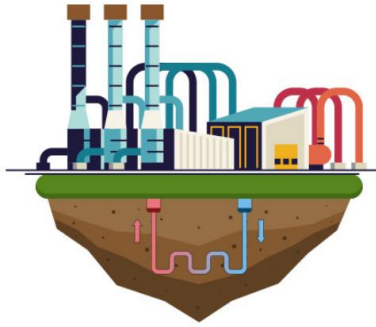


ZORLUENERJİ

ZORLUENERJİ

AR-GE



**4**  
GEOTHERMAL  
POWER PLANTS  
**305 MW**  
INSTALLED POWER



**2**  
WIND FARMS  
**191,4 MW**  
TOTAL CAPACITY



**7**  
HYDROELECTRIC  
POWER PLANT  
**118,9 MW**  
TOTAL CAPACITY



**1**  
SOLAR  
POWER PLANT  
**1,5 MW**  
CAPACITY



ELECTRICITY DISTRIBUTION  
**2,6 M**  
CUSTOMERS  
**6,3 TWh**  
DISTRIBUTED ENERGY



EV CHARGING STATIONS  
**4085**  
EV SOCKET CAPACITY



# QUICK LOOK

## ONGOING

## COMPLETED

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9

- 2 Horizon2020
- 1 Era-NET - Geothermica
- 4 Horizon Europe
- 1 Eurogia
- 1 TENMAK

5

- 2 Horizon2020
- 1 Era-NET ACT
- 1 Eurogia2020
- 1 ITEA3

OEDAŞ

19

- 1 Horizon2020
- 1 HorizonEurope
- 17 EMRA

13

- 15 EMRA
- 3 Horizon2020



# TIMELINE

2018



2019



2020



2021



2022



2023



SEHRENE

EOLIAN

nGEL

2024

5+  
new  
project  
proposal



# RESEARCH AREAS

	PLANT OPTIMISATION & DIGITALIZATION				
	PREDICTIVE MEINTENANCE				
	BIG DATA & AI				
	RENOVATION & GREEN CONVERSION				
	GREEN HYDROGEN				
	BATTERY & ALTERNATIVE STORAGE TECHNOLOGIES				
e - MSP	SMART GRID	RECYCLING			CCUS
CPO	CUTTING EDGE TECH.				LITHIUM EXTRACTION
UX	GRID PLANNING				GEOHERMAL BRINE
	DERs - EVs				
<b>EV CHARGING</b>	<b>DSO</b>	<b>WIND</b>	<b>SOLAR</b>	<b>HYDROPOWER</b>	<b>GEOHERMAL</b>



## Planning to have follow-up projects:

### Geothermal Power Plants with Zero Emissions



GEOTHERMAL EMISSION CONTROL

Horizon2020

<https://geco-h2020.eu/>



SYNERGETIC UTILISATION OF CO2 STORAGE

COUPLED WITH GEOTHERMAL ENERGY DEPLOYMENT

ACT-ERANET

- Reducing emissions originating from geothermal power plants and observing the effects of re-injected carbon dioxide on the reservoir
- Development and global popularisation of CO2 re-injection technologies.
- Purification and regaination of Non-Condensable Gases
- Investigation of the effects of carbon dioxide re-injected back into the reservoir on seismic activity and other wells



KIZILDERE III GPP



## 2024 Target Calls

CALL		ZORLU ENERJİ CONTRIBUTION
HORIZON-CL5-2024-D5-01-01	Smart, low-cost pervasive stationary slow charging and bi-directional solutions synergic with the grid for EV mass deployment (2ZERO Partnership)	EV Charging stations, DSO
HORIZON-CL5-2024-D4-01-02	Smart grid-ready buildings	Geothermal heating, EV Charging stations, DSO
HORIZON-CL5-2024-D2-01-03	Development of technical and business solutions to optimise the circularity, resilience, and sustainability of the European battery value chain (Batt4EU Partnership)	Lithium extraction from geothermal brines
HORIZON-CL5-2024-D3-02-02	Development of next generation synthetic renewable fuel technologies	Methanol synthesis from geothermal hydrogen and CO <sub>2</sub>
HORIZON-CL5-2024-D3-02-10	Market Uptake Measures of renewable energy systems	Data provider
HORIZON-CL5-2024-D3-02-05	PV-integrated electric mobility applications	PV charging stations



Thank you!

ZORLU ENERJİ ELEKTRİK ÜRETİM A.Ş.

<https://www.zorluenerji.com.tr/en>

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