
REPUBLIC OF TÜRKİYE
MINISTRY OF AGRICULTURE
AND FORESTRY
TRGM
WHY INVEST IN AN ORGANIZED AGRICULTURAL ZONE?
Türkiye's Agricultural Production Hubs
61 OAR
(Organized Agriculture Regions)
10,000
(Employment)
20 Billion TL
(Public Investment)
42 Provinces
(Across Türkiye)
DISCOVER INVESTMENT OPPORTUNITIES

CONTENTS

Minister's Foreword 4

Director-General's Foreword 5

SECTION 1: STRATEGIC INVESTMENT RATIONALE 6

Agricultural Competitive Advantages 7

Export Potential 8

Multimodal Logistics 9

Logistics Power and Sustainable Agriculture 10

SECTION 2: THE OAZ MODEL AND INVESTOR VALUE 11

OAZ Definition and Core Objectives 12

OAZ Advantages 13

Investment Comparison 14

Shared Infrastructure Advantages 15

SECTION 3: PRODUCTION MODELS 16

Greenhouse OAZ 17

Geothermal-Powered Greenhouse OAZ 18

Livestock OAZ 19

SECTION 4: DISTRIBUTION AND CAPACITY 20

Plant-Production OAZ List 21

Livestock OAZ Distribution 22

OAZ General Overview 23

SECTION 5: INCENTIVES AND APPLICATION 24

Investment Incentives and Grants 25

Geothermal Greenhouse Investment Model 26

Installation Phases 27

Ziraat Bank Support 28

Loan Application Process 29

SECTION 6: FINANCIAL FEASIBILITY 30

CAPEX Analysis 31

Financing Structure 32

Revenue Model and Projection 33

OPEX — Operating Expenses 34

Income Statement (P&L) 35

Cash Flow and DCF 36

Break-Even and Sensitivity Analysis 37-38

Monte Carlo Risk Analysis 39

Abbreviations & Glossary

Kısaltmalar ve Açıklamalar

OAZ	Organized Agricultural Zone (source: Organize Tarım Bölgesi, OTB)
OTB	Organize Tarım Bölgeleri — Turkish name of the OAZ
TRGM	General Directorate of Agricultural Reform
KKYP	Rural Development Investments Programme
IPARD	Instrument for Pre-Accession Assistance in Rural Development (EU–Türkiye)
CAPEX	Capital Expenditure
OPEX	Operating Expenditure
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
P&L	Profit and Loss statement (Income Statement)
IFRS	International Financial Reporting Standards
DCF	Discounted Cash Flow
NPV	Net Present Value
IRR	Internal Rate of Return
WACC	Weighted Average Cost of Capital
ROE	Return on Equity
FCF	Free Cash Flow
P5 / P50 / P95	5th / 50th (median) / 95th percentile of the distribution
ESG	Environmental, Social and Governance criteria

GlobalGAP	Global Good Agricultural Practices (certification standard)
SPP	Solar Power Plant
WPP	Wind Power Plant
MWe	Megawatt-electric (electrical power capacity)
CO_2	Carbon Dioxide
BTK	Baku–Tbilisi–Kars Railway
MENA	Middle East and North Africa
CIS	Commonwealth of Independent States (BDT)
EU	European Union
Ro-Ro	Roll-on/Roll-off (vehicle-carrying sea transport)
TARSİM	Agricultural Insurance Pool
VAT	Value Added Tax (KDV)
TRY	Turkish Lira
USD / $	United States Dollar
EUR / €	Euro
da	Decare— 1,000 m²
m²	Square metre
A.Ş.	Joint-Stock Company
M1 / M3 / M7	IPARD support measures (Agricultural enterprise / Processing & marketing / Modern greenhouse)

Climate change, wars, global crises and disasters have made food-supply security more vital than ever. In this environment, our priority is to meet the food needs of our growing population in an uninterrupted and secure manner. To this end, we have placed at our centre the **Modern Agricultural Production Model**, which provides affordable access to fresh food while minimizing logistics costs and losses. The strongest vehicle of this strategic model has been the **Organized Agricultural Zones (OAZ).**

As of 2025, **61 OAZ projects have been developed across 42 provinces, 46 of which have acquired legal-entity status**. Planned production has effectively begun in our regions, foremost the Balıkesir-Gönen OAZ, home to the World's Largest Geothermal Greenhouse project (which will combine four different renewable energy sources), as well as Aydın-Efeler and Denizli-Sarayköy.

Guided by the vision of our President, Mr. Recep Tayyip Erdoğan, that "the road to a strong Türkiye runs through strong agriculture," we are determined to make the Century of Türkiye the century of production and of the producer.

By crowning our production infrastructure with innovative systems through the Organized Agricultural Zones, we will secure our food-supply security and continue working tirelessly to make our country a global leader in agriculture.



İbrahim YUMAKLI
MINISTER OF AGRICULTURE AND FORESTRY



Dr. Osman YILDIZ

Director-General of Agricultural Reform
Head of the IPARD Managing Authority

61 OAZ
Designed

46 OAZ
Acquired Legal-Entity Status

10,000
Direct Jobs

Republic of Türkiye, Ministry of Agriculture and Forestry

As the General Directorate of Agricultural Reform, our fundamental objective is to transform agricultural production from a scattered and fragile structure into a planned, well-infrastructured and institutional model.

The strongest field expression of this vision has been the Organized Agricultural Zones (OAZ). As of 2025, 61 OAZs have been designed across 42 provinces, 46 have acquired legal-entity status, and 19 have completed their infrastructure and entered production. Managed under strict fiscal discipline, this process has to date channelled TRY 10 billion of public resources. Türkiye's production architecture is being reshaped through projects focused on geothermal greenhouse cultivation and integrated livestock farming.

At the point reached today, the OAZs contribute approximately TRY 20 billion directly to our national economy, providing 10,000 direct jobs and an annual capacity of 60,000 tonnes of crop and 160,000 head of livestock production.

Under the visionary leadership of our Minister, I thank our entire organization, our governorships, local administrations, our investors and my colleagues who have all put their shoulders to these enormous projects.

In the coming period, we will maintain our determination to make the Organized Agricultural Zones the main backbone of Türkiye's planned production power.

KKYP 70% Grant
up to TRY 21 million

IPARD 50-75% Grant
up to €3,000,000

Ziraat Bank
TRY 100M, Zero Interest
in Modern Greenhouse Investments

01

SECTION 1

The core rationale explaining why Türkiye is a strategic hub for agricultural investment and its competitive advantages.



TÜRKİYE'S AGRICULTURAL COMPETITIVE ADVANTAGES

Strategic advantages that put Türkiye at the forefront of global agricultural investment



Geothermal Power

1st in Europe · 4th in the world · 1,700+ MWe



Strategic Location

Crossroads of EU + MENA + Russia · a market of 1.5 billion people



Export Record

USD 36.4 billion in agri-food exports (2025 record)



Climatic Diversity

Mediterranean · Black Sea · Steppe all product groups



Water Resources

Strategic basins · agricultural water management



Young Workforce

Dynamic, cost-effective agricultural labour



Government Support

KKYP + IPARD + Ziraat Bank + the incentive system



Agri-Technology

Soilless farming · automation · digital agriculture



Food Value Chain

Production → Processing → Packaging → Export



Sustainability

Renewable energy · zero waste · carbon reduction

With its geothermal power, strategic location and strong government support, Türkiye is the natural base for global agricultural investment.

EXPORT POTENTIAL

From Türkiye to World Markets — the OAZ's Global Competitive Advantage

USD 1.07 billion

Q1 2026 Fresh Fruit & Vegetable Exports

+30% Growth

USD 36.4 billion

2025 Agri-Food Exports (Record)

Record Level

1.5 billion

Market Reach in People (EU + MENA + Russia)

THE OAZ'S EXPORT ADVANTAGES

Scale and Continuity

12-month uninterrupted supply guarantee

Quality Certification

Controlled environment → GlobalGAP, organic certification option

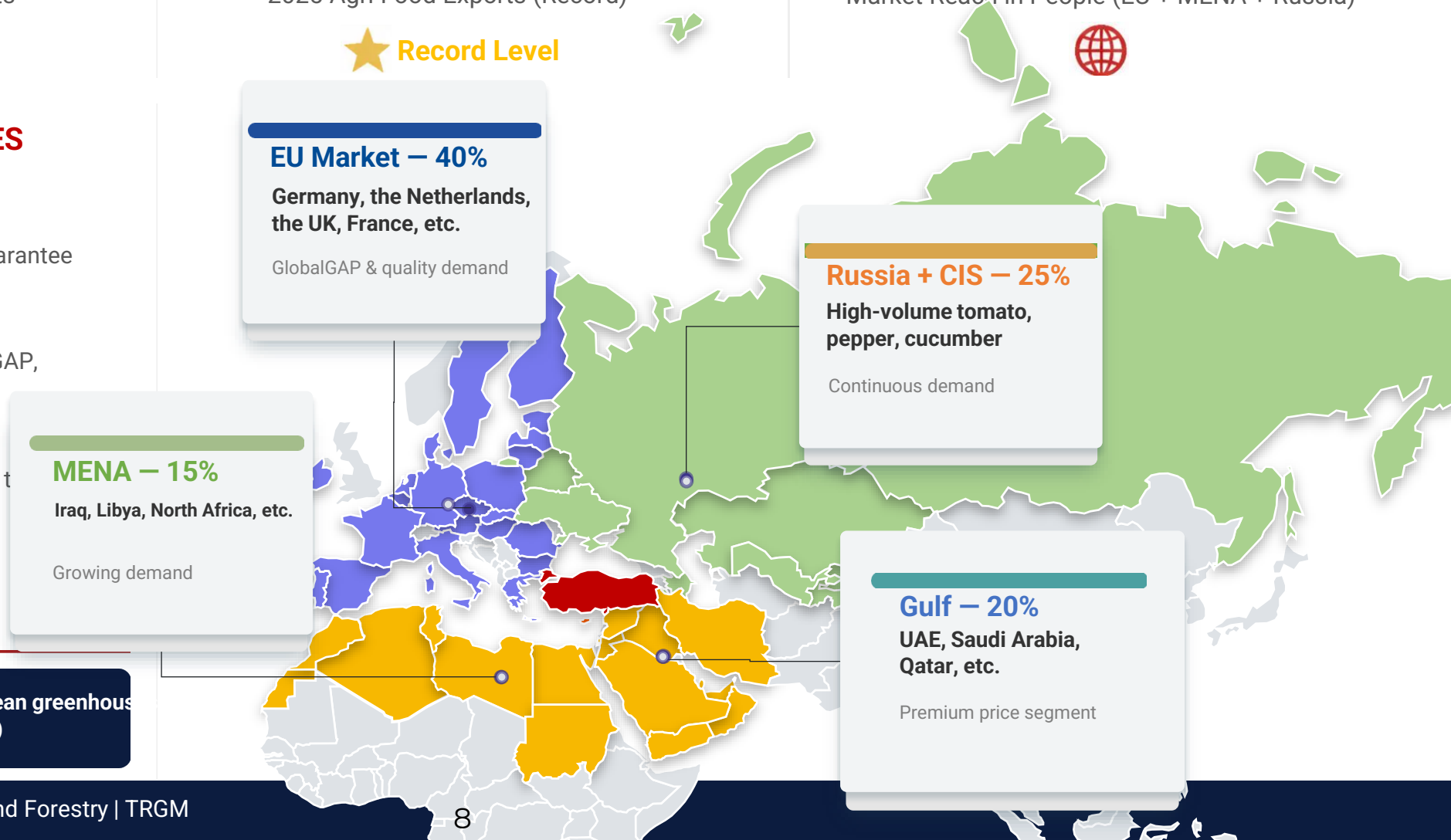
Competitive Pricing

Low-cost premium product thanks t the geothermal energy advantage

Logistics Infrastructure

Cold chain, export-support office, shared transport

EBITDA margin twice as high as European greenhous 48-50% vs. 20-35% (European average)



Multimodal Logistics and Global Hinterland Integration

SEA

Mersin & İzmir Ports · cold-chain overseas access to MENA and the Gulf

Europe, MENA and the Gulf

ROAD

Kapıkule & Hamzabeyli → EU interior 48-72 h · Habur & Gürbulak → Iraq, Iran, Levant

North Marmara Motorway · Kapıkule

RAIL & SILK ROAD

BTK & Middle Corridor → Central Asia and China · Marmaray → Europe · low carbon

Baku-Tbilisi-Kars · Belt and Road

AIR

Global cargo network via IST transfer for premium, high-value products

Istanbul Airport · Air Cargo

North Marmara / Kapıkule → EU

OAZ HUB

BTK / Middle Corridor → China

Mersin Port → MENA/Gulf

Habur / Gürbulak → Iraq, Iran

REGIONAL MARKET ACCESS MATRIX

TARGET MARKET	PRIMARY CHANNEL	INTEGRATED GATE / LINE	
European Union	Road / Rail / Sea	Kapıkule · Halkalı Station · Aegean Ports	2-3 days
Middle East & MENA	Road / Sea	Habur Border Gate · Mersin Port	1-3 days
Gulf States	Sea / Road / Air	Mersin Port · Ro-Ro Lines · Air Cargo	4-5 days
Central Asia & China	Rail	Baku-Tbilisi-Kars (BTK) · Middle Corridor	10-12 days

The OAZ network is designing a strategic logistics web that connects raw materials directly to border gates, ports and international green rail corridors. A single supply chain from Europe to China.

OAZ: Logistics Power Combined with Sustainable Agriculture

ACCESS CATCHMENT

1.3 BILLION

people — global food market.
4-hour flight radius and short-haul road hinterland.
USD 2 trillion potential

FREIGHT ADVANTAGE

up to 30%

Cost reduction · intermodal infrastructure · independent of geopolitical maritime crises

GOVERNMENT INCENTIVES

Multi-layered

KKYP – Ziraat Bank supports, corporate-tax reduction · VAT/customs exemption · land support

NEW-GENERATION AGRICULTURAL BASE

OAZs are state-incentivized modern clusters that gather production, industrial processing, packaging and logistics under a single roof, optimizing production costs.

Production → Packaging → Logistics

GEOSTRATEGIC CENTRE OF GRAVITY

At the crossroads of three continents, with a 4-hour flight radius and a short-haul road hinterland, Türkiye is on the threshold of direct access to a colossal food market of 1.3 billion people and USD 2 trillion.

EU · MENA · Gulf · Central Asia

FOOD-DISTRIBUTION HUB VISION

The core aim is not merely to produce raw food but to convert raw material into value-added processed product and integrate it into the global “just-in-time” supply chain.

Food Hub · Just-in-Time

COST AND RISK MANAGEMENT

Away from geopolitical maritime crises, and thanks to intermodal infrastructure, freight costs are reduced by up to 30% with zero-loss cold-chain protection.

Zero Loss · Cold Chain

02

SECTION 2

THE OAZ MODEL AND INVESTOR VALUE

- OAZ Definition and Core Objectives
- Investor Advantages and Value Proposition
- OAZ vs. Individual Investment Comparison
- Shared Infrastructure and Sectoral Solutions

What is an OAZ?

Organized Agricultural Zone — Definition and Core Objectives

An Organized Agricultural Zone is a goods-and-services production zone established by one or more public legal entities, designed to achieve the integration of the agricultural and industrial sectors, and hosting industrial facilities dedicated to crop and animal production and their processing.

01



PLANNED PRODUCTION

Consolidating scattered agriculture into organized areas

02



EFFICIENCY

Maximizing unit yield through technology

03



SUSTAINABILITY

Renewable energy, zero waste, closed-loop

04



VALUE ADDED

Production + processing + packaging integration

05



EXPORT

Access to global markets through economies of scale

OAZ ADVANTAGES

The six core strategic advantages offered to investors in Organized Agricultural Zones



Shared Infrastructure

Road, water, electricity, telecom, wastewater and geothermal connections — delivered ready. No individual infrastructure investment required.



Low Investment Cost

Infrastructure cost is shared, plots delivered ready. VAT and property-tax exemptions significantly reduce total cost.



Energy Advantage

Ready geothermal-heating connection, solar/wind (SPP/WPP) option. In energy cost, sixty to eighty percent savings.



Logistics Advantage

Locations near major cities, shared export-support office, cold-chain infrastructure and market-research service.



Financing Access

KKYP 70% grant, IPARD 50-75% grant, Ziraat / Ziraat Participation Banks near-100% interest / profit-share support, plus OAZ-specific additional interest / profit-share support



Government Support

One-stop office, fast licensing/permit process. Veterinary services, laboratory and social facilities within the OAZ.

Why Invest in an OAZ? Investment Comparison

Comparison of an OAZ Investment with an Individual Investment

Criterion	OAZ Investment ✓	Individual Investment
1. Infrastructure	Delivered ready, shared use — zero additional cost ✓	Built from scratch — high initial cost ✗
2. Land & Zoning	Zoning-approved plot, title-deed security ✓	Long bureaucratic process ✗
3. Energy Connection	Energy (geothermal, natural gas, etc.) & grid connection ready ✓	Obligation to source one's own energy ✗
4. KKYP Grant	70% grant with the OAZ bonus ✓	Standard grant rate ✗
5. Ziraat / Ziraat Participation Bank Loans	Additional 15% interest / profit-share support ✓	Standard interest / profit-share support ✗
6. Permit & Licence	One-stop office — fast, easy ✓	12+ separate institutions, long process ✗
7. Social Facilities	Bank, market, fuel station available ✓	Not available ✗
8. Market Access	Export-support office, joint procurement ✓	Individual marketing — limited reach ✗
9. Veterinary Service	Free within the OAZ ✓	Requires private expense ✗
10. Risk Profile	Shared — low individual risk ✓	Individual — high risk burden ✗

The OAZ investor holds the advantage on every criterion.

Shared Infrastructure Advantages

In an OAZ, infrastructure is delivered ready for every plot — the investor does not build from scratch.



ROAD
Internal-road construction and maintenance belong to the OAZ



ELECTRICITY
Grid connection + solar (SPP) option



NATURAL GAS
Grid connection ready at the plot



POTABLE & UTILITY WATER
Grid connection ready at the plot



SEWERAGE
Grid connection ready at the plot



Perimeter Wall
Protective boundary structure built around the OAZ.



GEOTHERMAL ENERGY
In geothermal greenhouses, heating system ready at the plot



WASTEWATER & TREATMENT
Advanced treatment plant available



TELECOM
Internet and communications infrastructure ready at the plot



LABORATORY
Analysis and certification services



EXPORT OFFICE
Market research, foreign trade



VETERINARY
Preventive medicine in livestock OAZs

12

Infrastructure Component

Organized Agricultural Zones are made available with all infrastructure facilities completed.

Whereas in individual investments each utility is established separately, in OAZs all infrastructure services are provided ready.

03

SECTION

3

PRODUCTION MODELS AND SECTORAL SCOPE



Analysis of the crop and animal production models within the OAZ, their modern technological infrastructure, and sectoral diversity.

WHAT IS A GREENHOUSE OAZ?

Today, agriculture has ceased to be a traditional pursuit dependent on the uncertainties of nature and has become an industry with advanced technology and data at its centre. **Operating under full automation in a closed environment producing year-round without interruption, independent of season these modern agricultural zones** are the most effective solution developed against rising global food demand and climate change. By combining both traditional soil-based and innovative soilless production models with smart systems, these facilities have begun a new era in agriculture.



High-Technology Farming in a Closed Environment

Year-Round Production
12 months of uninterrupted production, independent of season

High Yield Capacity
6-10 times more unit product than open field

Soilless Farming
Reduces water consumption by 70-90%

Controlled Production Environment
Independent of disease, pests and weather

High Capacity
30-75 tonnes of product per year from 1 decare of modern greenhouse

30-75 tonnes/decare/year
Production Capacity

12 Months Uninterrupted Production
Year-Round Continuous Production

Tomato · cucumber · lettuce · strawberry · seedlings
Main Product Varieties

GEOTHERMAL-POWERED GREENHOUSE OAZ

Competitive Advantage from the Earth's Heat

1st Largest in Europe

Geothermal Capacity

4th in the World

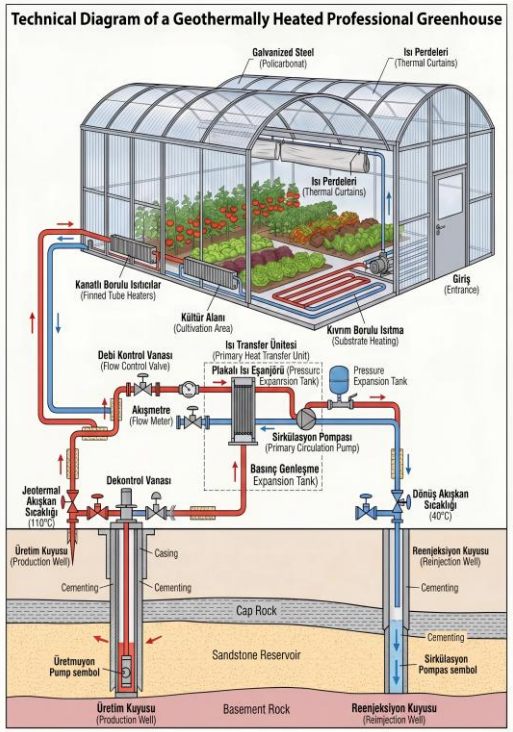
Geothermal Power — World Ranking

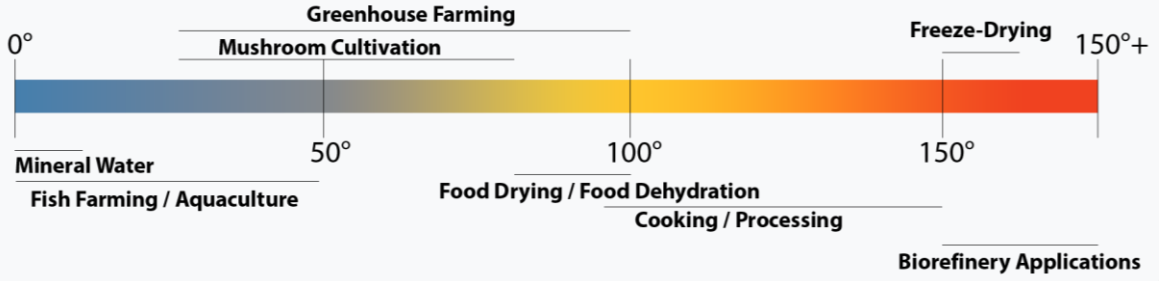
1,700+ MWe

Installed Geothermal Power

15 OAZs

Geothermal-Powered Greenhouse OAZ





Low Energy Cost

Heating expense reduced by 60-80%.

The geothermal well is delivered with a ready connection at the plot.

Year-Round Production

Uninterrupted production across all four seasons.

The advantage of remaining in the market when competitors close for the season.

Carbon Reduction & ESG Compliance

Renewable energy instead of fossil fuel.

A sustainable, ESG-compliant investment class.

High EBITDA Margin

2× higher EBITDA than European greenhouses.

OAZ geothermal greenhouses: 48-50%
in Europe: 20-35%

What is a Livestock OAZ?

- Organized production centres that bring cattle fattening, dairy cattle farming and small-ruminant husbandry together with modern infrastructure. Through the veterinary services, integrated meat facilities, cold-storage units, product-processing units, financing access and shared logistics networks they contain, they offer producers an integrated system.
- This innovative vision **which also encompasses the Aquaculture OAZ, targeting the world's first and only aquaculture-and-processing cluster** is a fully traceable, high-efficiency agricultural production model that permanently secures the supply security of animal-source food.

21	20 Provinces	54,656 da	160,000 Head
Livestock OAZ	Nationwide	Total Area 50% of OAZs	Current Capacity (2025)

2026 Strategic Target

300,000 Head → Long-term: 600,000 Head

Aquaculture

Animal-Product Processing

Cattle Fattening

Dairy & Combined Cattle Farming



04

SECTION

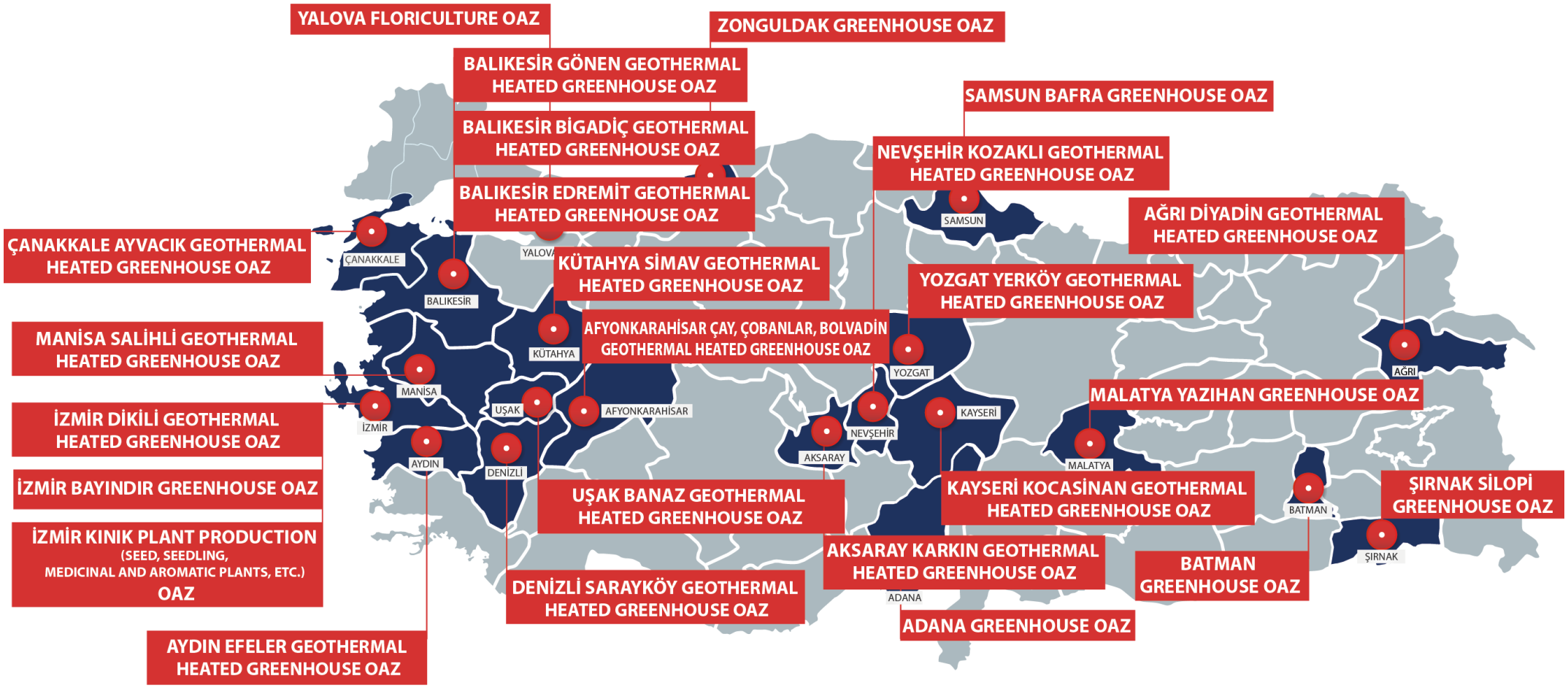
4

NATIONWIDE DISTRIBUTION, CAPACITY AND SCALE

A detailed analysis of the geographic distribution of OAZs across Türkiye, their sectoral placement, and production-capacity data.

Plant Production OAZs in Türkiye

25 Plant Production OAZs • 21 Provinces • 44,506 Decares



25 OAZ
Plant Production

44,506 da
Plant Production OAZ Area

21 Provinces
Nationwide

44%
Share of Plant Production OAZs in Total OAZ Area

LIVESTOCK OAZs IN TÜRKİYE

21 Livestock-Production OAZs • 20 Provinces

Map View

Cattle Fattening OAZ

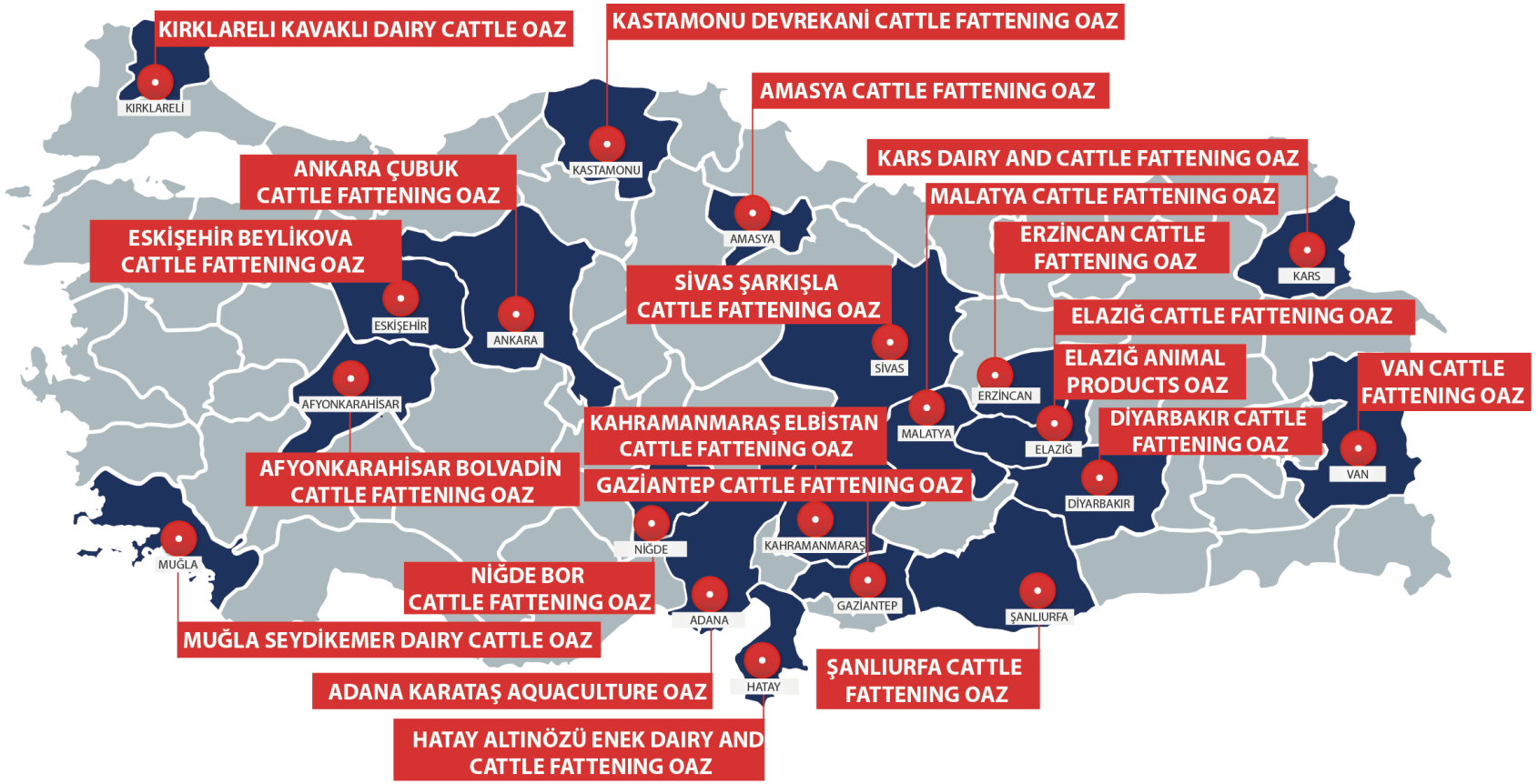
Dairy Cattle OAZ

Animal Product Processing OAZ

Aquaculture OAZ World's First

OAZ Distribution

Type	Count
Cattle Fattening	14
Dairy Cattle Farming	2
Dairy + Fattening	3
Animal-Product Processing	1
Aquaculture	1



21
Livestock-Production OAZ

20 Provinces
Nationwide Distribution

54,656 Decares
Total Livestock-Production OAZ Area

160,000 Head
Cattle Capacity

OAZ Numbers and Türkiye General Overview

61
OAZ
ORGANIZED AGRICULTURAL ZONE

42
PROVINCES
NATIONWIDE DISTRIBUTION

TRY 10 Billion
PUBLIC INVESTMENT
INFRASTRUCTURE FINANCING

~10,000
EMPLOYMENT
DIRECT EMPLOYEES

46 OAZ
Acquired Legal-Entity Status in 38 Provinces

99,162 da
Total Area Decares

16 OAZ
Entered Production
Active Production

20 OAZ
Infrastructure Completed
Awaiting Investors

TRY 5 Billion
2026 Infrastructure Loan Support

~TRY 20 Billion
Annual Economic Contribution Estimate

60,000 tonnes/year
Crop-Production Capacity
25 Crop OAZs | 44,506 decares



160,000 head
Cattle Capacity
21 Livestock OAZs | 54,656 decares



16 OAZ
Geothermal Heated Greenhouse
Europe's Largest Capacity

05

SECTION 5

INCENTIVES, INVESTMENT MODEL AND APPLICATION PROCESS

- INVESTMENT INCENTIVES & GRANTS
- GEOTHERMAL GREENHOUSE INVESTMENT MODEL
- ZIRAAT BANK SUPPORTS
- OFFICIAL APPLICATION PROCESS

A detailed examination of government incentives, grant programmes, modern investment models and the official application steps.

INVESTMENT INCENTIVES Grants, Exemptions and Loan Supports

KKYP Support Programme

Grant Rate **70%**

Upper Limit (Closed Environment) **TRY 30,000,000**

Lower Limit **TRY 100,000**

Implemented by **Ministry of Agriculture and Forestry**

- Closed Environment Crop Production
- Cattle / Small Ruminants Livestock
- Aquaculture
- Processing/Packaging/ Storage
- Renewable Energy

IPARD EU-Türkiye Joint Financing

M1	**Agricultural Enterprise** Milk/Meat Production	60-75% grant Max. €750,000
M3	**Processing and Marketing**	50-75% grant Max. €3,000,000
M7	**Modern Greenhouse Cultivation**	60-75% grant Max. €500,000

Additional Supports:
Young Farmer (<40 yrs) +5% - 10% • Organic Agriculture + 10% • Renewable Energy +10%

Maximum Support: **€3,000,000**

OAZ INCENTIVES Regional Investment Incentive System

VAT Exemption	All Regions ✓
Customs-Duty Exemption	All Regions ✓
Tax Reduction	Region 4: 30% Region 5: 40% Region 6: 50%
Interest Support	TRY: 3-7 points FX: 1-2 points
Employer's Insurance Premium	6-12 Years

Priority Investment: Geothermal Modern Technological Greenhouse → Region 5 Supports

OAZ-SPECIFIC TAX ADVANTAGES

- **On Land Acquisition** VAT Exemption
- **After Construction** Property-Tax Exemption
- **Local-Government** Tax Exemption
- **At TARSİM** 5% Premium Reduction

Geothermal Greenhouse Investment Model

Integrated system architecture from drilling to automation

Geothermal Energy System

Drilling well → heat exchanger
Distribution pipes → greenhouse heating

Solar (SPP) + Grid System

Photovoltaic panels → inverter → grid
Lighting + automation supply

Soilless Production Infrastructure

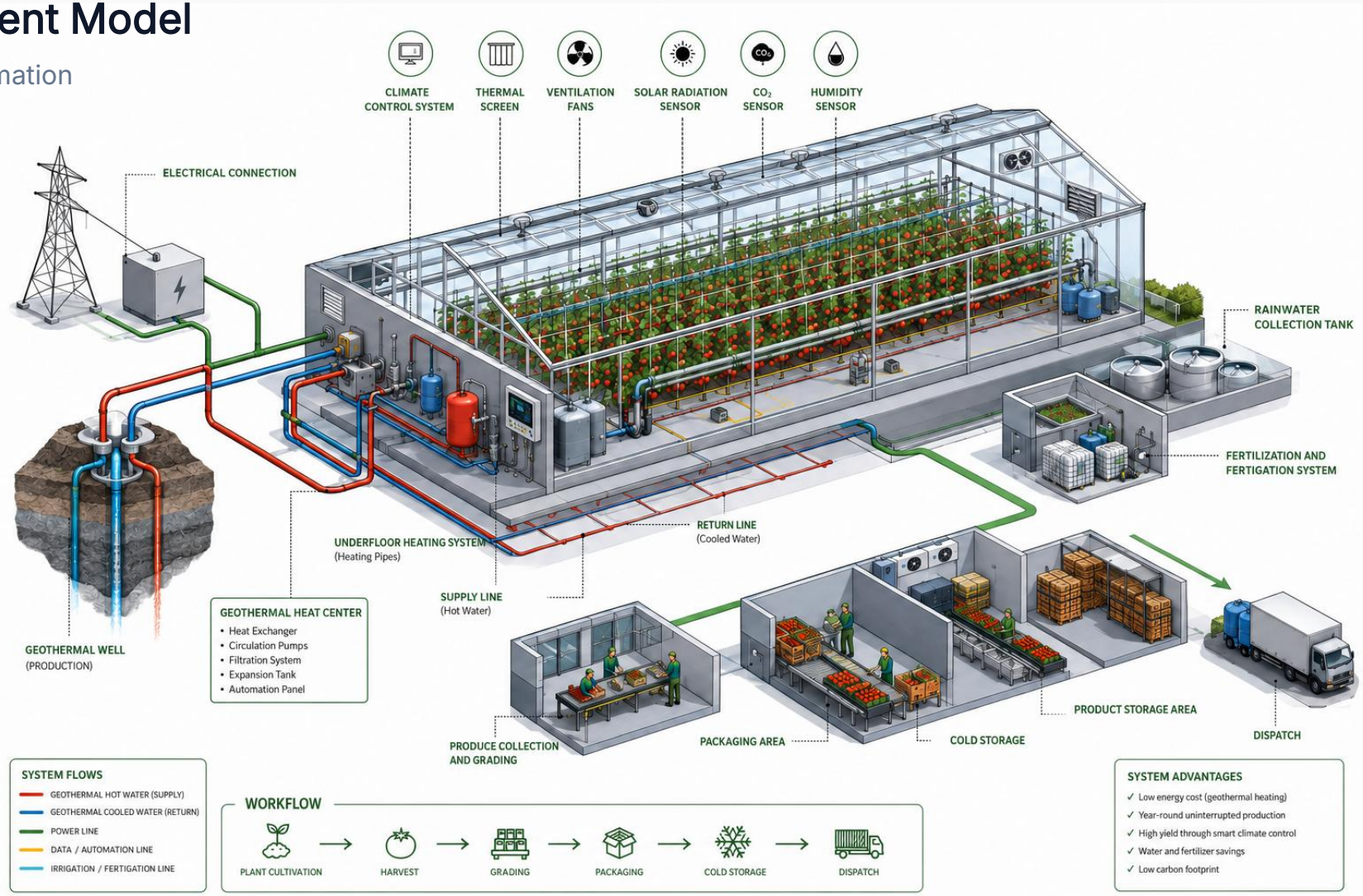
Substrate + drip irrigation
Nutrient-solution dosing

Controlled-Environment Management

CO_2 enrichment + humidity control
Automatic ventilation + thermal screen

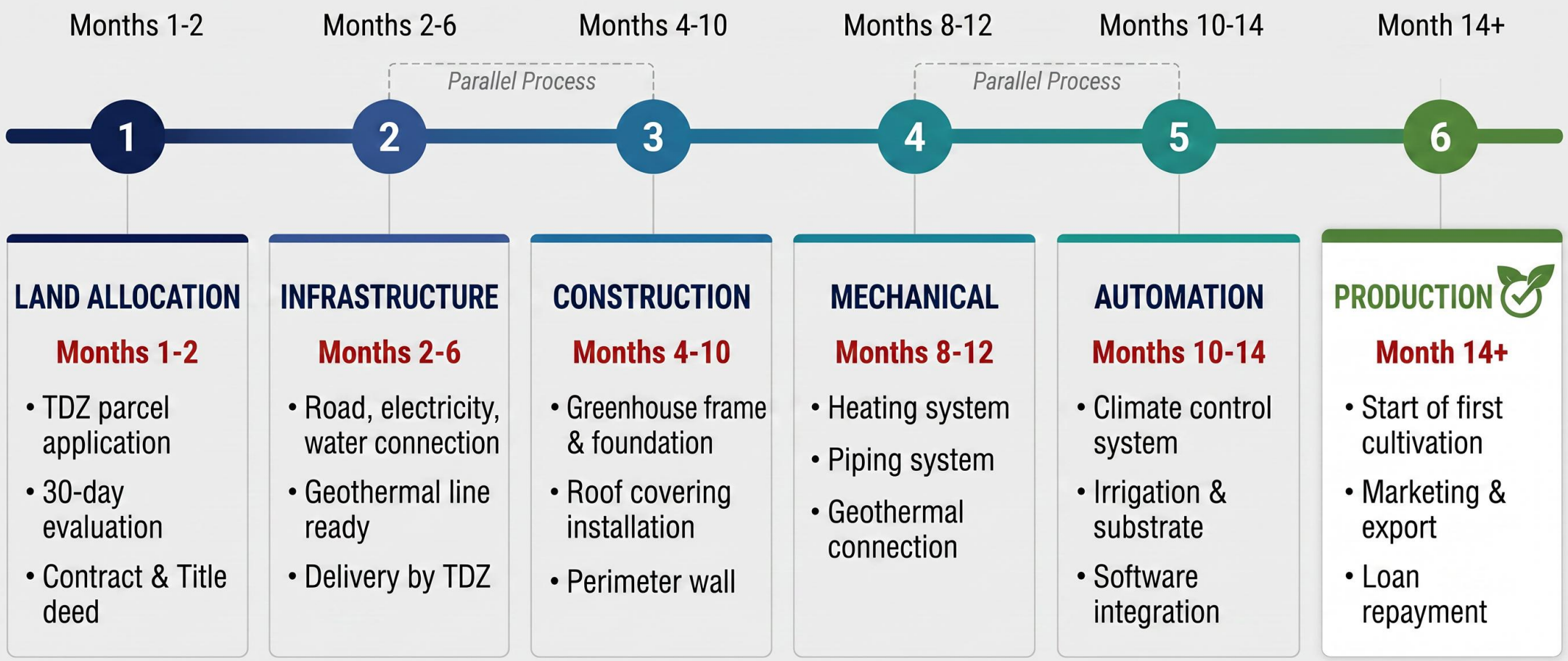
Harvest, Packaging & Cold Chain

Harvest line → packaging → cold store
Export logistics



Geothermal Greenhouse Installation Phases

A 6-phase investment process from land allocation to production



Ziraat Bank Investment Supports

Treasury-Interest-Subsidized Investment and Operating Loan — Special Advantages for OAZ Investors

Up to 100%
Interest-Reduction Opportunity

+15%
OAZ-Specific Additional Interest Reduction

Production Subject	Standard Interest Reduction	OAZ Add'l Reduction	Loan Ceiling
Closed-Environment Crop Production	50% (max. 100%)	+15%	TRY 100,000,000
Cattle Fattening	50% (max. 100%)	+15%	TRY 40,000,000
Dairy / Combined Cattle	50% (max. 100%)	+15%	TRY 60,000,000
Disease-Free Livestock	70% (max. 100%)	+15%	TRY 80,000,000
Small-Ruminant Husbandry	75% (max. 100%)	+15%	TRY 50,000,000
Aquaculture Sector	50% (max. 100%)	+15%	TRY 40,000,000
Processing of Agricultural Products	50% (max. 65%)	+15%	TRY 30,000,000
Agricultural Renewable Energy	75% (max. 100%)	+15%	TRY 15,000,000
Ornamental, Medicinal & Aromatic Plant Production	50% (max. 80%)	+15%	TRY 30,000,000
Cold-Storage Investments	50% (max. 65%)	+15%	TRY 40,000,000

Young / Women Entrepreneur: +1

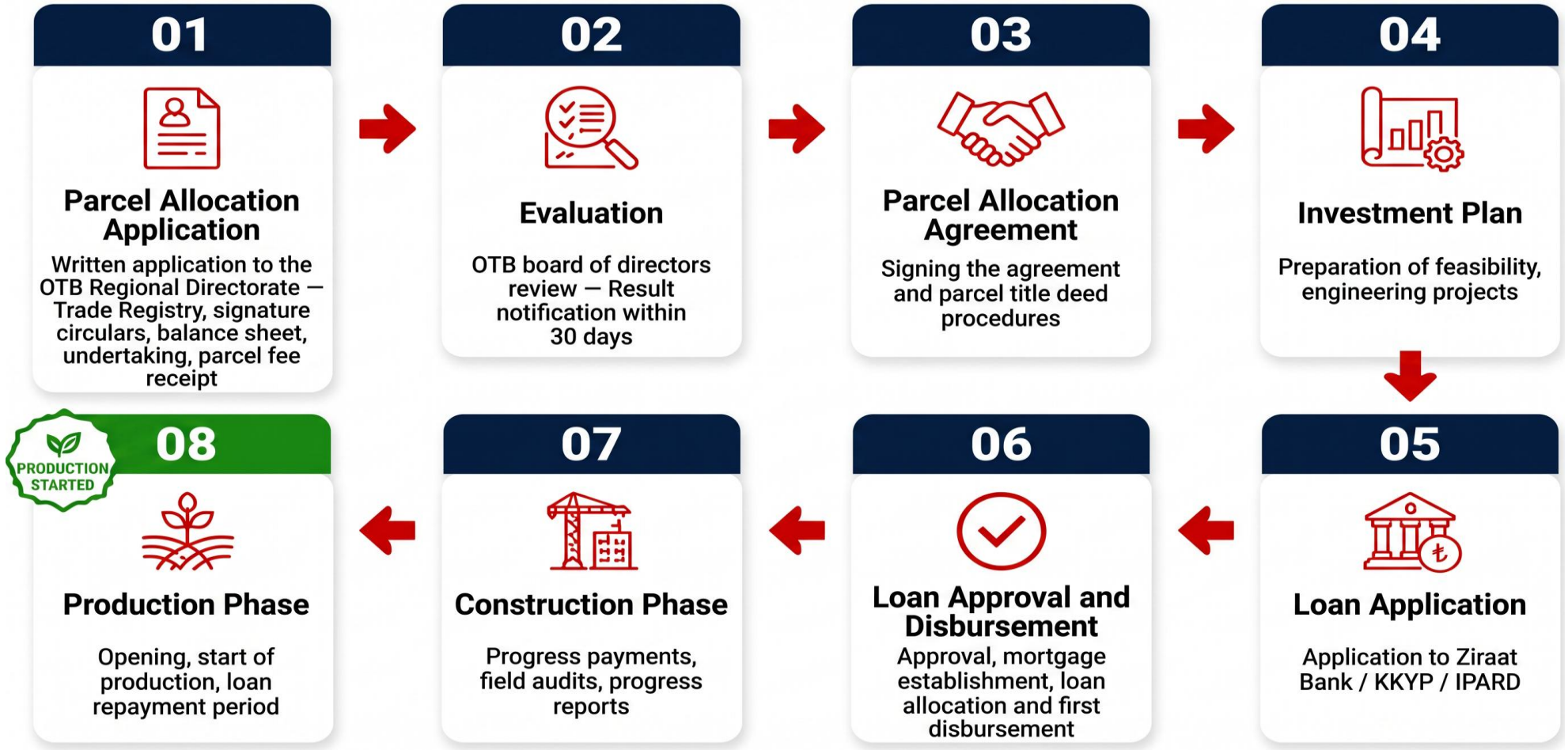
Renewable Energy: +5-20%

Contract Production: +15

Implemented by: T.C. Ziraat Bankası A.Ş. / Ziraat Participation Bank A.Ş. / Agricultural Credit Cooperatives

LOAN APPLICATION PROCESS

An 8-step official process from plot allocation to production



In the event of rejection, within 15 days at the latest written notification is provided

Plot-allocation announcements are published on the official website in the first week of each month

06

SECTION 6

FINANCIAL FEASIBILITY AND RISK ANALYSIS

A comprehensive assessment report covering the investment’s financial performance indicators, profitability projections, and Monte Carlo risk analyses over 50,000 simulations.

CAPEX Analysis of a 20-Decare Modern Greenhouse

20,000 m² Soilless Tomato Greenhouse — Total Investment Budget

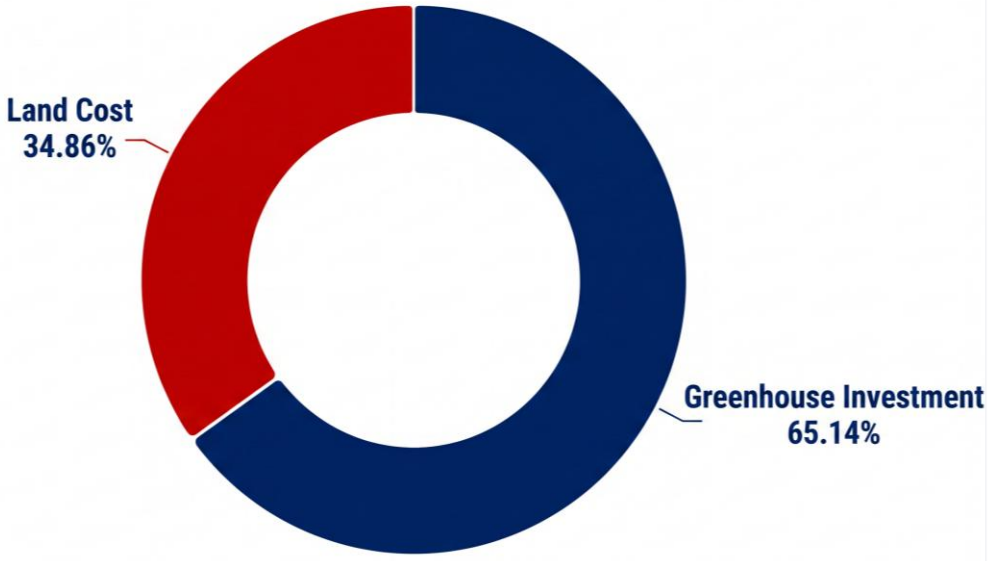
$2,777,621

TOTAL INVESTMENT (CAPEX)

$ 2,777,621

** 20,000 m² built-up area on a 25,000 m² plot*

MAIN BREAKDOWN (%)



GREENHOUSE INVESTMENT LINE ITEMS

INVESTMENT ITEM	AMOUNT ($)	SHARE (%)
Greenhouse Structure (Steel + Cover)	496,000	17.9%
Construction + Labour	369,000	13.3%
Electrical + Automation	212,000	7.6%
Irrigation + Substrate System	166,000	6.0%
Heating System (Geothermal)	130,000	4.7%
Infrastructure Connections	119,000	4.3%
Cold Storage + Packaging	96,000	3.5%
Other (Design, Insurance, etc.)	221,463	8.0%
LAND COST (25,000 m²)	**968,158**	**34.9%**

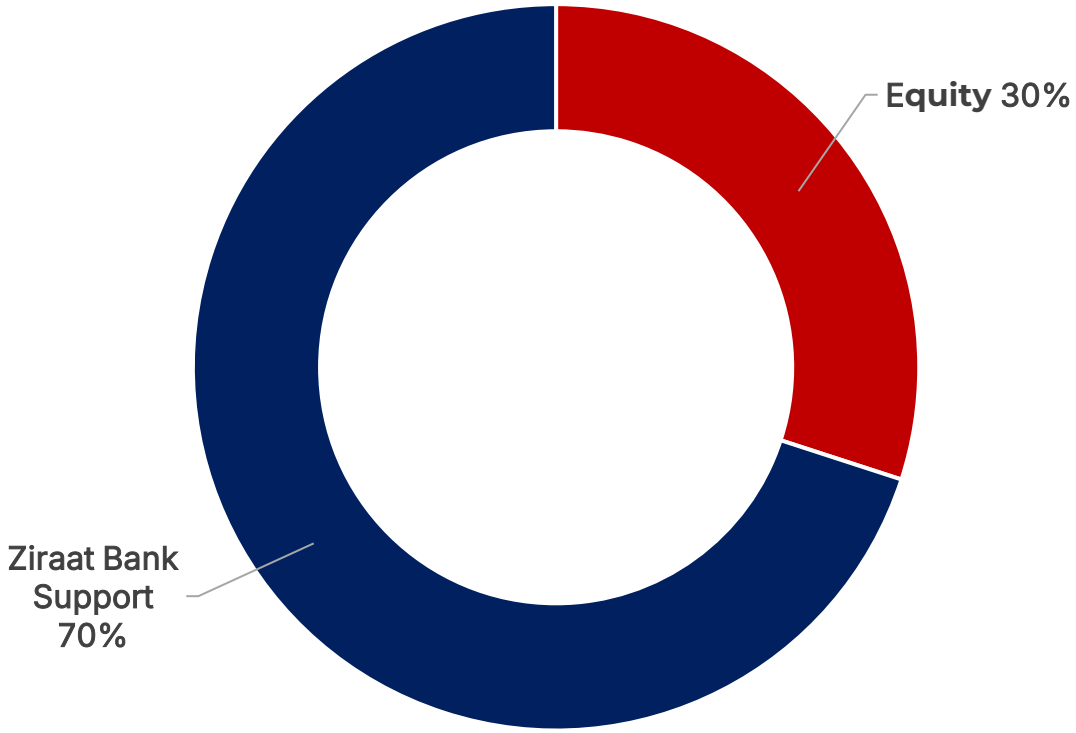
Land cost calculated at a unit price of TRY 1,800/m² and an exchange rate of 46.48 TRY/USD.

Greenhouse: a turnkey, high-technology structure suited to the soilless farming model.

Financing Structure and Source Distribution

Total Investment Sources

Equity vs. Bank Loan Ratio



TOTAL CAPEX

$2,777,621

ZIRAAT BANK INVESTMENT LOAN

INTEREST RATE
0% (Zero Interest)

TERM
7 Years

ANNUAL INSTALMENT
$277,762

LOAN TYPE
OAZ-advantaged Ziraat Bank profit-share / interest-subsidized loan

EQUITY REQUIREMENT

$833,286

30% of total investment

RETURN ON EQUITY (ROE)

42.7%

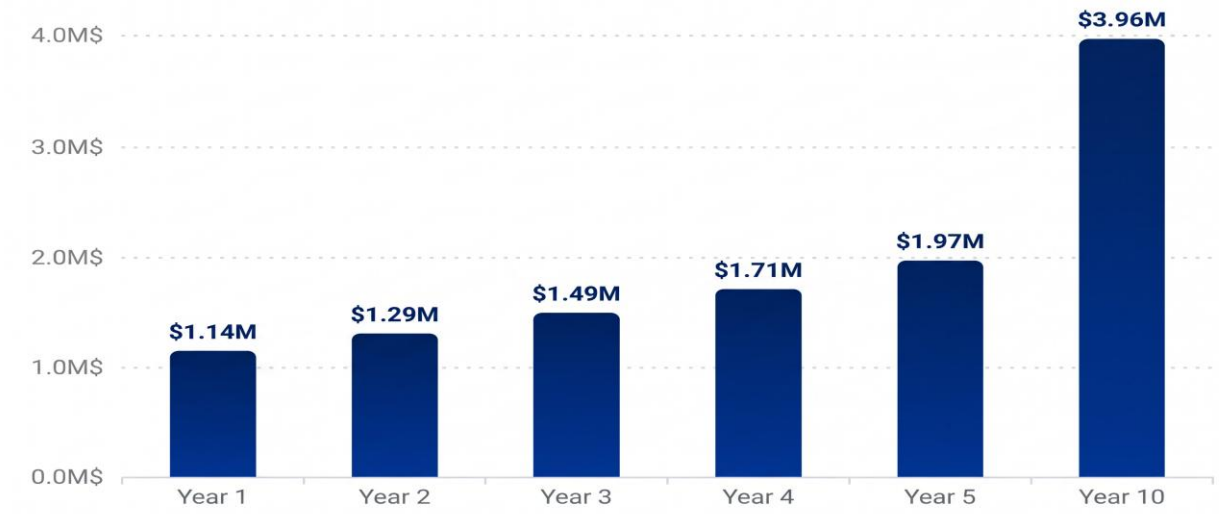
End-of-first-year figure

Loan repayments are planned to be financed from the project's cash flow. The zero-interest advantage significantly shortens the investment's payback period.

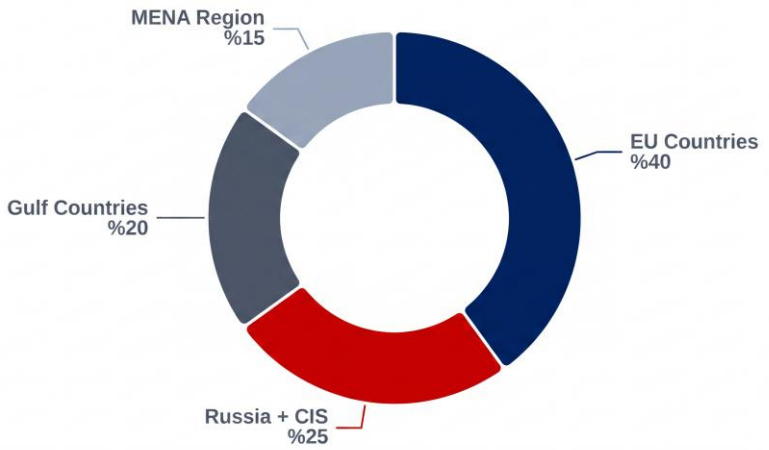
Revenue Model and Production Projection

ANNUAL PRODUCTION	UNIT YIELD	EXPORT SHARE (Y1)	EXPORT PRICE (Y1)
840 Tonnes	42 kg/m²	65%	$1.50 /kg

10-Year Revenue Projection ($)



Export-Markets Distribution



Strategic Note: Annual revenue growth is calculated on the basis of 15% price escalation. Export markets, at a 65% share, provide the foreign-currency inflow.

DOMESTIC MARKET (Y1)	TOTAL CAPACITY
$1.10/kg	840,000 kg

OPEX – Annual Operating Expenses

Year-1 Operating Costs: Fixed and Variable Cost Analysis

FIXED COSTS (62.7%)

Permanent Labour (16 People): **$136,478**

Agricultural Engineers (2 People): **$51,635**

Electricity **: $49,300**

Consultancy Services **: $30,000**

Geothermal Heating **: $18,500**

Marketing & Security: **$16,730**

Greenhouse Maintenance: **$2,500**

TOTAL FIXED: $305,143

VARIABLE COSTS (37.3%)

Packaging: **$83,133**

Fertilizer & Solution: **$42,300**

Temporary Labour: **$27,296**

Cocopeat: **$13,872**

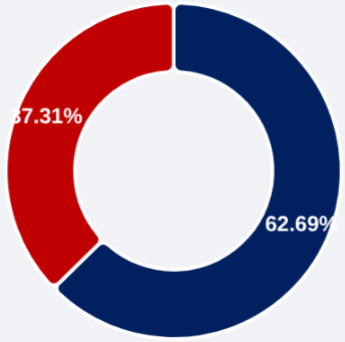
Seed: **$9,250**

Bees & Pollination: **$3,780**

Peat & Vermiculite: **$2,010**

TOTAL VARIABLE: $181,640

EXPENSE BREAKDOWN



Geothermal Advantage

COST LEADERSHIP

60-80% energy savings versus conventional heating.

Heating Cost: $18,500/year

Estimated Saving: ~$110,000/year

YEAR-1 TOTAL OPEX

$486,783

Income Statement (P&L) – IFRS-Compliant

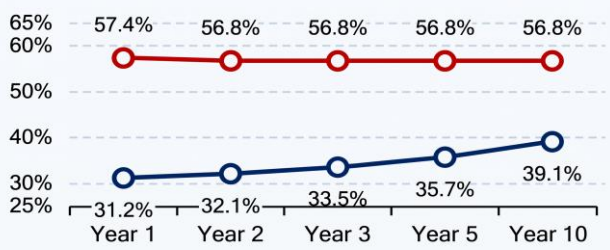
YEAR-1 TOTAL REVENUE
$1,142,400
↑ Base Scenario

YEAR-1 EBITDA
$655,617
57.4% Margin

YEAR-1 NET PROFIT
$356,003
31.2% IFRS Net Margin

PRE-TAX EBIT
$474,671
After Depreciation

Item ($)	Year 1	Year 2	Year 3	Year 5	Year 10
Revenue	1,142,400	1,294,440	1,488,606	1,968,681	3,959,722
(-) OPEX	-486,783	-559,800	-643,770	-851,386	-1,712,442
EBITDA	**655,617**	**734,640**	**844,836**	**1,117,295**	**2,247,280**
EBITDA Margin %	**57.4%**	56.8%	56.8%	56.8%	56.8%
(-) Depreciation	-180,946	-180,946	-180,946	-180,946	-180,946
EBIT	474,671	553,693	663,889	936,349	2,066,333
(-) Corporate Tax (25%)	-118,668	-138,423	-165,972	-234,087	-516,583
NET PROFIT	**356,003**	**415,270**	**497,917**	**702,262**	**1,549,750**
Net Profit Margin %	**31.2%**	32.1%	33.5%	35.7%	39.1%



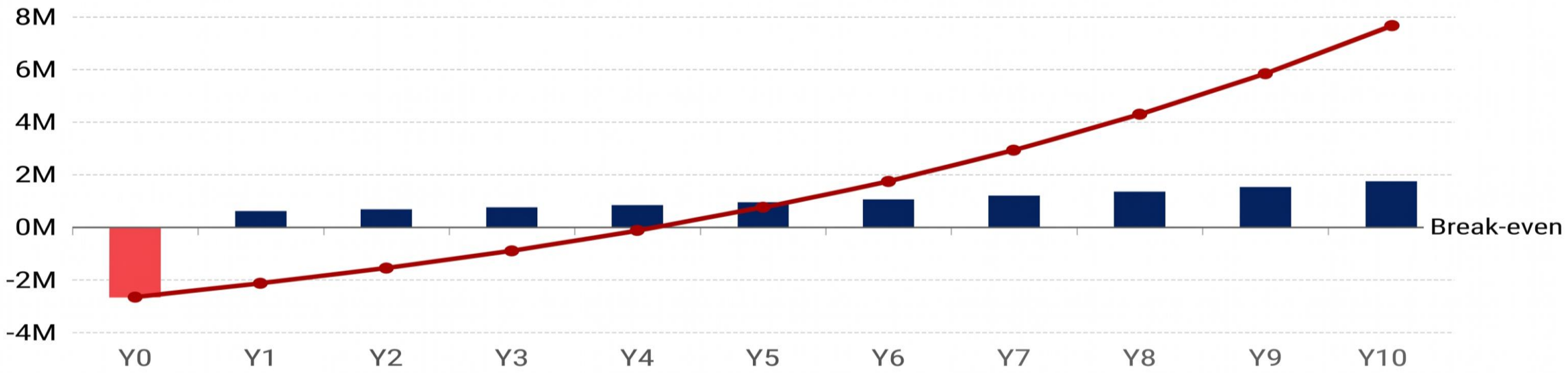
Financial Notes

- ✓ Depreciation: 10-year straight-line model on the greenhouse investment ($1.8M).
- ✓ Tax Advantage: 25% standard corporate-tax rate applied within the scope of modern greenhouse incentives.
- ✓ Interest: interest expense is $0 due to use of the Ziraat Bank zero-interest loan.

Cash Flow and DCF Analysis

NPV (18% WACC)	IRR (INTERNAL RATE OF RETURN)	PAYBACK PERIOD	ROE (Y1)
$1,062,243	26.0%	4.22 Years	42.7%

Annual FCF and Cumulative Cash Balance Projection



Year	0 (Investment)	1	2	3	4	5	7	10
Net Profit ($)	—	356,003	415,270	497,917	592,961	702,262	972,507	1,549,750
Free Cash Flow (FCF)	-2,777,621	536,949	596,216	678,863	773,907	883,208	1,153,454	1,730,696
Cumulative Cash	-2,777,621	-2,240,672	-1,644,456	-965,592	-191,685	+691,523	+2,853,880	+7,415,117

** Free Cash Flow (FCF) values are calculated including depreciation.*

Break-Even Analysis and Margin of Safety

267 TONNES

Break-Even Production Volume

Break-Even Turnover Threshold

$362,833 / Year

Annual Fixed Costs

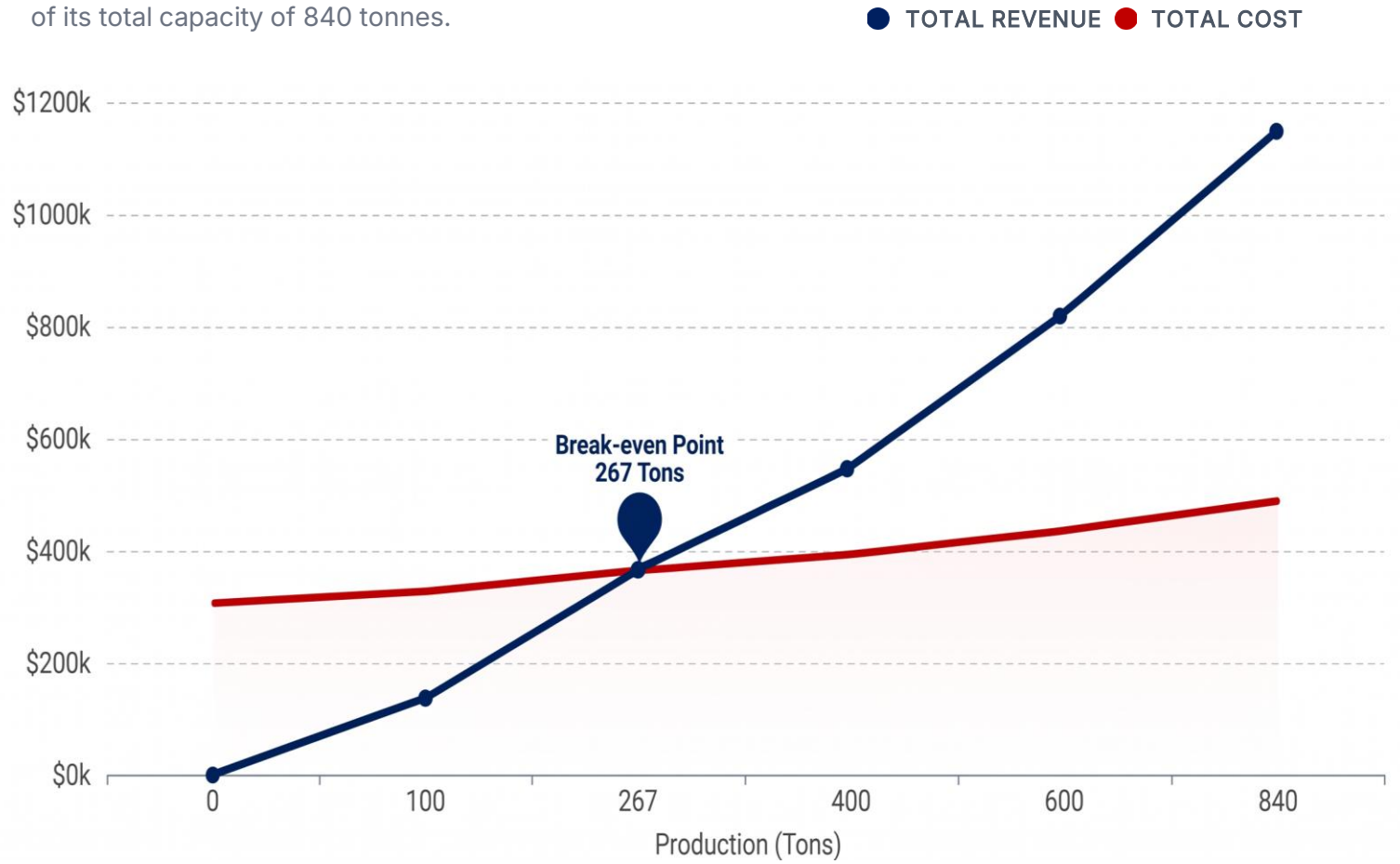
$305,143

Price-Decline Tolerance

57.4%

Margin of Safety: 68.2%

The project's entire operating expenses are covered by only 31.8% of its total capacity of 840 tonnes.



Unit Selling Price
$1,360/tonne

Variable Cost
$216.2/tonne

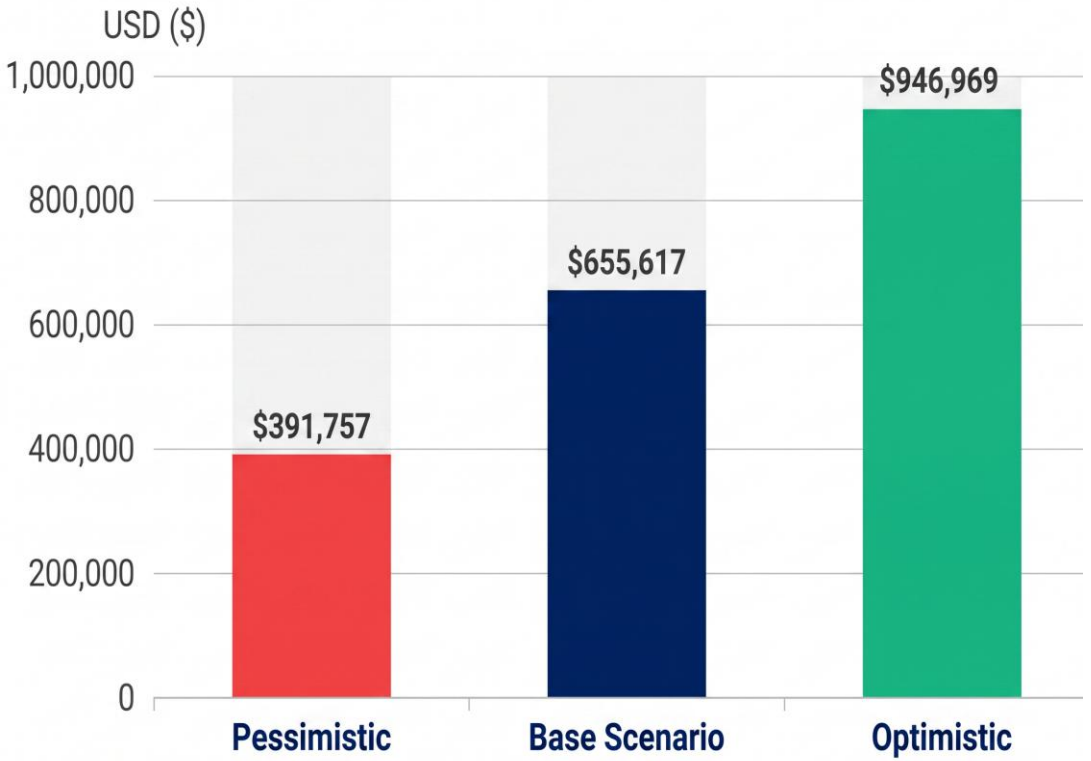
Contribution-Margin Ratio
84.1%

Sensitivity Analysis: Scenario Planning

Scenario Comparison Matrix

Parameter	Pessimistic	Base Scenario	Optimistic
Price Change	-15%	0%	+15%
Yield Change	-10%	0%	+10%
Energy Cost	+20%	0%	-10%
Revenue ($)	873,936	1,142,400	1,445,136
EBITDA ($)	391,757	655,617	946,969
EBITDA Margin	44.8%	57.4%	65.5%

Scenario-Based EBITDA Projection ($)



** Values are based on EBITDA (earnings before interest, taxes, depreciation and amortization).*

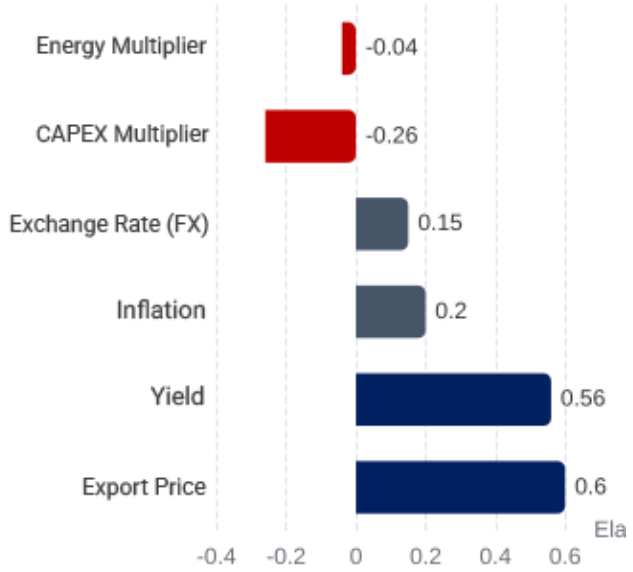
CRITICAL FINDINGS

- **Price Sensitivity:** the most critical factor. A 15% price decline narrows the margin by 12.6%.
- **Resilience:** even in the pessimistic scenario, an EBITDA margin above 44% is preserved.

Monte Carlo Risk Analysis and Probability Distribution

NUMBER OF SIMULATIONS	MEAN NPV	MEAN IRR	PROBABILITY OF LOSS
50,000	$1,113,410	25.6%	12.8%

Most Critical Factors Affecting NPV (Elasticity)



Statistical Distribution Results

Indicator	P5 (Bad)	Median (P50)	P95 (Good)
NPV ($)	-$471,424	$1,062,243	$2,749,412
IRR (%)	13.9%	26.0%	36.8%
Break-Even (Tonnes)	296	267	243

- P(NPV > 0): the project's probability of generating a profit is 87.2%.
- P(IRR < WACC 18%): the risk of return falling below cost of capital is 13.8%.

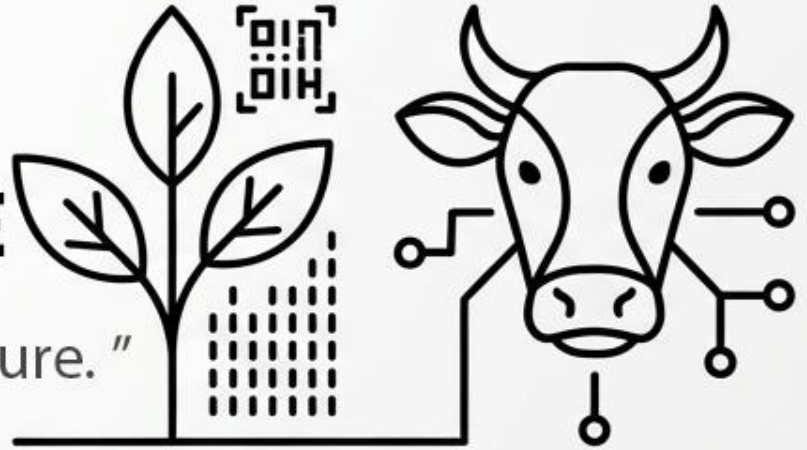
STRONG INVESTMENT PROFILE

Analytical Conclusion: The Monte Carlo simulation confirms that the project shows high resilience to variable market conditions (price, yield, exchange rate). The most critical risk factor, export price (0.60 elasticity), should be monitored closely; however, operational sustainability is preserved even in pessimistic scenarios.

REPUBLIC OF TÜRKİYE
MINISTRY OF AGRICULTURE
AND FORESTRY

TRGM
Reform yapar

ORGANIZED AGRICULTURAL ZONE



" Smart Agriculture, Organized Production, Sustainable Future. "

Ankara, Türkiye | June 2026 | All Rights Reserved.