

JUNE 2024

# ENERGY & CLIMATE TECHNOLOGIES INVESTOR PRESENTATION



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## Expansion to new adjacencies & abroad by leveraging the pioneer position in Türkiye

**Growth & High Investment**  
2006-2013



**Turnaround**  
2013-2017



**Capital Recycling**  
2017-2022



**Expansion to New Adjacencies & Abroad**  
2022 Onwards

**2006**  
Energy SBU  
Founded

**2013**

Partnership with E.ON  
Acquisition of AYEDAŞ and Toroslar  
Regions Unbundling of Distribution and  
Retail

**2016**  
Start of 3rd Regulatory Period  
2016-20

**2021**

Start of 4rd Regulatory Period 2021-25  
March 2021  
Enerjisa Europe Obtained Trading Licence

**2022**

October 2022  
Enerjisa Üretim's 1,000 MW  
Wind Plant Investment with  
the collaboration of Enercon

**2023**

October 2023  
Acquisition of Oriana Solar LLC:  
232 MW solar power plant and a  
60 MW energy storage facility  
investments in Texas, USA.

**2007**  
Partnership with  
Verbund

**2009**  
Acquisition  
of Başkent Region

**2014**  
Decision to defer new generation  
investments

**2017**  
FOCUS STRATEGY  
Separation of Business Lines

**2018**  
March 2018  
Enerjisa Üretim final capital increase  
February 2018  
Enerjisa Enerji IPO valued at ~2 bn USD

June 2022  
Sabancı Climate Technologies Founded

October 2022  
Renewable Energy Investments in the U.S:  
Safar Partner VC investments & Solar Plant  
Investment -Cutlass II Project - (272 MW)

July 2023  
Acquiring remaining 6% of E-şarj  
to reach 100% ownership

## Strategic Direction from “Traditional” to “Disruptive” ...



Sustainability is our guiding principle in each and every business decision we take.

We aim to benefit & develop our strong human capital and competencies to expand our operations abroad.



We position ourselves in the center of the global innovation ecosystem.

We are committed to staying at the center of the technologies that will shape the future energy world.



...with our subsidiaries present in many steps of the energy value chain...



### Distribution & Retail

40%

Sabancı Holding

40%

E.ON

20%

Free Float

14

Cities

6

Metropolises

22 mn

Population

10.7 mn

Customers

325,955 km

Network

TL 34.3 bn

Regulated Asset Base

43.2 TWh

Sales (2023)

12.2 mn

Connections

2,016

Charging Points in Eşarj

81

Cities with Eşarj Stations



### Generation & Trade



50%

Sabancı Holding

50%

E.ON

26

Power Plants

5

Technologies

3.8 GW

Installed Capacity (5 GW in 2026)

13.1 TWh

Generation (2023)

46.4%

Renewables (60% in 2026)

34 TWh

Trading (2023)



### Energy & Climate Tech.



100%

Sabancı Holding

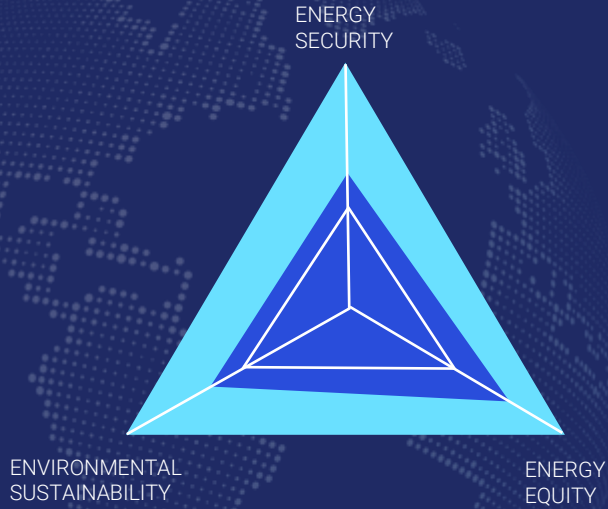


Renewable Energy  
Generation in U.S

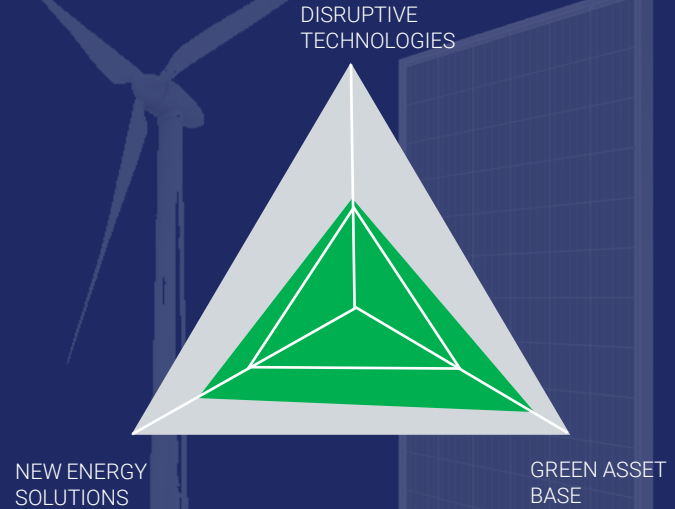


Investments in Climate Technologies  
Through Energy and Climate VC

# ...in order to achieve the impossible in the “Energy Trilemma”



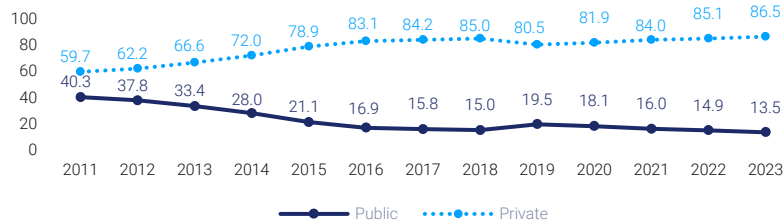
**ENERGY TRILEMMA**  
WORLD ENERGY COUNCIL



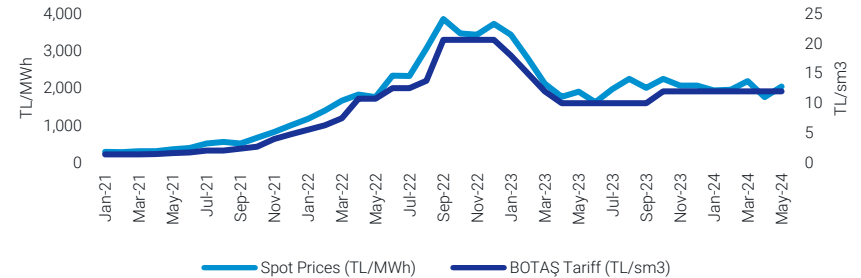
**PROPOSED SOLUTION**  
SABANCI ENERGY & CLIMATE TECHNOLOGIES

# Liberalized market mechanism in Türkiye

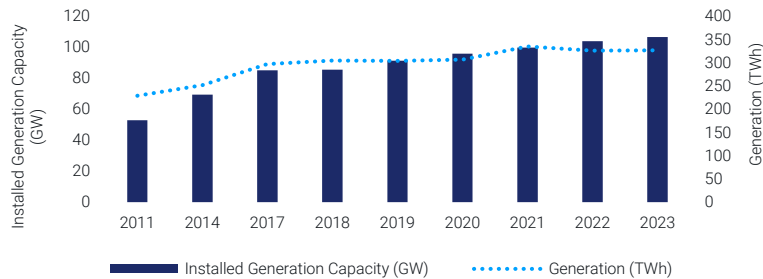
Change of Licensed Electricity Generation as Public-Private by Years<sup>(1)</sup> (%)



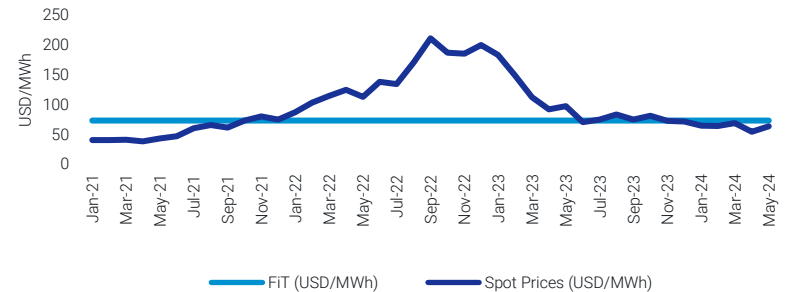
Spot Electricity Prices (TL/MWh, LHS) vs Natural Gas Prices (TL/sm<sup>3</sup>)<sup>(2)</sup>



Development of Installed Generation Capacity & Generation<sup>(1)</sup>



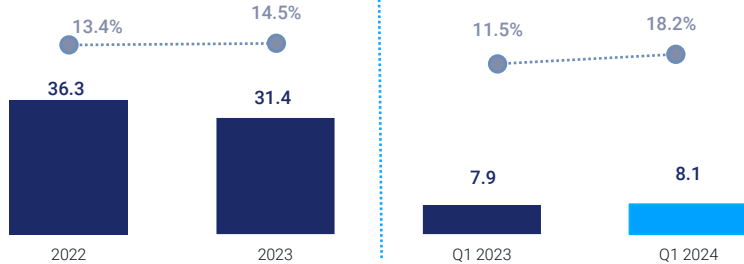
Spot prices vs Feed-in-tariff (USD/MWh)<sup>(2)</sup>



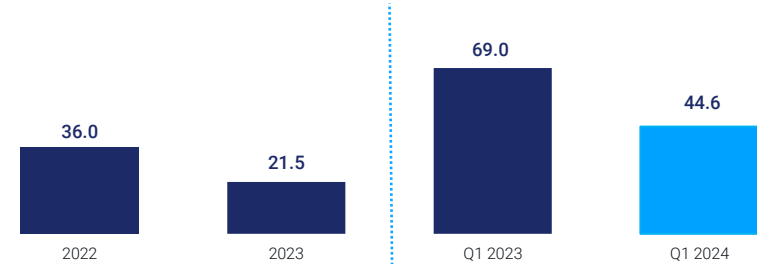
(1) Source: TEIAS (2) EPIAS, BOTAS

# Increasing investments with the start of the new capex cycle started to weigh on quarterly financial results

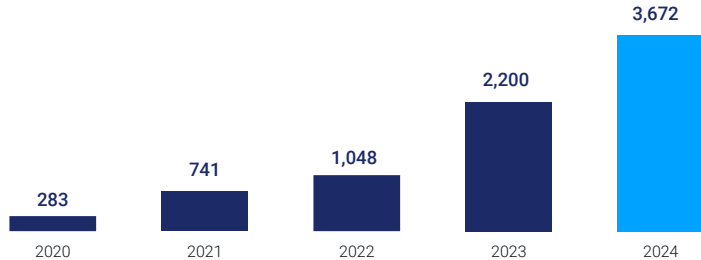
Combined EBITDA<sup>(1)</sup> (Bn TL) & EBITDA<sup>(1)</sup> Margin



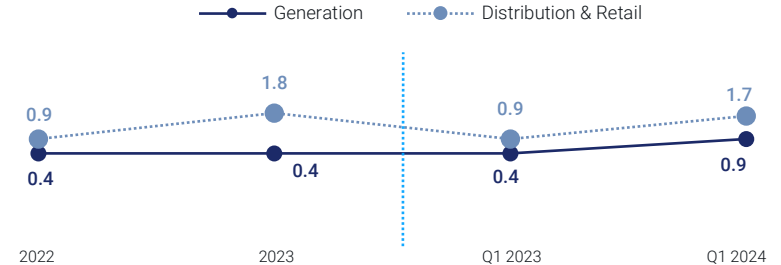
Combined Net Income<sup>(1)</sup> (Bn TL)



Dividends Paid to Sabanci Holding (Mn TL)



Net Debt / EBITDA<sup>(1)</sup> Ratio





## Enerjisa Üretim, with its clear roadmap, would continue to grow continuously by utilizing its own resources...

Protect &  
Grow the Core

④ Growth in Renewable Generation Capacity

④ Trade Business Expansion (Power, Gas and Carbon) Globally

④ Expand Digital & Energy Services

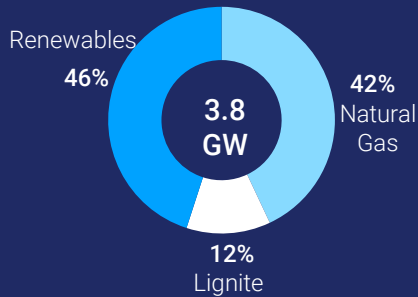
Adjacencies &  
Transform

④ Explore Green Hydrogen

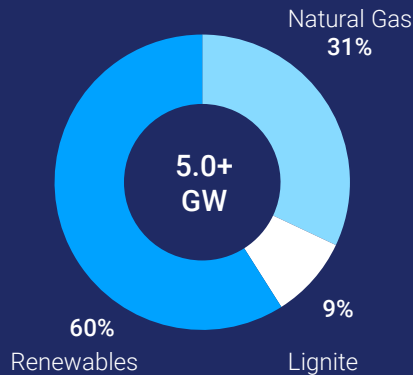
...consequently, a significant step towards +5,000 MW installed capacity target has been taken

### Installed **Generation** Capacity Mix

Currently



2026



### 1000 MW **YEKA-2** Wind Power Plant Investment (USD 1.2 bn)

ÇANAKKALE  
250 MW

BALIKESİR  
250 MW

AYDIN  
250 MW

MUĞLA  
250 MW



FX Guaranteed Revenue Stream for 15 Years

### Additional Capacity Growth Projects

01

Capacity increase in existing renewable power plants

02

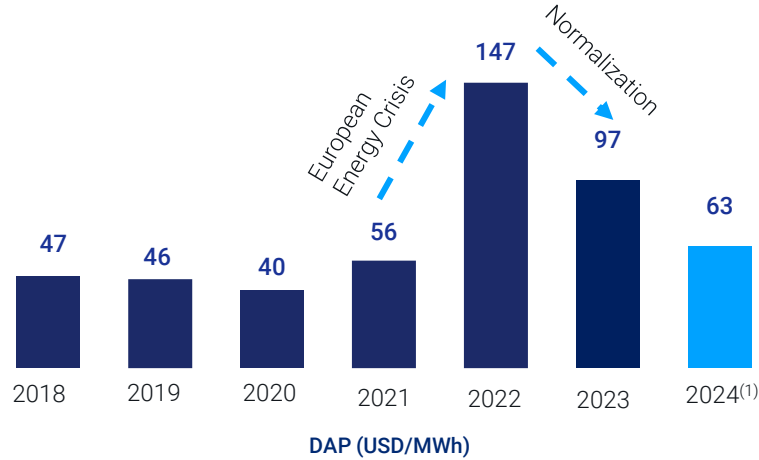
M&A activities for additional renewable power plants

03

Generation licenses with energy storage

# USD-based fixed price to continue after gradually replacing FiT renewable power plants with 1GW YEKA project for 15 years contract period

## Turkish Electricity Spot Market Day Ahead Price (DAP)



(1) YTD Average

Enerjisa Üretim Natural Gas (1.6 GW) & Lignite (0.4 GW) Generation are priced as follows;

### Price Caps & Limits

Enerjisa Üretim is bound by market price after removal of technology based maximum settlement price as of Oct. 2023.

Enerjisa Üretim Renewable Generation (1.8 GW) is priced as follows;

### FiT & Spot Market

✓ Wind: 73 USD/MWh  
 ✓ Hydro: 73 USD/MWh  
**Enerjisa Üretim ~430MW**

✓ Spot Price (DAP)  
 ✓ Licence tender fixed price  
**Enerjisa Üretim ~1,370MW**

## Exploring next generation capabilities in power generation & trading

### ASSET LIGHT GROWTH



#### Trading Globally

- ▶ Establishment of **Enerjisa Commodities BV** in 2023.
- ▶ Trading in 8 different countries and having activities for power, gas and carbon etc. for 25 countries.
- ▶ Reached a trading volume of +10 TWh in CWE<sup>(1)</sup> and CESEE<sup>(2)</sup> in 2023.



#### Energy & Digital Services

- ▶ Establishment of **Senkron Energy Digital Services BV** in 2023.
- ▶ Commercializing technological know-how and digital services with low market entry cost while sustaining the competitive advantage
- ▶ Providing plant management, data services, cyber security solutions and digital energy platform for training and green energy solutions.



(1) CWE: Central-Western Europe

(2) CESEE: Central-Eastern and Southeastern Europe

### GREEN HYDROGEN

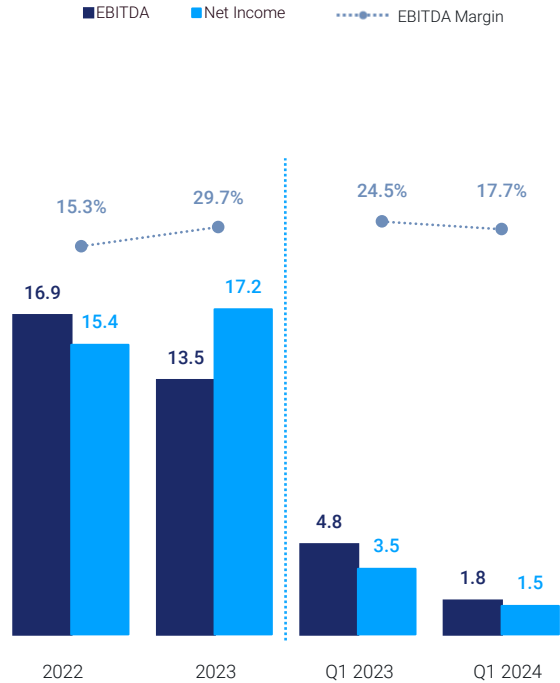


- ▶ Started to produce & store green hydrogen in the pilot project to use in generator cooling – as the first private sector player in Türkiye.
- ▶ Joined a 16-member consortium for the “**HY South Marmara Project,**” which aims to establish **Türkiye’s first Green Hydrogen Valley.**
- ▶ Planned to install electrolyzers, in line with the expected domestic and international demand.

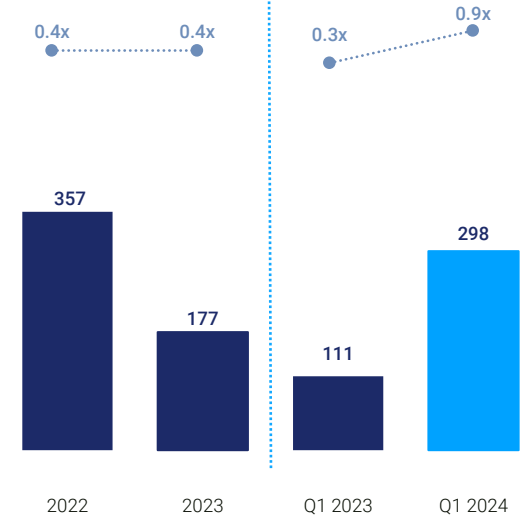
### ENERGY STORAGE LICENSES

- ▶ Energy storage preclicenses were distributed by the regulatory authority which covers utility scale electricity storage facilities coupled with same capacity wind or solar power plants.
- ▶ Enerjisa Üretim received **500 MW** capacity for 3 locations, all of which are also wind power plants.

## Solid balance sheet structure maintained



Net Debt (Mn EUR Equivalent) & Net Debt/EBITDA



## Enerjisa Enerji, in regulated and free market operations, would continue to grow and lead energy transition of Türkiye

**Protect &  
Grow the Core**

- ① **Maximize Grid Investments (RAB)**
- ② **Optimize Retail Operations**

**Adjacencies &  
Transform**

- ③ **Growth in Customer Solutions**
  - Distributed Generation / Solar
  - Energy Efficiency & Decarbonization
  - E-mobility / E-charging Platform

## Strong position in distribution & retail and an inflation-linked business with real return

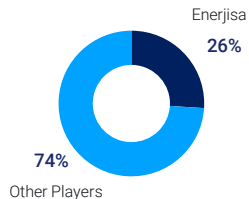
### Competitive Advantages

- ▶ Türkiye's leading electricity distribution and retail company – economies of scale
- ▶ TL and inflation linked long-term borrowing to match revenue stream – access to competitive financing with Sabancı brand
- ▶ Fundamental growth from incumbent regions (Başkent, Ayedaş and Toroslar)
- ▶ Large retail customer base of more than 10 million (representing 22% market share) with high proportion of regulated sales
- ▶ Premium sponsors and superior governance (Sabancı & E.ON)
- ▶ Well positioned to capture growth & attractive dividend pay-out

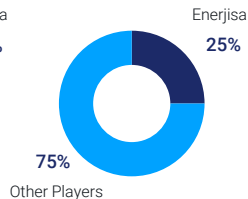
### Türkiye's

**no.1**  
electricity  
distribution and  
retail company

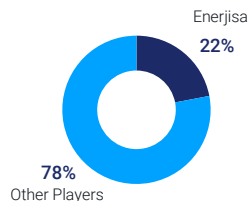
22 Million Population



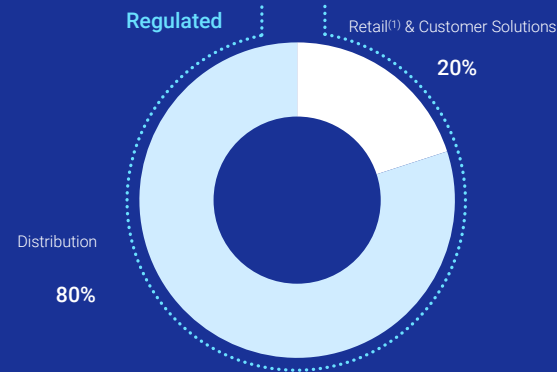
12. m Distribution Connections



10.7 m Retail Customers



### Supportive and Transparent Regulatory Framework Operational Earnings (2023)

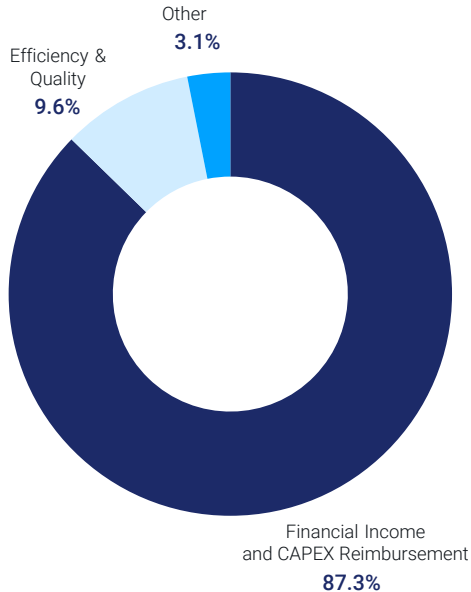


- ▶ Regulated Investment Returns with a supportive WACC (12.3%)
- ▶ Regulated Efficiency & Quality Parameters
- ▶ Regulated Retail Margin (2.38% on reference procurement price and retail service revenues resulting in 6.3% gross margin in 2023)

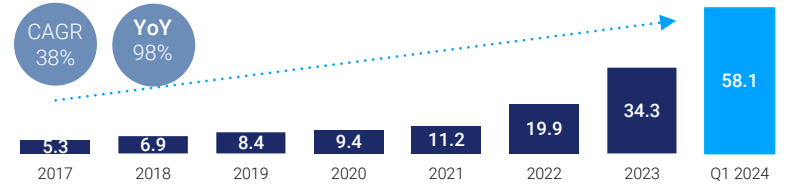
(1) More than 2/3 of retail sales volume is regulated.

# Heavily concentrated on network investments but also an important efficiency game

Distribution Operational Earnings<sup>(1)</sup>  
Breakdown (2024 Q1)



Strong Historical Growth and Untapped Potential  
Regulated Asset Base (TL bn)



Regulation Incentivizes Investments -  
Regulated WACC (real)



High Support for Efficiency Improvements<sup>(2)</sup>  
Efficiency & Quality (TL mn)



(1) Operational Earnings include Capex Reimbursement (2) 2022,2023 and Q1 2024 numbers are with IAS29



## Acting as a solution partner with technological competencies by leveraging extensive customer network



### Customer Solutions

**32.4 MWp**  
Installed Solar Power Capacity

**3.8 MW**  
Installed Combined Heat & Power

### Distributed Generation, Energy Efficiency, Decarbonization & Storage

- ▶ Creating a sustainable and service-based business model through Energy Performance Contracts (EPCs)
- ▶ Offering our customers environmentally-friendly energy solutions with a focus on distributed generation, decarbonization, and efficiency.
- ▶ Developing and executing sizeable-scale projects, with an upside potential highlighted by the Medium-Term Program (2024-2026) of Türkiye.
- ▶ 205 MW of solar power plant prelicenses with electricity storage



### E-mobility / E-charging Platform

- ▶ In July 2023, Enerjisa Enerji reached %100 ownership of Eşarj



Türkiye's  
**no.1**  
E-mobility  
DC Charging Point  
Operator

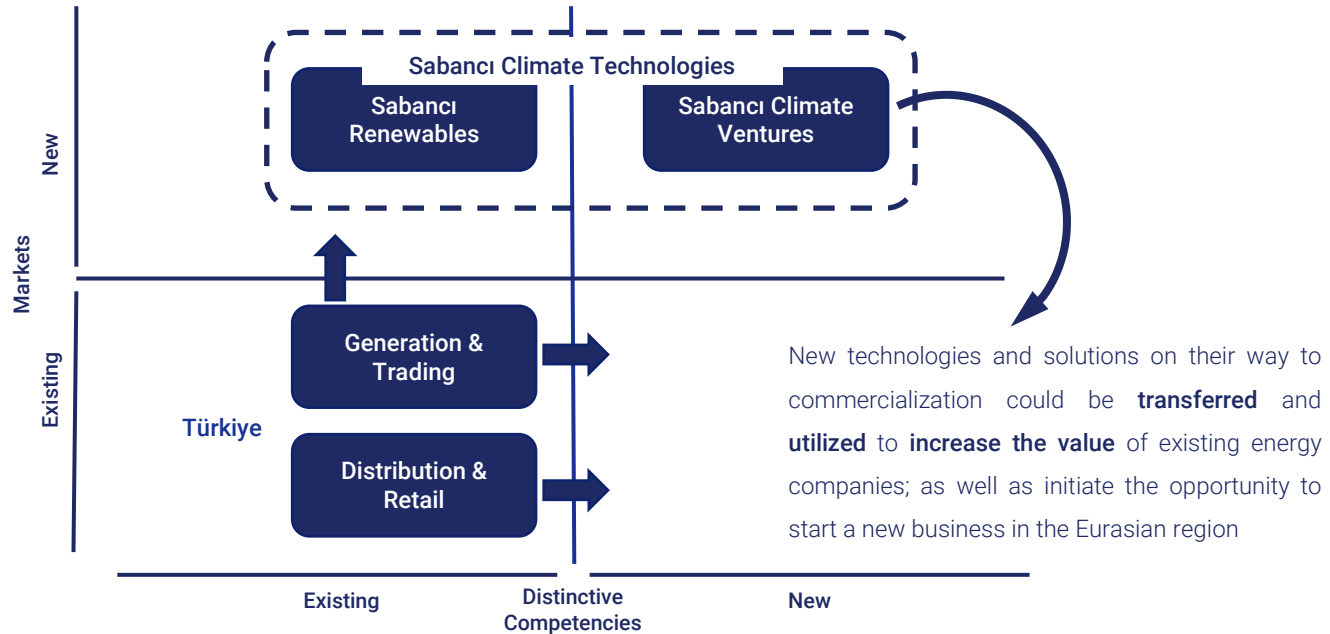
With  
**%24**  
High Speed  
Market Share

Presence in  
**81**  
Cities

**1,615**  
DC Charging Points

**2,016**  
Total Charging Points

## Transforming the energy business to pursue opportunities in “disruption & expansion abroad”



# It is time to leverage core capabilities in the Energy SBU & expand the business to create higher value for all stakeholders

We lead energy and climate transition by bridging the gap between emerging and developed markets



**Sabancı Climate Technologies**, wholly owned subsidiary of Sabancı Holding, undertakes renewable energy power plant investments and strategic investments in various venture capital funds and start-ups, primarily in the US and Europe.

## Sabancı Renewables

### Focus Investment Areas

- ▶ On-shore wind
- ▶ Utility scale solar
- ▶ Battery storage

### Focus Geographies

- ▶ ERCOT
- ▶ PJM
- ▶ MISO

### Distinctive Competency

- ▶ Execution and digital asset management capabilities in renewables

## Sabancı Climate Venture Investments

### Focus Investment Areas

- ▶ Early-stage Energy and Climate solutions

### Focus Geographies

- ▶ Predominantly the USA, and Europe as peripheral location

### Distinctive Competency

- ▶ Early market penetration of startups in emerging markets

## US came to the fore with the attraction of being world's 2<sup>nd</sup> largest renewable energy market & the largest corporate venture ecosystem



### Solar Resource Potential

**170 TW**

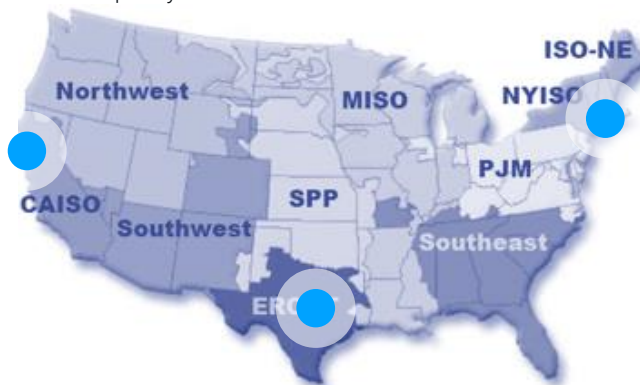
potential capacity



### Wind Resource Potential

**10.6 TW**

potential capacity



Academia and Start-up Ecosystems

### Facts on Renewable Energy Investments

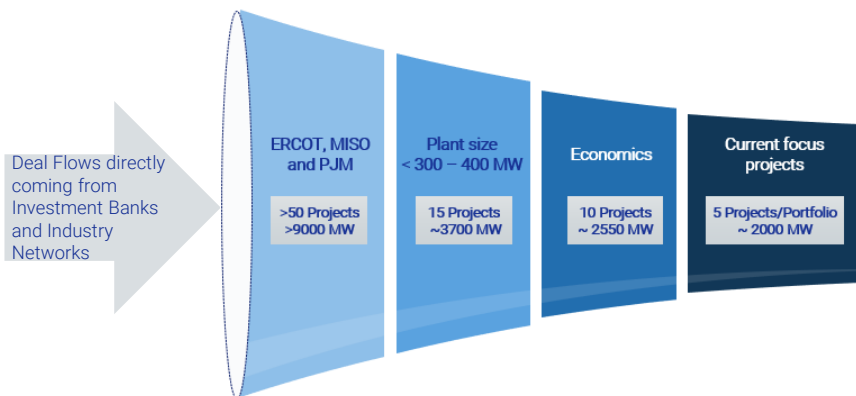
- ✓ US is the 2nd largest renewable energy market following China. Around 100 GW of renewable capacity was installed in the US for the last 3 years
- ✓ US companies have committed to source 80% of their consumption from renewable sources by 2045, which is around 4,050 TWh
- ✓ Extended and enhanced Renewable Energy Incentives (IRA – Inflation Reduction Act)
- ✓ The most developed & least-regulated power market and long-term stable base revenue streams in USD terms
- ✓ The most liquid financial market with the lowest cost of funding

### Facts on Start-up Investments

- ✓ North America set an annual record in capital commitments and captured 66.4% of the funds closed (168 bn USD) in 2022
- ✓ More than 50% of global unicorns emerge in the US

## Further investments are ongoing in on-shore wind and utility-scale solar projects to exceed 1,000 MW

### Sabancı Renewables Deal Flow in the Last 6-Months



### Focused Investment Approach

#### Target Technologies

- ✓ On-shore wind
- ✓ Utility-scale solar
- ✓ Battery storage

#### Target Geographies

- ✓ ERCOT
- ✓ PJM
- ✓ MISO

### Solid Business Model for the Execution

- ✓ EPC contract with a pioneer company
- ✓ Highly credible PPA contracts
- ✓ Financing partnerships with global banks
- ✓ Tax equity partnership as incentive model of the USA

# The first solar investment in Texas has been initiated, and the second solar investment has also started, leveraging the know-how acquired during the initial solar project

## 272 MW Cutlass II Solar Power Plant Project

- ✓ Project Acquisition: October'22
- ✓ EPC Agreement with Bechtel: October'22
- ✓ Construction Start (FNTP<sup>(1)</sup> to Bechtel): January'23
- ✓ Power Purchase Agreement with a Reputable Off-Taker: January'23
- ✓ Project Finance with Reputable Banks: January'23
- ✓ Tax Equity Closing: October'23
- ✓ Commercial Operation Date: Mid-May'24



## 232 MW Oriana Solar Power Plant Project with 60 MW Storage

- ✓ Close to the major load centers of Houston and Corpus Christi, anticipated centers of future green fuel investment, as well as the increasing LNG related load
- ✓ Shovel-ready project with low execution risk; developed by an experienced and reputable Project Firm

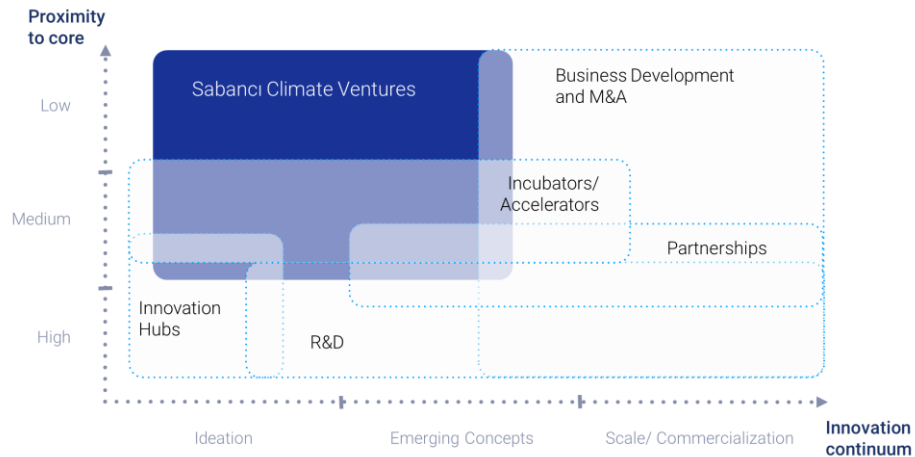
### Solid Business Model for the Execution

- ✓ Project Acquisition: October'23
- ✓ EPC Agreement: October'23
- ✓ Construction Start (FNTP): Q1'24
- ✓ Commercial Operation Date: Q2'25
- ✓ Opportunity to invest in battery storage project in the future

(1)Final Notice to Proceed

## Sabancı Climate Ventures creates extended innovation ecosystem & enables early access to disrupting technologies...

**Sabancı Climate Ventures is a necessity to position for the future and not competing with other activities while generating attractive financial returns over the full fund cycle**



### Value Proposition to Start-Ups

- ① Acceleration, piloting, and commercialization partner in a vibrant emerging market
- ① Access to multiple generation technologies and +10Mn user-base in the electricity value chain
- ① Relationship building and expertise gaining opportunity from leaders of Türkiye's largest private utility player

### Value Extraction

- ① Strong collaboration with Sabancı Group companies through dedicated platform teams to pilot and scale start-up concepts/products
- ① Pursue board observer seat in investments to increase collaboration opportunities and learnings

## ....via the investments in climate technologies funds & investments directly to start-up companies



- ✓ Invested in a venture fund with a portfolio of start-ups from seed to growth stage
- ✓ Portfolio with a focus on innovative energy and climate technologies



- ✓ Supporting ready-to-scale start-ups active in Europe or USA whose mission is to accelerate the energy transition and decarbonize society
- ✓ Looking for digital, scalable and asset-light companies in Series A and beyond funding that have shown evidence of a product-market-fit



- ✓ Invests in scalable early-stage climate tech startups and technologies addressing global climate change
- ✓ The firms' principals have been investing in, supporting and mentoring early-stage clean energy startups together since 2005, and work with a deep bench of Venture Partners



- ✓ Founded as an MIT spinout in 2022
- ✓ Active Surfaces has developed a low-cost, easy-to-manufacture, light-weight, high-performance flexible perovskite solar cell that is manufactured via thin-film deposition



- ✓ Coming out of MIT's Plasma Science and Fusion Center and reached a valuation of \$5 billion in 2021
- ✓ Having the potential to enable clean nuclear energy production in the future to remove the limits on energy



- ✓ AiDash is an AI-first vertical SaaS company on a mission to transform operations, maintenance, and sustainability in industries with geographically distributed assets by using satellites and AI at scale



- ✓ Coming out of MIT and reached a valuation of over 100 million USD in June 2022
- ✓ Planning to provide access to deep geothermal energy resources economically with its revolutionary drilling technology



- ✓ Founded in San Francisco in 2021
- ✓ Developed compliance tracking and insight software to manage and improve ESG footprint in various sectors
- ✓ Providing deep analytics that can be integrated with ESG systems



# While contributing to Türkiye's green energy transition, we stay committed to sound management of ESG risks and investing in communities that we operate in



## Key Player in Energy Security

- ✓ Providing uninterrupted, continuous, accessible energy to one out of every 4 people in Türkiye
- ✓ A Leading player in the industry with 3,727 MW with the most diverse generation composition



## Largest contributor to electrification

- ✓ One of the largest investors in grid expansion, upgrading, and modernization
- ✓ Pioneer in the Digitization of all processes in the electricity value chain
- ✓ Operating the largest, fastest, and green Charging Station Network in Türkiye



## Commitment to 100% Low Carbon Generation

- ✓ 1 out of every 3 solar and wind power plants will be realized by Enerjisa Üretim in the next 5 years
- ✓ %15 decrease in GHG intensity in 3 years with the ultimate aim to reach net zero before 2050



## Shaping the New Energy World

- ✓ Türkiye's first green hydrogen manufacturing plant in a bid to address energy security and green energy transition simultaneously
- ✓ With a potential of green hydrogen export capacity to Europe



## Helping Customers to Decarbonize

- ✓ Improving the efficiency of customers and helping them to decarbonize through our innovative and sustainable products under the umbrella of The Energy of My Business
- ✓ Trading 3rd parties' carbon and green power certificates
- ✓ 30% share in Sabancı Group's SDG-linked net sales revenues



Meet SirA, Sabancı Holding's digital investor relations assistant !



Türkiye's First Investor Relations Dedicated Assistant !

[ir.sabanci.com](http://ir.sabanci.com)



#### INVESTOR RELATIONS CONTACTS

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Investor Relations Director

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**Şule GENÇTÜRK KARDIÇALIOĞLU**  
Investor Relations Manager

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**Sezgi ESER AYHAN**  
Investor Relations Manager

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**Emine DALAN**  
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