

MARCH 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

323,421 km

Network

TL 30.2 bn

Regulated Asset Base

39.2 TWh

Sales (2022)

12.1 mn

Connections

1,862

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)

14.6 TWh

Generation (2022)

45.5%

Renewables (60% in 2026)

28.5 TWh

Trading (2022)



Energy & Climate Tech.



100%

Sabancı Holding

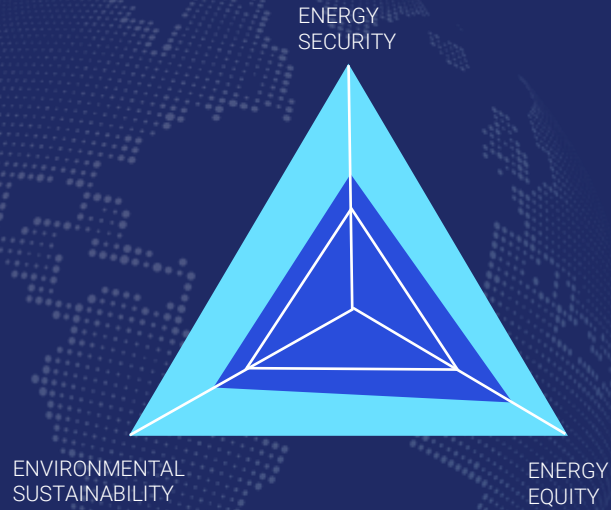


Renewable Energy
Generation in U.S

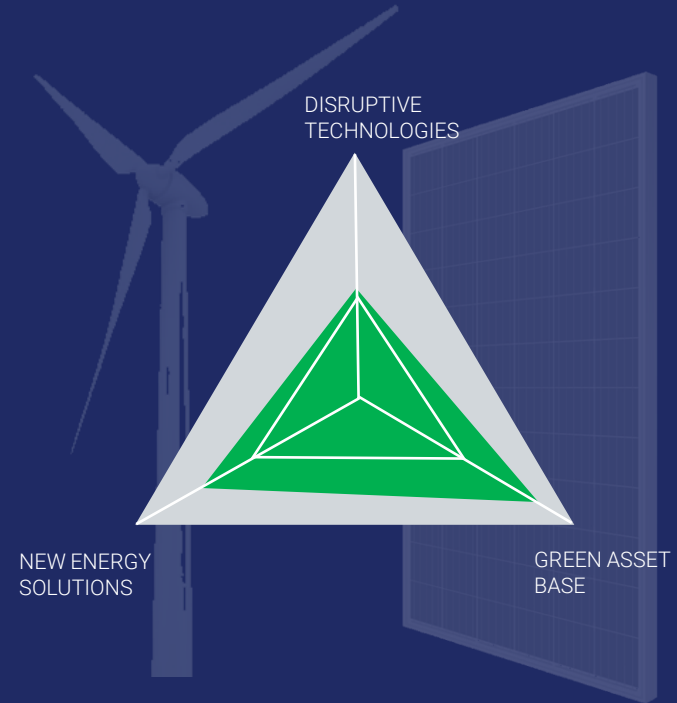


Investments in Climate Technologies
Through Energy and Climate VC

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



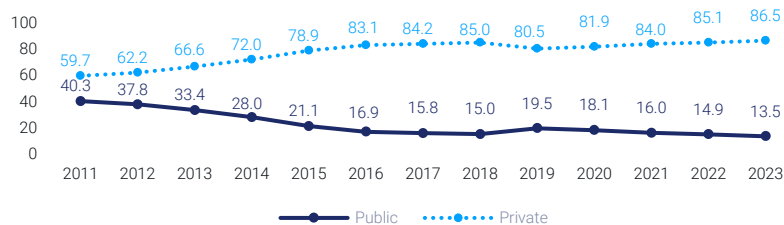
ENERGY TRILEMMA
WORLD ENERGY COUNCIL



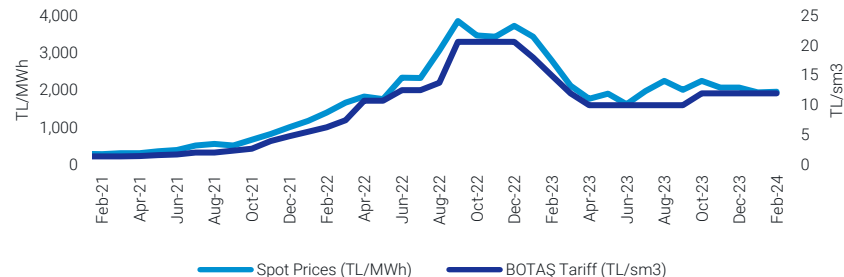
PROPOSED SOLUTION
SABANCI ENERGY & CLIMATE TECHNOLOGIES

Liberalized market mechanism in Türkiye

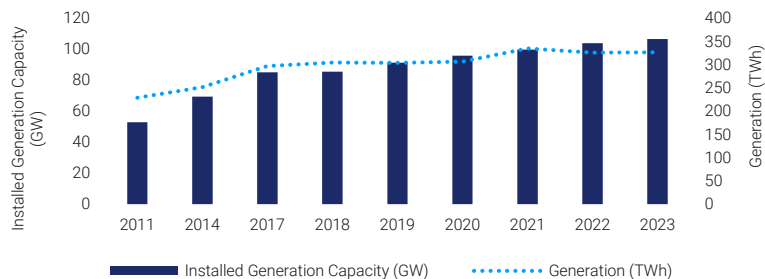
Change of Licensed Electricity Generation as Public-Private by Years⁽¹⁾ (%)



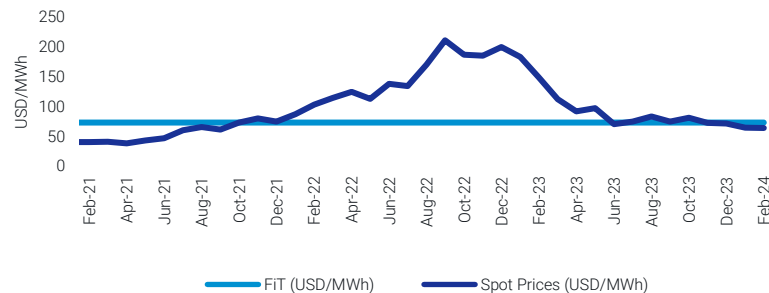
Spot Electricity Prices (TL/MWh, LHS) vs Natural Gas Prices (TL/sm³)⁽²⁾



Development of Installed Generation Capacity & Generation⁽¹⁾



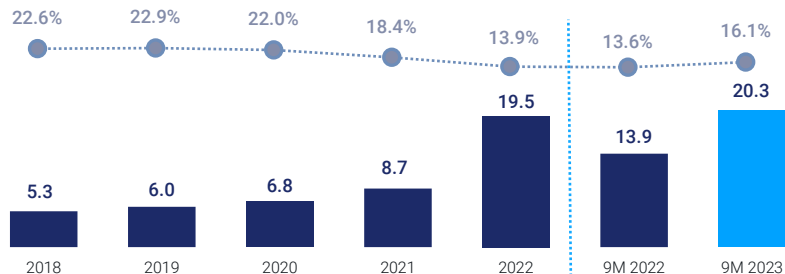
Spot prices vs Feed-in-tariff (USD/MWh)⁽²⁾



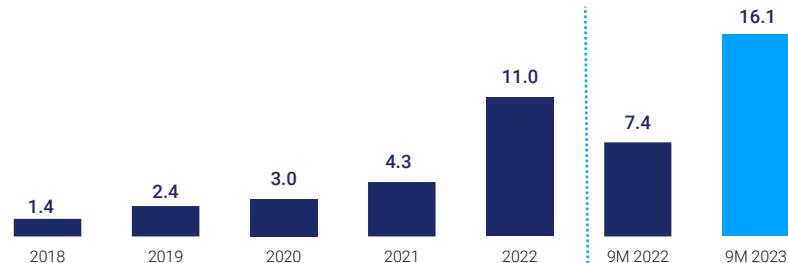
(1) Source: TEIAS (2) EPIAS, BOTAS

Exceptionally strong performance driven by stronger returns in Türkiye

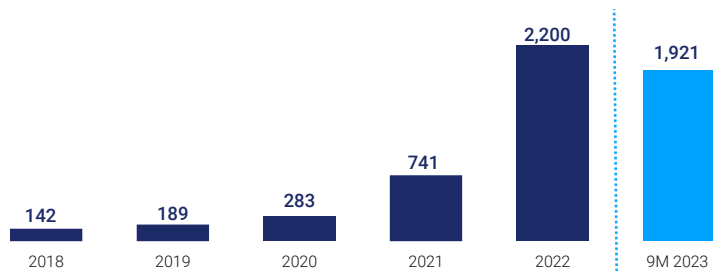
Combined EBITDA⁽¹⁾ (Bn TL) & EBITDA⁽¹⁾ Margin



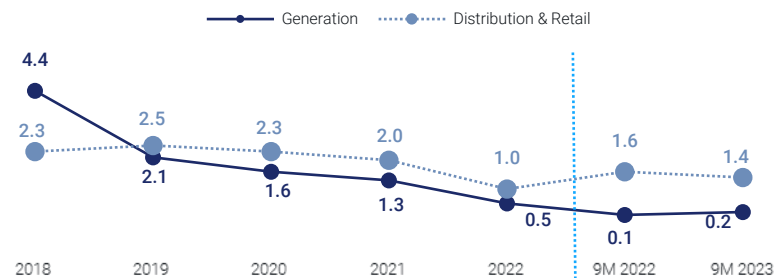
Combined Net Income⁽¹⁾ (Bn TL)



Dividends⁽²⁾ Paid to Sabancı Holding (Mn TL)



Net Debt / EBITDA⁽¹⁾ Ratio



(1) Excludes non-operational and non-recurring one off items

(2) 2022 and 9M 2023 dividend figures include advance dividend of the following year.

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

**Protect &
Grow the Core**

➤ **Growth in Renewable Generation Capacity**

➤ **Trade Business Expansion (Power, Gas and Carbon) Globally**

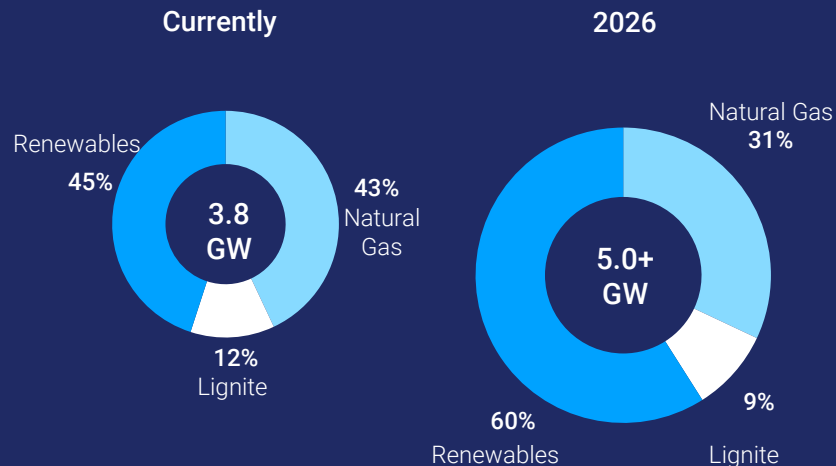
➤ **Expand Digital & Energy Services**

**Adjacencies &
Transform**

➤ **Explore Green Hydrogen**

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

Installed **Generation** Capacity Mix⁽¹⁾



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

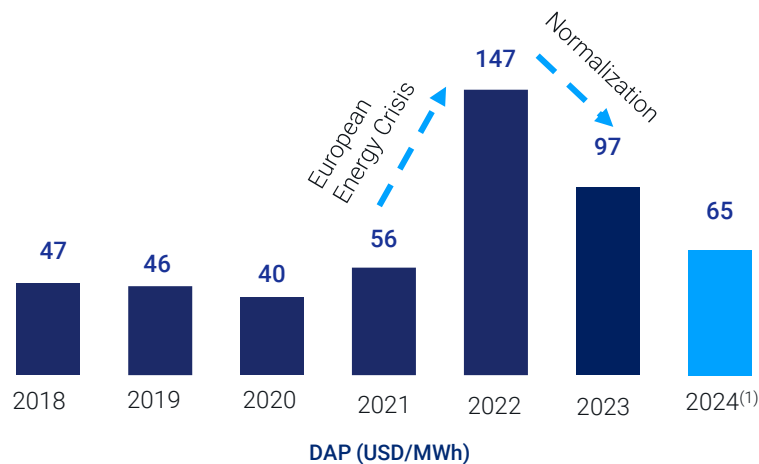
03

Generation licenses with energy storage

(1) Carbon intensity in line with Europe

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⁽¹⁾ and CESEE⁽²⁾ 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.



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.

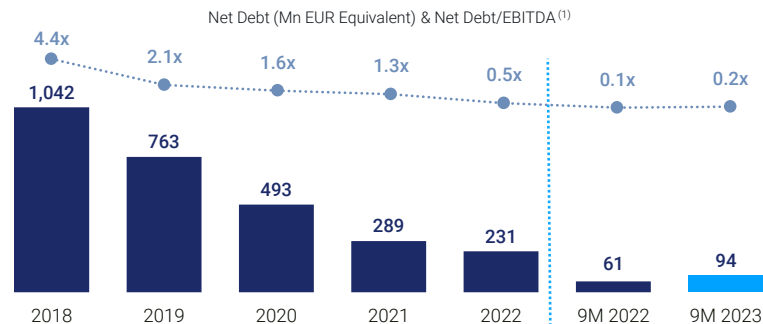
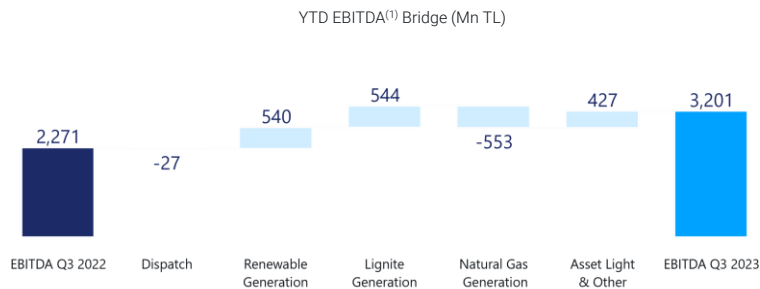
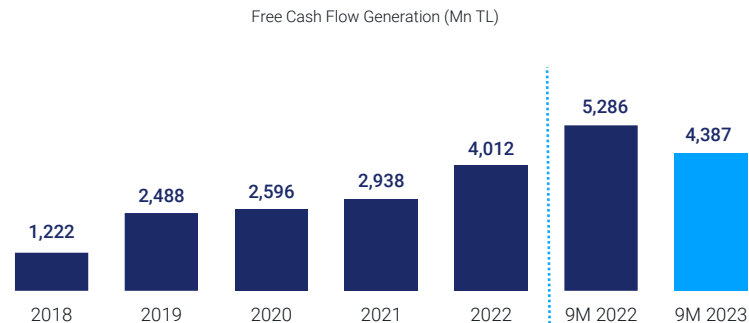
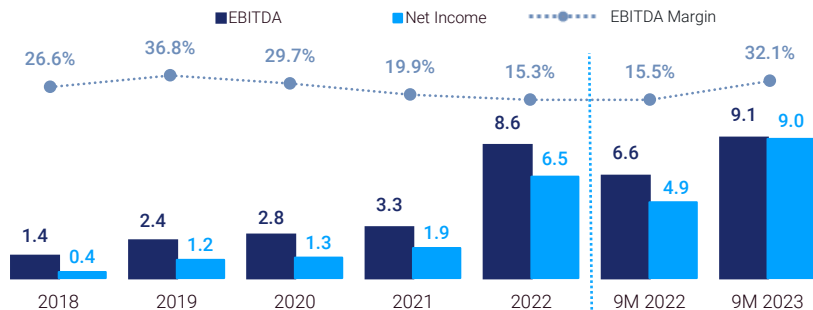
ENERGY STORAGE LICENSES

- ▶ Energy storage prelicenses 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.

(1) CWE: Central-Western Europe

(2) CESEE: Central-Eastern and Southeastern Europe

Solid balance sheet structure & strong financial performance



(1) Excludes non-operational and non-recurring one off items

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**

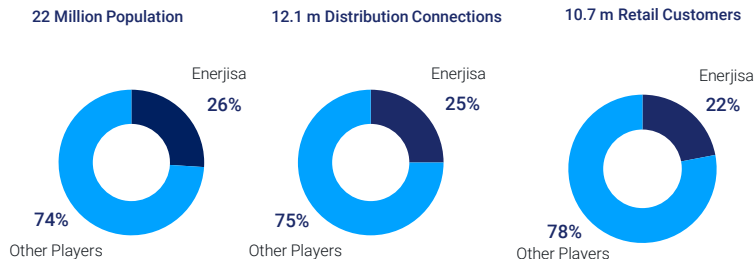
- ③ **Growth in Customer Solutions**
 - Distributed Generation / Solar
 - Energy Efficiency & Decarbonization
 - E-mobility / E-charging Platform

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

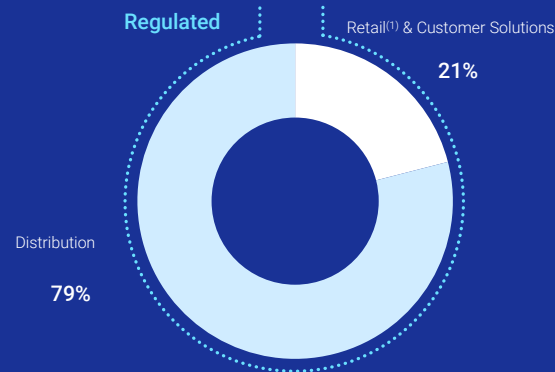
Competitive Advantages

- ▶ 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



Supportive and Transparent Regulatory Framework Operational Earnings (9M 2023)

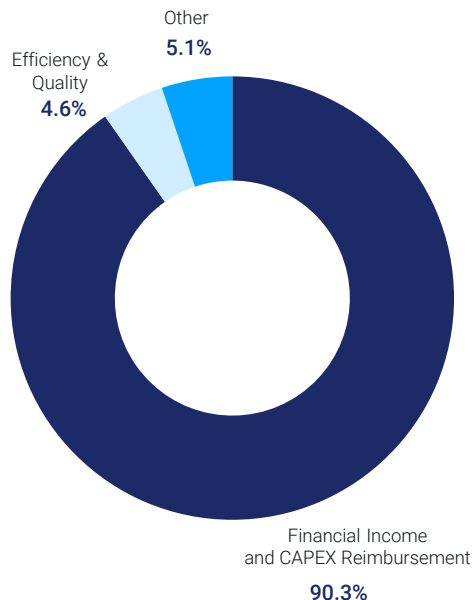


- ▶ Regulated Investment Returns with a supportive WACC (12.3%)
- ▶ Regulated Efficiency & Quality Parameters
- ▶ Regulated Retail Margin (2.38% on reference procurement price and retail service revenues resulting in 6.4% gross margin in 9M 2023)

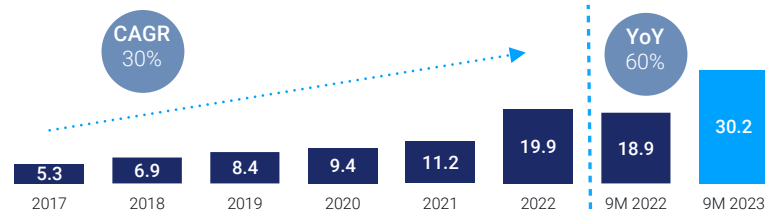
(1) More than 2/3 of retail sales volume is regulated.

Heavily concentrated on network investments but also an important efficiency game

Distribution Operational Earnings⁽¹⁾
Breakdown (9M 2023)



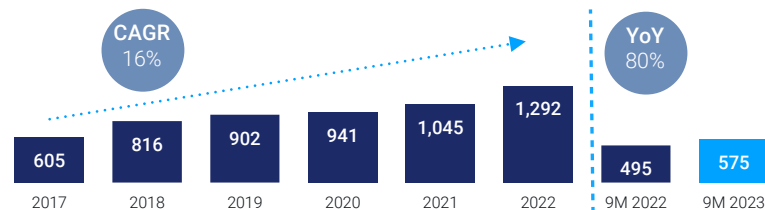
Strong Historical Growth and
Untapped Potential
Regulated Asset Base (TL bn)



Regulation Incentivizes
Investments –
Regulated WACC (real)



High Support for Efficiency
Improvements
Efficiency & Quality (TL mn)



(1) Operational Earnings include Capex Reimbursement

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

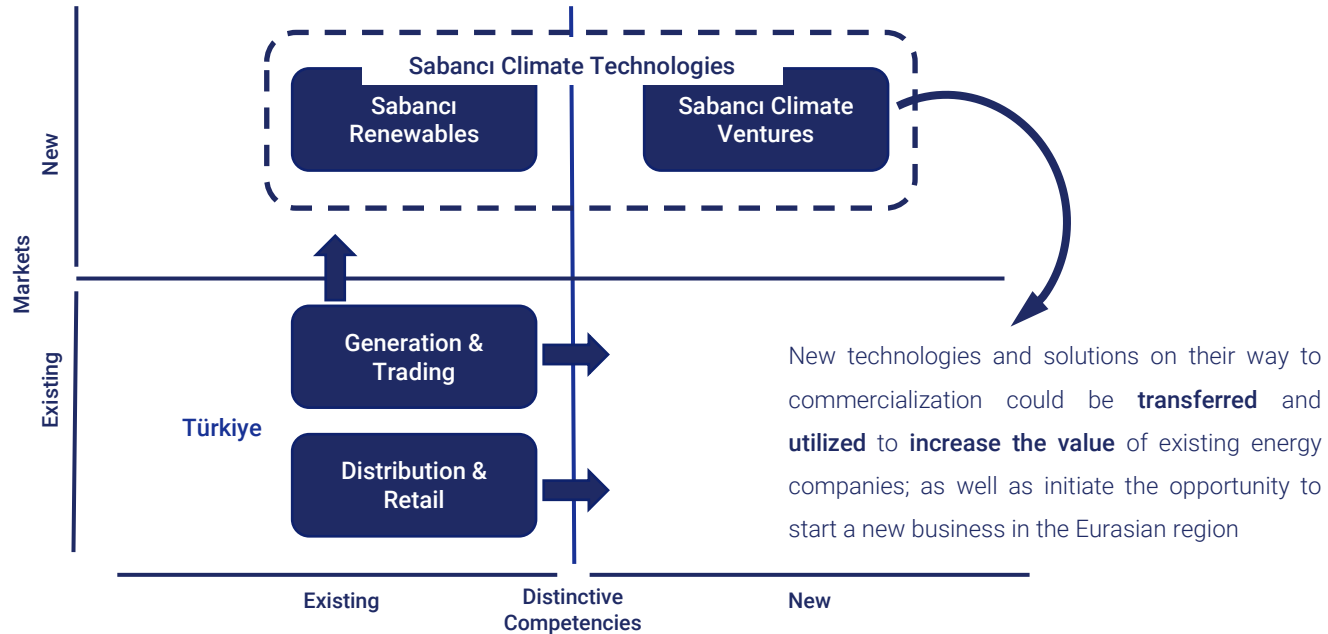
**With
%33**
High Speed
Market Share

Presence in
81
Cities

1,464
DC Charging Points

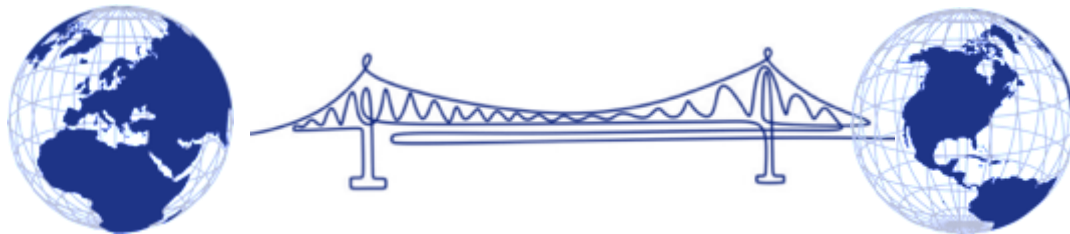
1,862
Total Charging Points

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, will undertake renewable energy power plant investments and strategic investments in various venture capital funds and start-ups, primarily in the USA 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 2nd largest renewable energy market & the largest corporate venture ecosystem



Solar Resource Potential

170 TW

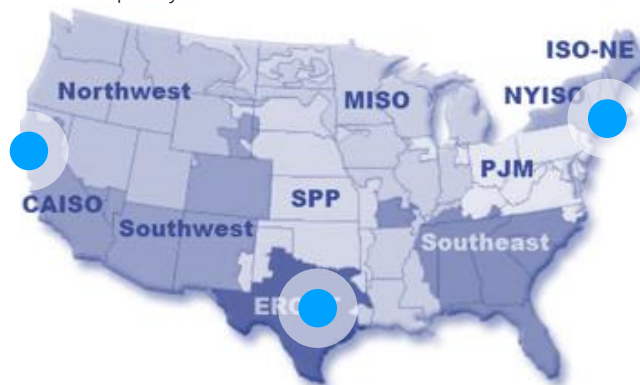
potential capacity



Wind Resource Potential

10.6 TW

potential capacity



Academia and
Start-up
Ecosystems

Facts on Renewable Energy Investments

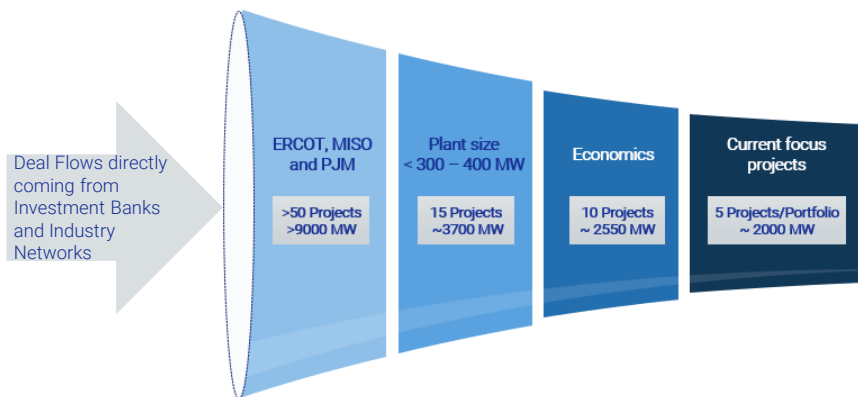
- ✓ US is the 2nd largest renewable energy market following China. Around 100 GW of renewable capacity was installed in the US for the last 3 years
- ✓ US companies have committed to source 80% of their consumption from renewable sources by 2045, which is around 4,050 TWh
- ✓ Extended and enhanced Renewable 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⁽¹⁾ 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-April'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

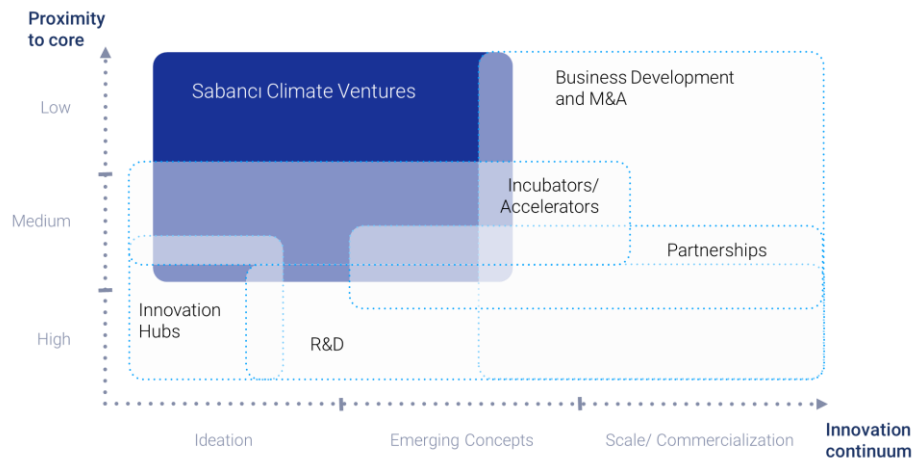
Solid Business Model for the Execution

- ✓ 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 will create extended innovation ecosystem & enable 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

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

Value Extraction

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

....via the investments in climate technologies fund & 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, advanced material technologies, artificial intelligence and robotics technologies
- ✓ Deal flow of start-ups originated from within and around MIT, Harvard, and Rochester University



- ✓ Coming out of MIT's Plasma Science and Fusion Center and reached a valuation of \$5 billion in September 2021
- ✓ Having the potential to enable clean nuclear energy production in the future to remove the limits on energy
- ✓ Breakthrough Energy, founded by Bill Gates, is among the major investors of the company



- ✓ 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
- ✓ Especially important for Türkiye as the 1st country in Europe to the geothermal potential
- ✓ Initiating a joint task force to search for cooperation opportunities in Tufanbeyli PP



- ✓ 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 of companies
- ✓ Enabling customization of the platform by companies to define its own framework from a collection of existing standards



- ✓ Founded as an MIT spinout in 2022
- ✓ Active Surfaces has developed a low-cost, easy-to-manufacture, lightweight, high-performance flexible perovskite solar cell that is manufactured via thin-film deposition.
- ✓ Its technology is 10x lighter, has comparable efficiency and stability, and is competitive on an LCOE basis.
- ✓ Currently exploring joint development agreements.

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



INVESTOR RELATIONS CONTACTS

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Investor Relations Manager

Emine DALAN

Investor Relations Specialist

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Investor Relations Specialist

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

Turkey's First Investor Relations
Dedicated Assistant !

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