					
	The cost of export packaging	1	6	6					
2.3.	Sollas SE40 automatic machine, as described, FCA Netherlands (INCO-terms 2010).	1	600,00	600,00					
	The cost of export packaging	1	25,20	25,20					
	Taping device for easy tampering	1	74,40	74,40					

	Modem for "online" monitoring of the machine's operation	1	19,92	19,92					
	Protection against power surges	1	12,84	12,84					
	Standard spare parts kit	1	12,84	12,84					
2.4.	Sollas SC2 machine, as described, FCA Netherlands (INCO-terms 2010).	1	1 800,00	0	0	0	0	0	1 800,00
	The cost of export packaging	1	37,20	0	0	0	0	0	37,20
	Dater, ink-roller system	1	54,60	0	0	0	0	0	54,60
Poditog (equipment for packed tea)			**7 827,00**	**5 935,20**	**0**	**0**	**0**	**0**	**1 891,80**

Source: Commercial offer from Peter Binder GmbH

7.3 Technology of packing and packaging of tea

A generalized scheme of production is shown in the figure below: Figure 7.7. Production flowchart



Source: Global Innovation Trade data

Packaging process for bagged tea

1. Dosage.

Tea enters the cells of the dispenser. The adjustment of the dose is made by the moving bottom of the dispenser cells. When working with dense tea (black tea, some green teas) no additional devices are required for the stability of the dosage.

2. Package Formation.

The formation of the longitudinal seam of the bag is done mechanically (without the use of heat-welded filter paper). Next, the filter paper sleeve is cut into equal parts and smoothed into a two-chamber bag.

3. Closing the package.

The top of the bag is closed in the shape of an envelope. The pouch is fastened and the thread is attached with an aluminum staple.

4. Label.

The machine automatically attaches the label to the tea bag. The thread is attached to the label with an aluminum staple.

5. Stacking in a cardboard box

The finished pouches are automatically formed into a group with a specified number of pouches and placed in a cardboard box. The box used on this machine must already be glued on one side (so-called american case). The minimum number of pouches in the box is 10, maximum 30 pouches.

The process of packing weighing tea is similar to that of bagged tea, but it consists of fewer steps.

The process of packing weighing tea

1. Dosage.
2. Package Formation.
3. Stacking in a cardboard box.

7.4 Other technological issues

As additional equipment for the tea-weaving factory is assumed buy:

Table 7.6. List and cost of additional equipment

№	Name	Quantity	Cost, thousand. dollars.
1	Electric forklift	3	41,4
2	Diesel generator Gesan DPB 90E	2	25,26
3	Air compressor	4	22,572
Total			**89,232**

Source: Global Innovation Trade data

Thus, the total cost of additional equipment is 89.232 thousand. dollars

7.5 Raw materials and components

The planned production capacity of the company is 55 tons of bagged and 45 tons of tea by weight per month. The following materials and components will be required for the production of the specified quantity:

Table 7.7. Raw materials, materials and components

Raw materials and components	Unit measurements	Quantity at 100% loading	Price per unit, thousand dollars.
Tea for packing 100 grams (imported)	%	90% to 30%	3,17064
Tea for bagging (imported)	%	90% to 30%	2,67
Tea to be packed by 100 grams (local)	%	10% to 70%	2,2194
Accessories for tea bags:			0
Filter paper	kg	4 818	0,0072
Label	thousand pcs.	27 500	0,00084
Wire	kg	468	0,00804
Thread	reels	440	0,01416
Cardboard boxes	thousand pcs.	1 100	0,03336
Polypropylene film	kg	1 540	0,00504
Corrugated boxes	pcs.	36 667	0,00012

Pallets	pcs.	1 019	0,00372
Accessories for weighing tea:			0
Film	kg	1 350	0,00396
Cardboard boxes	thousand pcs.	450 000	0,000036
Polypropylene film	kg	264	0,00504
Corrugated boxes	pcs.	15 000	0,00012
Pallets	pcs.	417	0,00372

Source: Global Innovation Trade data, Global Innovation Trade calculations

In calculating the business plan takes into account the delay in delivery of raw materials and components - 2 months from the date of receipt of payment to suppliers.

8. FINANCIAL PLAN

8.1 The assumptions made in the project are described below. **Product assumptions**

The main product of this enterprise is black tea. Tea weighing factory will produce it in two versions of packaging: bagged in 50g packaging (25 bags of 2 g) and weight in a package of 100 grams.

Assumptions about price

Prices for the company's products are set at the level of low and lower-middle price segment.

Assumptions about investment costs

Investment costs are divided into 6 categories:

- Preparatory work;
- Construction and landscaping;
- Equipment;
- Working capital;
- Additional costs;
- Cache-flo deficit coverage.

Assumption about the discount rate

The project adopted a discount rate of 9.22% per year. Below is the rationale for calculating this rate.

The cumulative construction method is based on summing up the risk-free rate of income and risk premiums for investing in the evaluated enterprise. The method takes into account all kinds of investment risks related both to the factors common for the industry and economy, and to the specifics of the evaluated enterprise. The calculations are made according to the formula:

$$r = {}_{rb} + \sum_{i=1}^{n} Ri$$

where r is the discount rate; rb is the base (risk-free or least risky) rate; Ri is the premium for the i-type of risk; n is the number of risk premiums. Let us present below the calculation according to this methodology.

Table 8.1. Determination of the cost of equity

Constituents	%
The size of the risk-free rate*	11,90%
Amount of country risk adjustment	2,00%
Amount of industry risk adjustment	2,50%
Amount of other risk adjustment	2,00%
Cost of equity	**18,40%**

Source: Global Innovation Trade analysis and calculations

Then, based on this, the discount rate was determined.

Table 8.2. Determination of the discount rate

Constituents	%
Equity share	10%
Share of borrowed capital	90%
Tax	18,00%
Cost of equity	18,40%
Cost of borrowed capital	10,00%
Total discount rate	**9,22%**

Source: Global Innovation Trade analysis and calculations

Thus, the expert calculation of the discount rate was 9.22% per annum.

Assumptions about revenue, profit and loss projections (P&L) and cash flow (CFP)

All of the above indicators were used to build revenue, P&L, and DDS plans.

8.2 Nomenclature and prices

This project involves the production of bagged and weight black tea, which is a blend of imported and Abkhazian varieties. The nomenclature of the produced products is presented in the table:

Table 8.3. Nomenclature and price of the company's products

Sales Parameters	Sales volume per month, package.	Price, $/pack.
Bagged tea	1 100 000	0,48
Bulk tea	450 000	0,66

Source: Global Innovation Trade data

The prices in the table are averaged over the year and are set with regard to possible changes depending on the dynamics of prices in the market and ongoing marketing campaigns.

8.3 Investment costs

The volume of main investments of the project will be **4 286.85 thousand dollars**. Capital expenditures, which will be required for the establishment of production, are shown in the table:

Table 8.4 Investment costs of the project, thousand dollars.

Investment in the project 1

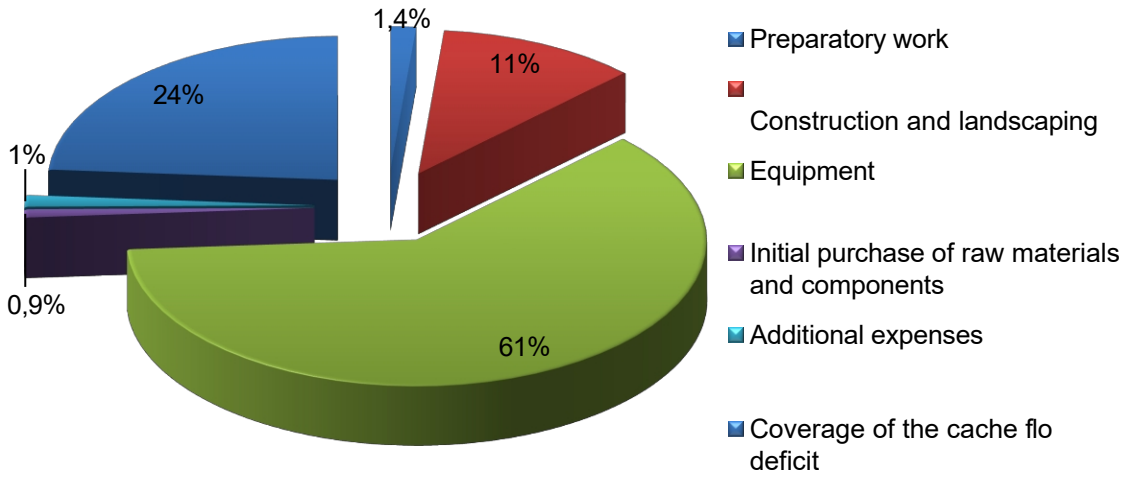
№	Capital expenditures	Qt/y %	Price	Cost thousand dollar
1	**Preparatory work**			**61,2**
1.1	Rationale financial project efficiency, preparation of a business plan	1	1,2	1,2
1.2	Project works	1	60,0	60,0
2	**Construction and landscaping**			**480,0**
2.1	Construction and installation work	1	480,0	480,0
3	**Equipment**			**2 616,5**
3.1	Equipment for tea bags		1 839,7	1 839,7
	1 stage	*1*	*339,3*	*339,3*
	Step 2	*1*	*275,3*	*275,3*
	Step 3	*1*	*275,3*	*275,3*
	Step 4	*1*	*267,1*	*267,1*
	Step 5	*1*	*267,1*	*267,1*

	Step 6	*1*	*415,5*	*415,5*
3.2	Equipment for packed tea		613,9	613,9
	Basic equipment	*1*	*465,5*	*465,5*
	Corrugated packaging line	*1*	*148,4*	*148,4*
3.3	Shipping и installation equipment Basic technological equipment	3%	73,6	73,6
3.4	Electric forklift	3	41,4	41,4
3.5	Diesel generator Gesan DPB 90E	2	25,3	25,3
3.6	Air compressor	4	22,6	22,6
4	**Initial purchase of raw materials and components**			**38,9**
4.1	Purchase of raw materials (including delivery)	1	29,6	29,6
4.2	Purchase of components (including delivery)	1	9,4	9,4
5	**Additional expenses**		**55,2**	**55,2**
5.1	Website development	1	1,2	1,2
5.2	Initial marketing costs (development of packaging, logo, trademark)	1	24,0	24,0
5.5	Equipping offices premises (furniture, office equipment)	1	30,0	30,0
Total capital costs				**3 251,8**
Coverage of the cache-flo deficit				**1 035,0**
Total investment in the project				**4 286,9**

Source: Global Innovation Trade analysis and calculations

The main item of investment costs is the purchase of equipment - 61% of the total amount of investments. In second place in terms of investment costs is the amount required to cover the deficit of cache-flo (24%).

Figure 8.1. Structure of investment costs under the project, %



Source: Global Innovation Trade analysis and calculations

Covering the deficit of cache-flo $1,035,012 thousand. - This is the minimum necessary investment, which will go to cover the operating costs, while the revenue on the project is not enough.

Table 8.5 Tax and other payments in 2024-2034, thousand dollars.

Taxes and other payments	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Income tax		25	28	29	29	29	27	27	27	27	27
Payroll deductions		51	57	59	59	59	54	54	54	54	54
Land tax	0,14	0	0	0	0	0	0	0	0	0	0
VAT			230	290	326	331	404	398	398	398	398
Property tax		2	2	3	3	3	4	4	4	4	3
Customs duty on import of goods	0,78	35	65	75	85	93	100	98	98	98	98
Customs fee for import/export	0,39	41	87	104	119	135	148	148	148	148	148
Taxes (excluding income tax)	**1,31**	**154**	**470**	**560**	**621**	**651**	**738**	**729**	**728**	**728**	**728**

Source: Global Innovation Trade calculations

Calculation of income tax is presented in paragraph 7.8 "Profit and loss forecast".

8.4 Operating costs (fixed and variable)

Fixed project **costs are** project costs that do not depend on changes in sales volume. They include, as a rule, maintenance and management costs. The main fixed costs are presented in the table:

Table 8.6 Fixed costs, thousand dollars.

№	Indicator	Calculation of costs, per month	Average value per month, thousand dollars.
1	Land lease	16.8 dollars per hectare per year, plot size - 1 hectare	0,001
2	Communication and Internet	0.06 thousand dollars.	0,060
3	Electricity	0.06 thousand dollars.	0,060
4	Equipment maintenance and service	0.6 thousand dollars, once every six months	0,060
5	Office expenses	0.06 thousand dollars.	0,060
6	Marketing and advertising costs	0.6 thousand dollars.	0,600
7	Maintenance and repair of fixed assets	0.06 thousand dollars.	0,060
8	Property insurance	0.3% of the cost per year	0,223
9	Security (alarm system)	0.12 thousand dollars.	0,120
10	Surveyor fees	3.6 thousand dollars per year	0,300
11	Payment for services of other organizations	0.24 thousand dollars.	0,240
12	Payment for electrician's services	0.3 thousand dollars.	0,300
13	Personnel payroll	*see the "Personnel" tab*	22,332
TOTAL			**24,417**

Source: Global Innovation Trade analysis and calculations

Project **variable costs** are costs that directly depend on the volume of production:

Table 8.7 Variable costs, thousand dollars.

№	Name of costs	Calculation of costs per month (at 100% load)	Average cost per month, thousand dollars.
1	**Raw materials**		**251,60**
1.1	Tea for packing 100 grams (imported)	see the "Source data" sheet	42,80
1.2	Tea for bagging (imported)	see the "Source data" sheet	44,05
1.3	Tea to be packed by 100 grams (local)	see the "Source data" sheet	69,91
1.4	Tea for bagging (local)	see the "Source data" sheet	71,96
1.5	Raw material delivery	10% of the cost	22,87
2	**Components for the production of bagged tea**		**126,72**
2.1	Filter paper	see the "Source data" sheet	34,97
2.2	Label	see the "Source data" sheet	22,95
2.3	Wire	see the "Source data" sheet	3,74
2.4	Thread	see the "Source data" sheet	6,24
2.5	Cardboard boxes	see the "Source data" sheet	36,71
2.6	Polypropylene film	see the "Source data" sheet	7,71
2.7	Corrugated boxes	see the "Source data" sheet	4,59
2.8	Pallets	see the "Source data" sheet	3,77
2.9	Delivery of components	5% of the cost	6,03
3	**Components for the production of pre-packaged tea**		**30,25**
3.1	Film	see the "Source data" sheet	5,29
3.2	Cardboard boxes	see the "Source data" sheet	18,77
3.3	Polypropylene film	see the "Source data" sheet	1,32
3.4	Corrugated boxes	see the "Source data" sheet	1,88
3.5	Pallets	see the "Source data" sheet	1,54
3.6	Delivery of components	5% of the cost	1,44
4	**Other expenses**		**74,64**
4.1	Transportation costs	4.0 dollars per 1-pack.	74,40
4.2	Electricity for production		0,12

4.2.1	*For tea bags*	*at 100% load: 11.82 kWh, 24-hour operation, 21 days per month, electricity tariff - 0.85 dollars.*	*0,06*
4.2.2	*For pre-packaged tea*	*at 100% load: 12.12 kWh, 24-hour operation, 21 days per month, electricity tariff - 0.85 dollars.*	*0,06*
4.3	Electricity to power forklifts	1 charge per day, 23.7 kWh per charge, electricity tariff - $0.85	0,02
4.4	Compressor power supply		0,10
4.4.1	*For tea bags*	*at 100% load: 5 kWh * 3 machines, 24-hour operation, 21 days per month, electric power tariff - $0.85.*	*0,08*
4.4.2	*For pre-packaged tea*	*at 100% load: 5 kWh * 1 car, 24-hour operation, 21 days per month, electric power tariff - $0.85.*	*0,03*
TOTAL TOTAL COSTS			**483,22**

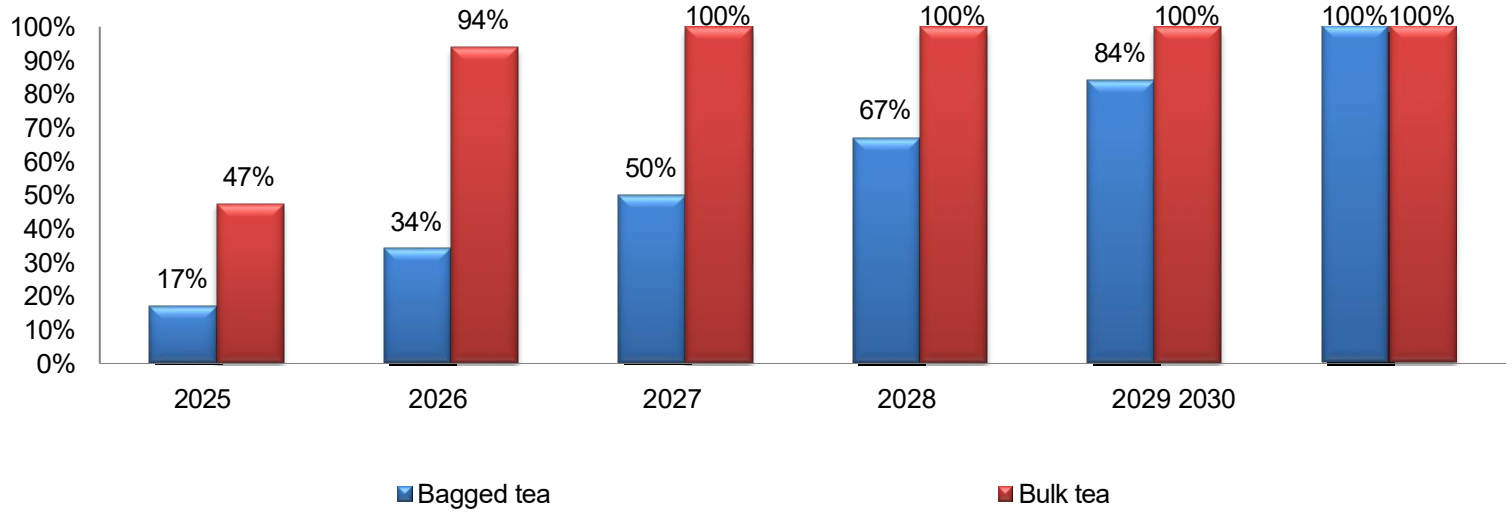
Source: Global Innovation Trade analysis and calculations

Variable costs are indexed to take into account the gradual attainment of design capacity.

8.5 Sales Plan

The project is planned to reach its planned capacity within 6 years. The increase in the production of bagged tea will be achieved through the purchase of additional filling machines.

Figure 8.2. Planned attainment of design capacity



Source: Global Innovation Trade data

Below is the planned production volume during 2025-2030:

Table 8.8. Production and sales plan in 2025-2034, packs.

Products	Unit. measurements	2025 г.	2026 г.	2027 г.	2028 г.	2029 г.	2030 г.	2031 г.	2032 г.	2033 г.	2034 г.
Bagged tea	package.	1 650 000	4 301 000	6 424 000	8 657 000	10 901 000	13 024 000	13 200 000	13 200 000	13 200 000	13 200 000
Bulk tea	package.	2 340 000	5 062 500	5 400 000	5 400 000	5 400 000	5 400 000	5 400 000	5 400 000	5 400 000	5 400 000
Total	**package.**	**3 990 000**	**9 363 500**	**11 824 000**	**14 057 000**	**16 301 000**	**18 424 000**	**18 600 000**	**18 600 000**	**18 600 000**	**18 600 000**

Source: Global Innovation Trade analysis and calculations

8.6 Revenue Calculation

Since food markets practice deferred payment for counterparties, the calculation part of the business plan took into account the delay in the receipt of funds for manufactured products for 2 months. The revenue plan in the first years of the project is presented in the table:

Table 8.9 Revenue Plan for 2025-2034, thousand dollars

Products	Unit. measurements	2025 г.	2026 г.	2027 г.	2028 г.	2029 г.	2030 г.	2031 г.	2032 г.	2033 г.	2034 г.
Bagged tea	*thousand dollars.*	523	1 795	2 830	3 886	4 963	5 998	6 336	6 336	6 336	6 336
Bulk tea	*thousand dollars.*	921	3 074	3 564	3 564	3 564	3 564	3 564	3 564	3 564	3 564
Total	**thousand dollars.**	**1 443**	**4 869**	**6 394**	**7 450**	**8 527**	**9 562**	**9 900**	**9 900**	**9 900**	**9 900**

Source: Global Innovation Trade analysis and calculations

8.7 Profit and loss forecast

The profit and loss statement by years is shown in the table: Table

8.10 Profit and Loss Statement, thousand dollars.

Income / expense item	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue from sales	0,00	1 443,42	4 869,15	6 394,08	7 450,08	8 527,20	9 562,08	9 900,00	9 900,00	9 900,00	9 900,00
Variable costs	0,00	1 961,28	3 712,25	4 335,32	4 904,89	5 452,57	5 904,78	5 798,60	5 798,60	5 798,60	5 798,60
Gross profit	0,00	-517,86	1 156,90	2 058,76	2 545,19	3 074,63	3 657,30	4 101,40	4 101,40	4 101,40	4 101,40
Fixed costs	0,00	279,49	311,73	323,65	326,70	329,00	308,40	307,64	309,05	310,48	311,92
Taxes (except income tax)	1,31	154,42	469,56	560,24	620,83	651,02	738,32	728,87	728,50	728,13	727,78
EBITDA	**-1,31**	**-951,77**	**375,61**	**1 174,87**	**1 597,66**	**2 094,61**	**2 610,58**	**3 064,90**	**3 063,86**	**3 062,79**	**3 061,70**
EBITDA, % (to revenue) average	0%	-66%	8%	18%	21%	25%	27%	31%	31%	31%	31%
Depreciation of fixed assets	0,00	44,64	56,18	67,14	77,14	86,64	110,50	104,97	99,73	94,74	90,00
EBIT	**-1,31**	**-996,41**	**319,43**	**1 107,74**	**1 520,53**	**2 007,97**	**2 500,08**	**2 959,93**	**2 964,13**	**2 968,05**	**2 971,70**
Payment of interest on loans and loans	0,00	0,00	62,91	352,70	307,06	256,65	200,96	139,44	71,48	8,06	0,00
Profit (Loss) to taxation	-1,31	-996,41	256,52	755,04	1 213,46	1 751,32	2 299,12	2 820,48	2 892,66	2 960,00	2 971,70
Income tax	0,00	0,00	46,17	135,91	218,42	315,24	413,84	507,69	520,68	532,80	534,91
Retained earnings	**-1,31**	**-996,41**	**210,35**	**619,13**	**995,04**	**1 436,08**	**1 885,28**	**2 312,80**	**2 371,98**	**2 427,20**	**2 436,79**
Retained earnings on an accrual basis	**-1,31**	**-997,73**	**-787,38**	**-168,25**	**826,79**	**2 262,87**	**4 148,15**	**6 460,95**	**8 832,92**	**11 260,12**	**13 696,92**
Return on sales	-	-69%	7%	17%	20%	24%	26%	30%	30%	30%	30%

Source: Global Innovation Trade analysis and calculations

8.8 Cash flow forecast

Cash flow projections by year are shown in the table below. Cash flow projections by month are shown in the appendix.

Table 8.11 Cash flow forecast, thousand USD.

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	TOTAL
INVESTMENT CASH FLOW (ICEF)	**-1 407,1**	**-378,9**	**-303,0**	**-276,1**	**-275,2**	**-546,7**	**-64,8**	**0,0**	**0,0**	**0,0**	**0,0**	**-3 251,8**
Capital expenditures	1 407,1	378,9	303,0	276,1	275,2	546,7	64,8	0,0	0,0	0,0	0,0	3 251,8
OPERATING CASH FLOW (OPF)	**0,0**	**-889,4**	**367,6**	**709,6**	**1 092,4**	**1 526,5**	**2 034,6**	**2 412,5**	**2 471,4**	**2 521,7**	**2 526,6**	**14 773,5**
Revenue total	0,0	1 443,4	4 869,2	6 394,1	7 450,1	8 527,2	9 562,1	9 900,0	9 900,0	9 900,0	9 900,0	77 846,0
Expenses total	0,0	2 240,8	4 024,0	4 659,0	5 231,6	5 781,6	6 213,2	6 106,2	6 107,6	6 109,1	6 110,5	52 583,5
Variable costs	*0,0*	*1 961,3*	*3 712,3*	*4 335,3*	*4 904,9*	*5 452,6*	*5 904,8*	*5 798,6*	*5 798,6*	*5 798,6*	*5 798,6*	*49 465,5*
Fixed costs	*0,0*	*279,5*	*311,7*	*323,7*	*326,7*	*329,0*	*308,4*	*307,6*	*309,0*	*310,5*	*311,9*	*3 118,0*
Accrued taxes and payments	0,0	92,0	368,5	536,9	600,6	647,3	699,5	734,1	728,8	728,4	728,0	5 864,0
Income tax	0,0	0,0	46,2	135,9	218,4	315,2	413,8	507,7	520,7	532,8	534,9	3 225,7
Payments of interest on the loan	0,0	0,0	62,9	352,7	307,1	256,7	201,0	139,4	71,5	8,1	0,0	1 399,3
FINANCIAL CASH FLOW (FDP)	**1 407,1**	**1 292,9**	**424,1**	**276,1**	**275,2**	**546,7**	**64,8**	**0,0**	**0,0**	**0,0**	**0,0**	**4 286,9**
Own funds	152,3	199,7	77,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	429,5
Borrowed funds	1 254,7	1 093,2	346,6	276,1	275,2	546,7	64,8	0,0	0,0	0,0	0,0	3 857,3
Payment of the body of the debt	0,0	0,0	0,0	0,0	553,6	626,2	691,8	764,2	844,2	377,3	0,0	3 857,3
Net cash flow (NFC)	**-1 407,1**	**-1 268,3**	**64,6**	**433,5**	**817,3**	**979,8**	**1 969,7**	**2 412,5**	**2 471,4**	**2 521,7**	**2 526,6**	**11 521,7**
Cumulative NPD	**-1 407,1**	**-2 675,4**	**-2 610,8**	**-2 177,4**	**-1 360,1**	**-380,3**	**1 589,5**	**4 002,0**	**6 473,4**	**8 995,1**	**11 521,7**	**0,0**

Source: Global Innovation Trade analysis and calculations

8.9 Project efficiency analysis

8.9.1 Methodology for assessing the effectiveness of the project

Performance indicators of an investment project make it possible to determine the efficiency of investment of funds in this or that project. When analyzing the effectiveness of investment projects the following indicators of investment efficiency are used: Net discounted (discounted) income (cash flow); Net present value, NPV; Payback period (period), PB; Discounted Payback period, DPB; Internal rate of return (profitability), Rate of Return, IRR (Modified Rate of Return, MIRR); Profitability index, profitability index, profitability index, PI.

Net present value (commonly abbreviated as NPV) is the sum of discounted simultaneous differences between the benefits and costs of a project. - The sum of discounted simultaneous differences between benefits and costs of a project. The sum of cash flows (receipts and payments) associated with operational and investment activities, reduced (discounted) at the beginning of the investment.

Net discounted income NPV is calculated by the formula 1.

$$NPV = \sum_{t=o}^{T} \frac{CFt(}{(1+i)^t} 1)$$

Where i is the discount rate;

CFt - net cash flow of period t;

T - the duration of the project in periods.

The NPV calculation is a standard method of evaluating the effectiveness of an investment project and shows an estimate of the effect of the investment, adjusted for the present time value of money. If the NPV is greater than 0, the investment is profitable, and if the NPV is less than 0, the investment is unprofitable.

With the help of NPV can also assess the relative effectiveness of alternative investments (with the same initial investment is more profitable project with the highest NPV).

Positive qualities of NPV:

- clear criteria for decision-making
- indicator takes into account the value of money over time (using the discount factor in the formulas).

Negative qualities of NPV:

- the indicator does not take risks into account.

- does not take into account the probability of the event outcome, since all cash flows and the discount factor are predicted values.

Payback period method (PB)

Payback period (PB) - the expected period of reimbursement of the initial investment from the net cash proceeds. The time in which the proceeds from the operating activities of the enterprise will exceed the costs of investment.

The payback period PB is calculated by formula 2.

PB= Investments/ACF (2)

Where Investments is the initial investment;

ACF - Annual Cash Flow (average annual amount of net cash flow). Discounted

Payback Period (DPB) method

Discounted Payback Period (DPB) - payback period (see above), but including discounting.

The discounted payback period of DPB is calculated by formula 3.

$$DPB = t_{-} - \frac{NPVt_{-}}{NPVt_{+} - NPVt_{-}} \quad (3)$$

Where t - , t + - period when negative and positive NPV were observed. Profitability

index, profitability index, profitability index, PI

The profitability index (PI) is the discounted value of cash proceeds from the project (NPV) per unit of investment. It shows the relative profitability of the project.

Profitability index PI is calculated by formula 4.

$$PI = \frac{NPV}{Investments} \quad (4)$$

PI values:

For an effective project PI must be greater than 1

Discounted cost and investment return indices are greater than 1 if the NPV is positive for that stream.

Internal rate of return (IRR)

In the case of heterogeneous cash flows, as in this project, can be applied appropriate analogue of IRR - the modified internal rate of return (MIRR).

The calculation algorithm involves several procedures. First of all, the total discounted value of all outflows and the total accrued

the value of all inflows, and both discounting and accretion are carried out at the price of the source of project financing. The accrued value of inflows is called the terminal value. Then the discount rate is determined, which equalizes the total present value of outflows and the terminal value, which in this case is the MIRR. So, the general formula for calculation is as follows:

$$\sum_{t=0}^{N} \frac{OF_t}{(1+r)^1} = \frac{\sum_{t=0} IF_t(1+r)^{n-1}}{\sum (1+MIRR)} \quad (5)$$

Where OF, - cash outflow in the N-th period (in absolute value);

IF, - cash inflow in the N-th period;

d - the cost of the source of funding for this project; n - the duration of the project.

Note that the formula makes sense if the terminal value exceeds the sum of discounted outflows.

8.9.2 Project performance indicators

The main financial indicators are shown in the table:

Table 8.12 Indicators of investment efficiency

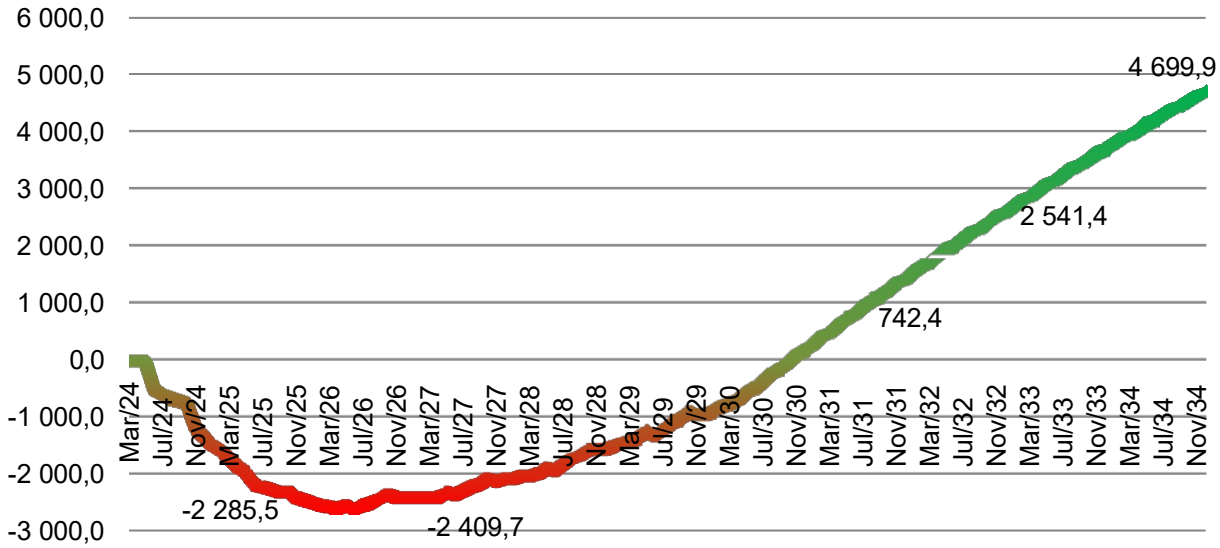
Investment performance indicators	Value
Calculation period (planning horizon), months.	132
Net income (NV), thousand dollars.	11 522
Net discounted income (NPV), thousand dollars.	4 700
Internal rate of return (IRR), % per year	29%
Profitability index (PI), units.	2,10
Payback period (PB), months.	73
Discounted payback period (DPB), months.	79
Investments in the project, thousand dollars.	4 287
Average return on sales for the project, %	24%
Net income (cumulative), thousand dollars.	13 697
Discount rate, %	9,22%

Source: Global Innovation Trade analysis and calculations

According to the study, it is clear that the project is profitable. It will pay for itself in about 6 years. Payback period, taking into account discounting will be about 79 months (6 years 7 months). The net profit of the project in 2026 will be **$13,696.92 thousand.**

The figure shows the NPV of the project:

Figure 8.3 Graph of the NPV of the project



Source: Global Innovation Trade analysis and calculations

On the NPV graph we see the increase in the net present value of the project by years of its implementation.

Net cash flow NPV of **$4,699.88 at** the end of the period shows the amount of cash the investor will receive from the project after cash inflows recoup his initial investment costs and periodic cash outflows associated with the project, taking into account the time value of money and project risks.

The PI indicator of 2.10 units means that at the end of 2034, for each invested unit, the Investor will receive 1.10 units (discounted) on top, which is a good indicator for investment projects.

9. PROJECT RISK ANALYSIS

9.1 Quantitative risk analysis

The table shows the sensitivity of the project to changes in external market conditions:

Table 9.1 Sensitivity analysis

Indicator	**NPV**		**IRR**	
Base value	**391 657**		**29%**	
Deviations	**Value**	**%**	**Value**	**%**
Decrease in selling prices by 5%	243 004	-38,0%	22%	-25,2%
Increase in investment costs by 5%	379 696	-3,1%	28%	-4,8%
Increase in variable costs by 5%	292 893	-25,2%	24%	-18,4%
Increase in fixed costs by 5%	384 974	-1,7%	29%	-1,4%

Continued

Indicator	**PI**		**PB**	
Base value	**2,10**		**72,6**	
Deviations	**Value**	**%**	**Value**	**%**
Decrease in selling prices by 5%	1,68	-19,9%	80,8	-11,3%
Increase in investment costs by 5%	2,06	-1,7%	73,6	-1,4%
Increase in variable costs by 5%	1,82	-13,2%	78,2	-7,7%
Increase in fixed costs by 5%	2,08	-0,8%	73,1	-0,7%

Source: Financial model calculations

* A description of the indicators in question is given in section 7.10 of this business plan.

According to the results of the analysis, there is the greatest dependence of the project on the selling price of products and the value of variable costs.

9.2 Qualitative risk analysis

Like any enterprise operating in the market, this project is under the conditions of risks. The main possible risks the probability of their realization, the degree of danger and ways to reduce the risks are shown in the table:

Table 9.2 Main risks of the project

Risk	Probability and degree of danger. Manifestations adverse effects	Means risk mitigation tools
Production and commercial risks		
Construction delays	Probability: medium Degree of danger: medium Impact: disruption of the entire project	Forming an agreement with clear points of interaction. Selection of contractors with extensive experience work.
Failures deadlinespurchase and delivery of equipment	Probability: medium Degree of danger: medium Impact: delaying the process company openings	Work with reliable companies, choosing contractors with a positive reputation.
Technical and technological failures	Probability: medium Degree of danger: high Impact: deterioration quality of the products produced	Timely maintenance and repair of equipment will minimize the risk of failures in work.
Obtaining substandard raw materials	Probability: medium Degree of danger: high Impact: deterioration quality manufactured products	Regular Checking of the shipped batch of raw materials and final products.
Market risks		
Dumping competitors' prices	Probability: medium Degree of danger: high Impact: Decrease profit of the company, loss of market share	Reduction costs, slight price reductions, various promotions.
Reduced consumer demand	Probability: low Degree of danger: high Impact: decrease in profits	Increase number of advertising campaigns, conducting promotions.
Environmental risks		

Pollution ecology of the area, epidemics	Probability: medium Degree of danger: high Impact: Suspension of production	Monitoring ecological situation in the region, carrying out protection measures.
Economic risks		
Increase Course	Probability: high	Availability stock financial

Risk	Probability and degree of danger. Manifestations adverse effects	Means risk mitigation tools
foreign currencies	Risk level: medium Impact: Increase in investment and transaction costs	means, work with domestic suppliers

Source: Global Innovation Trade analysis and calculations

9.3 Project break-even point

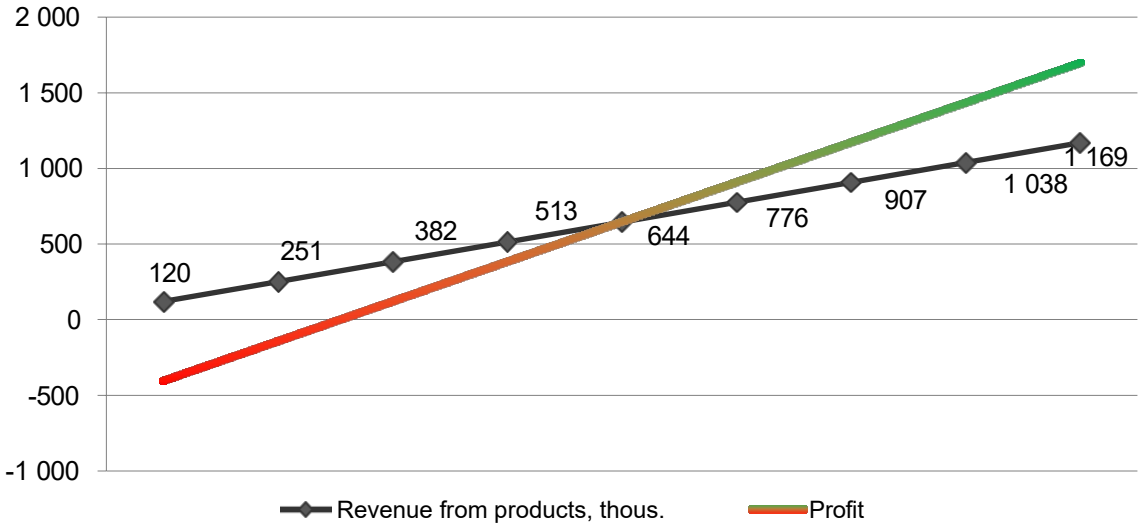
The break-even point determines what the volume of sales should be in order for the company to work break-even, could cover all its costs without making a profit.

To calculate the breakeven point, you must divide the costs into three components:

- Variable costs - increasing in proportion to the increase in production (volume of services).
- Fixed costs - does not depend on the number of services rendered (goods sold) and whether the volume of operations is increasing or decreasing.
- Loan payments.
- Tax deductions.

For this company, the break-even point graph will look as follows:

Figure 9.1 Break-even point chart



Source: Global Innovation Trade analysis and calculations

The break-even point is of great importance for the viability of a company and its solvency. Thus, the degree to which sales volumes exceed the break-even point determines the company's financial strength (margin of safety).

Due to the fact that the largest project costs are variable costs, the impact of other costs on the project is not significant.

On the break-even point chart, we see that the company must have revenue of at least **$644,46 thousand per** month.

9.4 Cash flow statement (by month), thousand dollars

	2024 г											
	Jan.24	**Feb.24**	**mar.24**	**Apr.24**	**May.24**	**Jun.24**	**July 24**	**Aug. 24**	**sen.24**	**Oct. 24**	**Nov.24**	**Dec. 24**
INVESTMENT CASH FLOW (ICEF)	**0,0**	**0,0**	**0,0**	**-1,2**	**-30,0**	**-495,9**	**-96,0**	**-72,0**	**-54,0**	**-54,6**	**-457,0**	**-146,4**
Capital expenditures	0,0	0,0	0,0	1,2	30,0	495,9	96,0	72,0	54,0	54,6	457,0	146,4
OPERATING CASH FLOW (OPF)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Revenue total	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Expenses total	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Variable costs	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*
Fixed costs	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*	*0,0*
Accrued taxes and payments	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Income tax	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Payments of interest on the loan	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
FINANCIAL CASH FLOW (FDP)	**0,0**	**0,0**	**0,0**	**1,2**	**30,0**	**495,9**	**96,0**	**72,0**	**54,0**	**54,6**	**457,0**	**146,4**
Own funds	0,0	0,0	0,0	1,2	30,0	42,0	0,0	0,0	6,0	6,6	6,6	59,9
Borrowed funds	0,0	0,0	0,0	0,0	0,0	453,9	96,0	72,0	48,0	48,0	450,4	86,4
Payment of the body of the debt	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Net cash flow (NFC)	**0,0**	**0,0**	**0,0**	**-1,2**	**-30,0**	**-495,9**	**-96,0**	**-72,0**	**-54,0**	**-54,6**	**-457,0**	**-146,4**
Cumulative NPD	**0,0**	**0,0**	**0,0**	**-1,2**	**-31,2**	**-527,1**	**-623,1**	**-695,1**	**-749,1**	**-803,7**	**-1 260,7**	**-1 407,1**
Cash balance at the beginning of the period	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Cash balance at the end of the period	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Net discounted income (NPV)	**0,0**	**0,0**	**0,0**	**-1,2**	**-29,1**	**-478,0**	**-91,9**	**-68,4**	**-50,9**	**-51,1**	**-424,6**	**-135,0**

NPV on an accrual basis	0,0	0,0	0,0	-1,2	-30,3	-508,3	-600,2	-668,6	-719,5	-770,6	-1 195,2	-1 330,2

	2025 г											
	Jan.25	**fev.25**	**mar.25**	**Apr. 25**	**May.25**	**Jun 25**	**July 25**	**Aug. 25**	**sen.25**	**Oct. 25**	**Nov. 25**	**Dec. 25**
INVESTMENT CASH FLOW (ICEF)	**-107,6**	**0,0**	**0,0**	**0,0**	**0,0**	**-110,1**	**0,0**	**0,0**	**0,0**	**0,0**	**-137,7**	**-23,6**
Capital expenditures	107,6	0,0	0,0	0,0	0,0	110,1	0,0	0,0	0,0	0,0	137,7	23,6
OPERATING CASH FLOW (OPF)	**-71,0**	**-111,9**	**-139,0**	**-158,9**	**-127,1**	**-103,4**	**-70,5**	**-41,3**	**-27,1**	**-7,1**	**6,1**	**-38,3**
Revenue total	0,0	0,0	0,0	0,0	56,1	96,4	141,9	182,2	207,6	238,3	253,1	268,0
Expenses total	71,0	111,9	139,0	157,6	178,4	190,1	201,5	211,8	222,0	232,2	233,3	292,1
Variable costs	*56,3*	*87,9*	*115,1*	*133,6*	*154,5*	*165,7*	*177,5*	*187,7*	*197,9*	*208,1*	*209,2*	*267,6*
Fixed costs	*14,6*	*24,0*	*24,0*	*24,0*	*24,0*	*24,4*	*24,0*	*24,0*	*24,0*	*24,1*	*24,1*	*24,4*
Accrued taxes and payments	0,0	0,0	0,0	1,3	4,7	9,7	10,8	11,7	12,6	13,2	13,8	14,2
Income tax	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Payments of interest on the loan	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
FINANCIAL CASH FLOW (FDP)	**178,5**	**111,9**	**139,0**	**158,9**	**127,1**	**213,6**	**70,5**	**41,3**	**27,1**	**19,7**	**157,4**	**48,1**
Own funds	20,8	8,6	11,2	12,7	14,4	15,5	16,5	17,6	18,6	19,7	19,7	24,5
Borrowed funds	157,7	103,3	127,9	146,2	112,7	198,1	53,9	23,7	8,4	0,0	137,7	23,6
Payment of the body of the debt	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Net cash flow (NFC)	**-178,5**	**-111,9**	**-139,0**	**-158,9**	**-127,1**	**-213,6**	**-70,5**	**-41,3**	**-27,1**	**-7,1**	**-131,6**	**-61,9**
Cumulative NPD	**-1 585,6**	**-1 697,4**	**-1 836,5**	**-1 995,3**	**-2 122,4**	**-2 336,0**	**-2 406,4**	**-2 447,8**	**-2 474,8**	**-2 481,9**	**-2 613,5**	**-2 675,4**
Cash balance at the beginning of the period	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	12,6	38,4
Cash balance at the end of the period	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	12,6	38,4	24,6

Net discounted income (NPV)	**-163,4**	**-101,7**	**-125,4**	**-142,3**	**-113,0**	**-188,5**	**-61,7**	**-35,9**	**-23,4**	**-6,1**	**-112,0**	**-52,2**
NPV on an accrual basis	**-1 493,6**	**-1 595,3**	**-1 720,7**	**-1 863,0**	**-1 976,0**	**-2 164,5**	**-2 226,2**	**-2 262,1**	**-2 285,5**	**-2 291,6**	**-2 403,5**	**-2 455,8**
	Jan.26	**Feb.26**	**mar.26**	**Apr.26**	**May.26**	**Jun 26**	**July 26.**	**Aug 26**	**sen.26**	**Oct. 26**	**Nov. 26**	**Dec. 26**
INVESTMENT CASH FLOW (ICEF)	**-31,7**	**0,0**	**0,0**	**0,0**	**0,0**	**-110,1**	**0,0**	**0,0**	**0,0**	**0,0**	**-137,7**	**-23,6**
Capital expenditures	31,7	0,0	0,0	0,0	0,0	110,1	0,0	0,0	0,0	0,0	137,7	23,6
OPERATING CASH FLOW (OPF)	**-30,3**	**-33,2**	**-40,0**	**-42,1**	**63,0**	**41,4**	**66,9**	**80,6**	**83,8**	**106,3**	**63,7**	**7,5**
Revenue total	282,8	297,7	312,5	312,5	417,1	432,0	446,8	461,7	476,5	476,5	476,5	476,5
Expenses total	298,6	315,8	325,8	335,8	336,9	338,3	338,0	338,0	338,0	338,0	338,0	383,0
Variable costs	*271,1*	*290,1*	*300,0*	*310,0*	*311,1*	*312,2*	*312,2*	*312,2*	*312,2*	*312,2*	*312,2*	*356,8*
Fixed costs	*27,5*	*25,7*	*25,7*	*25,7*	*25,8*	*26,1*	*25,8*	*25,8*	*25,8*	*25,8*	*25,8*	*26,2*
Accrued taxes and payments	14,6	15,0	15,2	18,9	17,2	40,7	41,9	43,1	43,2	32,2	43,2	43,2
Income tax	0,0	0,0	11,5	0,0	0,0	11,5	0,0	0,0	11,5	0,0	0,0	11,5
Payments of interest on the loan	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	31,6	31,3
FINANCIAL CASH FLOW (FDP)	**56,4**	**25,8**	**28,3**	**42,1**	**0,0**	**110,1**	**0,0**	**0,0**	**0,0**	**0,0**	**137,7**	**23,6**
Own funds	24,8	25,8	26,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	31,7	0,0	1,4	42,1	0,0	110,1	0,0	0,0	0,0	0,0	137,7	23,6
Payment of the body of the debt	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Net cash flow (NFC)	**-62,0**	**-33,2**	**-40,0**	**-42,1**	**63,0**	**-68,8**	**66,9**	**80,6**	**83,8**	**106,3**	**-74,0**	**-16,1**
Cumulative NPD	**-2 737,4**	**-2 770,6**	**-2 810,5**	**-2 852,7**	**-2 789,6**	**-2 858,4**	**-2 791,5**	**-2 710,9**	**-2 627,1**	**-2 520,8**	**-2 594,8**	**-2 610,8**
Cash balance at the beginning of the period	24,6	19,0	11,7	0,0	0,0	63,0	104,4	171,3	251,9	335,7	442,0	505,7
Cash balance at the end of the period	19,0	11,7	0,0	0,0	63,0	104,4	171,3	251,9	335,7	442,0	505,7	513,2

Net discounted income (NPV)	**-52,0**	**-27,6**	**-33,0**	**-34,5**	**51,3**	**-55,6**	**53,7**	**64,1**	**66,2**	**83,4**	**-57,6**	**-12,4**
NPV on an accrual basis	**-2 507,7**	**-2 535,3**	**-2 568,4**	**-2 602,9**	**-2 551,6**	**-2 607,2**	**-2 553,5**	**-2 489,4**	**-2 423,1**	**-2 339,7**	**-2 397,3**	**-2 409,7**
	Jan.27	**fev.27**	**mar.27**	**Apr.27**	**May.27**	**Jun.27**	**July 27.**	**Aug. 27**	**sen.27**	**Oct. 27**	**Nov.27**	**Dec. 27**
INVESTMENT CASH FLOW (ICEF)	**-31,7**	**0,0**	**0,0**	**0,0**	**0,0**	**-106,9**	**0,0**	**0,0**	**0,0**	**0,0**	**-133,6**	**-4,0**
Capital expenditures	31,7	0,0	0,0	0,0	0,0	106,9	0,0	0,0	0,0	0,0	133,6	4,0
OPERATING CASH FLOW (OPF)	**22,8**	**17,9**	**-2,0**	**12,8**	**101,5**	**64,1**	**98,7**	**99,0**	**65,3**	**110,3**	**99,9**	**19,3**
Revenue total	476,5	476,5	476,5	476,5	561,0	561,0	561,0	561,0	561,0	561,0	561,0	561,0
Expenses total	379,5	384,7	384,7	384,7	384,7	385,1	384,7	384,8	384,8	384,8	384,8	431,7
Variable costs	*349,6*	*358,1*	*358,1*	*358,1*	*358,1*	*358,1*	*358,1*	*358,1*	*358,1*	*358,1*	*358,1*	*404,6*
Fixed costs	*29,9*	*26,6*	*26,6*	*26,6*	*26,6*	*27,0*	*26,6*	*26,7*	*26,7*	*26,7*	*26,7*	*27,1*
Accrued taxes and payments	43,2	43,2	29,4	48,9	44,9	48,3	48,3	48,3	48,3	37,6	48,3	48,3
Income tax	0,0	0,0	34,0	0,0	0,0	34,0	0,0	0,0	34,0	0,0	0,0	34,0
Payments of interest on the loan	31,0	30,7	30,4	30,2	29,9	29,6	29,3	29,0	28,6	28,3	28,0	27,7
FINANCIAL CASH FLOW (FDP)	**31,7**	**0,0**	**0,0**	**0,0**	**0,0**	**106,9**	**0,0**	**0,0**	**0,0**	**0,0**	**133,6**	**4,0**
Own funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	31,7	0,0	0,0	0,0	0,0	106,9	0,0	0,0	0,0	0,0	133,6	4,0
Payment of the body of the debt	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Net cash flow (NFC)	**-8,9**	**17,9**	**-2,0**	**12,8**	**101,5**	**-42,8**	**98,7**	**99,0**	**65,3**	**110,3**	**-33,7**	**15,3**
Cumulative NPD	**-2 619,7**	**-2 601,8**	**-2 603,9**	**-2 591,1**	**-2 489,6**	**-2 532,4**	**-2 433,7**	**-2 334,6**	**-2 269,3**	**-2 159,0**	**-2 192,7**	**-2 177,4**
Cash balance at the beginning of the period	513,2	536,0	553,9	551,8	564,6	666,1	730,2	828,9	927,9	993,2	1 103,6	1 203,5
Cash balance at the end of the period	536,0	553,9	551,8	564,6	666,1	730,2	828,9	927,9	993,2	1 103,6	1 203,5	1 222,8

Net discounted income (NPV)	**-6,8**	**13,6**	**-1,5**	**9,6**	**75,7**	**-31,6**	**72,5**	**72,2**	**47,3**	**79,2**	**-24,0**	**10,8**
NPV on an accrual basis	**-2 416,5**	**-2 402,9**	**-2 404,5**	**-2 394,9**	**-2 319,2**	**-2 350,9**	**-2 278,4**	**-2 206,2**	**-2 158,9**	**-2 079,7**	**-2 103,7**	**-2 092,8**
	Jan.28	**Feb.28**	**mar.28**	**Apr.28**	**May.28**	**Jun.28**	**July 28.**	**Aug.28**	**sen.28**	**Oct. 28**	**Nov.28**	**Dec. 28**
INVESTMENT CASH FLOW (ICEF)	**-30,7**	**0,0**	**0,0**	**0,0**	**0,0**	**-106,9**	**0,0**	**0,0**	**0,0**	**0,0**	**-133,6**	**-4,0**
Capital expenditures	30,7	0,0	0,0	0,0	0,0	106,9	0,0	0,0	0,0	0,0	133,6	4,0
OPERATING CASH FLOW (OPF)	**57,3**	**53,2**	**12,3**	**45,6**	**142,0**	**84,3**	**139,6**	**139,9**	**85,6**	**151,3**	**140,9**	**40,5**
Revenue total	561,0	561,0	561,0	561,0	650,8	650,8	650,8	650,8	650,8	650,8	650,8	650,8
Expenses total	428,0	432,4	432,4	432,4	432,4	432,8	432,5	432,5	432,5	432,5	432,5	478,6
Variable costs	*396,7*	*405,7*	*405,7*	*405,7*	*405,7*	*405,7*	*405,7*	*405,7*	*405,7*	*405,7*	*405,7*	*451,4*
Fixed costs	*31,3*	*26,7*	*26,7*	*26,7*	*26,8*	*27,1*	*26,8*	*26,8*	*26,8*	*26,8*	*26,8*	*27,2*
Accrued taxes and payments	48,3	48,3	34,9	56,6	50,2	53,3	53,3	53,3	53,3	42,6	53,3	53,3
Income tax	0,0	0,0	54,6	0,0	0,0	54,6	0,0	0,0	54,6	0,0	0,0	54,6
Payments of interest on the loan	27,4	27,1	26,8	26,4	26,1	25,8	25,4	25,1	24,8	24,4	24,1	23,7
FINANCIAL CASH FLOW (FDP)	**30,7**	**0,0**	**0,0**	**0,0**	**0,0**	**106,9**	**0,0**	**0,0**	**0,0**	**0,0**	**133,6**	**4,0**
Own funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	30,7	0,0	0,0	0,0	0,0	106,9	0,0	0,0	0,0	0,0	133,6	4,0
Payment of the body of the debt	0,0	77,4	45,9	46,2	46,6	47,0	47,4	47,8	48,2	48,6	49,0	49,4
Net cash flow (NFC)	**26,6**	**53,2**	**12,3**	**45,6**	**142,0**	**-22,6**	**139,6**	**139,9**	**85,6**	**151,3**	**7,3**	**36,5**
Cumulative NPD	**-2 150,8**	**-2 097,5**	**-2 085,2**	**-2 039,7**	**-1 897,7**	**-1 920,3**	**-1 780,7**	**-1 640,8**	**-1 555,2**	**-1 403,9**	**-1 396,6**	**-1 360,1**
Cash balance at the beginning of the period	1 222,8	1 280,1	1 256,0	1 222,4	1 221,7	1 317,1	1 354,3	1 446,5	1 538,6	1 576,0	1 678,6	1 770,5
Cash balance at the end of the period	1 280,1	1 256,0	1 222,4	1 221,7	1 317,1	1 354,3	1 446,5	1 538,6	1 576,0	1 678,6	1 770,5	1 761,6

Net discounted income (NPV)	**18,7**	**37,1**	**8,5**	**31,3**	**96,9**	**-15,3**	**93,8**	**93,4**	**56,7**	**99,5**	**4,8**	**23,7**
NPV on an accrual basis	**-2 074,2**	**-2 037,0**	**-2 028,5**	**-1 997,2**	**-1 900,3**	**-1 915,6**	**-1 821,8**	**-1 728,4**	**-1 671,7**	**-1 572,2**	**-1 567,4**	**-1 543,7**
	Jan.29	**fev.29**	**mar.29**	**Apr.29**	**May.29**	**June 29**	**July 29.**	**Aug. 29**	**sen.29**	**Oct. 29**	**Nov. 29**	**Dec. 29**
INVESTMENT CASH FLOW (ICEF)	**-30,7**	**0,0**	**0,0**	**0,0**	**0,0**	**-225,6**	**0,0**	**0,0**	**0,0**	**0,0**	**-282,0**	**-8,5**
Capital expenditures	30,7	0,0	0,0	0,0	0,0	225,6	0,0	0,0	0,0	0,0	282,0	8,5
OPERATING CASH FLOW (OPF)	**99,4**	**96,0**	**30,9**	**88,1**	**185,0**	**103,2**	**182,7**	**183,0**	**104,6**	**206,4**	**184,1**	**63,1**
Revenue total	650,8	650,8	650,8	650,8	740,5	740,5	740,5	740,5	740,5	740,5	740,5	740,5
Expenses total	474,7	478,5	478,5	478,5	478,5	478,9	478,5	478,6	478,6	478,6	478,6	521,2
Variable costs	*442,6*	*451,6*	*451,6*	*451,6*	*451,6*	*451,6*	*451,6*	*451,6*	*451,6*	*451,6*	*451,6*	*493,9*
Fixed costs	*32,1*	*26,9*	*26,9*	*26,9*	*26,9*	*27,3*	*26,9*	*26,9*	*27,0*	*27,0*	*27,0*	*27,3*
Accrued taxes and payments	53,3	53,3	39,9	61,9	55,0	58,1	58,1	58,1	58,1	35,5	58,1	58,1
Income tax	0,0	0,0	78,8	0,0	0,0	78,8	0,0	0,0	78,8	0,0	0,0	78,8
Payments of interest on the loan	23,4	23,0	22,7	22,3	22,0	21,6	21,2	20,9	20,5	20,1	19,7	19,3
FINANCIAL CASH FLOW (FDP)	**30,7**	**0,0**	**0,0**	**0,0**	**0,0**	**225,6**	**0,0**	**0,0**	**0,0**	**0,0**	**282,0**	**8,5**
Own funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	30,7	0,0	0,0	0,0	0,0	225,6	0,0	0,0	0,0	0,0	282,0	8,5
Payment of the body of the debt	49,8	50,2	50,7	51,1	51,5	51,9	52,4	52,8	53,3	53,7	54,1	54,6
Net cash flow (NFC)	**68,7**	**96,0**	**30,9**	**88,1**	**185,0**	**-122,4**	**182,7**	**183,0**	**104,6**	**206,4**	**-97,8**	**54,6**
Cumulative NPD	**-1 291,4**	**-1 195,4**	**-1 164,5**	**-1 076,4**	**-891,4**	**-1 013,8**	**-831,1**	**-648,1**	**-543,5**	**-337,1**	**-434,9**	**-380,3**
Cash balance at the beginning of the period	1 761,6	1 811,2	1 856,9	1 837,1	1 874,1	2 007,7	2 058,9	2 189,2	2 319,4	2 370,8	2 523,4	2 653,4
Cash balance at the end of the period	1 811,2	1 856,9	1 837,1	1 874,1	2 007,7	2 058,9	2 189,2	2 319,4	2 370,8	2 523,4	2 653,4	2 661,9

Net discounted income (NPV)	**44,2**	**61,3**	**19,6**	**55,4**	**115,6**	**-75,9**	**112,5**	**111,9**	**63,5**	**124,3**	**-58,5**	**32,4**
NPV on an accrual basis	**-1 499,5**	**-1 438,2**	**-1 418,7**	**-1 363,2**	**-1 247,6**	**-1 323,5**	**-1 211,1**	**-1 099,2**	**-1 035,8**	**-911,5**	**-970,0**	**-937,5**

	Jan.30	fev.30	mar.30	Apr.30	May.30	Jun 30	July 30	Aug 30	sen.30	Oct. 30	Nov. 30	Dec. 30
INVESTMENT CASH FLOW (ICEF)	**-64,8**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Capital expenditures	64,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
OPERATING CASH FLOW (OPF)	**145,6**	**146,3**	**71,4**	**139,0**	**234,1**	**124,9**	**229,1**	**229,5**	**126,4**	**230,3**	**230,7**	**127,3**
Revenue total	740,5	740,5	740,5	740,5	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0
Expenses total	517,9	517,6	517,6	517,6	517,7	518,0	517,7	517,7	517,7	517,7	517,7	518,1
Variable costs	*484,3*	*492,8*	*492,8*	*492,8*	*492,8*	*492,8*	*492,8*	*492,8*	*492,8*	*492,8*	*492,8*	*492,8*
Fixed costs	*33,6*	*24,9*	*24,9*	*24,9*	*24,9*	*25,3*	*24,9*	*24,9*	*24,9*	*25,0*	*25,0*	*25,3*
Accrued taxes and payments	58,1	58,1	29,9	66,1	55,8	61,7	61,7	61,7	61,7	61,6	61,7	61,7
Income tax	0,0	0,0	103,5	0,0	0,0	103,5	0,0	0,0	103,5	0,0	0,0	103,5
Payments of interest on the loan	19,0	18,6	18,2	17,8	17,4	17,0	16,6	16,2	15,7	15,3	14,9	14,5
FINANCIAL CASH FLOW (FDP)	**64,8**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Own funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	64,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Payment of the body of the debt	55,1	55,5	56,0	56,4	56,9	57,4	57,9	58,3	58,8	59,3	59,8	60,3
Net cash flow (NFC)	**80,7**	**146,3**	**71,4**	**139,0**	**234,1**	**124,9**	**229,1**	**229,5**	**126,4**	**230,3**	**230,7**	**127,3**
Cumulative NPD	**-299,6**	**-153,3**	**-81,9**	**57,1**	**291,2**	**416,1**	**645,2**	**874,7**	**1 001,1**	**1 231,4**	**1 462,2**	**1 589,5**
Cash balance at the beginning of the period	2 661,9	2 752,4	2 843,2	2 858,6	2 941,2	3 118,4	3 185,9	3 357,1	3 528,3	3 595,9	3 766,9	3 937,8

Cash balance at the end of the period	2 752,4	2 843,2	2 858,6	2 941,2	3 118,4	3 185,9	3 357,1	3 528,3	3 595,9	3 766,9	3 937,8	4 004,7
Net discounted income (NPV)	**47,5**	**85,5**	**41,4**	**80,1**	**133,9**	**70,9**	**129,1**	**128,4**	**70,2**	**127,0**	**126,3**	**69,2**
NPV on an accrual basis	**-890,0**	**-804,5**	**-763,0**	**-683,0**	**-549,0**	**-478,1**	**-349,0**	**-220,6**	**-150,4**	**-23,4**	**102,9**	**172,0**

	Jan.31	Feb.31	mar.31	Apr.31	May.31	Jun.31	July 31	Aug. 31	sen.31	Oct.31	Nov.31	Dec. 31
INVESTMENT CASH FLOW (ICEF)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Capital expenditures	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
OPERATING CASH FLOW (OPF)	**234,8**	**241,5**	**115,0**	**238,1**	**244,0**	**117,2**	**244,9**	**245,3**	**118,9**	**246,3**	**246,7**	**119,9**
Revenue total	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0
Expenses total	514,5	508,2	508,2	508,2	508,2	508,6	508,3	508,3	508,3	508,3	508,3	508,7
Variable costs	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*
Fixed costs	*31,3*	*25,0*	*25,0*	*25,0*	*25,0*	*25,4*	*25,1*	*25,1*	*25,1*	*25,1*	*25,1*	*25,5*
Accrued taxes and payments	61,7	61,7	61,7	66,0	60,4	60,4	60,4	60,4	60,4	60,4	60,4	60,4
Income tax	0,0	0,0	126,9	0,0	0,0	126,9	0,0	0,0	126,9	0,0	0,0	126,9
Payments of interest on the loan	14,1	13,6	13,2	12,8	12,3	11,9	11,4	11,0	10,5	10,0	9,6	9,1
FINANCIAL CASH FLOW (FDP)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Own funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Payment of the body of the debt	60,8	61,3	61,8	62,4	62,9	63,4	63,9	64,5	65,0	65,5	66,1	66,6
Net cash flow (NFC)	**234,8**	**241,5**	**115,0**	**238,1**	**244,0**	**117,2**	**244,9**	**245,3**	**118,9**	**246,3**	**246,7**	**119,9**
Cumulative NPD	**1 824,2**	**2 065,8**	**2 180,8**	**2 418,8**	**2 662,9**	**2 780,0**	**3 024,9**	**3 270,3**	**3 389,2**	**3 635,4**	**3 882,1**	**4 002,0**
Cash balance at the beginning of the period	4 004,7	4 178,7	4 358,9	4 412,1	4 587,8	4 768,9	4 822,7	5 003,7	5 184,6	5 238,5	5 419,2	5 599,8

Cash balance at the end of the period	4 178,7	4 358,9	4 412,1	4 587,8	4 768,9	4 822,7	5 003,7	5 184,6	5 238,5	5 419,2	5 599,8	5 653,1
Net discounted income (NPV)	**126,6**	**129,3**	**61,1**	**125,6**	**127,8**	**60,9**	**126,4**	**125,7**	**60,4**	**124,3**	**123,6**	**59,6**
NPV on an accrual basis	**298,6**	**427,9**	**489,0**	**614,6**	**742,4**	**803,3**	**929,7**	**1 055,4**	**1 115,8**	**1 240,1**	**1 363,8**	**1 423,4**

	Jan.32	fev.32	mar.32	Apr.32	May.32	Jun.32	July 32	Aug.32	sen.32	Oct. 32	Nov.32	Dec. 32
INVESTMENT CASH FLOW (ICEF)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Capital expenditures	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
OPERATING CASH FLOW (OPF)	**241,6**	**248,1**	**118,4**	**244,9**	**249,5**	**119,4**	**250,5**	**250,9**	**121,3**	**252,0**	**252,4**	**122,4**
Revenue total	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0
Expenses total	514,3	508,4	508,4	508,4	508,4	508,8	508,4	508,4	508,4	508,5	508,5	508,8
Variable costs	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*
Fixed costs	*31,1*	*25,1*	*25,2*	*25,2*	*25,2*	*25,5*	*25,2*	*25,2*	*25,2*	*25,3*	*25,2*	*25,6*
Accrued taxes and payments	60,4	60,4	60,4	64,5	60,4	60,4	60,4	60,4	60,4	60,4	60,4	60,4
Income tax	0,0	0,0	130,2	0,0	0,0	130,2	0,0	0,0	130,2	0,0	0,0	130,2
Payments of interest on the loan	8,6	8,2	7,7	7,2	6,7	6,2	5,7	5,2	4,7	4,2	3,7	3,2
FINANCIAL CASH FLOW (FDP)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Own funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Payment of the body of the debt	67,2	67,7	68,3	68,9	69,5	70,0	70,6	71,2	71,8	72,4	73,0	73,6
Net cash flow (NFC)	**241,6**	**248,1**	**118,4**	**244,9**	**249,5**	**119,4**	**250,5**	**250,9**	**121,3**	**252,0**	**252,4**	**122,4**
Cumulative NPD	**4 243,6**	**4 491,7**	**4 610,1**	**4 855,0**	**5 104,5**	**5 223,9**	**5 474,4**	**5 725,3**	**5 846,6**	**6 098,6**	**6 351,0**	**6 473,4**
Cash balance at the beginning of the period	5 653,1	5 827,5	6 007,9	6 057,9	6 234,0	6 414,0	6 463,4	6 643,3	6 823,0	6 872,5	7 052,0	7 231,5

Cash balance at the end of the period	5 827,5	6 007,9	6 057,9	6 234,0	6 414,0	6 463,4	6 643,3	6 823,0	6 872,5	7 052,0	7 231,5	7 280,3
Net discounted income (NPV)	**119,3**	**121,6**	**57,6**	**118,3**	**119,6**	**56,8**	**118,3**	**117,7**	**56,5**	**116,4**	**115,8**	**55,8**
NPV on an accrual basis	**1 542,7**	**1 664,3**	**1 721,9**	**1 840,2**	**1 959,8**	**2 016,7**	**2 135,0**	**2 252,7**	**2 309,1**	**2 425,6**	**2 541,4**	**2 597,1**

	Jan.33	Feb.33	mar.33	Apr.33	May.33	June 33	July 33	Aug.33	sen.33	Oct. 33	Nov.33	Dec. 33
INVESTMENT CASH FLOW (ICEF)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Capital expenditures	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
OPERATING CASH FLOW (OPF)	**247,8**	**254,0**	**121,3**	**251,1**	**255,5**	**122,5**	**256,1**	**256,1**	**122,8**	**256,1**	**256,0**	**122,4**
Revenue total	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0
Expenses total	514,2	508,5	508,5	508,5	508,5	508,9	508,6	508,6	508,6	508,6	508,6	509,0
Variable costs	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*
Fixed costs	*31,0*	*25,3*	*25,3*	*25,3*	*25,3*	*25,7*	*25,3*	*25,4*	*25,4*	*25,4*	*25,4*	*25,8*
Accrued taxes and payments	60,4	60,4	60,4	64,3	60,4	60,4	60,4	60,4	60,4	60,3	60,4	60,4
Income tax	0,0	0,0	133,2	0,0	0,0	133,2	0,0	0,0	133,2	0,0	0,0	133,2
Payments of interest on the loan	2,7	2,1	1,6	1,1	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0
FINANCIAL CASH FLOW (FDP)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Own funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Payment of the body of the debt	74,2	74,8	75,5	76,1	76,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Net cash flow (NFC)	**247,8**	**254,0**	**121,3**	**251,1**	**255,5**	**122,5**	**256,1**	**256,1**	**122,8**	**256,1**	**256,0**	**122,4**
Cumulative NPD	**6 721,2**	**6 975,2**	**7 096,5**	**7 347,6**	**7 603,1**	**7 725,6**	**7 981,7**	**8 237,8**	**8 360,6**	**8 616,7**	**8 872,7**	**8 995,1**

Cash balance at the beginning of the period	7 280,3	7 453,9	7 633,0	7 678,8	7 853,8	8 032,7	8 155,2	8 411,2	8 667,3	8 790,1	9 046,2	9 302,2
Cash balance at the end of the period	7 453,9	7 633,0	7 678,8	7 853,8	8 032,7	8 155,2	8 411,2	8 667,3	8 790,1	9 046,2	9 302,2	9 424,6
Net discounted income (NPV)	**112,0**	**114,0**	**54,0**	**111,0**	**112,2**	**53,4**	**110,8**	**109,9**	**52,4**	**108,3**	**107,5**	**51,1**
NPV on an accrual basis	**2 709,2**	**2 823,1**	**2 877,2**	**2 988,2**	**3 100,4**	**3 153,8**	**3 264,5**	**3 374,5**	**3 426,9**	**3 535,2**	**3 642,7**	**3 693,8**

	Jan.34	fev.34	mar.34	Apr.34	May.34	Jun.34	July 34	Aug. 34	sen.34	Oct. 34	Nov.34	Dec. 34
INVESTMENT CASH FLOW (ICEF)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Capital expenditures	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
OPERATING CASH FLOW (OPF)	**250,6**	**256,0**	**122,3**	**252,3**	**256,0**	**121,9**	**255,9**	**255,9**	**122,2**	**255,9**	**255,9**	**121,8**
Revenue total	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0	825,0
Expenses total	514,0	508,6	508,7	508,7	508,7	509,1	508,7	508,7	508,7	508,8	508,8	509,1
Variable costs	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*	*483,2*
Fixed costs	*30,8*	*25,4*	*25,4*	*25,5*	*25,5*	*25,8*	*25,5*	*25,5*	*25,5*	*25,5*	*25,5*	*25,9*
Accrued taxes and payments	60,4	60,4	60,4	64,1	60,4	60,4	60,4	60,4	60,4	60,3	60,4	60,4
Income tax	0,0	0,0	133,7	0,0	0,0	133,7	0,0	0,0	133,7	0,0	0,0	133,7
Payments of interest on the loan	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
FINANCIAL CASH FLOW (FDP)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Own funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Borrowed funds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Payment of the body of the debt	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Net cash flow (NFC)	**250,6**	**256,0**	**122,3**	**252,3**	**256,0**	**121,9**	**255,9**	**255,9**	**122,2**	**255,9**	**255,9**	**121,8**
Cumulative NPD	**9 245,7**	**9 501,7**	**9 624,0**	**9 876,2**	**10 132,2**	**10 254,0**	**10 510,0**	**10 765,9**	**10 888,1**	**11 144,0**	**11 399,9**	**11 521,7**

Cash balance at the beginning of the period	9 424,6	9 675,2	9 931,2	10 053,5	10 305,7	10 561,7	10 683,6	10 939,5	11 195,4	11 317,6	11 573,5	11 829,4
Cash balance at the end of the period	9 675,2	9 931,2	10 053,5	10 305,7	10 561,7	10 683,6	10 939,5	11 195,4	11 317,6	11 573,5	11 829,4	11 951,2
Net discounted income (NPV)	**103,7**	**105,2**	**49,9**	**102,1**	**102,9**	**48,6**	**101,4**	**100,6**	**47,7**	**99,1**	**98,4**	**46,5**
NPV on an accrual basis	**3 797,5**	**3 902,7**	**3 952,6**	**4 054,7**	**4 157,6**	**4 206,2**	**4 307,5**	**4 408,2**	**4 455,8**	**4 555,0**	**4 653,4**	**4 699,9**

10. Methodological comments on business plan

This business plan is a blueprint for the implementation of business operations, actions of the firm, containing information about the firm, products and services, markets, marketing, organization of operations and their effectiveness.

The planning period is 2024-2032.

The object and subject of research and business planning

The object of the study is the tea market in Uzbekistan.

The subject of the study is the construction of a tea-weaving factory in the Kamashi district of Kashkadarya region.

Goals and objectives of the business plan

The purpose of business planning: to assess the cost-effectiveness and feasibility of the construction of a tea-packing factory in the Kamashinsky district.

The challenges of business planning:

- Assessment of the economic efficiency of the project;
- Justification of investment funds for the implementation of the project;
- Estimating the volume of the market;
- Analysis of consumers and main competitors;
- Assessment of trends and prospects of market development.

Sources of information

- Industry Statistics;
- Data from government agencies;
- Specialized databases of the Global Innovation Trade Agency;
- Ratings;
- Information resources of market participants;
- Industry and specialized information portals;
- Materials of the sites of the subject under study (web-resources of manufacturers and suppliers, electronic trading platforms, bulletin boards, specialized forums, Internet stores);
- Portals of information disclosure (reporting of public companies).

Distribution of the business plan

The Business Plan materials are not intended for wide distribution or publication. When making the Business Plan available to users, the purpose of the document, the assumptions adopted for its preparation, and any restrictions on its use must be communicated to them.

Scope of analysis

The business plan was prepared on the basis of information obtained from publicly available sources.

Limitation of liability

All opinions, conclusions and estimates contained in this business plan are valid as of the date hereof. The Contractor is not responsible for changes in economic, political, social, or other conditions that may affect the validity of these judgments.

Contractor shall not be liable for any loss or damage suffered by a third party as a result of the use of the information in this business plan.

11. Information about the excuter of the project

The business plan for the "Tea Grain Factory in the Kamashinsky District" was prepared by **Global Innovation Trade**, a research agency. All our specialists have an impressive experience in developing business plans, supported by deep knowledge in various spheres of economy and business, the presence of a strong information base, knowledge of the most advanced approaches to business organization, knowledge of the latest methods of calculation and their competent adaptation to the specifics of the region or a particular industry.