





ZORLU RENEWABLES

Review of 1H23 Financial Results

26 September 2023







Review of 1H23

- Slight yoy decline in total geothermal generation due to remaining optimization investments at Kızıldere 2 & 3 GPPs and higher temperatures compared to previous period and planned maintenance in Kızıldere 2 GPP
- Continued application of price caps for merchant power plants
- Increase in operating costs due to significant inflation in labor, maintenance and transmission costs, pulling down profitability yoy
- Continued decline in financial debt
- Installation of 0.1663 MWp roof-top solar system at Alaşehir
 GPP in January 2023
- Sustained weakness in Türkiye's electricity consumption mainly owing to slowing industrial production
- Sharp fall in spot market prices on the back of declining gas and coal prices and sluggish demand



1H23 HIGHLIGHTS

USD 92 mn

USD 68 mn

Revenues

EBITDA

73.6%

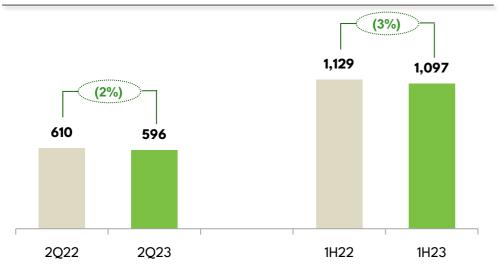
5.7x

EBITDA Margin

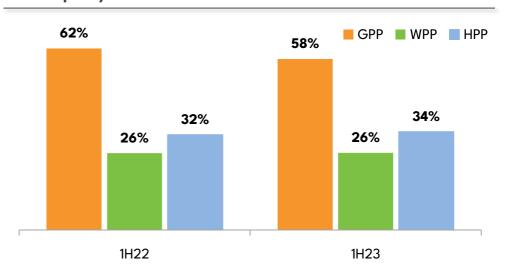
Net Debt/EBITDA

Electricity Generation

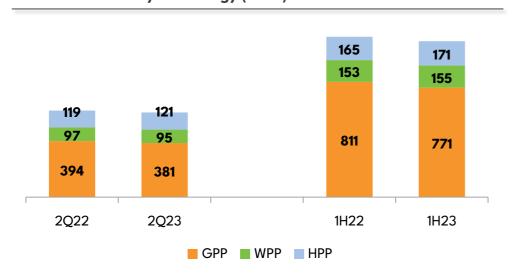
Net Electricity Generation (GWh)



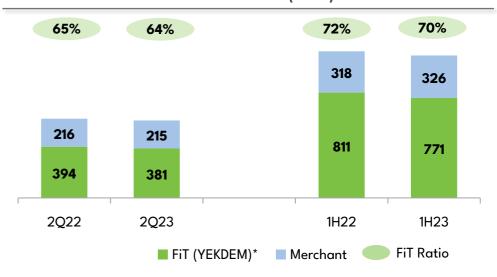
Net Capacity Factors



Net Generation by Technology (GWh)



Net Generation Under FiT Mechanism* (GWh)

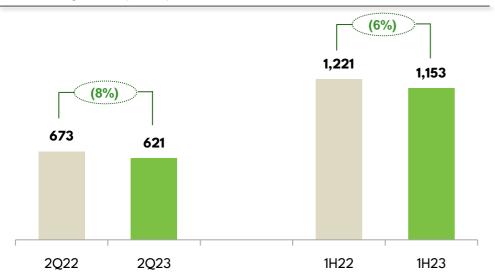


^{*} YEKDEM is the Turkish FiT mechanism which provides USD based fixed price support for electrical energy produced from renewable energy sources

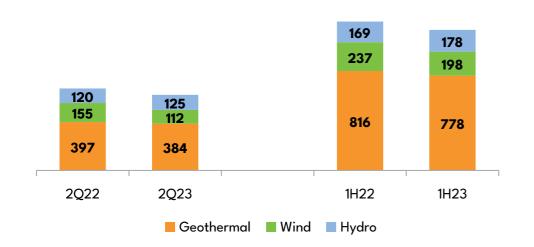


Electricity Sales

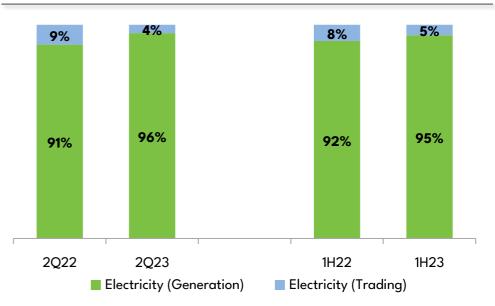
Electricity Sales (GWh)



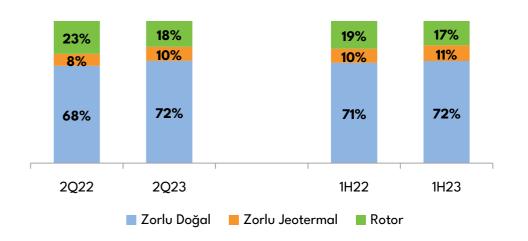
Net Sales by Technology (GWh)



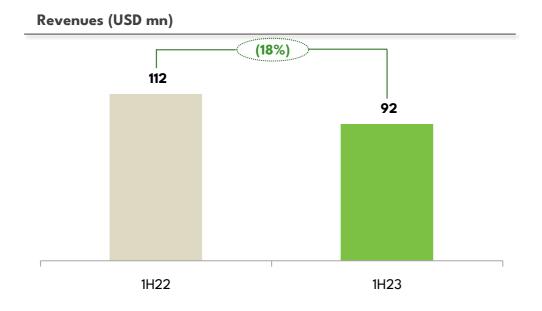
Breakdown of Electricity Sales

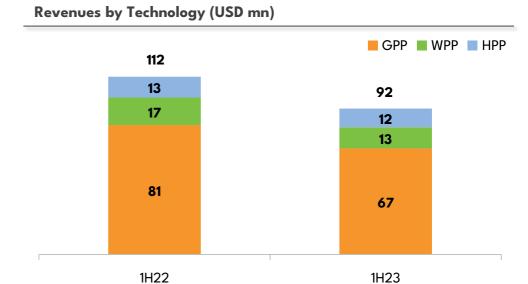


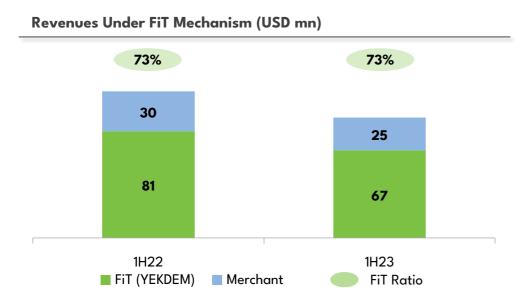
Electricity Sales by SPV



Revenues* (Inflation Adjusted IAS 29)









Revenues by SPV (USD mn) - 1H23

^{* 1}H22 revenue was restated due to retroactive reclassification of the renewable energy source cost and is expressed in terms of the purchasing power as of June 30, 2023. It is converted into USD by using the end-of period USD/TRY exchange rate of 25.8231. As a result, the restated 1H22 revenue differs from the reported figure last year.



EBITDA* (Inflation Adjusted IAS 29)

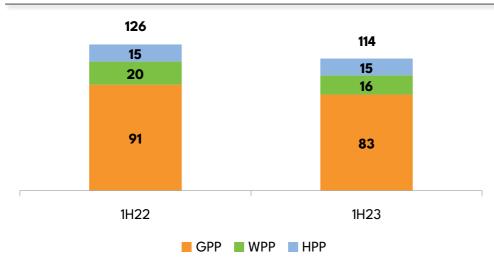


^{* 1}H22 EBITDA is expressed in terms of the purchasing power as of June 30, 2023 and is converted into USD by using the end-of period USD/TRY exchange rate of 25.8231. As a result, the restated 1H22 EBITDA differs from the last year's reported figure.

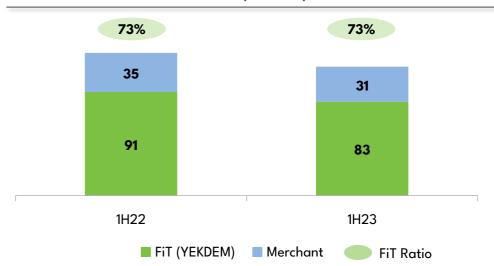


Revenues & EBITDA (Without IAS 29)

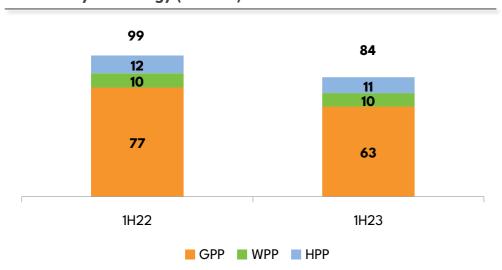




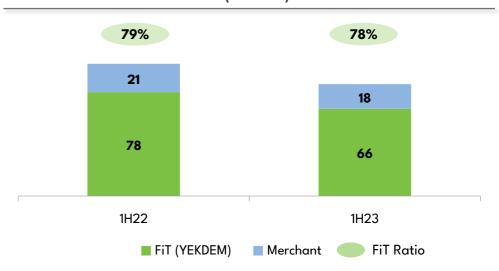
Revenues Under FiT Mechanism (USD mn)



EBITDA by Technology (USD mn)



EBITDA Under FiT Mechanism (USD mn)





Breakdown by SPV (Inflation Adjusted IAS 29)

	Net Sales			EBITDA			EBITDA Margin	
(USD mn)	1H22	1H23	YoY	1H22	1H23	YoY	1H22	1H23
Zorlu Doğal	83	68	(18%)	<i>7</i> 1	52	(27%)	85%	77%
Zorlu Jeotermal	12	11	(8%)	9	8	(10%)	76%	74%
Rotor	17	13	(23%)	9	8	(12%)	50%	58%
TOTAL	112	92	(18%)	88	68	(23%)	79%	74%



Breakdown by SPV (Without IAS 29*)

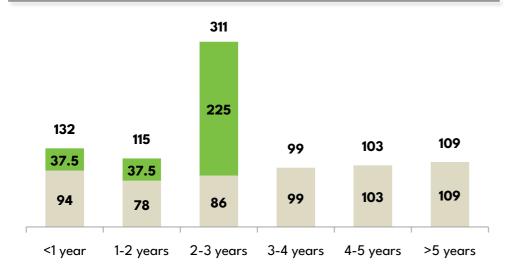
	Net Sales			EBITDA			EBITDA Margin	
(USD mn)	1H22	1H23	YoY	1H22	1H23	YoY	1H22	1H23
Zorlu Doğal	93	84	(10%)	79	64	(19%)	85%	77%
Zorlu Jeotermal	13	14	2%	10	10	0%	75%	74%
Rotor	20	16	(17%)	10	10	(5%)	51%	58%
TOTAL	126	114	(10%)	99	84	(15%)	79%	74%



^{*} Converted into USD by using the average USD/TRY exchange rate for the corresponding period.

Financial Debt

Maturity Profile of Financial Debt (USD mn)



¹Repayments are based on nominal principal amounts

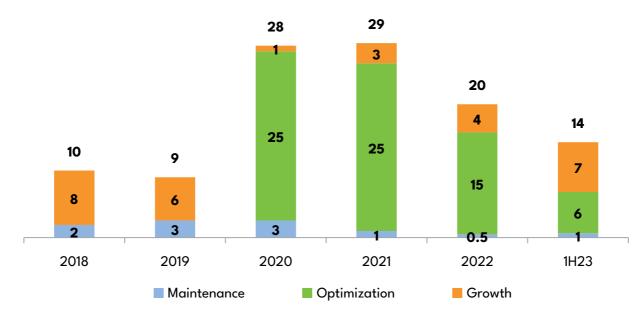
Breakdown of Gross Financial Debt (USD mn)²



² The amounts are based on IFRS reports and include IFRS adjustments and therefore, may differ from nominal amounts



CAPEX (USD mn)*



* Without IAS 29 and excluding borrowing costs

- Growth Capex: Investment works for Alaşehir 2 GPP, Alaşehir I Rooftop SPP, Kızıldere and Gökçedağ hybrid power plants
- Optimization Capex: Installation of ESP pumps and make-up wells at Kızıldere 2&3 and Alaşehir 1 GPPs
- Maintenance Capex: Minor works at Rotor WPP, Kızıldere GPPs and İkizdere HPP



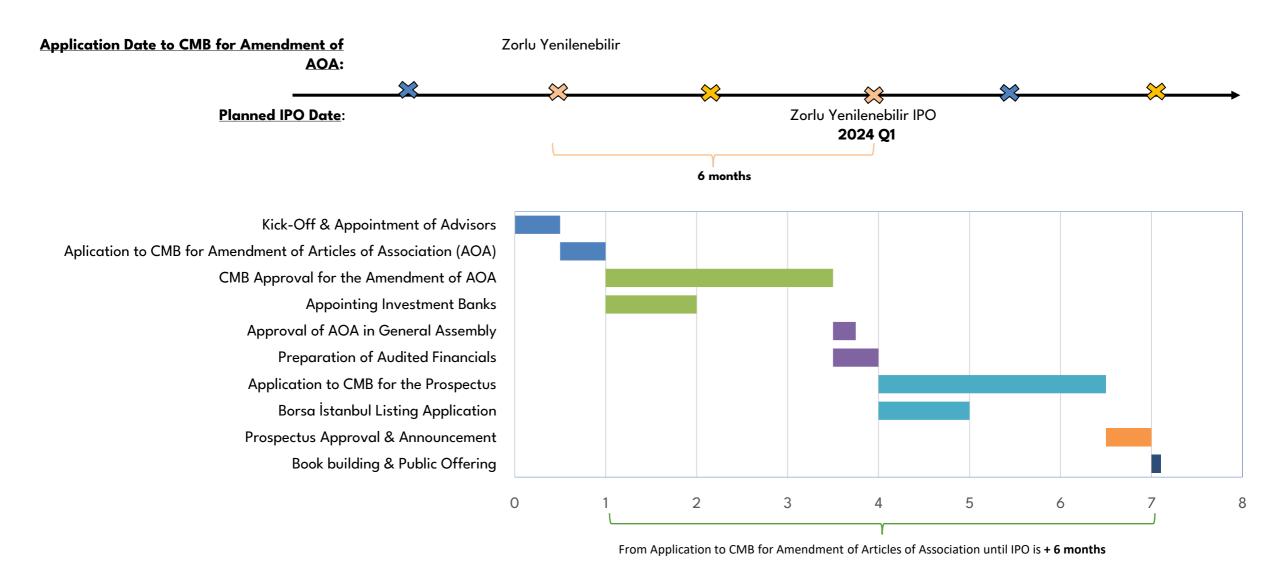
Project Pipeline

Power Plant	Туре	Current Capacity (MW)	Solar Capacity (MW)	Geothermal Capacity (MW)	Expected CoD
Kızıldere 1	Hybrid Solar	15	0.99	-	1Q24
Kızıldere 2	Hybrid Solar	80	11.99	-	2Q24
Kızıldere 3	Hybrid Solar	165	Phase 1: 24.75	-	2Q24
Kızıldere 3	Hybrid Solar	165	Phase 2: 32.6	-	4Q24
Gökçedağ	Hybrid Solar	135	9.61	-	2Q24
Tekkehamam 2	Geothermal	-	-	17.5×2	-
Alkan	Geothermal	-	-	18.6	2H24

- □ License amendments and environmental impact assessments for the addition of solar power are completed for the Kızıldere 1, 2 & 3 GPPs and Gökçedağ WPP
- □ Application was made to EMRA to add another solar power plant with a capacity of 32.6 MWp to Kızıldere 3 GPP
- □ The electricity from solar power will be used for internal consumption, hence maximizing net generation under FiT
- □ Solar power plants will benefit from the geothermal FiT of USD105/MWh until the expiration of the FiT period for the main plants



MANAGEMENT EXPECTATIONS



- Planning to be ready for the IPO for Zorlu Renewables in 1Q24.
- Decision process for the use of proceeds and appointment of investment banks is still in progress.



Income Statement

(USD mn)	1H22* (w/o IAS 29 and restated)	1H22 (IAS 29)**	1H23 (IAS 29)**	YoY
Sales	125.9	112.0	91.8	(18%)
Cost of Sales	(57.9)	(56.7)	(65.6)	16%
Gross Profit	67.9	55.2	26.3	(52%)
Gross Margin (%)	54.0%	49.3%	28.6%	
General administrative expenses	(3.4)	(3.1)	(3.4)	10%
Other operating income	2.2	2.0	3.6	81%
Other operating expenses	(4.5)	(4.2)	(8.3)	98%
Operating Income	62.2	49.9	18.1	(64%)
EBITDA***	99.2	88.3	67.6	(23%)
EBITDA Margin (%)	78.9%	78.9%	73.6%	
Gain on Monetary Position	-	111.3	51.3	(54%)
Financial Income	40.7	36.7	24.6	(33%)
Financial Expenses	(131.8)	(117.8)	(177.0)	50%
Profit / (Loss) Before Tax	(28.9)	80.1	(83.0)	n.m.
Deferred Tax Income/(Expense)	(1.6)	(44.0)	(7.2)	(84%)
Net Profit / (Loss)	(30.5)	36.2	(90.2)	n.m.

YoY comparison of IAS 29 Financials

□ 18% decline in revenues

- Lower generation at Kızıldere 2 & 3 GPPs and reduced trading activities at Rotor WPP
- Expiration of local content incentive for Kızıldere 3 GPP at YE22
- Lower average sales prices for merchant power plants yoy due to absence of price caps and higher spot market prices in USD terms in 1Q22
- Slowdown in inflation rate in 1H23 vs. 1H22

□ 23% drop in EBITDA

- Significant yoy increase in labor, maintenance and transmission costs
- Modest appreciation in average USD/TRY rate in 1H23 compared to last year, limiting EBITDA growth for YEKDEM power plants
- Lower average sales prices for merchant power plants on USD basis yoy
- Surge in non-cash net FX losses due to accelerated
 TL depreciation in June
- □ Decline in net monetary gains reflecting deceleration in inflation rate and lack of asset revaluations in 1H23



^{*} Converted at the average USD/TRY exchange rate of 14.83 for 1H22, figures were restated due to reclassification of some items

^{**} Converted at the end-of period (30 June 2023) USD/TRY exchange rate of 25.8231

^{***} Other operating income and expenses are excluded

Balance Sheet

(USD mn)	31.12.2022 (IAS 29)*	30.06.2023 (IAS 29)*
Cash & cash equivalents	61	40
Trade receivables	25	35
Inventories	6	3
Prepaid expenses	35	36
Other current assets	2	3
Total Current Assets	129	117
Property, plant and equipment	1,521	1,507
Right of use assets	18	18
Intangible assets	1	1
Total Non-current Assets	1,562	1,560
Total Assets	1,691	1,676
Short-term financial liabilities	153	215
- Short-term loans & borrowings	10	9
- Short term portion of long-term borrowings	119	146
- Lease liabilities	1	1
- Issued Bonds	22	60
Trade payables	20	30
Other current liabilities	2	2
Total Current Liabilities	175	248
Long-term financial liabilities	667	688
- Long-term loans & borrowings	423	443
- Lease liabilities	10	8
- Issued Bonds	234	236
Deferred tax liability	177	169
Other non-current liabilities	1	1
Total Non-current Liabilities	845	858
Shareholders' Equity	672	571
Total Equity & Liabilities	1,691	1,676
Converted at the end-of period (June 30, 2023) USD/TRV exchange	ne rate of 25 8231	

[□] USD73.3 mn of scheduled amortization (including interest payment) on Zorlu Doğal's loans in 1H23

- Payment of fourth coupon (USD 13.5 mn) on Eurobond in early June
- □ Higher increase in USD/TRY rate (38%) vs. inflation rate (20%) in 1H23 impacting comparison in USD terms



^{*} Converted at the end-of period (June 30, 2023) USD/TRY exchange rate of 25.8231

FX Position

	30.06.2023			
(US\$ mn)	US\$	Euro		
Total FX Assets	73	0.6		
Total FX Liabilities	(910)	(1.2)		
Net Position of Derivative Instruments	-	-		
Net FX Position	(837)	(0.5)		
Hedged Position	556	-		
Net FX Position After Hedging	(281)	(0.5)		

Hedge Accounting

- Zorlu Renewables applies cash flow hedge accounting
- □ As of June 30, 2023, USD556 mn of loans are used as a hedging instrument against exchange rate risk arising from the USD based YEKDEM revenues
- □ Under hedge accounting, the recognition of TL4,044 mn of foreign currency losses was deferred under equity in 1H23



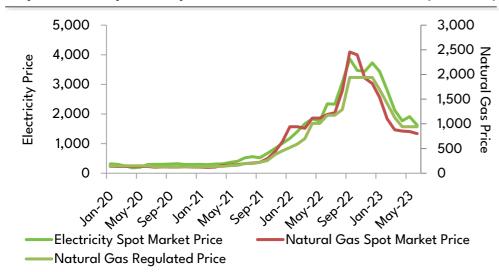
Spot Prices vs. Price Caps & FiTs (USD/MWh)



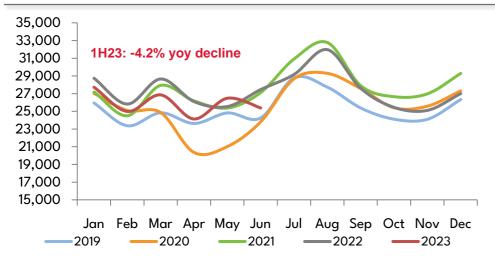
Month		Maximum Settlement				
	Renewable Power Plants	Lignite Power Plants	Imported Coal Power Plants	Natural Gas/Oil Fired Power Plants	Cap for Market Clearing Price (TL per MWh)	Spot Market Price (TL per MWh)
January	1,625	2,163	1,981	4,136	4,200	3,431
February	1,638	2,180	1,669	3,548	3,650	2,803
March	1,647	2,193	1,674	2,960	3,050	2,202
April	1,700	1,800	1,800	2,550	2,600	1,800
May	1,724	1,826	1,660	2,553	2,600	1,907
June	1,946	2,059	1,806	2,582	2,600	1,624

Market Development

Spot Electricity Price, Spot Gas Price and Botas Gas Tariff (TL/MWh)

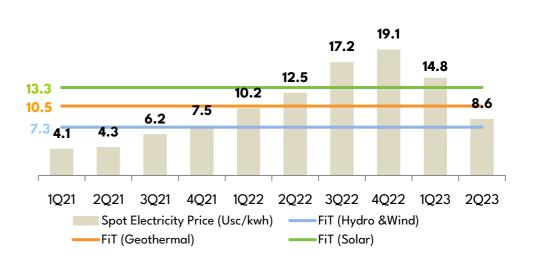


Monthly Electricity Consumption (GWh)

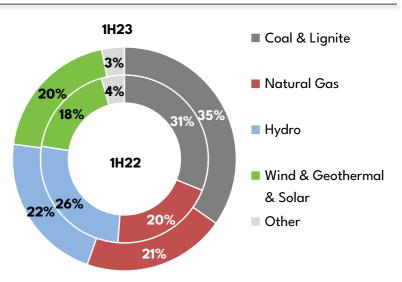


Source: TEIAŞ, BOTAŞ, TEDAŞ, EXIST

Average Spot Electricity Prices vs. FiT (USc/kWh)



Generation By Source





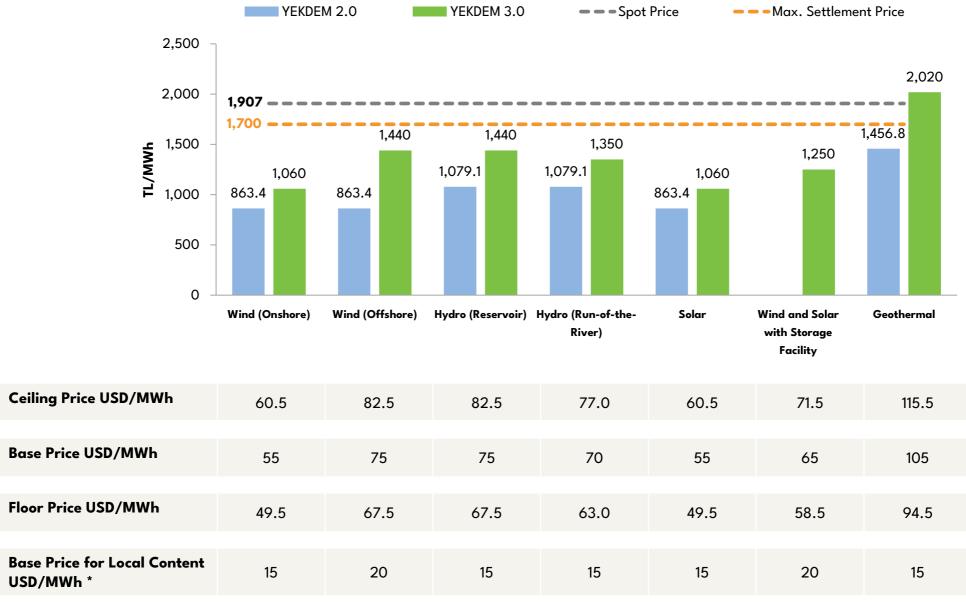
Revision in Feed-in Tariff Mechanism (YEKDEM 3.0)

Source		New Tariff Structure						
		Guaranteed FiT	Implementation Time	Additional Tariff for Local Content	Local Content Implementation Period	USD Cap on Tariffs - Min	USD Cap on Tariffs - Max	
		(TLkr/kWh)	(Year)	(TLkr/kWh)	(Year)	(USD cent/kWh)	(USD cent/kWh)	
11	Reservoir	144	10	28.8	5	6.75	8.25	
Hydroelectric	Run-of-the River	135	10	28.8	5	6.30	7.70	
w. 1	Onshore	106	10	28.8	5	4.95	6.05	
Wind	Offshore	144	10	38.45	5	6.75	8.25	
Geothermal		202	15	28.8	5	9.45	11.55	
Solar		106	10	28.8	5	4.95	6.05	
	Landfill Gas	106	10	28.8	5	4.95	6.05	
Biomass	Biomethanization	173	10	28.8	5	8.10	9.90	
Thermal Disposal		134.9	10	21.58	5	5.75	8.00	
Wind and Solar with Storage Facility		125	10	38.45	10	5.85	7.15	
Hydroelectric with Pumped Storage		202	15	38.45	10	9.45	11.55	
Wave or Tidal Energy		135	10	38.45	10	6.30	7.70	

- A new feed-in tariff mechanism (YEKDEM 2.0) was introduced on July 1, 2021 for renewable power plants that would come onstream between Jul 1, 2021 and Dec 31, 2030 while existing plants would continue to benefit from the USD-linked tariff mechanism (YEKDEM 1.0) until the end of their 10-year term.
- The new mechanism was further revised on May 1, 2023 (YEKDEM 3.0). Accordingly:
 - Purchase guarantee for geothermal plants is raised from 10 years to 15 years
 - FiTs are reset monthly (prev: quarterly) based on the changes in inflation (CPI (15%) & PPI (25%) 40% (prev: 52%)) and FX rates (USD/TRY & EUR/TRY 60% (prev: 48%) equally weighted)
 - USD based price floors are introduced in addition to USD based price ceilings
 - The scope is extended to include new sources of renewable energy such as offshore wind as well as energy storage



YEKDEM 3.0 vs. YEKDEM 2.0



^{*} USD prices are calcuted based on USD/TRY exchange rate of 19.2



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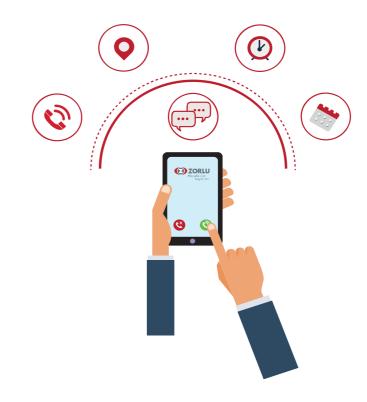
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