

# **ENERGY DEALS**

Merger and acquisition activity in Türkiye's energy market



### Contents

Welcome	03
<b>Deal Totals</b> Feeling the impact of global and domestic recession	04
<b>Utilities</b> Less deals for more value	06
<b>Oil and gas</b> Down to a single deal	10
2008 – 2023 overview	12
Looking ahead	18



### Methodology and terminology

Energy Deals 2022 includes analyses of crossborder and domestic deal activity in the oil, gas and electricity markets in Türkiye. The analyses are based on publicly available information and encompass announced deals as of 31 December 2022, including those pending financial and legal closure. Deal values are the consideration value announced or reported while the figures relate to actual stake purchases and are not multiplied to 100%. This document is also available at pwc.com.tr/energy-deals

### Welcome

to the 15<sup>th</sup> edition of the Energy Deals, our annual analysis of mergers and acquisitions in the Turkish energy market



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The war in Ukraine, continuing efforts to keep the pandemic under control, energy crisis stoking the cost of living crisis, hard landing of the tech companies, all amid the climate crisis outcry to shape the commitments at the COP27 and COP15 made 2022 another exceptional year.

Against this background, global deal activity could not hold onto its 2021 momentum in 2022. Global energy, utilities and resources sectors reflected this lower velocity in terms of both the number of deals and the time it is taking to agree to a value and execute a deal, are all highlighting the uncertainty in deal pricing caused by inflation, interest rates, geopolitical unrest and volatility in commodity prices.

At home, the Turkish energy market was hardly immune to any of these global forces. Total energy deal in figures in Türkiye reflected all this with falls in total deal number and value. In 2022, 31 energy deals generated an estimated total value of USD 2 billion, marking a 29% drop from USD 2.8 billion generated by 40 deals in 2021.

30 of those deals were in the utility segment. Similar to previous years, the majority of the targets were again in renewable energy and the rest in thermal power generation, electricity distribution, energy storage and EV charging infrastructure. And, the single deal in the oil&gas market with an undisclosed value was in the storage segment. Once again, the level progress in the liberalisation of the natural gas market sustained the cautious approach of the investor interest despite the hype of the reserve discoveries in the Black Sea.

An important aspect worth the highlight is the foreign investors' moves. Starting with the market entries, the acquisitions made by the Middle Eastern companies in different segments of the utility market were welcome developments and helped to keep the share of foreign deals in deal totals at 31%, although it is significantly lower than the 75% in 2021.

Looking ahead... The efforts by the Turkish energy administration to align its actions with the global best practices shaped by the Paris Climate Agreement are promising. On the deal space, the slowdown in the Turkish energy market was in line with that in the global markets. With the new YEKDEM scheme which did not satisfy the expectations in the market to prompt large number of deals so far, new attraction points are urgently needed to decouple from the global downturns and make the most of another global recovery. Although foreign interest still exists, this should be ideally happening in a seller's market and better reflect the intrinsic value of the companies with their high-quality assets and workforce. Now more than ever, the policy makers are spending effort to make Türkiye gain the safe haven status with a long-term view.

### **Deal Totals**

## Feeling the impact of global and domestic slowdown...

The upward momentum that the Turkish energy deal space had gained in 2020 and sustained in 2021 against all odds of the pandemic had a reversal in 2022 as a repercussion of the deepening slowdown in the global and domestic markets.

31 energy deals generated an estimated total value of USD 2 billion, marking a fall of 29% from USD 2.8 billion in 2021. And, the average deal value stayed almost the same at USD 65 million in 2022.

All of the deals were in the utilities segment except one in oil & gas. Renewable energy assets were the main transaction targets in almost all the utility deals similar to the recent past, with four exceptions in EV charging infrastructure, thermal power generation and electricity storage. And, all deals happened between the private players except a negligible privatisation.

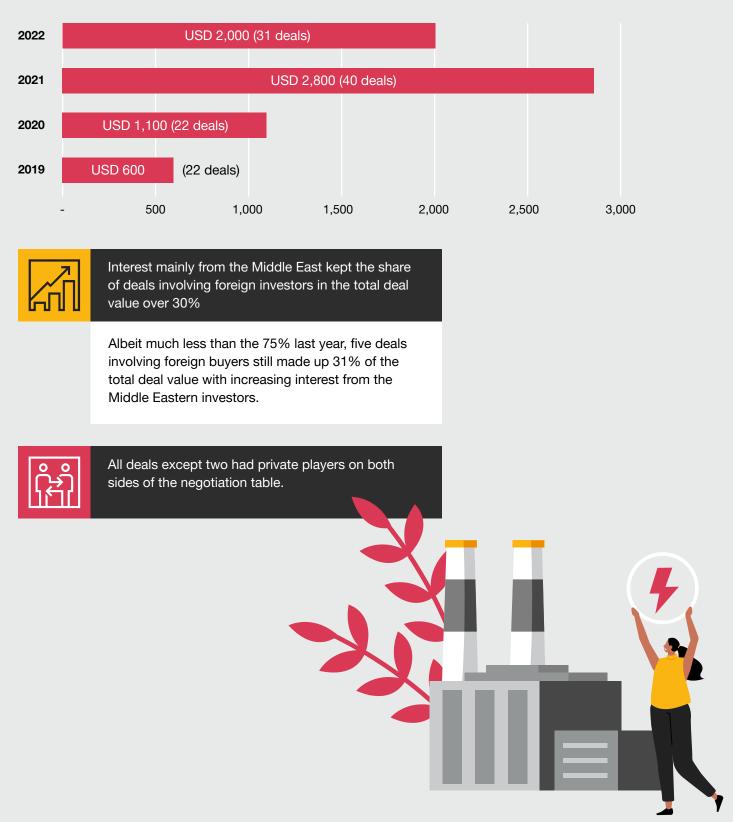




The total deal number and value in 2022 inevitably felt the brunt of the slowdown in global and domestic markets

Figure 1: Total Energy Deals in 2021 and 2022

	FY21		FY22			YoY change		
	Number	Value (USD m)	Average Value	Number	Value (USD m)	Average Value	% number	% value
Utilities	39	1,500	38	30	2,000	67	-23%	33%
Oil and gas	1	1,300	1,300	1	n.d.	n.d.	0%	n.d.
Total	40	2,800	70	31	2,000	65	-23%	-29%



#### Figure 2: Total deals between 2019 and 2022 by value (USD million) and number of deals

### Utilities

### Less deals for more value...

The global energy crisis worsened by the war in Ukraine and not so conciliatory approach by the OPEC members about the global oil supply continue to cause tremendous changes with long-lasting impacts around the globe with unprecedented variety and complexity. Global coal consumption is set to reach its highest level in 2022, second time after a decade ago. European gas prices have reached uncharted levels in the third guarter of 2022, increasing roughly 14-fold from the third quarter of 2019. At the same time, US gas prices have tripled and global oil prices have increased by about 40%. In addition to short-term measures like caps on the utility bills to shield consumers from the impacts of the cost of living crisis, many governments are also taking longer-term steps. Some are seeking to increase or diversify oil and gas supplies, and many are looking to accelerate structural changes, including the US Inflation Reduction Act, the EU's Fit for 55 package and REPowerEU, Japan's Green Transformation (GX) programme and South Korea's aim to increase the share of nuclear and renewables in its energy mix.

At home, 2022 was the year when total installed power generation capacity exceeded the 100-GW mark to reach 103 GW. With the latest additions, the share of renewables in Türkiye's installed power reached to 54%.

The clarification of the uncertainties of the new 10-year YEKDEM scheme with quarterly adjustments to TRYdenominated tariffs calculated with PPI, CPI, €/TRY and USD/TRY parities support mechanism for the renewable energy assets to be commissioned between 1 July 2021 and 31 December 2025 was a cause for celebration for the renewable energy players.

However, it was indeed deemed insufficient to bring about the anticipated acquisition interest into the assets or projects eligible to benefit from it in 2022. In fact, some of the assets which changed hands in 2022 are approaching the end of their first YEKDEM period, meaning that they will not be eligible to benefit from any feed-in-tariff anymore under the current regulation. This interest in them and not necessarily in the new assets under the new YEKDEM system can be considered an indication of the acquirers' bet for scenarios including a better functioning merchant market and an increase in interest by large customers to engage in longterm PPAs with them. Likewise, the key improvements brought forward by the regulation of the fourth tariff period in the electricity distribution and retail segments (2021-2025) announced in 2021 was yet to prove it as an attraction for deals in this segment in 2022. Having said that, we think that it was a factor in the success of ODEAS, the electricity distribution company serving Osmangazi region, in securing a TRYdenominated financing package equivalent of USD 350 million from an international consortium including the Dutch entrepreneurial development bank FMO, IFC, EBRD, AIIB, and Denizbank. The loan is reported to be used to finance the capital expenditure programme required by EMRA for the mentioned tariff period.

In this tough climate, although the number of utility deals fell from 39 in 2021 to 30 in 2022, the estimated total deal value in this segment rose 33% to USD 2.0 billion from USD 1.5 billion.

The largest deal realised in 2022 involved a foreign buyer, International Energy Holding from the UAE, who acquired 50% share in Kalyon Enerji Yatirimlari for USD 490 million through one of its subsidiaries. The transaction includes the photovoltaic power plant project with an installed capacity of 1,347,734 MWp / 1,000 MWe in Konya, and additional 1 GW capacity wind power plants, 100 MW solar project in Niğde, 50 MW solar project in Gaziantep, among other renewable projects in various cities across Türkiye, according to a disclosure by the Turkish Investment Office.

The second largest deal at a value of USD 484 million was the acquisition of 99.24% shares of the Turkish power company Entek by Tüpraş, the largest downstream oil company in Türkiye. Considering the ownership structures of both companies, the deal can be considered a reorganisation to contribute to the buyer's strategic transformation and carbon neutrality efforts. Entek's renewable power generation portfolio includes the 60 MW Süloğlu WPP and 8 HPPs with a total installed capacity of 264 MW in various regions of Türkiye. In addition, the company owns a 112 MW natural gas conversion plant in Kocaeli.



The next two deals in the order of value had Wren House Infrastructure (WHI), an affiliate of the Kuwaiti state-owned wealth fund Kuwait Investment Authority (KIA) on the buyside. In a combined deal, WHI acquired:

- a majority stake in ZES NV, an EV charging infrastructure company based in the Netherlands, from Zorlu Enerji for USD 50 million.
- 12% stake in Zorlu Enerji, a diversified energy company with operations in renewable energy, power distribution / sales / trade and natural gas distribution and trade in Türkiye, from its controlling shareholder Zorlu Holding, a Turkish conglomerate, for USD 38 million.

These deals with WHI reportedly involved a loan restructuring amounting to USD 150 million as well.

In a further internal reorganisation effort, Zorlu Enerji transferred all its shares in its fully-owned subsidiary ZES Dijital, a local company active in EV charging infrastructure and energy management systems, to its Dutch subsidiary Electrip Global B.V. for USD 10.7 million.

And, on the buyside, Zorlu Enerji acquired its JV partner Rarik Turkison Enerji, a small Turkish energy company, for USD 800k. The two companies had been reported to plan to invest in a 100MW-150MW geothermal capacity.

In another deal involving a foreign investor, OME Eurasia, the Singaporean subsidiary of the Chinese industrial conglomerate Kaishan Group, acquired 49% stake in Transmark Turkey Gulpinar Enerji, a Turkish geothermal power generation company, for USD 21 million from Transmark Renewables. The buyer has been already an equipment supplier to its target.

On the other hand, a foreign exit from the renewables segment is currently subject to the approval by the Turkish Competition Authority. In that, Akfen Holding is aiming at becoming the majority shareholder of Akfen Yenilenebilir Enerji, its renewable energy subsidiary, by buying the shares held by IFC and EBRD out for an undisclosed sum. The company has a diversified portfolio with 235.7 MW of HPPs, 121.4 MW of SPPs and 348.9 MW of WPPs. Back to the deals among the local players, in the absence of more of the large players in action, smaller ones continued to grow their renewable energy portfolio with multiple deals. Ekvator Enerji, a local company, completed three acquisitions involving six HPPs of 74 MW total installed capacity for undisclosed sums. And, Makyol Insaat, another local energy and construction company, acquired a 9 MW HPP and a 58 MW SPP. The interest in biomass assets continued to remain limited in 2022 with only one deal. Ustyapi, a local holding company active in a variety of industries, acquired Ekolojik Enerji for an undisclosed sum. The target is a local integrated waste management company holding a biomass power generation license for 55 MW and an annual waste treatment capacity of 83.2 thousand tons.

Among the remaining ten deals in the renewable energy segment, mostly involving WPPs, took place among the local players.

Although gradually waning from the deal space, there were still two deals in the thermal power generation segment and one of them says it all about the latest state of the naturalgas power plants in Türkiye. In that, Enka Insaat ve Sanayi, a Turkish conglomerate, fully acquired Verbena Enerji Sanayi for its license for a 890 MW CCGT for USD 12.9 million. The buyer ENKA already owns three CCGTs in Türkiye with a total installed capacity of 4,000 MW and is understood to bet for the potential of a favourable merchant market in the country.

The second deal in this segment was also one of the two public deals. In that, the 2 x 145 MW Adularya Yunus Emre lignite-fired PP, which was transferred to the Turkish Savings Deposits Insurance Fund, was sold to Doruk Madencilik, a local mining company, for USD 177 million through a public tender.

Moving onto power distribution segment, the single deal on that front was in fact a much anticipated exit. CEZ Group of Czech Republic sold its 50% stake in AKCEZ Enerji A.Ş. to Torunlar Enerji Sanayi ve Ticaret A.Ş. and with Başkent Doğalgaz Dağıtım Gayrimenkul Yatırım Ortaklığı A.Ş. (Torunlar Group) for an undisclosed sum. AKCEZ, 50% of which still owned by Akkök Holding, has three subsidiaries operating in power distribution, energy sales and energy services.

The target distribution company SEDAŞ, acquired through privatisation in 2009, serves approximately two million subscribers. Sales company SEPAŞ, which was established in 2012 after the unbundling of energy companies, supplies electricity to 1.8 million customers. And, Sepaş Smart Solutions provides energy efficiency services. On the buyside, Başkent Doğalgaz Dağıtım Gayrimenkul Yatırım Ortaklığı A.Ş. holds the license to operate Baskentgaz, the largest natural gas distribution network in Türkiye. And the parent company Torunlar owns assets in power generation as well.

And finally, there was a single deal in the power trade and energy storage segments. In that, Biotrend Enerji, a local alternative energy and waste management company, bought the full shares of Doğan Kent Elektrik Enerjisi active in these two segments from Dogan Yatırım Holding and its subsidiaries for USD 200k.

Not eligible as a 'deal' to be added to our figures, but it is still worth mentioning the IPOs that took place in the Turkish energy sector, emerging as an alternative financing method to diversify away from high leverage as a hedge against the volatility in the Turkish economy. Four IPOs in the utility segment and one in natural gas distribution were completed in 2022: Alfa Solar, Consus Enerji, Smart Gunes Enerjisi, Hun Enerji and Ahlatci Natural Gas Distribution.

Another class out of our definition of 'deals' but still needs mentioning is the YEKA tenders launched by the state to award private investors with licenses to build and operate large WPP and SPP capacities while providing them with fixed tariffs for 15 years and extra incentives for using locally manufactured equipment. Following the pandemic-related pause in 2021, two new tenders were released in 2022. In YEKA-3 tender for a total of 850 MW wind power generation capacity, winning bids ranged between 40.8 and 77.8 TRY cent /kWh. And, in YEKA-4 tender for a total of 300 MW solar power generation capacity winning bids ranged between 37.50 and 42 TRY cent /kWh. YEKA-5 for another basket of solar power capacity has been delayed to an announced date.

#### Figure 3: Utility Deals in 2022

AnnocedTargetin %AcquirerNationality(USD m)18-Jan-22Kiy HES100%Exvator EnerjiTurkeyn.d.18-Jan-22HPP (Horyan, Koprubasi, Sogukpinar, Kiran)100%Exvator EnerjiTurkeyn.d.4-Feb-22Bayra Enerji100%Exvator EnerjiTurkeyn.d.2-Mar-22Canakci HES100%Gama EnerjiTurkeyn.d.2-Mar-22Carakci HES100%Gama EnerjiTurkeyn.d.2-Mar-22Darsk ULSSDorpark Venimeebilir EnerjiTurkeyn.d.2-Mar-22Darse Datca & Mare Manastir WPP50%Dernirer EnerjiGermanyn.d.25-Apr-22Enerk Elektrik Uretimi99%TuprasTurkeyd.d.3-Jun-22Maven Enerji Elektrik Uretimi90%Dogalar Yatim HoldingTurkeyd.d.3-Jun-22Accez Enerji50%Baskent Dogalagz and TorunlarTurkeyd.d.3-Jul-22Accez Enerji60%Baskent Dogalagz and TorunlarTurkeyd.d.23-Jul-22Accez Enerji60%Baskent Dogalagz and TorunlarTurkeyd.d.23-Jul-22Kalor Enerji SanayiTurkeyd.d.d.d.23-Mag-22Galaya Enerji Uretimi100%Private InvestorsTurkeyd.d.23-Mag-22Salker WP project100%Dost Enerji SanayiTurkeyd.d.23-Mag-22Salker WP project100%Colu EnerjiTurkeyd.d.24-Ag-22Iskler WP proj	Date		Stakes		Acquirer	Deal Value
2-Jan-22   4 HPP (Horyan, Koprubas), Sogukpinar, Kiran)   100%   Ekvator Enerji   Turkey   n.d.     4-Feb-22   Bayra Enerji   100%   Ekvator Enerji   Turkey   n.d.     17-Feb-22   Ekolojik Enerji   100%   Ustyapi Enerji   Turkey   n.d.     2-Mar-22   TGT Enerji   0.03%   Gama Enerji   Turkey   n.d.     2-Mar-22   Carakci HES   100%   Makyol Insaat   Turkey   n.d.     3-Mar-22   Dares Datca & Mare Manastir WPP   50%   Demirer Enerji   Germany   n.d.     25-Apr-22   Entek Elektrik Uretimi   99%   Tupras   Turkey   A.d.     30-Jun-22   Maven Enerji Elektrik Uretimi   30%   Deganlar Yatrirm Holding   Turkey   n.d.     30-Jun-22   Masola Girisim   100%   HUN and Kartal Yenienebilit Enerji   Turkey   n.d.     30-Jun-22   Maven Enerji Lektrik Uretim   30%   Baskert Dogalaga: and Torular   Turkey   n.d.     29-Jul-22   Akoze Enerji   100%   Baskert Dogalaga: and Torular   Turkey	Announced	Target	in %	Acquirer	Nationality	(USD mn)
4-Feb-22   Baya Enerji   Turkey   n.d.     17-Feb-22   Ekolojik Enerji   Turkey   n.d.     2-Mar-22   TGT Enerji   0.03%   Gama Enerji   Turkey   n.d.     2-Mar-22   TGT Enerji   0.03%   Gama Enerji   Turkey   n.d.     2-Mar-22   Canakci HES   100%   Makyol Insaat   Turkey   n.d.     28-Mar-22   Darkspun 1-2-3 SPP   100%   Toprak Yenilenebilir Enerji   Turkey   n.d.     25-Apr-22   Entek Elektrik Uretimi   99%   Tupras   Turkey   484.2     3-Jun-22   Maven Enerji Elektrik Uretimi   99%   Tupras   Turkey   n.d.     30-Jun-22   DGN Solar Girisim   100%   HUN and Kartal Venilenebilir Enerji   Turkey   n.d.     30-Jun-22   Kaloz Enerji   50%   Baskent Dogalgaz nian drunnar   Turkey   n.d.     29-Jul-22   Kaloz Enerji   50%   International Energy Holding   UAE   490.0     23-Aug-22   Isikar MPP project   100%   Dost Enerji Sanayi   Turkey<	18-Jan-22	Kiy HES	100%	Ekvator Enerji	Turkey	n.d.
17-Feb-22   Ekolojik Enerji   Turkey   n.d.     2-Mar-22   TGT Enerji   0,03%   Gama Enerji   Turkey   0.0     7-Mar-22   Canakci HES   100%   Makyol Insaat   Turkey   n.d.     28-Mar-22   Parkgun 1-2-3 SPP   100%   Toprak Yenlienebilir Enerji   Turkey   n.d.     1-Apr-22   Dares Datca & Mare Manastir WPP   50%   Demirer Enerji   Germany   n.d.     25-Apr-22   Entek Elektrik Uretimi   39%   Doganal Yatirim Holding   Turkey   A.d.     30-Jun-22   DGN Solar Girisim   100%   HUN and Kartal Yenilenebilir Enerji   Turkey   n.d.     30-Jun-22   Msilan 13 Enerji   100%   Private Investors   Turkey   n.d.     30-Jun-22   Kalyon Enerji Yatirimari   50%   Baskent Dogalgaz and Torunlar   Turkey   n.d.     29-Jul-22   Akoez Enerji   50%   International Energy Holding   UAE   4900     20-Aug-22   Isklar WPP project   100%   Dost Enerji Sanayi   Turkey   n.d.     27-Sep-22	25-Jan-22	4 HPP (Horyan, Koprubasi, Sogukpinar, Kiran)	100%	Ekvator Enerji	Turkey	n.d.
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25-Apr-22   Entek Elektrik Uretimi   99%   Tupras   Turkey   484.2     3-Jun-22   Maven Enerji Elektrik Uretim   36%   Doganlar Yatirim Holding   Turkey   n.d.     30-Jun-22   DGN Solar Girisim   100%   HUN and Kartal Yenilenebilir Enerji   Turkey   n.d.     5-Aug-22   Mislina-13 Enerji   100%   Private Investors   Turkey   n.d.     5-Aug-22   Kalyon Enerji Yatirimlari   50%   Baskent Dogalgaz and Torunlar   Turkey   n.d.     11-Aug-22   Kalyon Enerji Yatirimlari   50%   International Energy Holding   UAE   490.0     23-Aug-22   Galaty Enerji Uretimi   100%   Berges Elektrik   Turkey   n.d.     24-Sep-22   Gokova Elektrik   100%   Galata Wind Enerji   Turkey   .d.     27-Sep-22   ZES   n.d.   Kuwait Investment Authority   Kuwait   .38.0     17-Oct-22   Transmark Turkey Gulpinar Enerji   10%   Kausan Inscaut ve Sanayi   Turkey   .0.8     15-Nov-22   Verbena Enerji Sanayi   100%   Enerpisa Uretim<	28-Mar-22	Parkgun 1-2-3 SPP	100%	Toprak Yenilenebilir Enerji	Turkey	n.d.
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12-Dec-22Zigana Enerji ve Yatirim100%Makyol InsaatTurkeyn.d.12-Dec-22Zes Dijital Ticaret100%Electrip GlobalTurkey10.719-Dec-22Akfen Yenilenebilir Enerji33%Akfen HoldingTurkeyn.d.27-Dec-22Adularya Termik Santrali100%Doruk MadencilikTurkey177.028-Dec-22Soli GES50%Is Enerji YatirimlariTurkeyn.d.30-Dec-22Sisli and Ortakoy Enerji100%Pamel Yenilenebilir Enerji4.4	17-Nov-22	Dogan Kent Elektrik Enerjisi	100%	Biotrend Enerji ve Cevre Yatirimlari	Turkey	0.2
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30-Dec-22 Sisli and Ortakoy Enerji 100% Pamel Yenilenebilir Enerji Turkey 4.4	27-Dec-22	Adularya Termik Santrali	100%	Doruk Madencilik	Turkey	177.0
	28-Dec-22	Soli GES	50%	Is Enerji Yatirimlari	Turkey	n.d.
Total ≅ 2,000.0*	30-Dec-22	Sisli and Ortakoy Enerji	100%	Pamel Yenilenebilir Enerji	Turkey	4.4
	Total				Ξ	2,000.0*

n.d.: not disclosed

\*: Includes estimated deal value for undisclosed deals



#### 9 | PwC Energy Deals 2022



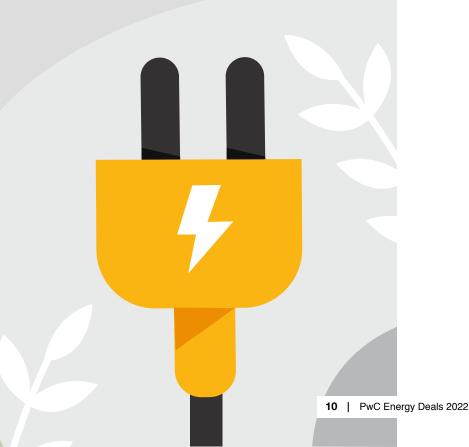
### Down to a single deal...

The pause of 2021 in the Turkish oil and gas deal space was extended into 2022. But this time, it was in line with the slowdown in the global oil and gas deals.

In the single disclosed deal albeit with an undisclosed value, Can Uluslararası Yatırım Holding acquired Haramidere Depoculuk, a fuel products storage business with facilities in Istanbul, from OMV Enerji and MKT Enerji. From the buyer perspective, which owns a large fuel distribution network and fuel storage capacity, this is a consolidation in the Turkish downstream oil market. And for OMV Enerji, the local subsidiary of the Austrian OMV, it is another move in a series of exits from the Turkish market.

Moving onto the fuel retail segment, during the first nine months of 2022, post-pandemic recovery in gasoline sales slowed down y-o-y at 13% (vs. +28% in the same period in 2020-2021), diesel and auto LPG sales dropped by 6% and 4%, respectively. And, as of December 2022, the pump price of LPG jumped by 32%, diesel by 92% and gasoline by 60% y-o-y due to the upward volatility in product prices under the impact of global oil prices and the currency.





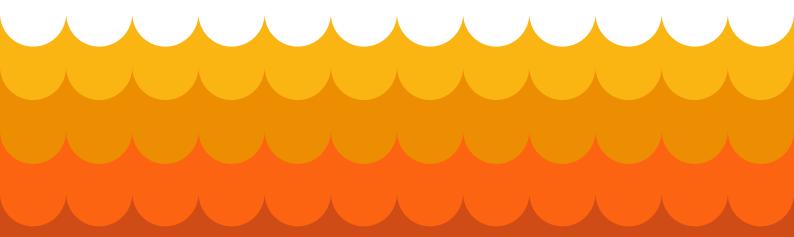


#### Figure 4: Oil & gas Deals in 2022

Date Announced	Target	Stakes in %	Acquirer	Acquirer Nationality	Deal Value (USD mn)
20-Jan-22	Haramidere Depoculuk	100%	Can Uluslararasi Yatirim Holding	Turkey	n.d.
Total					n.d.

n.d.: not disclosed





### 2008 - 2023 overview

### Fifteen years of momentum

The last fifteen years in the Turkish energy market can be divided into two periods in terms of the structural changes and the origin, nature and interest of different investor types.

The first ten years (**2008 – 2017** – 'first period' hereinafter) were marked with a series of tectonic changes brought by the privatisation of electricity and gas utilities, high demand, high foreign investor interest, fast evolution of the renewable energy market, introduction of the electricity spot market and the ususfructus decision concerning the fuel retail market. All these provided conductivity for a vibrant deal environment.

The following five years (**2018 – 2022** 'second period' hereinafter) were sort of a mixed tape with, on the one hand, stellar growth in renewable energy generation capacity and enactment of the Paris Climate Agreement, and, one the other hand, macroeconomic problems, gradual exodus of the foreign investors, evaporating profitability in fuel retail, deepening debt problems in the power industry and, of course, the pandemic. All these prevented the expectations to build on the deals legacy of the first period.

**Electricity market,** where liberalisation proved to be a success, hosted the majority of the deals over the last fifteen years.

Sustained increase in total power demand at a CAGR of 3.5% to reach 320 billion kWh in 2022 and Türkiye's capability to meet it by investing in own generation capacity was a key attraction. As a result, installed capacity grew at a CAGR of 7% to reach 103 GW in 2022, with no major fluctuation between the two periods thanks to the increasing involvement of the private players, funding and investment support from the international financing institutions in the first period in particular and the efforts of the energy administration to encourage the investors. During this growth, the breakdown among the generation types has had a major overhaul and the share of the renewable technologies exceeded 50% thanks to the favourable feed-in tariff regulation and the concession schemes. During the first period, the completion of the privatisations of 78% of the electricity generation and the entire distribution network and affiliated retail businesses came to limit the state's activities mainly to transmission and market operations. And, the operationalisation of the spot market and the gradual elimination of the eligibility limit to choose own supplier opened new horizons to private players, including local conglomerates eager to diversify into energy.

During the second period, on the sunny side of the street, the headlines about privatisations were replaced with the increase in renewable energy generation capacity with improved regulation. However, delays in addressing some regulatory issues and macroeconomic conditions further decreased the appetite of the foreign investors towards the Turkish energy market among the strategic priorities in particular and pushed the players with investments to look for restructuring options.

Transformation in the **natural gas market** over the last one and half decades has been more noisy compared to the electricity market and in fact was one of the main reasons behind the demise of the natural-gas-fire power generation segment.

The 5.3% CAGR in natural gas consumption during the first period slowed down at a CAGR of 3% during the second period due to decreasing share of the CCGTs in power generation, warmer winters, impact of Covid-19 on industrial demand and self-control by the residential and commercial consumers due to the severe hikes in their tariffs. As a result, the total figure is back to below 60 bcm pa. in 2022.

The supply, almost all imported via long-term Take-or-Pay contracts, is under the state company BOTAS with its domination over the use of the pipelines and storage.

Privatisations took place in the distribution segments, all but one – IGDAS, still operated by the Istanbul Metropolitan Municipality – completed so far. Interest by the foreign companies was weaker compared to the tenders in the electricity market and the ones with winning bids exited altogether in less than a decade.

Some developments during the second period in the upstream and midstream have been promising for the security of gas supply in Türkiye. The recent discoveries of new gas reserves in Black Sea are providing a cause for a celebration. The 16-bcm Trans-Anatolian Natural Gas Pipeline (TANAP) carrying the Caspian gas to Europe became operational and now is subject to plans to double its capacity. With the commissioning of two Floating Storage Regasification Unit (FSRU) terminals, the share of LNG in total supply has approached 10% as an alternative to pipe gas although it hardly comes cheaper. And, operationalisation of the natural gas storage facilities in Silivri and Salt Lake marked major additions to capacity by 4.6 bcm and 1.2 bcm, respectively, with further plans of capacity increase.

The main story during the first period in the oil and fuel products market was the landmark decision of the Competition Authority of Türkiye in 2010 to limit the duration of the usufruct contracts between the fuel and LPG distributors and the dealers to 5 years, much shorter than the established practice. This enabled the dealers to change their distributors much earlier than agreed in their original contract and therefore deprived the distributors of the required time to fully amortise their investments in fuel stations. And the EMRA decision to cap the margins only added to deterioration in their financial capacity. While some of the large foreign distributors exited from the Turkish market, a much anticipated consolidation wave among the rest did not materialise. Instead, first there has been a proliferation of smaller distributors working under the COCO model. And, some others have been trying to keep afloat by a partial vertical consolidation by acquiring fuel storage facilities.

Moving upwards to the refinery and petrochemicals segment, the operationalisation of a new refinery on the Aegean coast increased the total annual capacity in this segment to 38 mtpa from 28 mtpa.

Not much changed in the upstream, on the other hand, despite the ratification of the new Petroleum Law during the first period, which offers a more favourable environment for foreign investment. TPAO, the state upstream company, still holds a large majority of the E&P licenses.

### **Deal Totals**

### 483 deals generated USD 54.4 billion

The last 15 years saw 483 disclosed energy deals with a total estimated value of USD 54.4 billion, producing an average value of USD 3.6 billion per annum and USD 113 million per deal. The utility deals have always led the figures: 83% of the total value and 87% of the total number.

Dominating the deal numbers and values over a good part of the last fifteen years, privatisation of the power generation and distribution companies and of the natural gas distribution companies made the utilities segment the main action hub in the Turkish energy deal space. These tenders generated a total of around USD 28.4 billion in total, making up 53% of the total deal value.

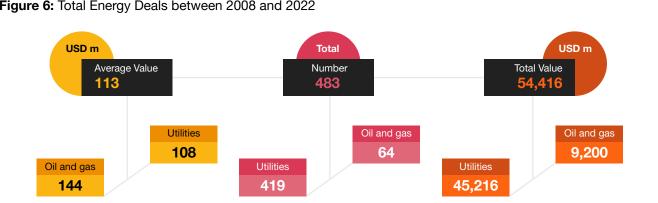
More than 90% of the deal value raised through privatisations came during the first period. What kept the utilities segment at the forefront of the deal figures in the second period were mostly the private deals for the renewable energy generation companies in line with the improvements in the regulation of the incentives.

The more limited and scattered picture of the oil and gas deals, on the other hand, displays the reflection of the problems mentioned before to the deal environment.

#### Figure 5: Energy deal values and numbers between 2008 and 2022 (USD billion)





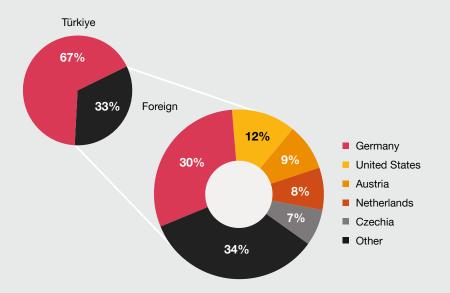


#### Figure 6: Total Energy Deals between 2008 and 2022



Closed public deals in electricity and natural gas markets generated 53% of the total deal value since 2008

Figure 7: Nationality breakdown in energy deals between 2008 and 2022



Foreign investors, mostly the big European companies from Germany and also from the US who did not want to miss the privatisations, were on the buyside for a good part of the first period, making significant inroads to both thermal and renewable power generation and distribution.

During the second period, however, unexpected regulatory changes, increasing macroeconomic drawbacks deepened with the consequences of the Covid-19 have all forced the investors to either postpone their investment decisions or revisit their priorities and regional preferences for investment. With a partial replacement by the Middle Eastern and South Asian investors so far, the contribution of the foreign buyers to the total deal value displays great y-o-y fluctuations. Recently, a new interest has started to develop among the Middle Eastern players in line with the deepening relationship with Türkiye's Government.



Foreign involvement stayed above 30% of the total estimated deal value between 2008 and 2022, however with decreasing budgets

### Utilities

### All-time front runner

Hosting most of the changes on the regulatory space and all the privatisations, utilities have almost always led the deal figures during the last one and a half decades. 419 announced and closed deals in this space generated USD 45.2 bn, 83% of the total estimated energy deals value and 87% of total disclosed deal number between 2008 and 2022. During this period, nine of thirteen closed mega energy deals with the value exceeding USD 1 billion were in the utilities front, all in the first period. They were all generated during the privatisations.

#### Figure 8: Mega utility deals closed between 2008 - 2022

Date Announced	Target	Stakes in %	Acquirer	Acquirer Nationality	Deal Value (USD mn)
18-Apr-14	Yenikoy Elektrik & Kemerkoy Elektrik	100%	IC Ictas Enerji	Turkey	2,671
28-Dec-12	Seyitömer Termik Santrali	100%	Çelikler Taahhüt İnşaat	Turkey	2,248
14-Dec-12	Boğaziçi Elektrik Dağıtım	100%	Cengiz - Kolin - Limak JV	Turkey	1,960
15-Mar-13	Toroslar Elektrik Dağıtım	100%	EnerjiSA	Turkey - Germany	1,725
19-Dec-12	Gediz Elektrik Dağıtım	100%	Elsan - Tümaş - Karaçay JV	Turkey	1,231
15-Mar-13	Anadolu Yakasi Elektrik	100%	EnerjiSA	Turkey - Germany	1,227
1-Jul-08	Baskent Elektrik Dagitim	100%	EnerjiSA	Turkey - Germany	1,225
25-Jan-13	Başkent Doğalgaz	100%	Torunlar Enerji	Turkey	1,162
12-Jun-14	Yatagan Termik Santrali	100%	Elsan Elektrik	Turkey	1,091

The reason why we emphasise the attribute 'closed' deals here is worth the attention. In that nine tenders, which could be qualified as mega deals on the list above, had to be cancelled due to the winning bidders' failure to secure financing. And when the tenders were relaunched, the values in most of them remained below USD 1 billion.

Those winning bidders who managed to secure financing to complete the takeover did it with FX-denominated debts which was made directly or indirectly available to them by international banks who also did not want to miss the privatisations. As a result of these shake ups and improvements in the incentives regulation which have become a comparative advantage for Türkiye, the share of the renewable energy assets exceeded 50% of the country's total installed generation capacity. In the meantime, the number of deals in this segment reached 270 in the total utility deals figure of 419 since 2008.



### Oil and gas

### More downs than ups...

The oil and gas deals have never had us off our seats, making us to use the term 'hibernation' frequently to define the state of the transactions on that front over the last fifteen years. 64 deals were disclosed and generated USD 9.2 billion, 17% of the total estimated energy deals value and 13% of total disclosed deal number between 2008 and 2022. During this period, only four mega deals, and actually involving two assets only, with a value exceeding USD 1 billion took place in this market, all in the downstream and only one in the second period.

29 of the 64 oil and gas deals disclosed since 2008 over the last decade were in fuel distribution with 25 of them during the first period.

#### Figure 9: Mega oil and gas deals closed between 2008 - 2022

Date Announced	Target	Stakes in %	Acquirer	Acquirer Nationality	Deal Value (USD mn)
3-Mar-17	OMV Petrol Ofisi AS	100%	Vitol Investment Partnership	Netherlands	1,450
23-Oct-10	Petrol Ofisi	54%	OMV	Austria	1,390
15-Aug-15	Socar Turkey Enerji	13%	The Goldman Sachs Group	United States	1,300
2-Sep-21	STEAŞ	13%	SOCAR	Azerbaijan	1,300



### Looking ahead

We expect five topics to potentially shape the deal environment in the Turkish energy market in 2023 and beyond: macroeconomic developments, Türkiye's commitments under the Paris Climate Agreement, alternative financing, upcoming YEKA tenders, TEIAS' privatisation.

#### **Macroeconomic developments**

The macroeconomic policies kept alive by Türkiye's government and the upcoming general elections are expected to continue to shape investors' and in particular foreign players' decision in the Turkish investment environment. In this sense, the impact of recent hikes in the minimum wage, in the payments to pensioners and in the energy prices on inflation and investment ratings will be closely watched.

The impact of the current macroeconomic environment has been already reflected to the contraction of the deal environment in terms of total deal numbers and values. In that sense, it is for sure that the utility deals involving renewable energy assets in particular would continue to happen (until they cannot) dependently to the consequences of these policies.

### Türkiye's commitments under the Paris Climate Agreement

Yet to be finalised, a clear strategy to reach the national net-zero target by 2053 is expected to be a key topic in Türkiye's 12th National Development Plan (NDP) (2024-2028), the preparation efforts for which have been recently kicked off by the Strategy and Budgeting Directorate of the Turkish Presidency.

It is only with this visibility that a more diversified set of clean energy investment options and larger and more diversified financial institution interest would develop to support them. Against this background and growing reactions around the globe, the approach in the 12th NDP to new coal-fired power generation capacity, which is still deemed as the backbone of the economic development in the country, has the potential to become one of the dealbreakers for foreign investors' interest in the country.

### **Green bonds**

Although less than ten green bonds have been issued so far, all by private players in Türkiye, a recent announcement by the Turkish Treasury is promising for further development in this alternative financing market in the country. In that, the Treasury is planning to issue green eurobonds in early 2023 depending on the macroeconomic climate.

Having said that, the urgent need for a proper legal framework and transparent reporting for it to become a mainstream financing tool for the private players has been hardly addressed over the recent years. This highlights the necessity for even a more intensive lobbying by the Turkish financial institutions and the private players.

### **YEKA tenders**

As clarified before, although they are not eligible to show up on our deal league, YEKA tenders are still an important source to produce potential acquisition targets with their robust concession structure. In that sense, the relaunch of the delayed YEKA SPP-5 tender for 1.5 GW capacity will be followed closely.

### **TEIAS'** privatisation

The privatisation of the Turkish Electricity Transmission Corporation (TEIAS) did not take place in 2022. And, 2023 being the year of a general election is dimming the possibility of it to happen anytime soon. However, if it happens, it may mark a resumption of the big ticket utility privatisations of the past with potential interest in not only its operations but also its considerable real estate portfolio.

In this intensive climate both abroad and at home, where one crisis supersedes another week in week out, Türkiye should never fall into a sense of security but instead keep generating new attraction points to decouple from the global downturns and make the most of another global recovery. As the foreign interest still exists, this should be ideally happening in a seller's market and better reflect the intrinsic value of the companies with their high-quality assets and workforce.



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