

Call for interest

Kilkis, 11th February 2022

To our prospective investors:

With great appreciation for your attention, we present to you the opportunity to invest in a new industrial cannabis manufacturing facility in Greece to start production in 2022/2023: HANAF S.A.

We have studied the market opportunity for the past decade and are now actively fundraising for equity capital partners to break ground on June 2022. We present the opportunity based on our expertise and existing groundwork in research and development thanks to:

- ▶ **Deep Industry Experience**: Industrial cannabis is a unique commodity market with private margins and local markets. Our team has extensive experience in setting up and operating promising projects for more than 30 years.
- ▶ **Founding Experience**: Our team consists of 2 Founding Partners that invest their own capital and time to source investment opportunities and have a proven track record of accomplishing bankable projects.
- ▶ Market Research: We have studied the market and we can verify there is a specific window of opportunity in the European Union area for a new industrial cannabis manufacturing facility. This opportunity is being studied by competitors and is now in play as Greece is recovering as a main market.
- Financing sources: The project is estimated to be co-financed with subsidy grants from the Greek Government in 2022, amounting to €1 million, utilizing the Greek Development Law 4399/2016.

We are now seeking the anchor equity investor for € 1.848.947 to unlock the remaining sources of financing for HANAF S.A.

Andrew Kamtsiklis

Executive summary

Industrial cannabis is a structurally growing market globally and there is an enduring capacity gap within the European Union that can be served by a new manufacturing facility in Greece.

The present investment proposal aims into the establishment of a new manufacturing facility to produce industrial cannabis. The investment plan consists of the reconstruction of existing buildings, required landscape works, supply of electromechanical equipment and special facilities, and purchase of raw materials. To this end, HANAF seeks funding to fuel the investment, unlock additional sources of finance, and initiate production and sales.

Market Opportunity

- ► Greece is one of the first European countries to have a legislative framework already in place for the operation of processing plants to produce industrial cannabis products.
- ▶ Industrial use of cannabis is legal since 2016, enabling the cultivation of hemp of more than 5.800 acres.
- ► The **prevailing climate** of Greece favors the production process.
- There is **skilled workforce**, and the **cost of energy** needs of industrial cannabis production facilities is **relatively low**.
- Positive investment prospects to produce industrial cannabis products, capitalizing in increased exports.
- ► Hemp is the only aspect of cannabis at a commodity level, with import and export being legal in the E.U. at under 0.2% THC.

Project plan

- ▶ Founders profile: Founding team has an extensive management experience, especially in Greenfield and Brownfield projects.
- ▶ Capital expenditures: CapEx are calculated at €1,84M, including the purchase of three separate buildings to facilitate production and the required mechanical and other equipment.
- ▶ **Financing scenarios**: Seeking a majority equity partner to to unlock the remaining sources of financing through the grants of Greek Government.
- Operating performance: Based on current market prices and full utilization of the plant, run-rate EBITDA is €1,7M and FCF €1M.
- ▶ **Return profile**: Investment horizon for the CapEx renewal is 20 years, while equity sponsor returns are estimated at 2.0x (IRR~50%) in a 4-year period.

Section 1

- ► Company overview
- ► Market insights
- ▶ Legislation
- ► Macroeconomic trends

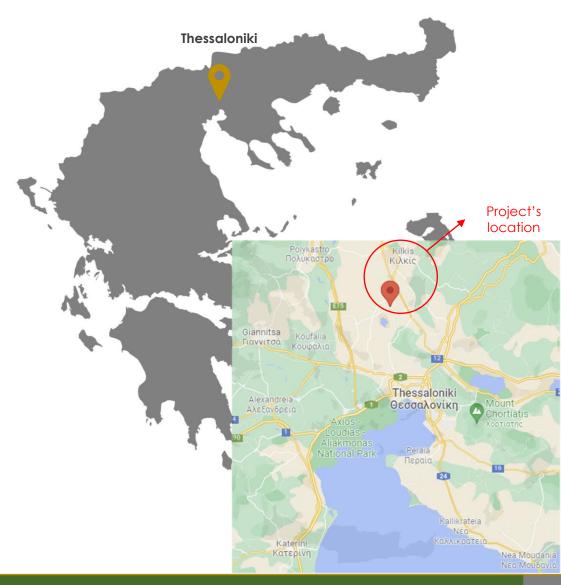
Company overview

HANAF S.A. is a newly established family company with the sole purpose to implement the current investment plan. Major shareholder is Andrew Kamtsiklis (also legal representative), with 99% participation, and minor shareholder is Eleni Ekonomou, with 1% participation.

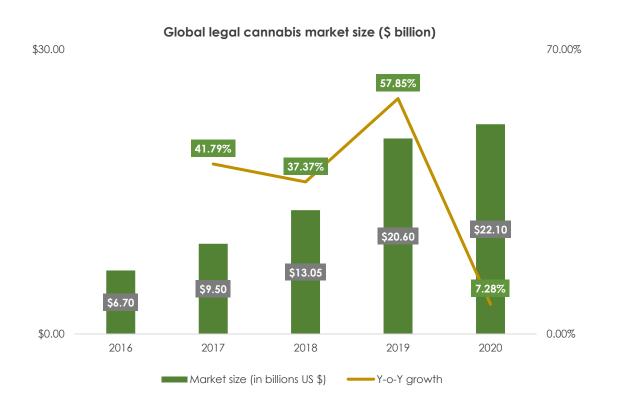
Manufacturing facilities are planned to be established in ~23.000 sqm which include several old industrial buildings. The company will acquire the entire plot to reconstruct it.

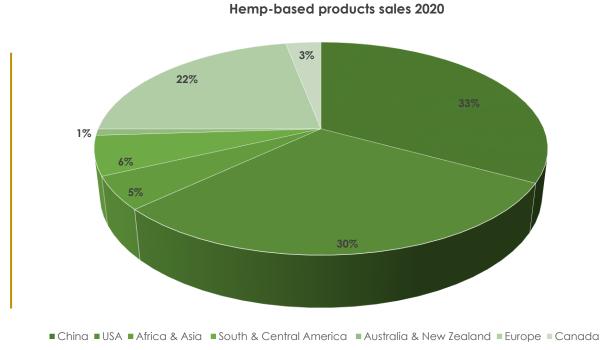
The company's main objectives are to:

- ► Acquire a ~23.000 sqm plot which includes old industrial buildings.
- Claim significant market share within the Greek territory.
- Penetrate new foreign markets, emphasizing export orientation.
- ▶ Be identified as a brand quality through the creation of distinctive products, produced according to the strictest safety standards.



Global market outlook

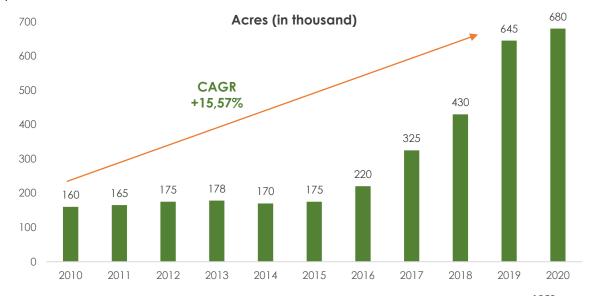


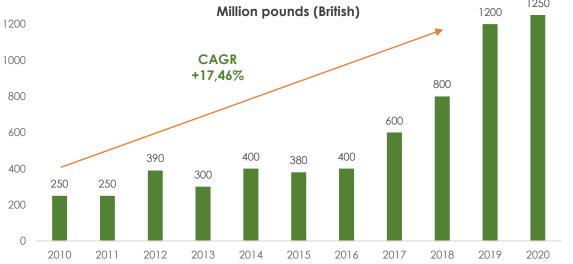


The **global legal cannabis market** is forecasted to be gain the value of US\$103.9 billion by 2024. The global CBD industry is projected to accelerate from \$2.8 billion in 2020 to about \$13 billion at a CAGR of over 20% from 2021 to 2028.

Europe is projected to be the <u>largest legal cannabis market by 2024</u>. The total EU CBD market value is estimated at €1.6 billion in 2020 and it is projected to grow at a CAGR of 18%, to reach 8.7 billion by 2030. The two biggest markets for CBD are **Germany** and the **United Kingdom** representing around €350 million and €330 million.

Global hemp market expansion since 2010





- At least 47 countries cultivate hemp for commercial purposes, such as USA, China, Canada, France, and Columbia.
- Hemp acreage in North America and the European Union countries reached record levels in 2020, over 360,000 acres and about 135,000 acres respectively, which put global acreage at about 675,000 acres.
- China, the world's largest hemp fiber and seed producer, planted more than 160,000 acres of hemp in 2020.
- ▶ The global hemp market size was valued at \$4.13 billion in 2021 up from \$3.61 billion in 2020 and is expected to grow at a compound annual growth rate of 16.2% so as to reach \$12.1 billion by 2028.

Significant remarks

- In **legal markets**, next-generation industrial cannabis products such as edibles, topicals and extracts **are becoming mainstream**, thanks in large part to celebrity-endorsement, which in turn normalizes the wider cannabis market.
- The **early-stage investment community** has shifted its focus away from up-stream, plant-touching producers towards **industrial cannabis infrastructure**, focusing on ancillary sectors, technological innovations, and regulatory aids.
- There has been an explosion in **ancillary markets** that supports the industrial cannabis infrastructure as it matures, from product testing, insurance and risk management to marketing intelligence that tracks sales and consumer habits.
- Large consumer companies have been slow to enter the industrial cannabis space, taking tentative steps through acquisitions. **Independent startups are leading the charge in consumer products**, capitalizing on the legal status that abounds worldwide, and which served to frustrate larger-brand participation early on.

Significant market players





Cellular Goods



Sanity Group



KANABO*

Israel



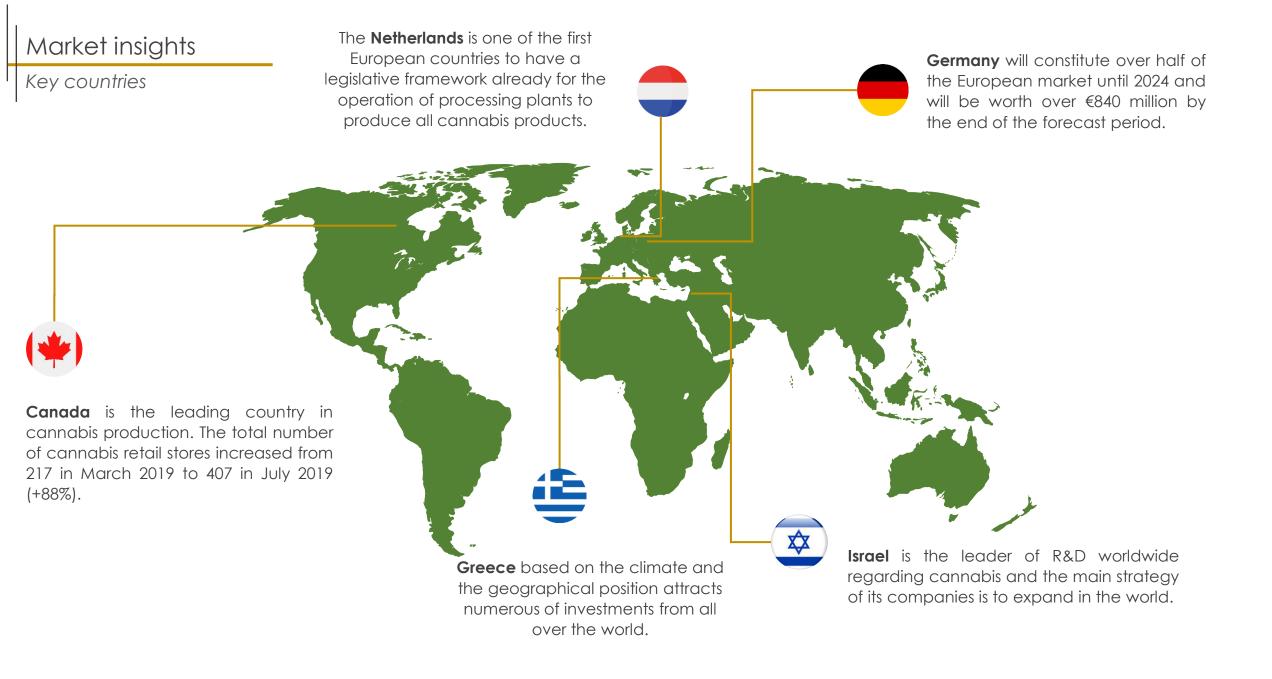








CBD



Europe

- ► European Court of Justice ruled that CBD is not considered a narcotic substance under EU Law.
- ► The **production of hemp** increased from 94,120 tones to 152,820 tons (a 62.4% increase).
- The total area dedicated to hemp cultivation <u>has increased</u> significantly in the EU from 19,970 hectares (ha) in 2015 to 34,960 ha in 2019 (a 75% increase).
- ► European cannabis supply chain **underwent substantial change** during 2020, <u>diversifying away from duopoly of Canada and Netherlands and increasing imports from Israel and Uruguay</u>.
- The market for industrial hemp in Europe accounted for a revenue share of 22.2% in 2019, or about €1 billion on construction materials, textiles, and fabrics in the form of fibers.
- The value of all hemp-based product markets combined (CBD, hemp bioplastics, insulation, hemp concrete, and others) in Europe was valued €1.62 billion in 2020, increasing to 6.3 billion in 2025.



The European cannabis market will be worth €403.4 million by the end of 2021 (under estimation).



Estimated to grow with a CAGR of 31,21% from 2020 to reach €6.3 billion by 2025.

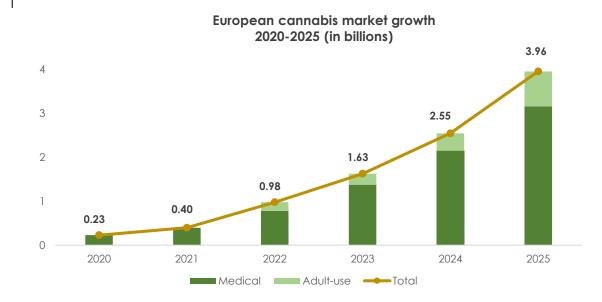


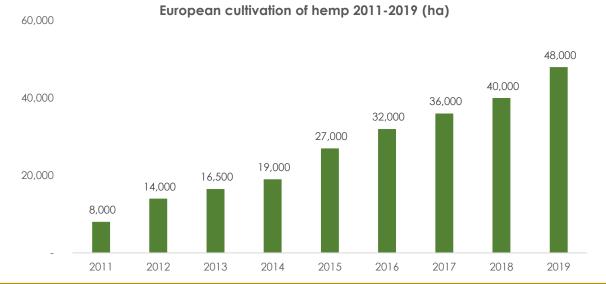
France is the largest producer, accounting for more than 70% of EU production, followed by the Netherlands (10%) and Austria (4%).



Beginning of sales of adult-use cannabis in Europe are expected to start legally in the NT, SW, and LX.

Europe forecast 2025





- Europe is expected to formulate the <u>largest legal cannabis market by 2024</u>. The **total European CBD market** value is estimated at €1.6 billion in 2020 and is projected to grow at a combined annual growth rate (CAGR) of 18,5% so as to reach 8.7 billion by 2030.
- ► The value of the market for adult-use cannabis products in Europe is entirely dependent on progress made in the political and regulatory sphere.
- Several nations such as Spain, Portugal, the Netherlands, Luxembourg, Germany, Switzerland and Malta will introduce legal access to adultuse cannabis, at least on a trial basis, by 2025.
- The most lucrative market will be the Netherlands, owing to the existing culture of acceptance around adult-use cannabis and the upcoming trial scheme involving coffeeshop supply.
- The black-market revenue for cannabis in Europe was estimated at €11 billion in 2019. Upon legalization in Canada, the black market in Europe for cannabis was worth €800 million. It took just two years for the legal adult-use cannabis industry in Canada to take away.

Greece

Potential competitors within 2022

First company to launch in the Greek cannabis market is Tikun Europe which maintains facilities in <u>Corinth</u>. It is a subsidiary of the Israeli Tikun Olam (leading company in Israel and among the top worldwide) and was founded in 2018. The company received a five-year installation permit for cultivation for commercialization and processing of industrial and pharmaceutical cannabis.

Total investment reaches €40 million for the establishment of production unit in an area of 56.000m². It is expected to be completed in the first quarter of 2022, including the establishment of greenhouses and the industrial processing of help blossoms to produce medicinal products.

€6 million investment to produce industrial and medicinal cannabis in the coastal area of <u>Epanomi, Thessaloniki</u>, is taking place. **First phase (€1million)** has begun and includes the **cultivation of industrial hemp** in an area of 40.000 sqm., estimating the first harvest by the end of 2021.

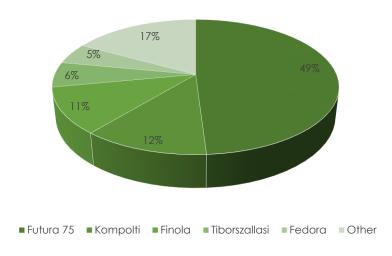
Second phase (€5million) starts in 2022 for the creation of pharmaceutical cannabis processing unit (finished cannabis products with a THC content of more than 0.2%). The farm of Epanomi sowed for the cultivation of industrial cannabis, with THC content of less than 0.2% and high levels of CBD. In its final phase, about 40 permanent employees will be employed, excluding seasonal ones.

Legislation

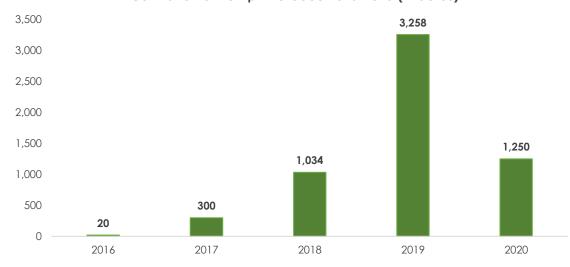
Greece

- ▶ Industrial use of cannabis is legal since the Law 929B/6-4-2016 has passed in the Greek Parliament and published in the Government Gazette in 2016.
- ▶ Plenty of companies have applied for licenses, of which only 90 have been authorized for installation and cultivation of industrial cannabis.
- ► Currently, **cannabis strains** with tetrahydrocannabinol (THC) content exceeding 0.2% are cultivated for industrial use.
- ▶ Recreational cannabis legislation is currently illegal. Although very small amounts (<0.5 grams or 1 pure / 2 impure cannabis cigarettes) are decriminalized.
- ► CBD hemp oil legislation is currently legal (pending legislation on THC limits in food).
- ► Around 200 cultivators produced industrial cannabis in Greece, in more than 1250 acres.

Varieties of industrial cannabis cultivated in Greece in 2020



Cultivation of hemp in Greece 2016-2020 (in acres)



Legislation

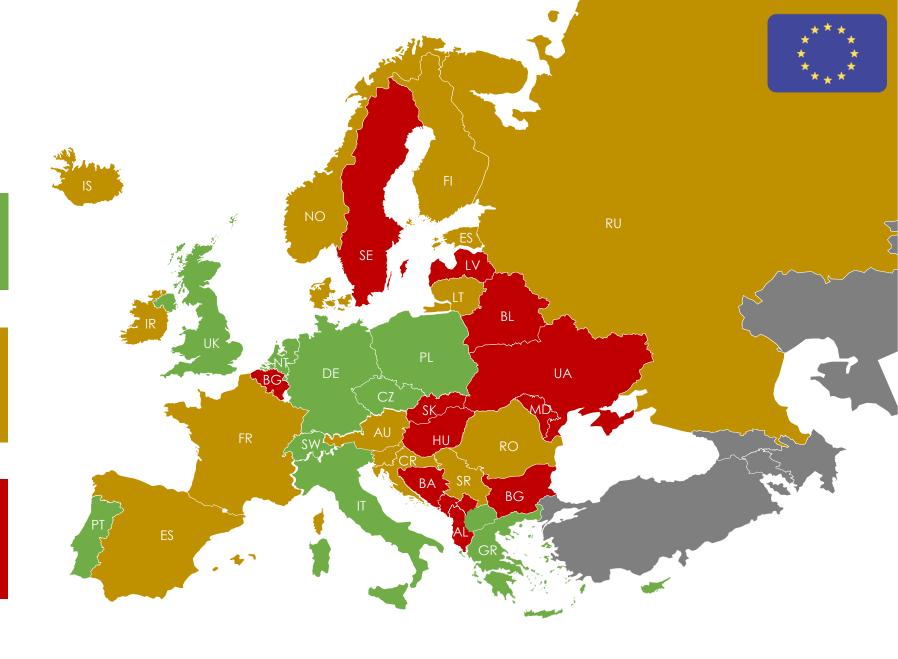
Legal framework of cannabis in Europe

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Countries with wellestablished cannabis legislation.

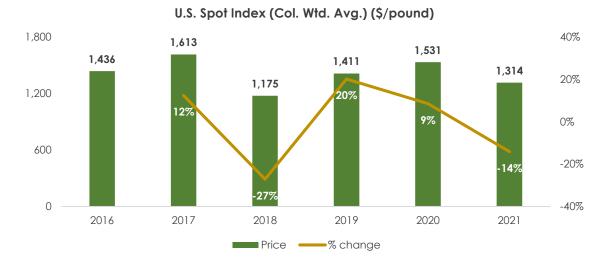
Countries that permit the supply of specific cannabis products under specific conditions.

Countries prohibited. It is illegal to use, buy, or sell cannabis in these countries.

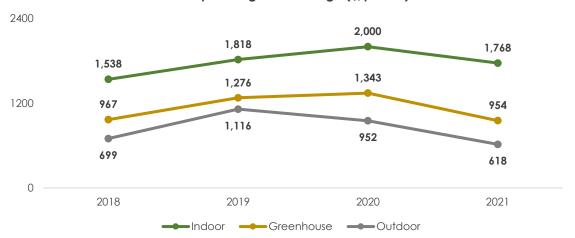


Macroeconomic trends

Cannabis prices benchmarked



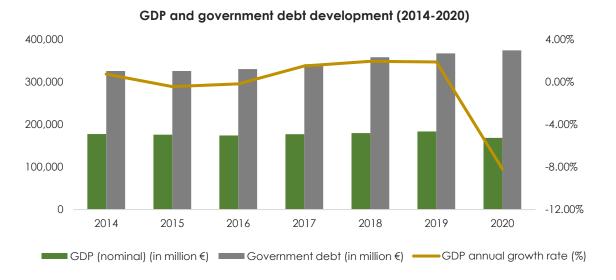


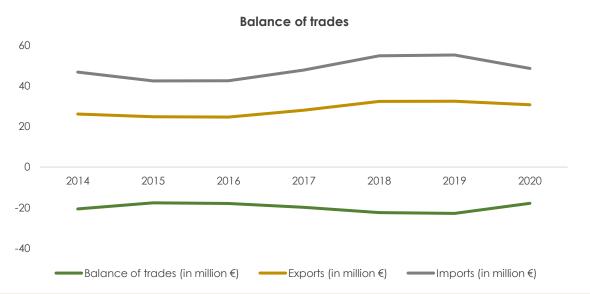


- ► Cannabis spot index aims to track average wholesale prices for dried flower across various licensed producers.
- ▶ U.S. cannabis spot index is selected for benchmarking due to the allowance of cannabis sales in many states and the free-market approach with buyers and sellers setting prices between them.
- ► Commodity potential within the cannabis industry includes <u>THC</u> flower, hemp biomass, THC/CBD distillates or isolates, and crude oil.
- ▶ Hemp is the only aspect that is today at a commodity level globally, with import and export being legal in the U.S. at under 0.3% THC, or 0.2% THC in the European Union.
- Cannabis is required to be internationally legalized so to have a commodity status, needing a type of standardization and minimum requirements for products to be traded and sold.
- ▶ Every country has different standards. For there to be import/export of products, standards for quality, testing, ingredients and many other factors must be determined.
- ▶ Different standards will be defined for different kinds of cannabis, including cultivation, processing and the end user product.

Macroeconomic trends

Greek economy





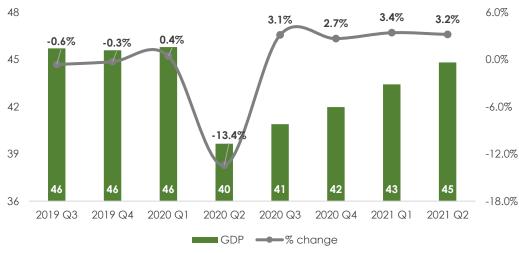
- **Covernment debt is about to double**, recording an increase of 80% as a percentage of GDP In 2019, and amounted to 331€ billions or 180% of GDP. However, **in 2017 economy rebooted**, marking 5% increase till 2019.
- Private consumption provided contribution to growth due to the increase in employment and in real wages.
- In terms of foreign trade, **Greece improved its trade deficit** from €33.1 billion to €22.8 billion in 2009-2019, mainly due to increase in exports which recorded 83% growth.
- Imports increased by 8,7%, reaching €55,2 billion in 2009-2019, recording a minimum level of €42.5 billion, in 2016. The decrease occurred due to diminished consumption and investments, resulting into positive impact on GDP growth. After 2016, imports surged by 29,8%.
- Export performance improved due to country's fiscal consolidation, including deduction in public sector size, structural labor, and product market reforms.
- Consequently, competitiveness of Greek economy improved leading to real GDP growth. Remarkably, tourism and shipping services constitute more than 50% of exports.

Macroeconomic trends

Pandemic impact on Greek economy

- ▶ Due to the Covid-19 pandemic and the population's lockdown, Greek GDP suffered sharp contraction in 2020, as the economic activity was frozen for long period and affected most companies.
- ► The **second quarter recorded a decrease of -13,8%**, presenting the first negative outcome of the pandemic. Q3 and Q4 declined by 10,5% and 7,9% accordingly in contrast with 2019.
- ▶ GDP recorded total decline of -8,2% in 2020, while in the following years it is projected to recover by 4,8%.
- ▶ In **September 2021**, the total number of employees amounted to 4.09 million people. The unemployed persons amounted to 609 thousand, while the economically inactive population amounted to 3.16 million people. **The unemployment rate was recorded at 13%**.
- ▶ In addition, the number of **employees in suspended companies** amounted to 519.995 nationwide during April 2021.
- ▶ **GDP rebounded** in Q2 2021 by 16,2% compared to Q2 2020 and by 3,4% in comparison with Q1.
- As a result, many **business opportunities were negatively affected**, others were created, and technology was boosted (i.e., teleworking).

Gross Domestic Product (in billion €)



19 2020 2020 2021 18 16.9 17.3 17 16.3 16.2 15.8 15 14.9 14.1 13.9

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Unemployment rate in Greece (%)

Section 2

- ► The project
- ► Business model
- ► Capital expenditures
- ► Financial data
- Advisors

The project

Overview

The project constitutes the establishment of **state-of-the-art manufacturing facilities** to process cannabis and produce industrial cannabis products.

Manufacturing facilities are planned to be situated in a ~23.000 sqm plot. The plot contains three old industrial buildings totaling 13.163 sqm (A: 3.163 sqm, B: 5.000 sqm, and C: 5.000 sqm) which are appropriate to host the desired planned facilities. These buildings stopped their operations in 2010-2011 due to discontinued projects.

Industrial cannabis organic product portfolio includes:

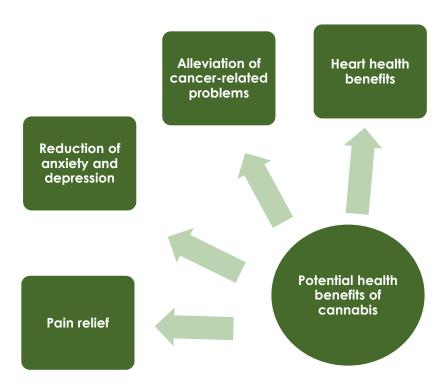
- 1. Industrial cannabis extract with percentage of tetrahydrocannabinol^(*) lower than 0.2% (CBD oil).
- 2. Cannabis hemp powder (tea).
- 3. Cannabis hemp flower strains (in sachet of 1-2 gr).
- 4. Cannabis hemp cosmetics.

CBD oil is made by extracting CBD from the cannabis plant, then diluting it with a carrier oil like coconut or hemp seed oil. CBD oil is a great resource for making 100% biodegradable, environmentally friendly products.

(*) **Tetrahydrocannabinol** (THC) is the main psychoactive cannabinoid found in cannabis and causes the sensation of getting "high" that's often associated with marijuana. However, unlike THC, **CBD** is **not psychoactive**. This makes CBD an appealing option for those who are looking for relief from pain and other symptoms without the mind-altering effects of marijuana or certain pharmaceutical drugs.

Using CBD oil, the following products will also be added to the company's portfolio:

- ► Cannabis pastilles/gummies (gel).
- ► Cannabis capsules for children and adults (varying in quantity).
- ► Cannabis tincture bottles, in three different version (5%, 10%, and 15% of CBD oil).
- ► Cannabis transdermal patches.



The project

Industrial cannabis benefits

CBD pastilles/gummies are edible candies that contain CBD oil. They come in a rainbow of flavors, colors, shapes, and concentrations of CBD.

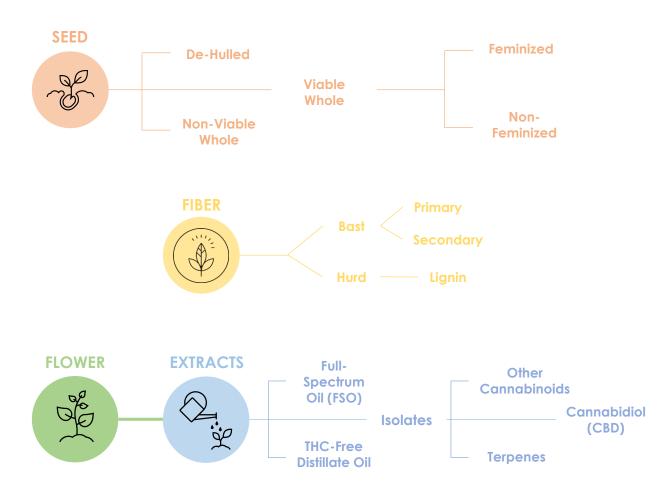
Cannabis hemp powder (tea) is one of the healthiest beverages on the planet. It is loaded with vitamins, nutrients, and antioxidants. Because of hemp powder is a lean source of plant-based protein, it is also a great supplement to a plant-based diet (lowering meat intake).

Cannabis hemp cosmetics can be very effective moisturizers functioning as emollients to soften and smoothen the skin. Hemp seed oil is high in essential nutrients (fatty acids) which keeps the skin in a good condition. Body lotion, face and hand cream, and bath soap will be produced under this category.

Cannabis transdermal patches provide all day relief using a slow-release method. Patches are absorbed through the outer layers of the skin so to be drawn into the bloodstream and circulated through the body, resulting in a steadier and prolonged dose.

CBD tinctures are combining CBD, very low THC levels, and smaller organic molecules, leading to better therapeutic effects (such as, according to studies, against epilepsy and anti-tumor effects).

Product portfolio comprises of two main and pure ingredients (1) CBD flower and (2) CBD oil



How-to-market



Direct sales (wholesale) – **B2B2B** promotion reaching out to traders (intermediary contact).





Stable quality, trustworthy & certified product for maximum profitability.







Sample distribution for quality check. Significant barrier in the market.

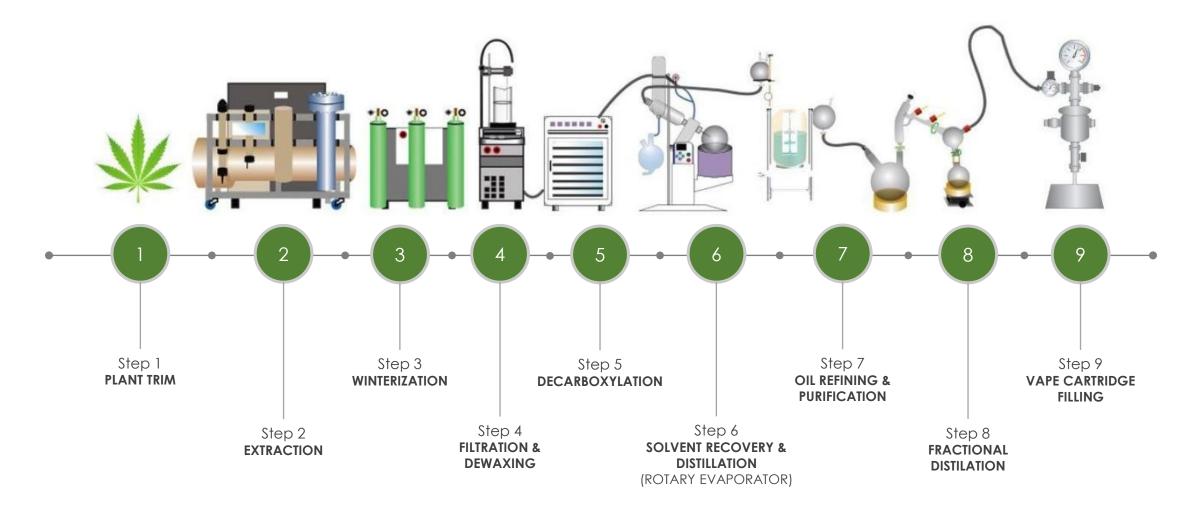




Long-term partnerships for revenue stabilization & brand awareness.



Production process



Emphasized supply chain

Key arrow = product moving from one license to another

CULTIVATION

GREENHOUSE INDOOR OUTDOOR

- o FLOWER
- BIOMASS



MANUFACTURING

TYPE 6 (NON- VOLATILE)

TYPE 7 (VOLATILE)

EDIBLE KITCHEN



DISTRIDISTRIBUTION

- POST PROCESSING
- PACKAGING



TESTING

PRODUCTS MUST PASS LAB
TEST TO ENTER
FAILED PRODUCTS MUST BE
DESTROYED OR REMEDIATED
BY MANUFTACTURING



DELIVERY

PRODUCTS SOLD TO END USERS



PRODUCTION DISPOSAL

THIRD PARTY CONTRACTOR
TO DESTROY PRODUCT



CONSUMPTION LOUNGE



RETAIL

PRODUCTS SOLD TO END USERS



Lifecycle of cannabis plant





Seedling 2-3 weeks

Seeds ready for germination are dark brown, hard, and dry. Encourage spouting by watering seeds in paper towel.





Germination/Seed

1-2 weeks

Move seeds into growing medium. Plants need the maximum light at this stage, and appropriate water levels. Cotyledon (seed leaves) and icon fan leaves will grow.





Vegetative

2-8 weeks

Plants need flowering dry air, fresh warm water, and increased nutrients – especially nitrogen.





Flowering

6-8 weeks

Gradually reduce light exposure to produce medicinal qualities. Increase phosphorous levels and decrease nitrogen. Fertilizers can help stimulate bud formation.



Harvesting

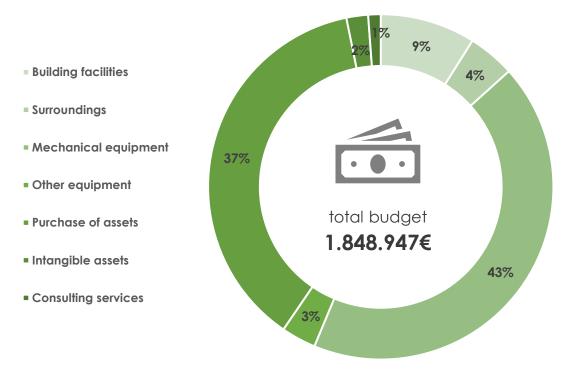
6-8 weeks

Trim and dry the buds – plant is ripe when buds turn from milky to white reddish orange. Harvest once 70-90% of pistils are browned for maximized taste and effect.

Duration last minimum 17 up to maximum 29 weeks.

Capital expenditures

Investment plan



Building facilities	€164.902		
Surroundings	€81.350		
Mechanical equipment	€794.400		
Other equipment	€60.195		
Assets	€689.000		
Intangible assets	€37.500		
Consulting services	€21.600		
Total	€1.848.947		

Project's total investment has been submitted for financing from the Greek Government, under the Greek Development Law 4399/2016.

Investment plan is projected to be co-financed with 54,89% in grants, amounting to €1.015.046.

- ▶ **Building** expenditures include essential refurbishment of the hotel unit such as earthworks, reinforcements, metal and wooden constructions, exterior and interior works (frames, doors, etc.), elevators, etc.
- ▶ Surrounding area expenditures comprise of fencing the space and other related works such as the floors, front doors, pergolas, etc.
- ▶ Mechanical equipment expenditures entail the necessary production equipment such as the dryer, the plant cutting machine, packaging machines, air compressor, etc.
- ▶ Other equipment expenditures integrates the alarm system, CCTV system, workbench, and industrial shelves and benches.
- ▶ Purchase of assets are related to the acquisition of three separate buildings to facilitate the production units.
- ▶ Intangible assets include all the related works regarding ISO 9001 and 14001 certifications.
- ► Consulting services comprise of the project's supervision within the Greek Development Law and the licensing of the buildings permit.
- ▶ V.A.T. is not calculated as the provision of all equipment and services will be supplied from abroad.

Financial data

P&L projections

The investment yields € 1,2M in Net Income (EBITDA margin = 37,7%) by fiscal year 5 and grows at a +4,0% CAGR (FY5-FY10)

Profit and loss statement	Notes	FY1	FY2	FY3	FY4	FY5	FY6	FY7	FY8	FY9	FY10
Income statement											
Revenue		3,680,000	3,790,400	3,904,112	4,021,235	4,141,872	4,266,129	4,394,112	4,525,936	4,661,714	4,801,565
Cost of goods sold	_	1,736,527	2,198,941	2,257,040	2,316,876	2,378,501	2,441,967	2,507,330	2,574,646	2,643,975	2,715,376
Gross profit		1,943,473	1,591,459	1,647,072	1,704,359	1,763,372	1,824,162	1,886,783	1,951,290	2,017,739	2,086,189
Gross margin		52.8%	42.0%	42.2%	42.4%	42.6%	42.8%	42.9%	43.1%	43.3%	43.4%
General and administrative		90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000
Research and development		110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000
Marketing		0	0	0	0	0	0	0	0	0	0
Operating expenses		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Earning before interest, taxes, depreciation and amortization		1,743,473	1,391,459	1,447,072	1,504,359	1,563,372	1,624,162	1,686,783	1,751,290	1,817,739	1,886,189
EBITDA margin		47.4%	36.7%	37.1%	37.4%	37.7%	38.1%	38.4%	38.7%	39.0%	39.3%
Depreciation		126,620	126,620	126,620	126,620	126,620	126,620	126,620	126,620	126,620	126,620
Earnings before interest and tax		1,616,853	1,264,840	1,320,452	1,377,739	1,436,752	1,497,542	1,560,163	1,624,670	1,691,120	1,759,570
EBIT margin		43.9%	33.4%	33.8%	34.3%	34.7%	35.1%	35.5%	35.9%	36.3%	36.6%
Interest											
Earning before taxes	_	1,616,853	1,264,840	1,320,452	1,377,739	1,436,752	1,497,542	1,560,163	1,624,670	1,691,120	1,759,570
EBT margin		43.9%	33.4%	33.8%	34.3%	34.7%	35.1%	35.5%	35.9%	36.3%	36.6%
Income tax		355,708	278,265	290,499	303,103	316,085	329,459	343,236	357,427	372,046	387,105
Net income	_	1,261,146	986,575	1,029,953	1,074,637	1,120,667	1,168,083	1,216,927	1,267,243	1,319,073	1,372,465
Net margin	_	34.3%	26.0%	26.4%	26.7%	27.1%	27.4%	27.7%	28.0%	28.3%	28.6%

Financial data

Margin benchmarking

Gross margin / EBITDA, NET profitability for cannabis production is demonstrably very high – based on private audited reports management has access to. Remarkably, recent IPOs in cannabis sector face significant losses such as Tilray.



Financial data

Return profile

The Management has confidently projected the returns to equity investors with the base case and a highly liquid liquidity exit scenario. Sponsor equity returns are sensitized on the exit (EV/EBITDA) multiple and on the cost of equity in 10 year's time.

Equity Returns

Assumptions:

Committed equity capital: €1,84M

Full operations: fiscal year 2

► Exit multiple of EBITDA: 15.00x

Run-rate EBITDA: €1,6M on average

Enterprise Value: €11M

Returns:

Net present value: €4,1M

► IRR: 60%

► MIRR: 29%

► ROI: 484%

Return Sensitivity

Assumptions:

► Cost of equity (discount rate): 13,27%.

► EV/EBITDA multiple: 15.00x

Sensitivit	y Analysis	EV/EBITDA Multiple			
EV	€ 11	10.00	15.00	20.00	
Φ	10.50%	5 11	14	16	
rat	12.00%	10	12	15	
ountrate	13.27%	9	11	13	
	14.50%	8	10	12	
Disc	16.00%	5 7	9	11	

(in million euros)	Min	Max
Recommended enterprise value	7	16

Cash on year 10: €12M

Management profile

Advisors



Dr. Panagiotis Madesis, Greece

Consultant in Plant Breeding, specialized in conventional methods and molecular markers.

Currently acting as Assistant Professor at the University of Thessaly, director of Molecular Biology Lab at the school of Agriculture. Also, collaborating professor at the Institute of Applied Biosciences. Cofounder of the spin off Mobase active in agricultural product authentication and AgriEnt active in agricultural entrepreneurship. Research interests focuses on studying plant stress responses, developing stress tolerant plants, increase yield and quality, understand the molecular mechanisms of high yield and quality and tolerance, plant genotyping, barcoding and food traceability and authenticity through DNA barcoding and HRM analysis.



Dr. Apostolos Kalyvas, Greece

Consultant in Plant Breeding.

Apostolos Kalivas is a researcher in Plant Breeding and Genetic Resources Institute of the HELLENIC AGRICULTURAL ORGANIZATION "DEMETER". He received his Ph. D., his second cycle thesis (M.Sc.) and his first degree (Diploma) from the Department of Genetics and Plant Breeding of the School of Agriculture, Aristotle University of Thessaloniki. His main research interests include conventional and molecular plant breeding. He has published several papers in the above topics, and he has also participated in various EUfunded and national research projects.

