

Energy Deals *2015 Annual Review*

Merger and acquisition
activity in Turkey's energy
market

January 2016



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Methodology and terminology

Energy Deals 2015 includes analyses of cross-border and domestic deal activity in the oil, gas and electricity markets in Turkey. The analyses are based on publicly available information and encompass announced deals as of 31 December 2015, 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 www.pwc.com.tr/energy.

Welcome

to the eighth edition of the Energy Deals, our annual analysis of mergers and acquisitions in the Turkish energy market



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The contraction since 2012 in total deal values in the Turkish energy market reached a new low in 2015 with a total value of USD 4.8 billion in 44 deals, in a way to prove us optimistic even in our most conservative prediction the year before.

Nevertheless, it was still a year of few novelties. For instance, although the pack was still led by the deals in the utilities, the share of the oil&gas deals jumped from a mere 2% in 2014 to 36%, thanks to the big ticket share acquisition by Goldman Sachs in Socar Turkey.

Significant slowdown in utilities was mostly due to a slowdown in privatisation deals, which reduced the total value of the utilities deals by more than 40% y-o-y to USD 3.1 billion in 2015. But good things happened too. First and foremost, IFC and EBRD not only financed some deals, but also took a very important step to acquire shares in Gama Energy and Akfen HES Yatirimlari. And, the out-of-the-roof bids by the Turkish companies to buy the operational rights of the state HPPs had a significant contribution to the total value in this segment.

Out of 9 deals in the oil&gas segment, two almost determined the full bottom line figure. Goldman Sachs acquired 13% stake in SOCAR Turkey Enerji for USD 1.3 billion and Total Oil sold its fuel retail arm in Turkey to Demiroren for USD 356 million. The former confirmed the growing confidence in the target's operations in Turkey, whereas the latter underlined the depleting hopes of the

foreign players in the Turkish fuel retail market. Also, BP's acquisition of 12% stake in TANAP is considered quite critical for the project implementation.

These all boiled down into the other novelty: the total value of the deals involving a foreign party came almost to par with the local plays, and increased from just 6% in 2014 to 45% in 2015.

Looking ahead... Our expectations for the deal environment in 2016 mostly depend on how much of the commitments will be delivered by the political and regulatory bodies. If all goes by the disclosed schedules, it will be another year of privatisations and therefore utilities will probably continue to lead the deals pack. Likewise, the support of the renewable investments will be the key to keep the foreign and local upbeat in the renewables segment. IGDAS privatisation would be a good candidate to take the 2016 deal values to a new high, but the recent announcements that the asset will be privatised via an IPO, make us less optimistic that IGDAS will ever hit our deal tables. And, we cannot go away without mentioning what is our regular item every year, the privatisation of Afsin-Elbistan B. Although no specific signals yet, we keep our fingers crossed for a successful completion.

Deal totals: Oil & gas picking up...

2015 did not break the rule since 2011 and the total deal values reached new lows. Although the number of deals rose from 40 in 2014 to 44 in 2015, the total value dropped by 14% from USD 5.6 billion to USD 4.8 billion. This resulted in 21% fall in average deal value to USD 110 million per deal in 2015, compared to USD 140 million in 2014.

35 deals took place in the utilities segment, all in power generation except two in energy trading. The majority of the deal value was

balanced between the privatisations of thermal and hydroelectric power plants. The interest by IFC and EBRD in both thermal and renewable portfolios has been quite promising. Similar to 2013 and 2014, smaller private deals including international acquirers targeting renewable energy companies signalled the continuation of the healthy activity in this segment. On the other hand, contrary to the expectations, no improvement posted to date in the expected Afsin-Elbistan B deal.

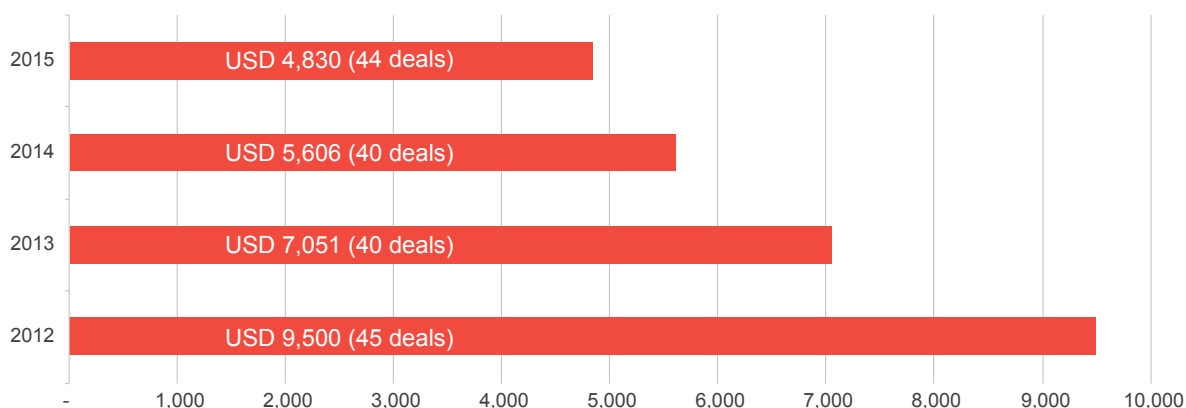
The pick up in the oil&gas deals was quite significant. Although the deal number was still a single digit, the deal value in 2015 was the highest since the spectacular privatisation values in 2006. The two key events with disclosed deal values were the share acquisition by Goldman Sachs in SOCAR Turkey and Total Oil's leaving Turkey. And, the undisclosed value of the BP-TANAP deal would push the total oil&gas deal value to new highs.

Contrary to the experience in the recent years, the pick up in the oil&gas deals was quite significant, accounting for 36% of the total deal value.

Figure 1: Total Energy Deals in 2014 and 2015

	FY14			FY15			YoY change	
	Number	Value (USD m)	Average Value	Number	Value (USD m)	Average Value	% number	% value
Utilities	34	5,500	162	35	3,100	89	3%	-44%
Oil and gas	6	106	18	9	1,730	192	50%	1538%
Total	40	5,606	140	44	4,830	110	10%	-14%

Figure 2: Total deals between 2012 and 2015 by value (US\$ mn) and number of deals



2015 was exceptional in terms of the public-private breakdown. With the decrease in privatisation deals, the share of private deals increased from 18% in 2014 to 63% in 2015.

63%
value generation by private deals

versus

37%
for public deals

55%
local involvement

versus

45%
foreign

With the acquisitions by IFC, EBRD and Goldman Sachs in addition to the other international names, the share of the foreign deals increased from 6% to 45% in 2015. Their interest was quite diversified in almost all segments.

Utilities: still leading...

Utilities kept leading the energy deals landscape in 2015 with 35 deals amounting to USD 3.1 billion, all in power generation except two in energy trading.

The privatisation tenders in 2015 were for one thermal power plant together with the operational rights of the feeding mines, and for five hydroelectric power plant packages including ten assets. Similar to the previous privatisations, all failed to attract foreign interest, as the foreign players tend to show higher interest in private deals.

The acquisitions of 900 MW Soma - B Thermal coal-fired PP by Konya Seker is the indication of the company's dedication to grow its coal power plant portfolio via privatisations, after their acquisition of 457 MW Kangal coal-fired PP in 2013.

The first asset on sale was the 16.5 MW Fethiye HPP to Eti Aluminium for USD 44 million. The owner is Cengiz Holding, which has a considerable power generation and distribution portfolio. So, this move by Eti Aluminium can be considered a part of the group strategy to grow in energy.

This was immediately followed by the tender for the bundled package of 6 MW Kepez-2 and 48 MW Manavgat HPPs, for which the highest bid of USD 128 million was placed by Kibar Holding. The company's presence in the energy sector is currently limited to its natural gas import license. So, this acquisition signals a growth strategy in other segments.

The third tender was for the package of Karacaoren 1 and 2 HPPs of 32 MW and 47 MW, respectively. The highest bid of USD 179 million was placed by Gama Enerji, which has been also a party to two other deals in 2015.

IC ICTAS, a familiar name in the privatisations, was the winner of the tender for the package of Kadincik 1 and 2 HPPs of 70 MW and 50 MW, respectively. The company, who placed USD 301 million to win this tender, had also acquired electricity distribution and supply licenses in Thrace region and Yenikoy (2 x 210MW) and Kemerkooy (3 x 210MW) lignite power plants via privatisation.

The final tender during the last days of 2015 was for the largest package on the shelf, including Dogankent, Kurtul and Torul HPPs of 75MW, 85 MW and 103 MW, respectively. Kolin Insaat, who won the race with USD 418 million, is also a familiar name in privatisations.

Gama Enerji was present in the private sphere as well, but as an acquisition target in two foreign deals. Following the exit of GE in 2014, IFC Asset Management Company (AMC) acquired 27% share in the company. The second deal was completed recently and the Malaysian state power company Tenaga Nasional acquired another 30% in Gama Enerji.

IFC also subscribed to a 23% stake in Unit subsidiary Unit Investment. The target company is currently developing a 1,260 MW CCGT project in Iraq, for which IFC is the mandated lead arranger. IFC and Unit will reportedly raise USD 365 million for Unit Investment to invest in new power generation capacity in the region surrounding Turkey.

Another deal involving thermal power plants was the sale of 15% stake in Silopi Elektrik owned by Park Holding to GSD Holding for USD 125 million. Silopi Elektrik has three asphaltite-fired power plant units in Şırnak, southeast Turkey, 2 x 135 MW operating and 135 MW under construction.

The share acquisition of Mitsubishi in Calik Energy is significant in terms of the acquirer's motivation. The Japanese company explained its investment thesis as to boost orders for infrastructure in the energy, power and other sectors in fast-growing economies such as Turkey and its surrounding countries, including Northern Africa, with the help of this partnership.

The remaining deals in the power generation segment were all in the renewables, and not only wind as we are used to see but also solar and geothermal. The Government's determination about the renewables still makes Turkey an attractive market. As part of a drive to install 20 GW of wind capacity by 2023, EMRA made a call for license applications for 3 GW of power capacity in 2015. The application round was massively

oversubscribed and saw applications to build over 42 GW of wind capacity. Another 2 GW is earmarked to be tendered in October 2016 and expected to get as much interest.

In this positive atmosphere, the largest deal on this front in 2015 was EBRD's acquisition of 20% stake of Akfen Hes Yatırımları (an Akfen Holding Company) in a deal worth USD 100 million. Akfen has a 210 MW operating portfolio of hydro, solar and wind projects, and EBRD's investment is expected to take this to 500 MW in wind and solar capacity.

Difficulties with grid access and a relatively low feed-in tariff had always been cited among the reasons for insufficient investment in solar power despite the high insolation rates. However, the per MW bids reaching TL 2.5 million/MW placed during the TEIAS tenders for the license packages no. 3, 4, 5 and 6 in 2015 (versus TL 0.8 million / MW in 2014) pushed the boundaries, and created questions about how the investors will be able to cover this with the current feed-in tariff levels.

Apart from these, three publicly disclosed deals in 2015 involved solar assets: KosiFrankensolar - IBC, VOE - Verusa, Afta - Mehdi Buyukkapan. We would expect a higher number of undisclosed deals among the small players trading unlicensed assets.

2015 was even more eventful on the geothermal front although just one disclosed deal in 2015 involved geothermal assets in Turkey. In that, Verusa Holding bought 21.45% share in Enda Elektrik, whose portfolio includes a geothermal asset in addition to wind.

At this point, albeit not an M&A transaction, we think it is well worth mentioning about Gürış Holding's 170 MW Efeler geothermal plant project, which will be among the ten largest geothermal plants in the world once built. And with its project cost of USD 970 million, it has been the world's largest geothermal plant to be financed in 2015. With a debt-equity ratio of 74:26, including USD 200 million from EBRD, this is a quite significant indication of the growing trust in the Turkish market.

Figure 3: Utility Deals in 2015

Date Announced	Target	Stakes in %	Acquirer	Acquirer Nationality	Deal Value (USD mn)
13-Jan-15	Soma B TPP	100%	Konya Seker	Turkey	686
27-Jan-15	Ansa Enerji Yatirim	56%	Aksel Enerji Yatirim Holding	Turkey	3
27-Jan-15	KosiFrankensolar	100%	IBC Solar	Germany	n.d.
3-Feb-15	Tahta HPP	100%	Guris Insaat	Turkey	n.d.
20-Feb-15	Bozuyuk CAPP; Cerkezkoj CAPP	100%	Asiatech Energy	Singapore	28
24-Feb-15	Arpa HPP	100%	Guris Insaat	Turkey	n.d.
1-Apr-15	BND Elektrik Uretim	100%	Cemas Dokum Sanayi	Turkey	28
27-Apr-15	VOE Elektrik Uretim	50%	Verusa Holding	Turkey	n.d.
20-May-15	Standard Enerji Uretim	50%	Verusa Holding	Turkey	0
25-May-15	Sembol Enerji	100%	Akcay Enerji	Turkey	1
25-May-15	Aktif Dogal Gaz Ticaret	100%	Akcay Enerji	Turkey	1
4-Jun-15	Calik Enerji Sanayi	n.d.	Mitsubishi Corp	Japan	n.d.
8-Jun-15	Silopi Elektrik	15%	GSD Holding	Turkey	125
4-Jul-15	Gama Enerji	27%	International Finance Corporation (IFC)	Multinational	n.d.
13-Jul-15	Akfen Termik Enerji Yatirimlari	30%	Akfen Holding	Turkey	28
13-Jul-15	Karine Enerji Uretim	100%	Akfen Holding	Turkey	24
13-Jul-15	Adana Ipekyolu Enerji Uretim	40%	Akfen Holding	Turkey	25
26-Jul-15	Ventis Enerji	100%	ACWA Power International	Saudi Arabia	n.d.
14-Aug-15	Birkapili & Gazipasa Enerji Uretim	100%	Melike Tekstil	Turkey	n.d.
17-Aug-15	Unit Investment	23%	International Finance Corporation (IFC)	Multinational	138
19-Aug-15	Afta Enerji Uretim Sanayi	100%	Mehdi Buyukkaplan	Turkey	1
2-Sep-15	Yelen-Gulpinar Enerji Uretim	70%	Catak Enerji	Turkey	4
18-Sep-15	Akocak Hydroelectric Power Plant	100%	Canakci HES Elektrik Uretim	Turkey	n.d.
6-Oct-15	Enda Enerji	21%	Verusa Holding	Turkish	17
10-Oct-15	Promak Enerji	40%	Akpol Insaat	Turkish	n.d.
19-Oct-15	Fethiye HEPP	100%	Eti Aluminyum	Turkey	44
23-Oct-15	Kepez 2 & Manavgat HEPP	100%	Kibar Holding	Turkey	128
30-Oct-15	Iklimya Elektrik Uretim	94%	Pamukova Elektrik Uretim	Turkey	5
30-Oct-15	Carsamba Enerji Uretim	37%	Kazim Gurol Yilmaz / Mithat Yilmaz	Turkey	n.d.
6-Nov-15	Akfenhes Yatirimlari ve Enerji Uretim	20%	EBRD	Multinational	100
9-Nov-15	Karacaoren I & II	100%	Gama Enerji	Turkey	179
16-Nov-15	Kadincik I, Kadincik II	100%	IC Ictas	Turkey	301
19-Nov-15	Demiroren Axpo Enerji Toptan Ticaret	50%	Axpo International SA	Luxemburg	n.d.
14-Dec-15	Gama Enerji	30%	Tenaga Nasional	Malaysia	243
18-Dec-15	Dogankent & Kurtun & Torul HPP	100%	Kolin Insaat	Turkey	418
Total					≈ 3,100*

n.d.: not disclosed

*: Includes estimated deal value for undisclosed deals

Oil and gas: started to find its sparkle back...

Although the deal number was just 9 in 2015, the total deal value of USD 1.73 billion was the highest since the spectacular privatisation figures in 2006. The two key events with disclosed deal values were share acquisition by Goldman Sachs in SOCAR Turkey and Total Oil's leaving Turkey. And, if it was disclosed, the value of the BP-TANAP deal would push the total oil&gas deal value to new highs.

Goldman Sachs's subscription to 13% in SOCAR Turkey for USD 1.3 billion was not a surprise to the market, as the company had finalised another deal with the group company Petkim, by buying 30% stake in its port. SOCAR Turkey's disclosure about the latest deal emphasised Goldman Sachs' confidence in its projects, and we believe that this especially refers to the

smooth progress in TANAP, as well as its other oil downstream projects.

The progress in TANAP prompted another investment, when BP finalised its long-awaited decision to buy 12% share in the project company for an undisclosed sum.

The third significant deal was Total Oil's exiting the Turkish downstream market, which was again not a surprise as the fifth largest company in this segment had already disclosed its intention in 2014. The main reason cited by the company was that it would be difficult to attain a large enough retail market share to achieve the level of profitability expected for the company's operations worldwide. Demiroren bought Total's service station network and commercial sales, supply and logistics assets for USD 356

million. Total Oil will keep its presence in Turkey through its lubricant activities, including a blending plant in Menemen and odourless LPG operations. Demiroren, on the other hand, plans to almost double the number of the service stations to 876, if not restructured, and add another 5% on top of its current market share of around 1.6%. This acquisition is quite in line with its strategy to diversify away from the LPG market, where it is currently the market leader.

With the acquisition of 50% in Aytemiz Petrol, 2015 was a year which saw the return of Doğan Group into the oil&gas sector after the sale of Petrol Ofisi shares to OMV.

The remaining deals involved very small players, selling their small fuel retail networks for undisclosed sum.

Figure 4: Oil and Gas Deals in 2015

Date Announced	Target	Stakes in %	Acquirer	Acquirer Nationality	Deal Value (USD mn)
30-Jan-15	Aytemiz Akaryakıt Dağıtım	50.0%	Doğan Enerji Yatırımları	Turkey	64
27-Feb-15	Marmara Petrolleri Sanayi	62.5%	Rifat Erbay	Turkey	0
13-Mar-15	TANAP Natural Gas Transmission Company	12.0%	BP Pipelines Limited	UK	n.d.
16-Mar-15	Odas Dogalgaz Toptan Satış	40.0%	ODAS Elektrik Üretim	Turkey	0
25-May-15	İkideniz Petrol ve Gaz Sanayi	100.0%	Akçay Enerji	Turkey	0
25-May-15	Cep Petrol Dağıtım Sanayi	99.5%	Akçay Enerji	Turkey	2
15-Aug-15	Socar Turkey Enerji	13.0%	The Goldman Sachs Group	United States	1,300
26-Aug-15	Staroil Petrolculuk	100.0%	Aksel Yatırım Holding	Turkey	8
1-Sep-15	Total Oil Turkey	100.0%	Demiroren	Turkey	356
Total					1,730

Looking ahead

Our expectations for the deal environment in 2016 mostly depend on how much of the commitments will be delivered by the political and regulatory bodies.

It will be another year of privatisations if the disclosed calendars are followed by, and therefore utilities will probably continue to lead the deals pack.

The Privatisation Administration had already disclosed the list of 15 HPPs and 3 NGPPs to be privatised until 2020. For three HPP packages including 51 MW Sanliurfa HPP, 26 MW Tortum HPP and the package of 62 MW Adiguzel HPP and 48 MW Kemer HPP, and two NGPPs, namely 1,482 MW Bursa and 180 MW Aliaga, the tender schedule is set to the first quarter of 2016.

If all goes to plan with the calendar, the high per MW bids for the HPPs may provide a similar story as 2015. And some more HPPs would follow in order to seize the high appetite of the local investors. However, the current weakness in the NGPP segment may result in another delay due to lack of interest. The same bleak outlook may halt the private NGPP projects as well, which are already finding extremely hard to secure project finance.

The long-awaited decision to privatise IGDAS has been finally released. IGDAS privatisation would have been a good candidate to take the 2016 deal values to a new high, but the recent announcements that the asset will be privatised via an IPO, make us less optimistic that IGDAS will ever hit our deal tables.

One may ask about TP, the state fuel retail company, which has been also declared to be privatised by 2020. Given the poor conditions in the fuel retail market, which has recently seen Total Oil leave, we do not expect this tender to take place in 2016. And, unlikely to receive much interest even if it does.

Back to power generation, we expect to see some more upbeat developments in the renewables market with the recent announcement for new investment incentives. The commitment by the Turkish Government to stand behind its promises in this segment is the key to attract more foreign investment including the likes of IFC and EBRD.

Regarding what is now a regular item in our new year expectations for the last couple of years, it would be nice to see a progress or completion on the Afsin-Elbistan B privatisation.

Last but not the least, the high amount of debts of the power distribution and retail companies has already reached a point where the companies warned EMRA about their financial sustainability due to the significant depreciation in TL since the privatisations. This may lead to share sales to refinance their foreign currency-denominated privatisation debt, which is already beyond their TL revenues.

If there is one, we do not want to open our 2016 report by saying 2016 did not break the rule since 2011 and the total deal values reached new lows. So fingers crossed that all goes well at least with the privatisations and some more trust is instilled by the political and regulatory bodies into all the hearts, foreign and local.

Given the obvious indications, it seems 2016 will not be much different from 2015.

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