



# ENERGY & CLIMATE TECHNOLOGIES DAY

16 October 2023

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## ON STAGE TODAY



**Orhun  
KÖSTEM**

Group Chief Financial Officer  
Sabancı Holding



**Kivanç  
ZAIMLER**

Energy Strategic Business Unit President  
Sabancı Holding



01

Energy & Climate  
Technologies  
in Sabancı Group

02

Energy & Climate  
Technologies  
Strategy & Roadmap

03

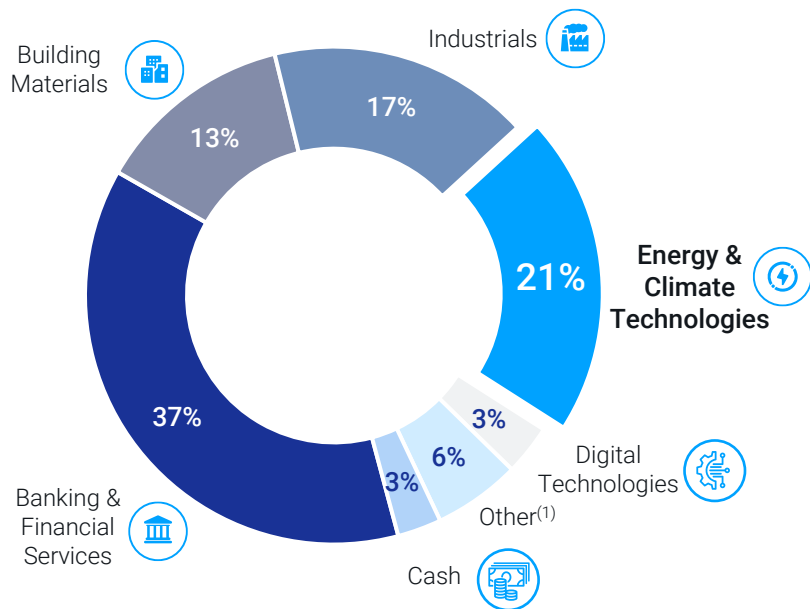
Q&A

# Energy & Climate Technologies in Sabancı Group

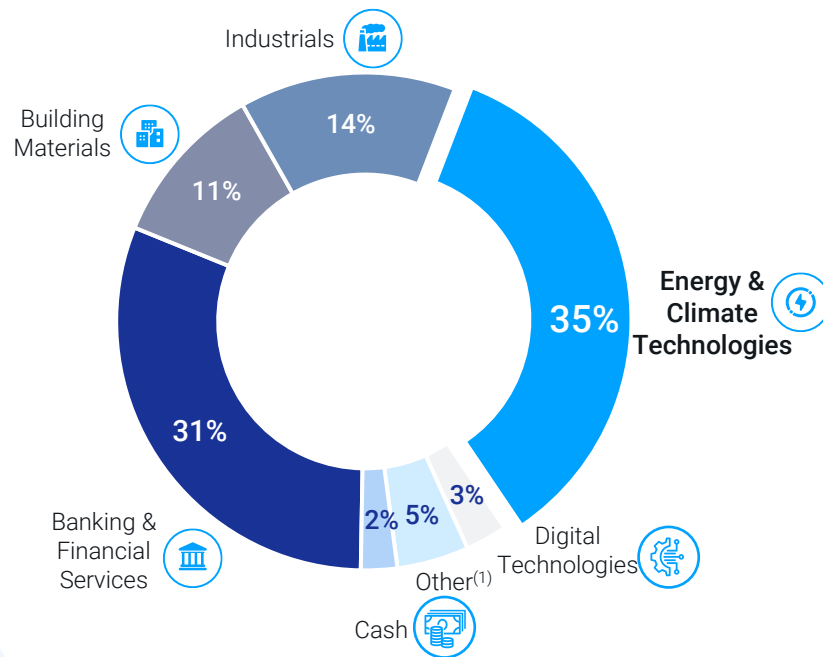


## Energy & Climate Technologies segment has the largest share in NAV

### NAV Breakdown Based on Book Value



### NAV Breakdown Based on Independent Valuation <sup>(2)</sup>



All listed figures are as of October 13, 2023.

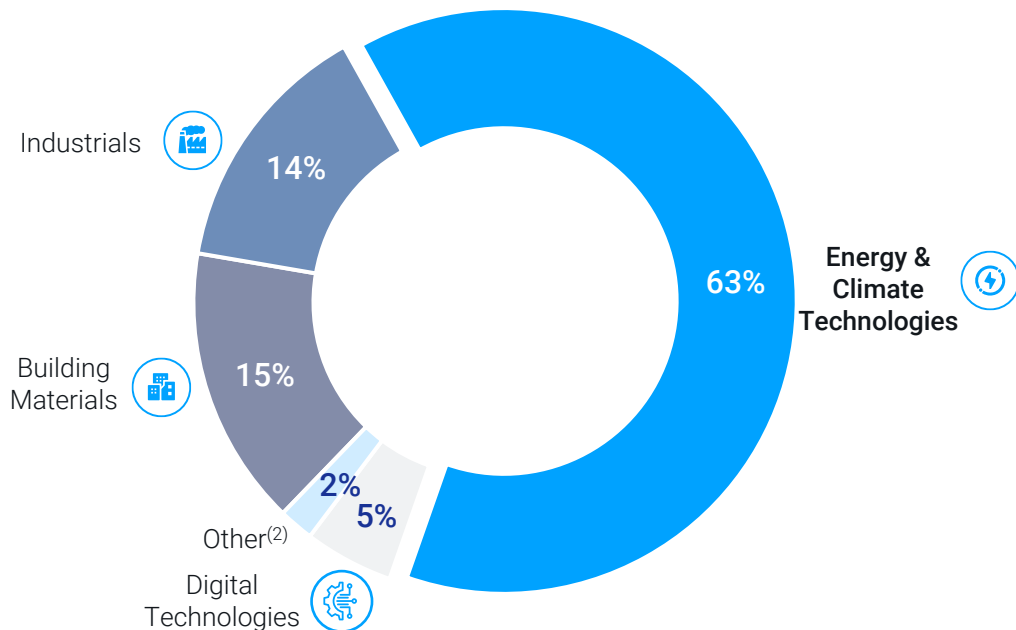
(1) Other includes Carrefoursa, Holding Solo, AEO, Tursa, Exsa.

(2) Value of Enerjisa Üretim was calculated USD 3.8bn in the EY report published on 21.06.2023.



## Energy & Climate Technologies constitutes the majority of non-financial services combined EBITDA

Non-Financial Services Combined EBITDA<sup>(1)</sup> Breakdown



Energy & Climate Technologies' Share in Non-Financial Services Combined EBITDA

Last 3 Years	Last 5 Years	Last 10 Years
63%	65%	53%

Net Debt / EBITDA

1.2x

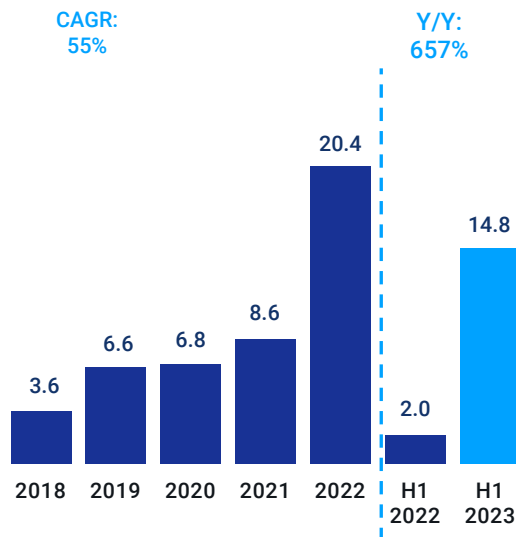
All figures are for H1'23 period.

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

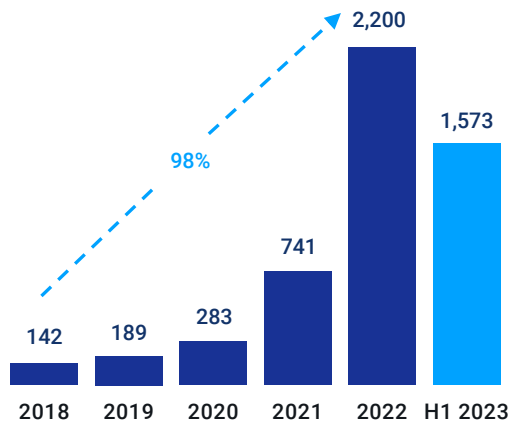
(2) Other includes Carrefoursa, Holding Solo, AEO, Tursa, Exsa.

## Divergence to more balanced dividend inflow stream with a higher contribution from energy segment

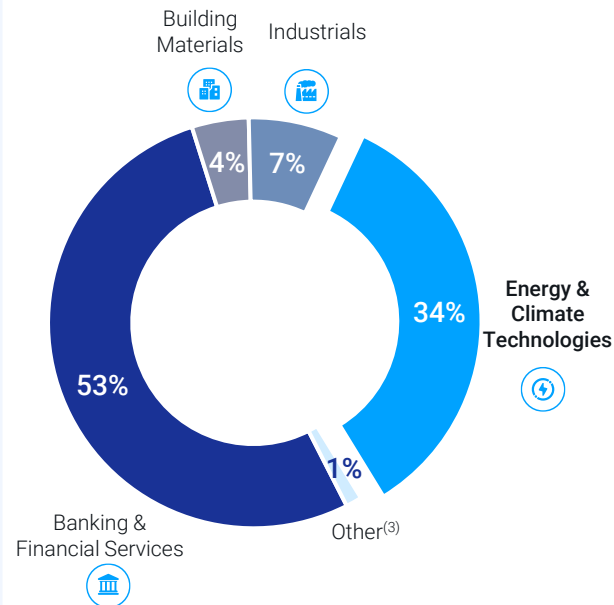
Energy Segment Operational Cash Flow  
(TL Bn)



Dividends<sup>(1)</sup> Paid to Sabancı Holding  
(TL Mn)



Dividends Breakdown<sup>(2)</sup>



(1) 2022 and H1 2023 dividend figures include advance dividend of the following year.

(2) Includes paid dividend for 2023, excludes advance dividend.

(3) Dividends paid to 50.6 million shares representing share buyback as of March 30, 2023.



## We prioritize new economy to transform our portfolio for the future

### Energy & Climate Technologies



Renewables



Electrification



E-mobility



Digitalization



Energy Storage

H<sub>2</sub>

Green  
Hydrogen

### Advanced Material Technologies



Sustainable  
Chemicals



Telematics  
IoT 4.0



Lightweight  
materials



Sustainable  
building materials



Carbon  
Capture



New Energy Vehicles  
& Components

### Digital Technologies



Cybersecurity



Digital Marketing



Marketplaces



Internet of Things



Artificial  
Intelligence

A stylized globe in the background, composed of a grid of dots, with the SABANCI logo in the top left corner.

# Energy & Climate Technologies Strategy & Roadmap



## We are gearing towards a new strategic direction in energy: 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.

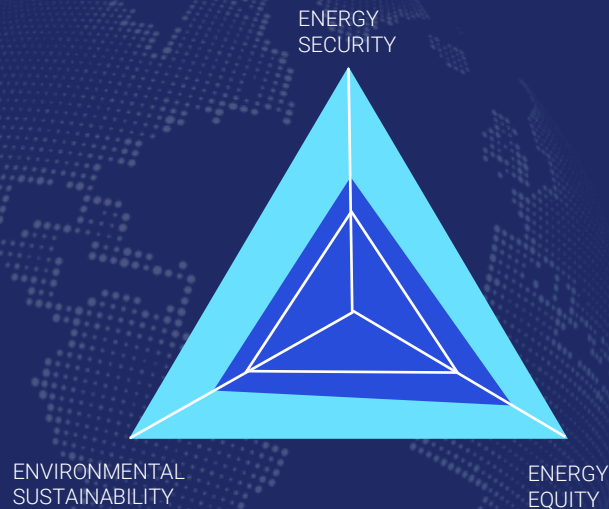


We position ourselves in the center of the global innovation ecosystem.

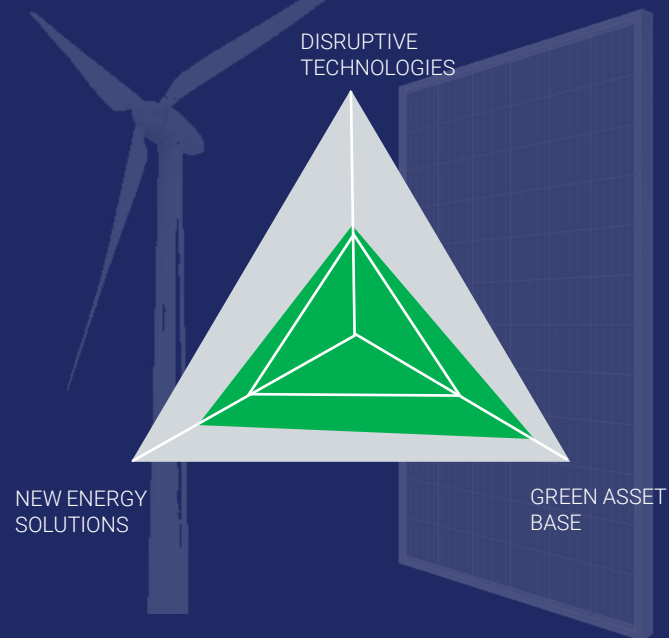
We are committed to staying at the center of the technologies that will shape the future energy world.



...in order to achieve the impossible in the “Energy Trilemma” with our clearly defined strategic targets for our energy companies...



ENERGY TRILEMMA  
WORLD ENERGY COUNCIL



PROPOSED SOLUTION  
SABANCI ENERGY & CLIMATE TECHNOLOGIES

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

**ENERJİSA**

Energy of Turkey

*Distribution & Retail*

40% Sabancı Holding

40% E.ON

20% Free Float

**ENERJİSA ÜRETİM***Generation & Trade*

50% Sabancı Holding

50% E.ON

**SABANCI CLIMATE**  
TECHNOLOGIES*Energy & Climate Tech.*

100% Sabancı Holding

...by leveraging from our successful execution & well-balanced portfolio in Türkiye.



*Distribution & Retail*

**14**

Cities

**6**

Metropolises

**22 mn**

Population

**10.4 mn**

Customers

**321,332 km**

Network

**TL 28.0 bn**

Regulated Asset Base

**39.2 TWh**

Sales (2022)

**12.1 mn**

Connections

**668 / 512**

Stations in Eşarj / DC Stations

**66**

Cities with Eşarj Stations

**ENERJİSA ÜRETİM**

*Generation & Trade*

**24**

Power Plants

**5**

Technologies

**3.7 GW**

Installed Capacity

**14.6 TWh**

Generation (2022)

**45.5%**

Renewables (59%  
renewables in 2026\*)

**28.5 TWh**

Trading (2022)



*Energy & Climate Tech.*



Renewable Energy  
Generation in U.S



Investments in Climate Technologies  
Through Energy and Climate VC

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

**Protect &  
Grow the Core**

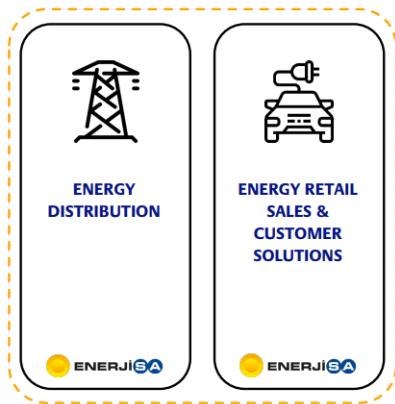
- ① **Maximize Grid Investments (RAB)**
- ② **Optimize Retail Operations**

**Adjacencies &  
Transform**

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



...with its leader position in electricity distribution and retail, as well as its guaranteed earnings flow from regulated market incumbencies...



- ▶ Turkey's leading energy company in Energy Distribution and Retail Sales
- ▶ ESG and sustainability driven business profile with no exposure to fossil fuel
- ▶ Listed on the Istanbul stock Exchange (BIST) since 2018
- ▶ Attractive geographic footprint with exposure to fast growing urban cities as Istanbul, Ankara and Adana.

#### Distribution

TL 28.0 billion  
Regulated Asset Base

321 thousand km  
Distribution Network Length

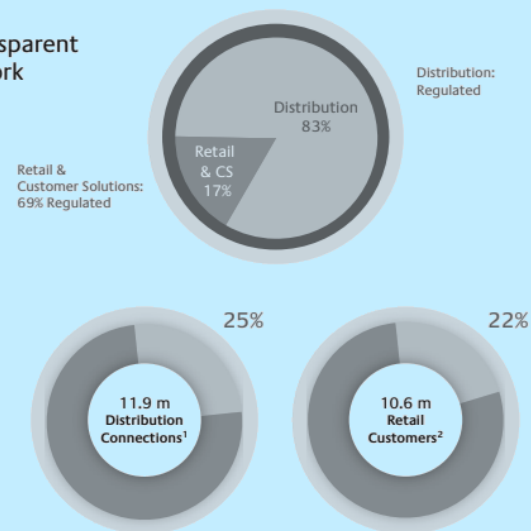
#### Retail

39.2TWh  
Total Annual Electricity Sales

27.5TWh  
Regulated Segment Sales

#### Supportive and Transparent Regulatory Framework

#### Regulated Earnings Share at 95%



#### Leader in an Attractive Market

(1),(2) as of end of 2022

...and with the most extensive customer network in Türkiye, where the business transformed to a solution partner thanks to their technological competencies.



#### Customer Solutions

**27.9 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

#### As of the end of September

**668**

Stations in

**66**

Cities

**156**

AC Stations

**512**

DC Stations

#### As of 2023 YE

**1,000**

Stations in

**81**

Cities



**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**

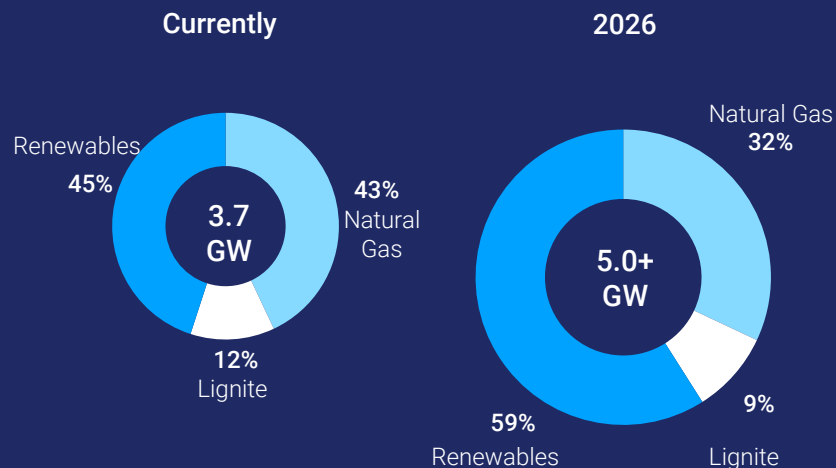
➤ **Expand Digital & Energy Services**

**Adjacencies &  
Transform**

➤ **Explore Green Hydrogen**

....consequently, a significant step towards +5000 MW installed capacity target has been taken...

Installed **Generation** Capacity Mix<sup>(1)</sup>



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



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

## ...along with exploring new capabilities.

### ASSET LIGHT GROWTH



#### Trading Globally

- ▶ Establishment of **Enerjisa Commodities BV** in 2023.
- ▶ Trading in 8 different countries and having activities for environmental commodities 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 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.

## We are using our existing sector-leading competencies in Türkiye ...

**01**

Balance and  
Resilience of the  
Portfolio

**02**

Effective Risk Management  
with a Solid Balance Sheet  
and Sustainable Dividend

**03**

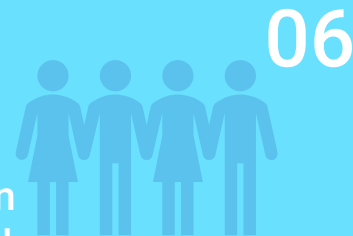
Operational  
Excellence

**04**

Efficiency

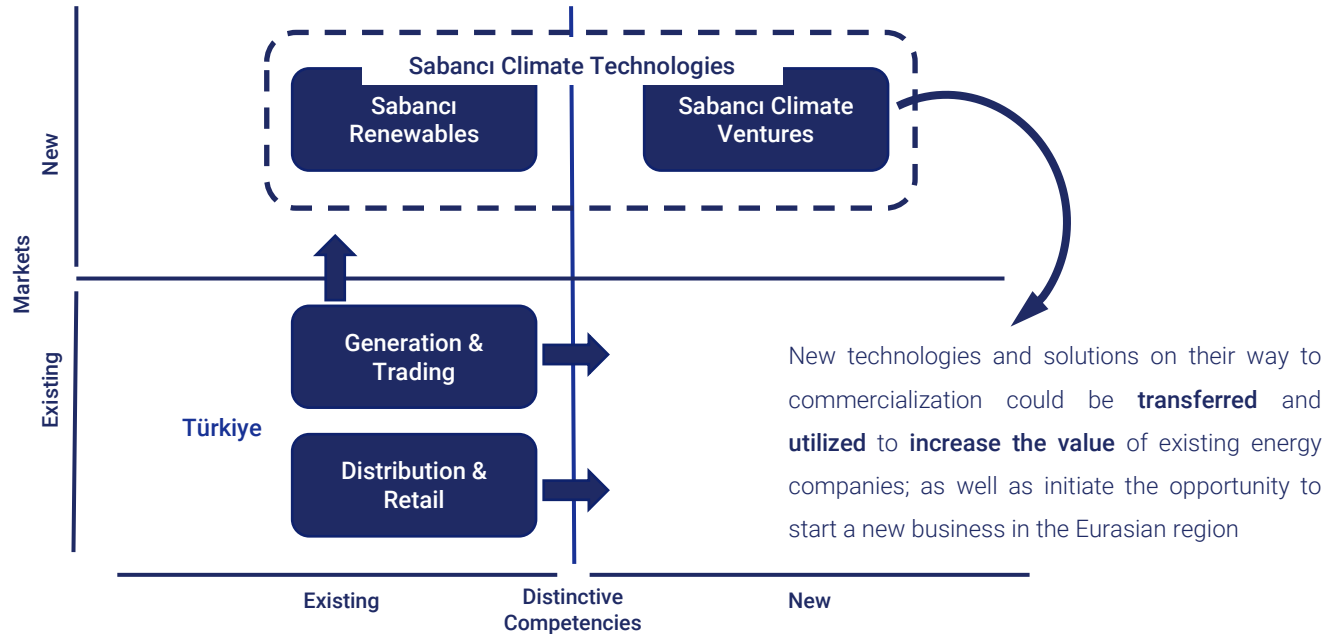
**05**

Digital  
Capabilities

**06**

Human  
Capital

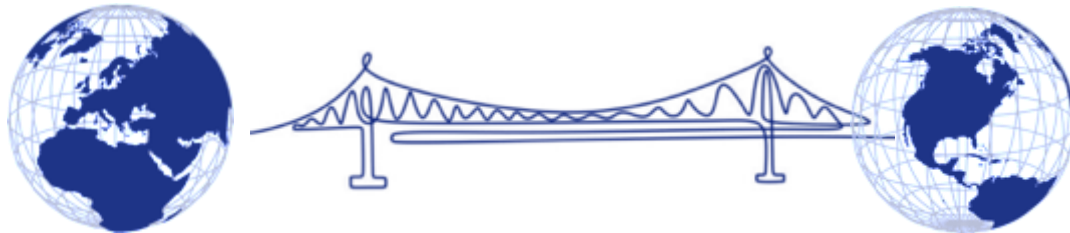
...to transform Energy & Climate Technologies to pursue opportunities in “disruption & expansion abroad”





**It is time to leverage core capabilities in the Türkiye & expand the business in international arena 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

## USA 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

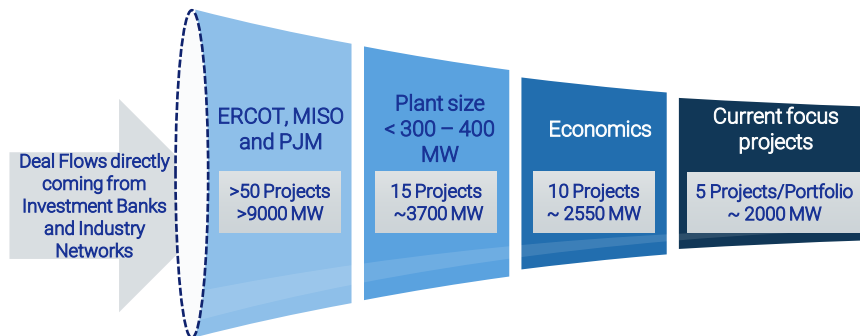
- ✓ USA is the 2<sup>nd</sup> largest renewable energy market following China. Around 100 GW of renewable capacity was installed in the USA for the last 3 years
- ✓ US companies have committed to source 80% of their consumption from renewable sources by 2045, which is around 4,050 TWh
- ✓ Extended and 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 reach 1000 MW of portfolio size by 2025 under Sabanci Renewables.**

### Sabanci 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, which offers a variety of opportunities for the future growth...



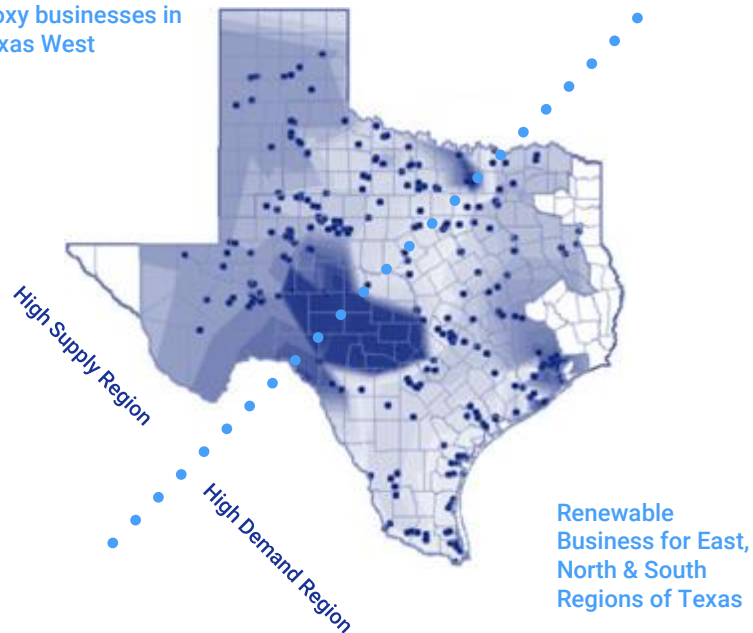
### 272 MW Cutlass II Solar Power Plant Project

- ✓ Project Acquisition: October'22
- ✓ EPC Agreement with Bechtel: October'22
- ✓ Construction Start (FNTF<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-April'24

(1) Final Notice to Proceed

...and the second solar investment has also initiated in Texas, leveraging the know-how acquired during the initial solar project.

Market potential for proxy businesses in Texas West



### 232 MW Solar Power Plant Project With 60 MW Battery Storage

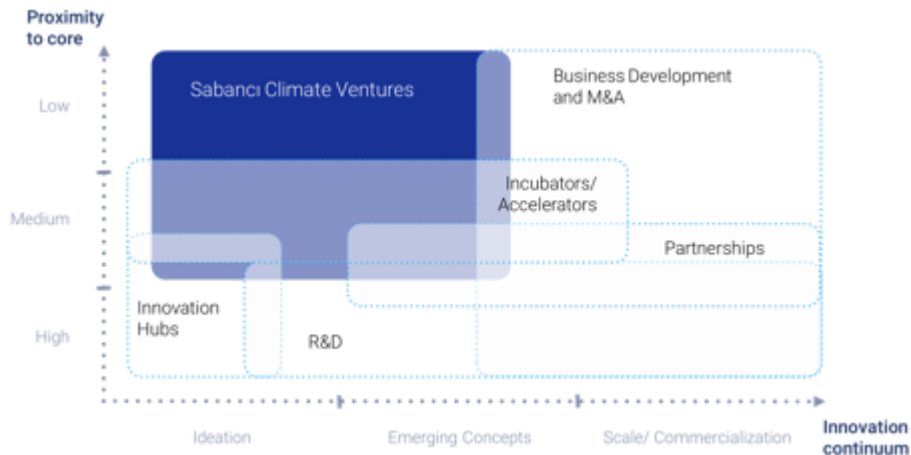
- ✓ Close to the major load centers of Houston and Corpus Christi, anticipated centers of future green fuel investment, as well as the increasing LNG related load
- ✓ Shovel-ready project with low execution risk; developed by an experienced and reputable Project Firm

### 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

## 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



## Key takeaways

# 01

## Keep Growing in Türkiye

- Renewable Generation
- Distribution Network
- Customer Solutions



# 02

## Expand Renewable Asset Base

- Türkiye
- USA



# 03

## New Energy & Climate Technologies

- Green Hydrogen
- Climate-tech Funds
- Start-ups





03

/03

Q&A





## INVESTOR RELATIONS CONTACTS

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Investor Relations Manager

**Emine DALAN**

Investor Relations Specialist

**Hamza SÜMER**

Investor Relations Specialist

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

Turkey's First Investor Relations  
Dedicated Assistant !

For Further  
Details

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For Further  
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Presentations