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Mergers and acquisitions activity within the global power, utilities and renewable energy market

Power & Renewables Deals
2015 outlook and 2014 review

US$243.1bn

Worldwide power and renewables deal value up 70% year on year

66%

North American investors account for the biggest share of activity

13%

Increase in renewables deal value

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Introduction

Welcome to our 2015 Power and Renewables Deals outlook. It is the latest in our annual series in which we look at mergers and acquisitions activity in the power utilities sector.

We start the report with a look at some of the main themes that will drive deal activity in the year ahead. In 2014 the big deal spotlight was largely focused on the US. We expect activity in 2015 to be more globally balanced. There's likely to be an element of 'wait and see' as deal makers take stock of a changed energy pricing environment. There are also a number of wider economic uncertainties to give investors some pause for thought, not least the risk of deflation. But this is also likely to heighten interest in the stable contracted or regulated returns available in the sector. We see plenty of potential deal flow in the pipeline.

On the following pages we highlight the key developments that are likely to characterise 2015 M&A activity in the sector worldwide. We also look at the main deal hotspots which provide particular deal opportunities as well as review who is doing what and where. We conclude the report with a look at activity in the main regions of the Americas, Asia Pacific and Europe.

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2015 outlook: plenty of worldwide potential

As we reach the mid-decade, the upward momentum that we forecast in last year's report did indeed translate into greater power and renewables sector deal value in 2014. Much of the buoyancy in deal value came from the US gas sector with a surge in big gas pipeline deals. Five of these were for amounts of US$5bn plus and had fairly one-off rationales. This surge may not be indicative of the long-term trend but we believe there is plenty of potential elsewhere in the global power M&A pipeline.

We expect a lull in activity while the implications of a changed hydrocarbon pricing environment on US gas deals and other deal areas are assessed. But overall, there are good reasons to believe that any dip in US deal value might be taken up, in part at least, by activity elsewhere, not least because the flow of divestment- and privatisation-driven deals looks strong and sector M&A as a whole is becoming more globally balanced.

Whereas the mid-noughties was an era of mega corporate expansion deals, driven principally by the ambitions of European and some US players, we see the momentum coming mid-way through this decade as more global and multi-faceted. Although the US took the deal spotlight in 2014 and activity in Europe remains substantial, buy-side participation in deals in these territories is coming from a wider spread of players. More country markets are open to M&A and we are beginning to see the emergence of new hot spots, as emerging market power systems reform and expand. There are significant east-west and east-south investment flows and a wider community of financial investors as well as corporate buyers and sellers. And the market for renewables deals is maturing and widening.

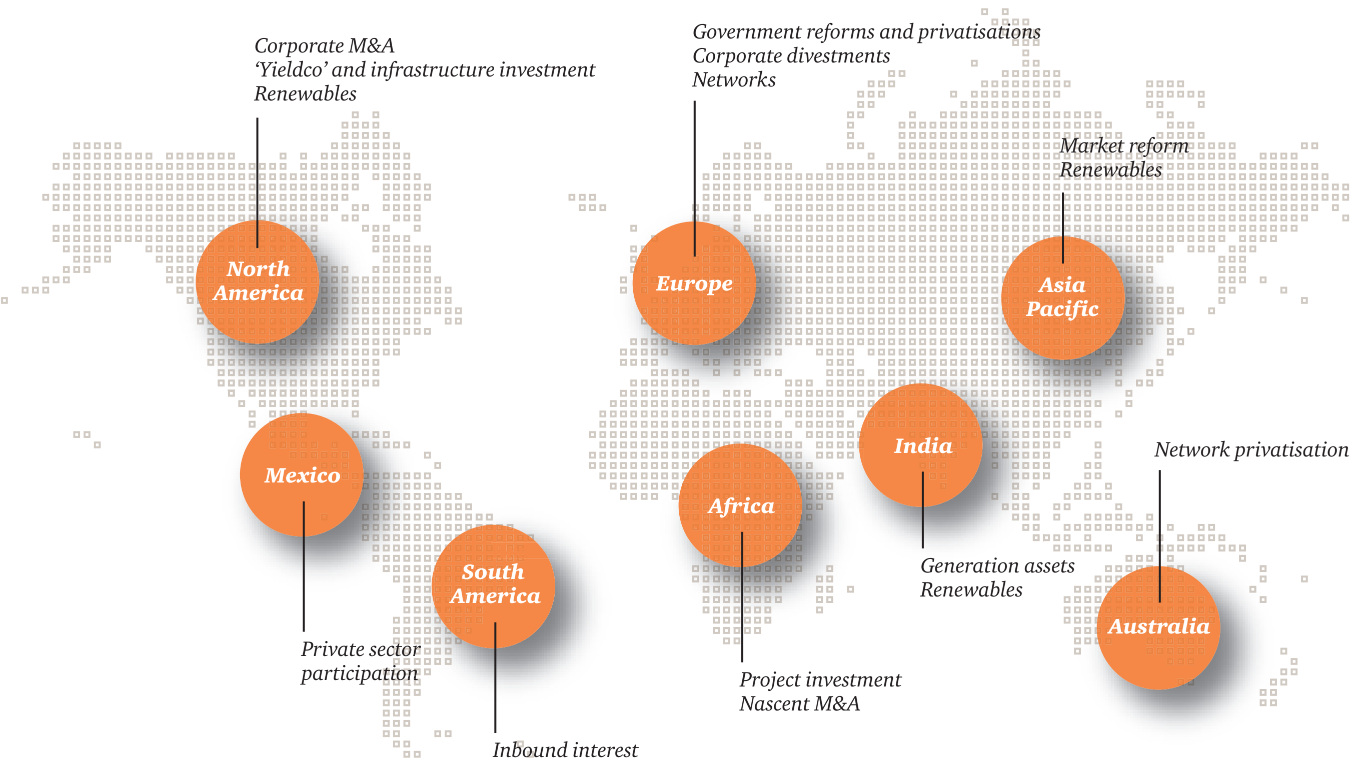
In this section, we look at the influences on deals and specific expectations for power and renewables deal activity.

In the later sections, we discuss current deal trends and the deals that have taken place in each region.

Megatrends and energy transformation add to M&A flow

Global megatrends such as technological shifts, policy moves to encourage clean energy and the changing world economic power balance are becoming increasingly reflected in power sector M&A activity. This momentum will gather pace as the effects of energy transformation, in the form of the growth of renewables, distributed generation, local energy systems and customer energy management, take root. This energy transformation is driving companies to reconsider their business models and search out new positions in the value chain. This could become a growing part of power sector M&A in the coming years. In a landmark move, E.ON has announced its intention to focus on renewables, distribution networks and customer solutions and to separately spin-off its power generation, global energy trading and exploration and production activities into a 'new company'. This strategic repositioning by E.ON will spur deal flow in its own right, quite apart from the moves that other companies in Europe and elsewhere in the world make in response to energy transformation.

Figure 1: Global deals outlook and opportunities – areas of activity



Source: PwC, *Power & Renewables Deals*

Stranded assets present opportunities as well as risks

A complex interaction of trends in demand and pricing plus the effects of policy-led energy transformation has led to the sidelining of many existing generation plants. For example, even some of the most modern and efficient new gas-fired generation assets in Germany have been left stranded as renewables and distributed generation eat away at the traditional centralised grid and large-scale generation model. In Australia, demand reduction in combination with current renewables policy is leading to reduced demand for centralised generation and the mothballing of a number of power stations. In the US, one can draw a direct line from environmental policy to the stranded asset risk faced by many of the country's coal generation plants. Closure may well be the fate of some plants but these situations could also lead to deal flow in 2015, as companies seek to make adjustments to their generation mix and as the policy environment evolves and changing hydrocarbon prices affect the economics of different plants.

A changing hydrocarbon pricing environment

Power sector deal makers will be mindful of the oil price plunge, both in terms of its overall economic impact and its more specific effect on the hydrocarbon fuel mix. Given the stance of Saudi Arabia as the key swing producer, it is plausible to assume that a lower oil price environment will persist. In turn, this will exert downward pressure on natural gas prices, particularly in Europe where the gas- to oil-price contract linkage remains significant. Globally there are also supply and demand factors leading to lower gas prices. In the US, natural gas prices have already fallen to two-year lows on the back of greater supply availability. In Asia, the gradual restarting of Japanese nuclear generation will ease gas pricing pressure in eastern markets. Falling gas prices will change fuel mix economics, causing power producers to further review their portfolio positions, boosting the competitiveness of gas-fired generation and potentially spurring deal activity for gas generation assets. There is also likely to be an impact on deal flow in the gas pipeline sector as buyers and sellers take time to assess the lower price implications. Persistently low hydrocarbon prices could also challenge the economics of renewables and nuclear generation, where these do not have stable policy support.

Continued US deal flow

Outside of the gas pipeline sector, many of the same imperatives that underpinned a strong recent US deal flow are set to continue. We expect to see a continued flow of generation assets coming to the market as companies re-evaluate their fuel mix and, in the case of some, seek to divest competitive assets in order to focus on the regulated parts of their business. In turn, this is providing opportunities for independent power producers to add to their portfolios. Additionally, 'yielcos' have demonstrated the desire to grow through affiliate as well as third party acquisitions. In both the regulated and unregulated sectors, the logic of gaining synergies through consolidation still has a long way to run. We expect to see some further corporate mergers, although a number of players will need time to pause as they negotiate regulatory clearance for recent large deals and then bed them down. The evolution of rate regulation and decoupling may also have an influence on deals. For example, we might see some utilities looking for acquisition opportunities that will give them exposure to more progressive rate regulation regimes so they can take some of the lessons from that to influence other state regulatory frameworks.

Appetite will remain high for regulated asset sales

The appetite from buyers for regulated assets with stable and predictable cash flows has been strong. Corporate divestments have provided a source of such opportunities but, in general, there's been a shortage of sales of good assets. Where they have been available, competition has been intense. We expect this scarcity to continue in 2015 but to be helped by government sales, bringing deals to the table in different parts of the world. Chinese state-owned companies and non-corporate investment buyers are strongly represented in the purchases of such assets, as evidenced by State Grid of China's US$2.8bn purchase of a 35% stake in a vehicle controlling Italy's energy grids and Australian infrastructure investment fund manager Macquarie's recent moves for US utility Cleco and for E.ON's Spanish operations.

Australian network opportunities keenly anticipated

Anticipation will be particularly keen for any network assets that become available. Expansion through acquisition is a goal for some network operators, while for non-corporate investors, networks continue to be a favoured target asset in the power sector. All eyes will be on a potential flow of privatisation sales in Australia. Subject to the outcome of early 2015 state elections, the privatisation of transmission and distribution grids in Australia will attract many interested parties, not least from China and south-east Asia, with interest expected from companies such as State Grid Corporation of China, China Southern Power Grid and Cheung Kong Infrastructure Holdings. Singapore Power is already an owner of AusNet and it remains to be seen whether it will move to extend its Australian network involvement.

All eyes on Mexico and Latin American growth

New legislation opening the Mexican electric industry to private sector participation in generation, transmission, distribution and power marketing activities became effective on 12 August 2014. As the reforms are rolled out, we anticipate considerable project investment from foreign companies. Spain's Iberdrola, Gamesa and Acciona are reported to be planning to invest nearly US$14bn in Mexico between 2015 and 2018. GDF Suez is also active in the country and US companies are also likely to take a close interest in the liberalisation process. Organic investment looks most likely in the short-term but M&A might also transpire to enable companies to establish a firm footprint in the newly opening market. Deal activity is also heating up considerably in South America, with continued inbound interest, as evidenced by 2014's US$7.3bn acquisition of Cia General de Electricidad in Chile by Spain's Gas Natural Fenosa.

Government moves could boost deals

As well as the possible privatisations in Australia and electricity reform in Mexico, 2015 looks set to provide further deal flow from government moves elsewhere. In Turkey, further power sector privatisation is expected and, in Canada, a government report has put electricity market reform back on the agenda in Ontario. In the UK, one of the first issues for a post-election government will be the findings of the competition investigation into the energy supply market being conducted by the Competition and Markets Authority (CMA). Vertical integration will be an issue under consideration and it's possible that any policy changes could trigger M&A moves.

'Go abroad' encouragement for Chinese companies

After a relatively quiet year in 2014 compared to earlier years, we expect greater momentum in 2015. As well as the catalyst of the possible Australian privatisations, such momentum will be helped by recent measures announced by the Chinese government that relax the rules on foreign investment, with the intention of encouraging 'go global' moves. But companies are also focused on the anti-corruption campaign being prioritised by the Chinese government, which is necessitating important corporate attention.

Japanese reforms spur alliances

The electricity reforms in Japan are prompting some deal activity in the form of joint ventures. Tepco and Chubu Electric Power Company have already announced their intention to form a joint alliance and similar ventures are expected between Tokyo Gas and Kansai Electric Power Company, and between Marubeni and Osaka Gas. In addition, we don't rule out international deals by Japanese companies in order to boost their experience and capabilities of retail operations in competitive markets as they prepare for market liberalisation.

The battle for 'behind the meter'

A key area for power companies in the coming years is competition for the territory 'behind the meter': in particular, the development of strategies for power companies to become more relevant to customers as 'energy enablers' and deliverers of innovative energy solutions in a world of self-generation, big data, digital technology, e-mobility and smart grids. We would expect M&A to increasingly reflect these developments as companies seek to develop alliances, R&D, technology, analytics as well as their customer offer. It's likely that the US, in particular, will see an upturn in M&A activity as solution providers seek to expand their sales reach prior to the expected surge in demand before the investment tax credit reduction at the end of 2016. Deal flow is likely to be focused on smaller rather than larger deals, although we wouldn't rule out more landmark moves in the medium to longer term.

Long-term sights set on Africa

Chinese power companies and Japanese trading houses are already very active in sub-Saharan Africa. Others are following. In 2013, for example, GDF Suez made its first investment in sub-Saharan Africa after signing power purchase agreements (PPAs) for two greenfield power plants in South Africa. At this stage in its development, Africa is a 'hot spot' for project investment rather than M&A. The nature and focus of activity varies. Independent power producers (IPPs) have an important part to play across the continent. In South Africa, for example, a series of procurement programmes is designed to attract IPP investment. In the wider southern Africa region, the potential for the development of gas-fired generation and infrastructure is immense. Elsewhere, there is considerable potential for geo-thermal, hydro and other renewables, as well as thermal power. In Tanzania, unbundling is part of a new reform roadmap but much of it remains in the medium distance. In Nigeria, a round of privatisation reforms has been completed and companies are in 'digest and assess' mode. Across all these areas, the secondary market for deals to sell down debt or equity remains fairly immature. We expect that to change over the coming years.

Deal flow: mid-decade momentum builds

Total worldwide power and renewables 2014 deal value was up 70% year on year, rising from US$143.3bn to US$243.1bn (figure 2). It's the highest deal value seen in the current decade and any further upward movement would begin to move power and renewables deals back towards the heady levels last seen ten years ago. 2014 was the first time that the total value of deals moved above the US$100–200bn range established since the pre-credit crisis year of 2007 (figure 3).

But there are one-off reasons for the high total deal value. The surge was due to an exceptional number of very big deals in the US gas pipeline sector arising from corporate restructuring. The value of gas deals rose more than fourfold, from US$28bn in 2013 to US$118.4bn in 2014, with US$100bn of this coming from US targets. Deal activity in terms of the number of deals remained fairly flat in each of the sub-sectors of electricity, gas and renewables.

Total value, though, was up in all sub-sectors. The value of electricity deals rose 6%, from US$93bn in 2013 to US$99bn in 2014, while renewables deal value was up by 13% year on year, from US$22.8bn to US$25.8bn.

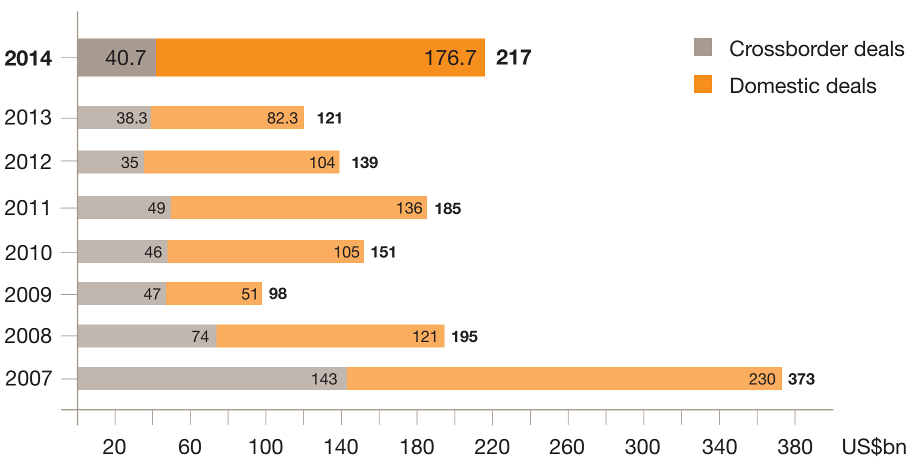
Not surprisingly, given the surge in US gas deals, the total value of domestic deals increased significantly, nearly doubling year on year. But international deal values also rose, up 6.2% to US$40.7bn. This continues a three-year trend of modest increases since 2011, but still leaves international deal value some way short of the levels recorded in the years immediately before that.

Figure 2: All electricity, gas and renewables deals by value (US$bn) – 2013 and 2014

		2013		2014		Change in 2014	
		Number	Value	Number	Value	% number	% value
Total deals		**1,048**	**US$143.3bn**	**1,043**	**US$243.1bn**	**(0)%**	**70%**
of which:	Electricity	407	US$93.0bn	423	US$99.0bn	4%	6%
	Gas	146	US$27.5bn	139	US$118.4bn	(5)%	330%
	Renewables	495	US$22.8bn	481	US$25.8bn	(3)%	13%

Note: Numbers are rounded to a single decimal place. Rounding accuracy means totals may not exactly match the sum.
Source: PwC, *Power & Renewables Deals*

Figure 3: Electricity and gas sector deal activity (US$bn)



Source: PwC, *Power & Renewables Deals*

Deal makers: who's doing what

On the face of it, diversity on the buy-side of deals has reduced substantially, with non-corporate buyers accounting for only 20% of deal value in 2014 compared with 31% in the previous year (figure 4). But this was largely due to the impact on value of the large number of gas deals, most of which were corporate deals. Outside of the gas sector, in electricity and renewables, acquisitions by buyers such as insurance funds, pension funds, sovereign wealth funds and others who are not corporates continue at a significant level.

These 'non-corporate' buyers are featured in many big deals outside of the top five. Four of the largest twelve power deals in 2014 had 'non-corporates' on the buy side.

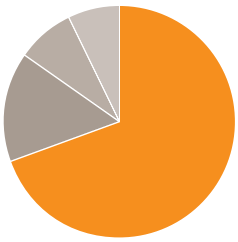
The biggest of these saw Berkshire Hathaway Energy purchase Canadian transmission operator AltaLink in a deal worth US$5.5bn, and an investor group led by British Columbia Investment Management Corporation and Macquarie Group funds acquire Louisiana-based Cleco Corporation for a total deal value of US$4.7bn. The latter investor group also included the insurance and investment subsidiary of Manulife Financial Corporation and we continue to see insurance companies and pension funds taking an active buyer interest in the sector.

The top five deals tables for both electricity and gas show the tilt of deal activity towards North America, with all but two of the ten featuring buyers and sellers from within the region. Greater geographical diversity features in the five largest renewables deals, which are spread across North America, Europe and Asia. Four US$1bn-plus deals helped maintain the value of renewables deals on an upward path, although the actual number of renewables deals was down slightly.

The upturn in the value of deals for renewable power targets comes on top of a 25% year on year increase the previous year, taking renewables deal value back to levels similar to the US$26bn reached three years earlier, in 2011. Uncertainty about policy support slowed or even stalled deal flow in some countries, such as Australia and parts of Europe, but this was offset by increases in renewables deal value in other parts of Asia Pacific region, as well as in North and South America.

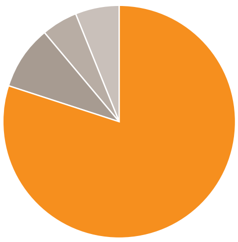
Figure 4: Institutional and infrastructure bidder activity
(Deal value shown in parenthesis)

Source of funds 2013



- Corporate **69%** (US$99.3bn)
- Institution **15%** (US$22.1bn)
- Infrastructure fund **8%** (US$11.6bn)
- Other **7%** (US$10.4bn)

Source of funds 2014



- Corporate **80%** (US$194.9bn)
- Institution **9%** (US$21.1bn)
- Infrastructure fund **5%** (US$12.8bn)
- Other **6%** (US$14.3bn)

Note: Numbers are rounded to a single decimal place. Rounding accuracy means totals may not exactly match the sum. Corporate includes energy and power and utility companies; Institution includes pension funds, insurance funds, mutual funds, sovereign wealth funds and banks, etc.; Infrastructure fund includes specialised infrastructure funds and private equity funds; Other comprises sovereign state, market purchase, private investor, non-disclosed acquirers, management buy-out, etc.

Source: PwC, *Power & Renewables Deals*

Figure 5: Top five – electricity deals 2014

No.	Value of transaction (US$bn)	Date announced	Target name	Target nation	Acquirer name	Acquirer nation
1	12.1	30 April 14	Pepco Holdings Inc.	United States	Exelon Corporation	United States
2	9.2	23 June 14	Integrys Energy Group Inc.	United States	Wisconsin Energy Corporation	United States
3	7.3	03 Dec 14	Compania General de Electricidad SA (96.5%)	Chile	Gas Natural Fenosa SDG SA	Spain
4	5.5	01 May 14	AltaLink Holdings LP	Canada	Berkshire Hathaway Inc.	United States
5	4.7	20 Oct 14	Cleco Corporation	United States	Macquarie Group Ltd - MGL; Manulife Financial Corp; British Columbia Investment Management Corporation	Australia

Figure 6: Top five – gas deals 2014

No.	Value of transaction (US$bn)	Date announced	Target name	Target nation	Acquirer name	Acquirer nation
1	53.4	10 Aug 14	Kinder Morgan Energy Partners LP (65.9329%)	United States	Kinder Morgan Inc.	United States
2	12.0	10 Aug 14	Kinder Morgan Management LLC (87%)	United States	Kinder Morgan Inc.	United States
3	10.8	10 Aug 14	El Paso Pipeline Partners LP (59%)	United States	Kinder Morgan Inc.	United States
4	9.9	15 June 14	Access Midstream Partners LP (50%)	United States	Williams Companies Inc.	United States
5	6.0	15 June 14	Access Midstream Partners LP (27.4%) Access Midstream Partners GP LLC	United States	Williams Companies Inc.	United States

Figure 7: Top five – renewables deals 2014

No.	Value of transaction (US$m)	Date announced	Target name	Target nation	Acquirer name	Acquirer nation
1	2,372	17 Nov 14	First Wind Holdings Inc.	United States	SunEdison Inc; TerraForm Power Inc.	United States
2	1,587	26 Sep 14	Himachal Baspa Power Co. Ltd.	India	JSW Steel Ltd.	India
3	1,116	26 Nov 14	Power Station; Kaidi Sunshine Bio-energy Investment Co Ltd; Wuhan Kaidi Green Energy Development & Operation Co Ltd.	China	Wuhan Kaidi Electric Power Co. Ltd	China
4	1,064	31 Jan 14	London Array 1 wind farm	United Kingdom	Caisse de Depot et Placement du Quebec	Canada
5	930	28 Nov 14	Energisa SA	Brazil	Brookfield Renewable Energy Partners LP (40%)	Canada

Figure 8: Who's investing and why?

Who	Level of activity	What are their aims?	Examples
Chinese state-owned enterprises	Medium	• Long-term strategic investment	State Grid Corporation of China, China Southern Power Grid, China General Nuclear, Shanghai Electric Power Company
Sovereign wealth funds	Medium	• Long-term strategic investment	Government of Singapore Investment Corporation, Qatar Investment Authority, Abu Dhabi Investment Authority, Kuwait Investment Authority
Infrastructure & private equity funds	Medium	• Stable long-term investment • Controlling positions preferred • Yield and growth	Blackstone, GIP, IFM Investors, KKR, Macquarie Funds
Pension & insurance direct investors	High	• Stable long-term investment • Minority positions acceptable • Yield and growth	Allianz Capital Partners, Borealis Infrastructure, British Columbia Investment Management Corporation, Canadian Pension Plan Investment Board, PSP
Investment holding companies and other institutional investors	High	• Stable long-term investment • Yield and growth	Berkshire Hathaway, Cheung Kong Infrastructure Holdings
Japanese trading houses	Medium	• Financial investment and operations • Geographic diversification	Mitsubishi Corporation, Mitsui & Co, Marubeni Corporation
Corporates (excl. China state-owned)	Medium/High	• Consolidation and synergies in adjacent domestic/regional markets	Exelon, Dynegy
	Low	• Expansion in growth markets	Enel, GDF Suez, Gas Natural Fenosa

Source for figures 5, 6, 7 and 8: PwC, *Power & Renewables Deals*

Deal places: regional analysis

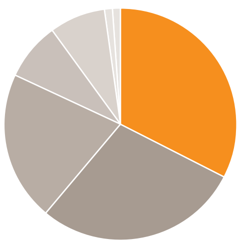
Europe, followed closely by Asia Pacific, led the way in terms of the number of deals by both bidder and target in 2014, but it was North America and US deals that were firmly in front as measured by the value of deals. North American bidder activity as a share of all worldwide power deal value rose from 28% in 2013 to 66% in 2014, with the share of target value coming from the region rising almost identically. North American bidder volume rose 19%, up from 204 to 242 deals year on year.

Despite this increase, deal volumes from European and Asia Pacific bidders remain well ahead of that in North America. Indeed, at 333 and 321 deals respectively, bidder volumes from Europe and Asia Pacific are nearly level pegging. But there was an opposite year on year movement – while deal volume involving European buyers fell 9%, purchases by Asia Pacific buyers inched up 1.3%. Moves by European utilities to gain footholds in fast-growth markets continue to be an important theme. Gas Natural Fenosa's US$7.3bn purchase of Chile's Cia General de Electricidad gave a big boost to South American target deal value.

The increase in Asia Pacific activity has mainly featured Chinese, Australian, Indian and Korean buyers. Much of this is domestic in character. International expansion continues to be on the agenda for many buyers from the region, but it's been a quiet period for such moves after a busy time the year before. State Grid Corporation of China's US$2.8bn purchase of a 35% stake in the Italian natural gas and electric power infrastructure company, CDP Reti, was the only notable such move from a corporate buyer in 2014.

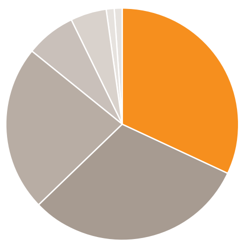
Figure 9: 2014 deal percentages by continent
(2013 percentages shown in parenthesis)

Deal number by target



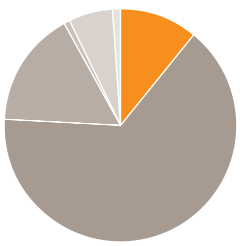
- Europe **33%** (35%)
- Asia Pacific **29%** (28%)
- North America **21%** (20%)
- Russian Federation **8%** (7%)
- South & Central America **8%** (7%)
- Africa **1%** (2%)
- Middle East **1%** (0%)

Deal number by bidder



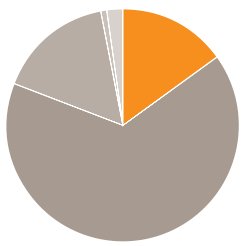
- Europe **32%** (35%)
- Asia Pacific **31%** (30%)
- North America **23%** (19%)
- Russian Federation **7%** (8%)
- South & Central America **5%** (5%)
- Africa **1%** (1%)
- Middle East **1%** (1%)

Deal value by target



- Asia Pacific **11%** (30%)
- North America **65%** (26%)
- Europe **16%** (32%)
- Russian Federation **1%** (5%)
- South & Central America **6%** (5%)
- Africa **0%** (2%)
- Middle East **1%** (0%)

Deal value by bidder



- Asia Pacific **15%** (34%)
- North America **66%** (28%)
- Europe **16%** (28%)
- Russian Federation **1%** (5%)
- South & Central America **2%** (3%)
- Africa **0%** (1%)
- Middle East **0%** (1%)

Note: Numbers are rounded to a single decimal place. Rounding accuracy means totals may not exactly match the sum.
Source: PwC, *Power & Renewables Deals*

Refocusing on the regulated space is also being accomplished by consolidation in the unregulated part of the US power sector.

Americas

Big gas pipeline deals involving Kinder Morgan, Williams and Access Midstream Partners dominated the list of the biggest US deals in 2014. These companies were responsible for the top five gas deals, producing US$92.2bn of deal value. Three further US gas pipeline transactions just outside the top five added US$4.6bn more. Together, these eight US$1bn-plus gas pipeline deals accounted for US$96.8bn, or just over three-fifths (61%) of total 2014 North American power and renewables deal value.

The Kinder Morgan and Williams gas deals centred around decisions on the best way to structure for growth. The two companies have both simplified their structures but along different lines. In a landmark move, the former has moved away from the master limited partnership (MLP) structure and consolidated Kinder Morgan Energy Partners, Kinder Morgan Management and El Paso Pipeline Partners into one company – Kinder Morgan Inc. Williams retained the MLP structure but merged the Williams and Access MLPs into one. The US gas pipeline sector has been fast-growing since the advent of shale gas. Lower oil and gas prices may reduce the opportunities for near-term shale gas development, and related M&A, but they are already also likely to further stimulate longer-term market demand for gas, primarily in industrials, power generation and LNG exports.

Strong US deal flow

Gas was not the only sector seeing big deals flowing though. North American electricity deal value surged 82%, from a relatively low US$27bn in 2013 to US$49bn in 2014, and renewables deals recorded a healthy 33% increase from US$6.3bn to US$8.4bn. The renewables total was boosted by SunEdison's US$2.4bn deal for First Wind, which takes the company into the US windpower sector for the first time, doubles its addressable market and sets it on course to be the world's largest renewable energy company. The deal allocates the First Wind development projects to SunEdison, with contracted operational projects ultimately going to TerraForm Power, its 64%-owned listed 'yieldco' unit.

Growth through consolidation was a big driver of corporate M&A among US power utility companies. Heading a wave of consolidation in 2014 was Exelon Corporation and Pepco Holdings, with a US$12.1bn merger based on the rationale of geographic proximity in the Mid-Atlantic and overall regulated rate base expansion. The combined electric and gas utility businesses will serve approximately 10 million customers and have a rate base of approximately US$26bn.

A similar rationale lay behind the US$9.2bn Wisconsin Energy Corporation/Integrys Energy Group combination. The combined entity is projected to have a regulated rate base of $16.8 billion in 2015, serving more than 4.3 million total gas and electric customers across Wisconsin, Illinois, Michigan and Minnesota, as well as operating nearly 71,000 miles of electric distribution lines and more than 44,000 miles of gas transmission and distribution lines. A third big power utility expansion move saw NextEra Energy acquire Hawaiian Electric Industries Inc. in a US$4.4bn deal. The offshore move builds on NextEra's renewable energy capabilities through its NextEra Energy Resources subsidiary and its experience serving customers in Florida through Florida Power & Light.

Regulated and unregulated attractions

The attraction of network assets was reflected in the US$5.5bn purchase of Altalink in Canada by Berkshire Hathaway from SNC-Lavalin Group. Altalink owns and operates about half of Alberta's high-voltage transmission grid and will operate as a separate unit of Berkshire Hathaway Energy. As part of the overall sale agreement, SNC-Lavalin and MidAmerican Transmission, a subsidiary of Berkshire Hathaway Energy, have committed to seeking out new engineering, procurement and construction opportunities together within North America.

Refocusing on the regulated space is also being accomplished by consolidation in the unregulated part of the US power sector. In two deals worth a total of US$6.3bn, Dynegy acquired 12,500MW of coal and gas generation from Duke Energy and Energy Capital Partners, almost doubling its existing portfolio to nearly 26,000MW. Independent power producers like Dynegy are seeking to expand merchant asset holdings to capitalise on economies of scale in regional power generation, while utility owners like Duke focus on more predictable returns from regulated assets.

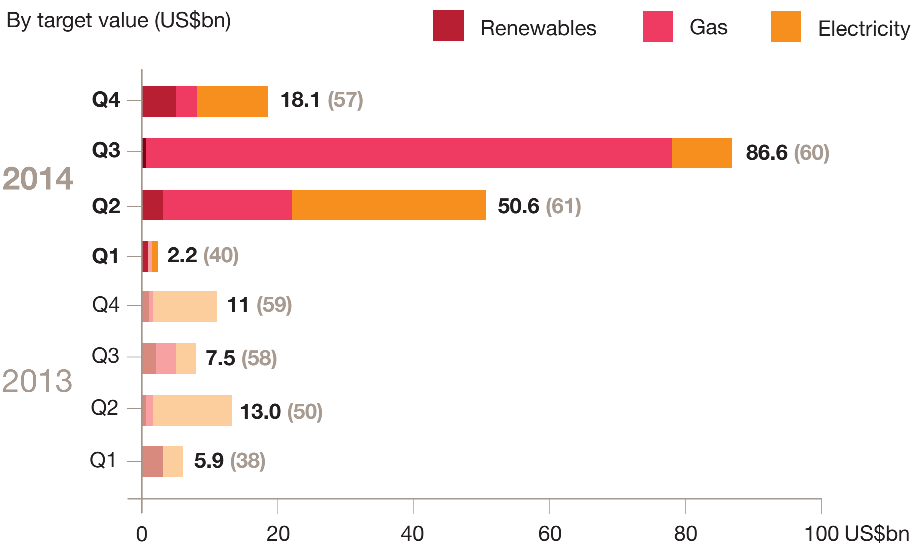
Latin America spotlight on Chile

In South America, power and renewables deal volumes in 2014 remained fairly flat year on year, but total deal value was up substantially, from US$6.8bn in 2013 to US$15.8bn in 2014. Much of this came from the US$7.3bn takeover of Cia General de Electricidad in Chile by Spain's Gas Natural Fenosa. The deal enables Gas Natural Fenosa to enter the Chilean energy market by taking over the top electricity and gas distribution company in the country, providing electricity to 40% of the Chilean market.

While the Gas Natural Fenosa deal led the way in terms of size of deals, there was sizeable other 2014 deal activity in South America. Nineteen deals had values in the US$100m–US$1bn range. The biggest was a US$930m purchase by Brookfield Renewable Energy Partners of a multi-technology renewable portfolio in Brazil from Energisa, comprising 163 MW hydro, 150 MW wind and 175 MW biomass, underpinned by long-term contracts.

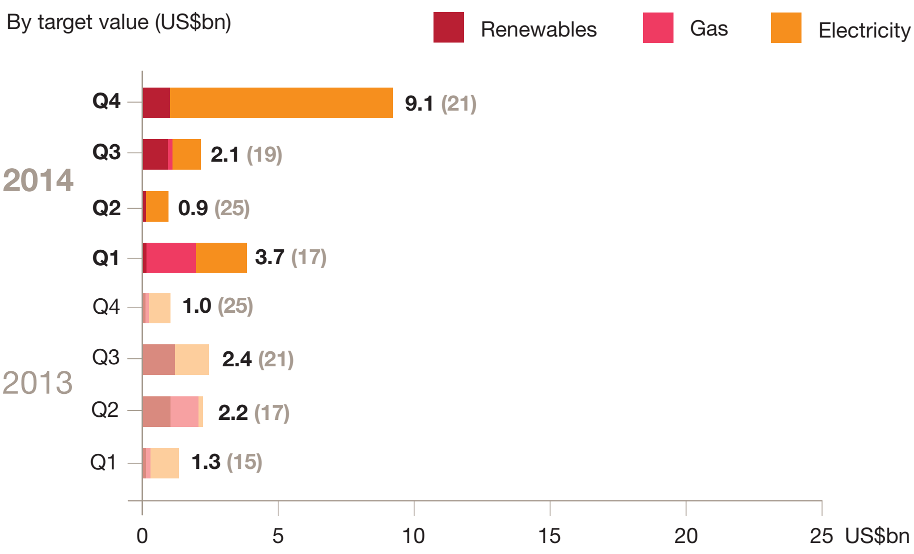
Another large deal involving renewables was GDF Suez's US$794m sale of its power generation assets in Panama and Costa Rica to Columbia-based power generation company Celsia. GDF Suez is targeting regions such as South America for expansion and views the deal as giving the company an opportunity to redeploy the proceeds in fast-growing countries. Elsewhere in South America, a US$860m transaction saw Santiago-based Enersis bought by Enel. Enersis operates electric power generation, transmission and distribution assets in Argentina, Brazil, Chile, Colombia and Peru. The move is part of a wider reorganisation of Enel and Endesa activities, to put Endesa's Latin American assets under direct Enel control.

Figure 10: North America quarterly tracking of deals – 2013 and 2014
(Number of deals shown in parenthesis)



Source: PwC, *Power & Renewables Deals*

Figure 11: South & Central America quarterly tracking of deals – 2013 and 2014
(Number of deals shown in parenthesis)



Source: PwC, *Power & Renewables Deals*

Asia Pacific

Deal volume for Asia Pacific power and renewables targets edged up 2.4% year on year in 2014 but the total value of deals was down 38%, from US$42.5bn in 2013 to US$26.6bn in 2014. Renewables deal value was the only sub-sector gainer, rising 22% from US$4.9bn in 2013 to US$6bn in 2014, with a series of deals in India and China offsetting a hiatus in Australian renewable deal flow. There were fewer big deals – six US$1bn-plus deals in 2014 compared to nine such deals in 2013.

The number of deals involving Asia Pacific buyers remained more or less unchanged but the value of deals involving Asia Pacific buyers dropped, down 24% from US$48.3bn in 2013 to US$37bn in 2014. Caution was being exercised by Chinese, Japanese and other south-east Asian bidders in their approach to international deals, with State Grid Corporation of China's network purchase in Italy being the only notable big corporate move for a target outside the region.

Deals worth US$4.7bn and US$3.1bn involving Macquarie Group funds for US utility Cleco and for the Spanish operations of German utility company E.ON are included in the Asia Pacific buyer total, on account of the fact that the group is headquartered in Australia. But investors in the buying funds are from many territories and include many US and European investors. The buy-side in these two deals also featured Canadian and Kuwaiti investment entities, highlighting the global nature of the investors.

Renewables boosted by India and China deals

The greater deal value attributable to renewables deals in the region stemmed from two US$1bn-plus domestic deals for hydropower and biomass generation assets in India and China respectively. In the largest of these, JSW Energy, part of the JSW Group, a steel, energy, infrastructure and cement conglomerate, acquired two hydroelectric projects in Himachal Pradesh from Jaiprakash Power Ventures in a US$1.6bn deal. The second, a US$1.1bn acquisition in China by Wuhan Kaidi Electric Power, included 87 biomass power stations, five windpower projects and three hydroelectric installations.

Renewables deal activity in Australia was much more subdued, with just five deals in 2014, only one of which was announced in the second half of the year. The outlook for Australian renewables deals has been clouded by the cessation of the carbon tax, as well as the recent review and possible reduction in the 2020 renewable energy targets by the Federal Government. A reduction in renewable targets is likely to adversely affect the industry, given investments already made in achieving the existing targets. It is difficult to foresee any pick-up in Australian renewables deal flow until there is a more positive and certain policy outlook for renewable power projects.

Government sales boost deal flow

The largest Australian deal in 2014 was AGL Energy's US$1.5bn acquisition of the Macquarie Generation (MacGen) coal-fired assets from the New South Wales (NSW) government. A further NSW generation sale was the US$190m purchase of the 667MW Colongra gas-fired power station by Snowy Hydro at the end of 2014. A month earlier, Snowy Hydro bought Lumo Energy and Direct Connect Australia for US$568m. Snowy Hydro is itself government-owned and has been the subject of regular privatisation conjecture.

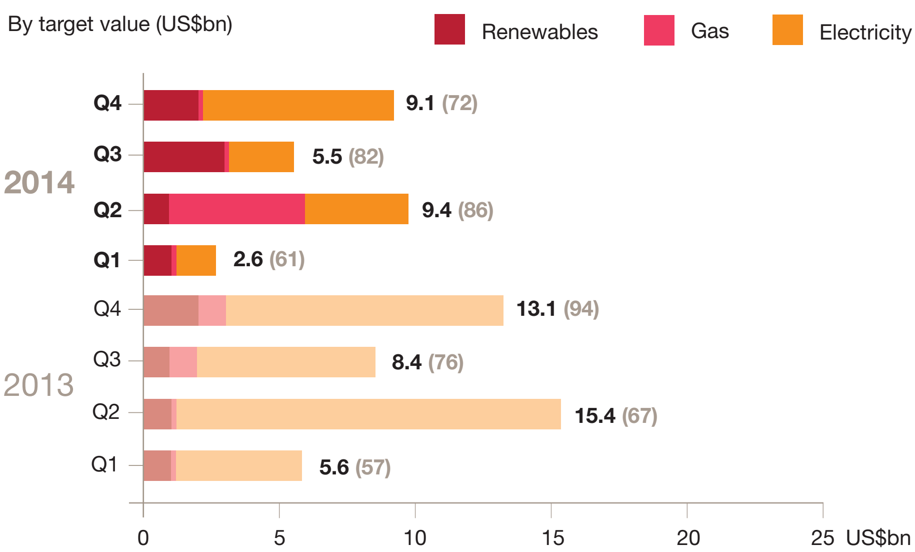
The Colongra sale was protracted, in part due to reduced overall demand for power and the mothballing of a number of Australian generation plants. Against this background, the NSW government is yet to find a buyer for the coal-fired Vales Point power station. TPG Capital is likely to face similar difficulties with its possible sale of Alinta Energy, which it acquired in 2011 as part of a debt-for-equity swap.

2015 sights turn to network assets

The momentum of state owned assets sales in Australia is set to gather pace in 2015 and 2016. The Queensland government plans to offer leases of 50 years or 99 years for transmission company Powerlink and two distribution companies – Energex and Ergon Energy. New South Wales plans to offer long-term leases of 100% of the Transgrid transmission network as well as half stakes in the Ausgrid and Endeavour Energy distribution networks.

Queensland has also announced its intention to sell generation assets but the difficult environment for generation will mean networks will be the priority. Both the NSW and Queensland privatisations are subject to the outcome of general elections in each state in early 2015. Elsewhere, electricity privatisation remains the subject of discussion in Western Australia but does not have as much political support. As we discussed in the earlier 'deal outlook' section, the Australian privatisations are likely to attract considerable interest from domestic and overseas institutional investors, such as Canadian pension funds, and awaken outbound moves by Chinese, Japanese and south-east Asian bidders.

Figure 12: Asia Pacific quarterly tracking of deals – 2013 and 2014
(Number of deals shown in parenthesis)



Source: PwC, *Power & Renewables Deals*

Australian privatisation plans are exciting strong international interest.

Europe

Power and renewables deal activity in Europe continued to dip in 2014. The number of deals for European targets was down 7% year on year, while target deal value was down 13%, from US$45.4bn to US$39.5bn. We have separated out activity in the Russian Federation. Here, target deal numbers rose from 74 to 79 deals while target deal value was down substantially to US$1.7bn in 2014 from US$7.9bn in 2013, a year when the total was boosted by US$5.1bn attributable to the Moscow Power Company privatisation and Russian grid restructuring.

The combination of falling deal value in Europe and rising deal value in most other regions meant Europe's share of worldwide power and renewables target deal value halved, down from 32% in 2013 to 16% in 2014. In part, this is because European targets have been in short supply rather than being less attractive. But the trend away from Europe also reflects regulatory uncertainty which is taking some time to resolve, as well as the constraints faced by many European power utility companies and the maturity of the market opportunity in Europe. With the notable exception of Gas Natural Fenosa's expansion into the Chilean market, corporate buyer activity has been subdued, and for the second year running, no deals for European targets were big enough to feature in the 2014 power deals top five (p. 7).

Corporate restructuring

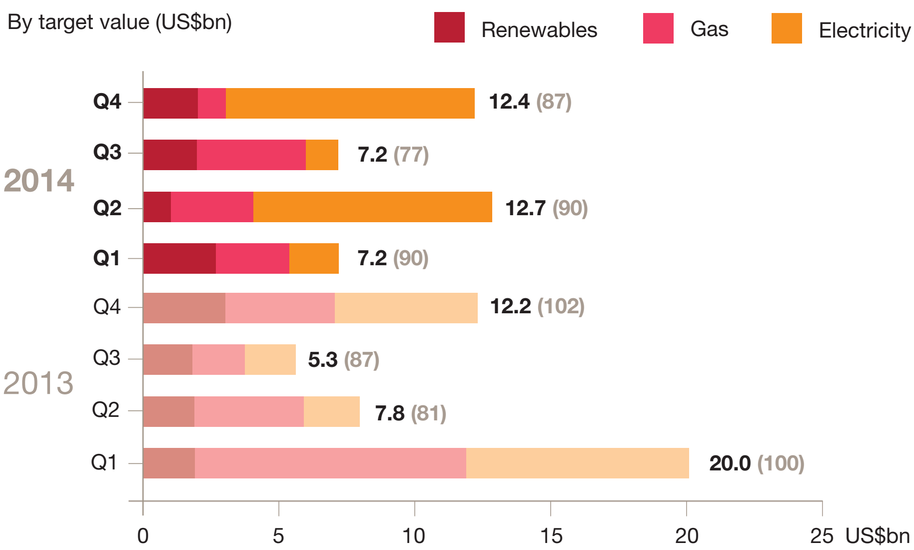
There were ten US$1bn-plus deals for European targets in 2014 compared to 13 the year before. The biggest came as part of the restructuring and deleveraging being undertaken by Enel, designed to enable it to compete in growth markets and optimise its operations in Europe. The company raised US$3.4bn in a public offer to investors in November 2014 for 19% of Endesa. Enel is taking direct control of Endesa's Latin American operations and focusing the Endesa business on Spain and Portugal. In total, during 2014, Enel realised US$4.8bn from M&A disposals. Enel's deleveraging is set to produce further deal flow in 2015 with the planned disposal of its assets in Slovakia and Romania.

Similar deleveraging is being undertaken by E.ON. The second-largest deal in Europe was the US$3.1bn divestment of all of its Spanish and Portuguese businesses to Macquarie European Infrastructure Fund IV, with a minority stake going to Wren House Infrastructure, the global direct infrastructure investment vehicle of the Kuwait Investment Authority. E.ON had put its operations in Italy and Spain on the block as part of a retrenchment from southern Europe.

The Italian divestment is taking time against a background of reduced demand and lower prices. But it moved partially forward in January 2015 with the announcement of the sale of its Italian coal and gas generation assets to Czech energy company Energetický a Průmyslový Holding (EPH) for an undisclosed sum. E.ON will be hoping to follow up with further asset sales during 2015.

EPH had earlier bought the 2GW Eggborough coal-fired power station in the UK, indicating a clear strategy of pursuing targets to complement its existing utility business, which includes substantial coal extraction activities. In contrast, a number of companies are selling thermal generation assets as part of a strategic repositioning of their generation portfolios. For example, UK company Centrica has been seeking buyers for some of its gas-fired plants while Sweden's state-owned utility Vattenfall plans to press ahead with the sale of its lignite power plants in Germany.

Figure 13: Europe quarterly tracking of deals – 2013 and 2014
(Number of deals shown in parenthesis)



Source: PwC, *Power & Renewables Deals*

Restructuring and deleveraging moves continue.

Networks attract inbound investment

Italy was also the focus of the biggest inbound purchase by a buyer outside of Europe, with State Grid Corporation of China's US$2.8bn purchase of a 35% stake in Italian natural gas and electric power infrastructure company, CDP Reti Srl, from Cassa Depositi e Prestiti SpA. CDP Reti holds a 29.85% stake in the Italian transmission company Terna and a 30% stake in gas network company Snam. The move is the latest in a series of international purchases by State Grid and adds Italian network assets to those already owned in Brazil, Australia, the Philippines, Portugal and Mozambique.

A number of opportunities for further network deals look set to arise in 2015. Following the sale of its Norwegian distribution business during 2014, Finland's Fortum has said it expects to sell its Swedish electricity distribution businesses. Also in Scandinavia, private equity investor EQT is planning to sell Swedish gas grid operator Swedegas. Iberdrola is exploring the sale of a minority stake in its Spanish distribution business. And in Turkey, gas distributor IGDAS is due to be privatised.

Lifting of regulatory uncertainty

Deals in Europe have to some extent been clouded by a degree of regulatory uncertainty but this is lifting. In Spain, a new regulatory period for electricity distribution is commencing. The network regulation regime for gas and electricity network regulation in France is now in its second year of operation and German grid regulation is now settled until 2019. In the UK, the new RIIO (Revenue = Incentives + Innovation + Outputs) price control outcome for electricity distribution (RIIO-ED1) is now published and gives an eight-year regulatory settlement from April 2015. Also in the UK, the outcome of the competition investigation into the energy supply market being conducted by the Competition and Markets Authority (CMA) will be known in 2015.

Windpower deals

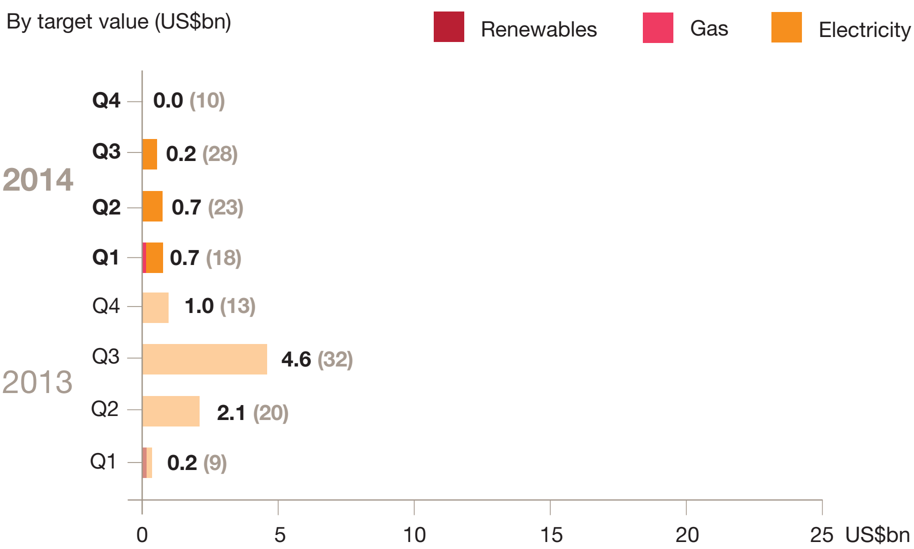
In the UK, with the project becoming operational, windpower developer Dong Energy sold half of its 50% share in the 630MW offshore London Array windfarm to pension and insurance fund manager La Caisse de dépôt et placement du Québec (La Caisse). The US$1bn transaction means the joint venture ownership of the project becomes La Caisse (25%), Dong Energy (25%), E.ON (30%) and Masdar (20%). DONG Energy will remain the service provider of operational and maintenance services to the project.

There are also a number of other renewables assets likely to be subject to deals in 2015. The desire across Europe to recycle capital from operating wind and solar portfolios to new opportunities and the need to find co-investment for the significant sums involved in offshore wind construction mean that many of the deals are likely to see both minority and majority equity stakes transacted rather than an outright change in ownership. Most of these situations involve some form of long-term partnering and present a different dynamic from the more typical buying and selling of assets.

Government divestments

Government asset sales formed a significant part of European power deals flow in 2014. As well as the Italian network divestment, there was the US$2.8bn sale of the Yenikoy and Kemerkoy power plants by the Turkish government in an auction to Ibrahim Cecen Yatirim Holding, a Turkish conglomerate covering energy, infrastructure, construction and tourism; a US$2.1bn market divestment by the French government of a 3.18% stake in GDF Suez SA; and the Irish government's US$1.5bn privatisation of Bord Gáis Energy, which was bought by UK company Centrica together with Brookfield Renewable Energy Partners and iCON Infrastructure Partners.

Figure 14: Russian Federation quarterly tracking of deals – 2013 and 2014
(Number of deals shown in parenthesis)



Source: PwC, *Power & Renewables Deals*

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Methodology

Power & Renewables Deals includes analysis of all global power utilities, renewable energy and clean technology deal activity. Power deals includes all deals involving power generation, transmission and distribution; natural gas transmission, distribution, storage and pipelines; energy retail; and nuclear power assets. Deals involving operations upstream of these activities, including upstream gas exploration and production, are excluded. Renewable energy deals are defined as those relating to the following sectors: biofuels, biomass, geothermal, hydro, marine, solar and wind. Renewable energy deals relate to the acquisition of (i) operating- and construction-stage projects involved in the production of renewable energy and (ii) companies manufacturing equipment for the renewables sector. We define clean technology deals as those relating to the acquisition of companies developing energy-efficient products for renewable energy infrastructure.

The analysis is based on published transactions from the Dealogic 'M&A Global database' for all electricity, gas utility and renewables deals. Deals are included at their announcement date when they are partially completed (pending financial and legal closure) or completed. Deal values are the consideration value announced or reported, including any assumption of debt and liabilities. Comparative data for prior years and quarters may differ to that appearing in previous editions of our analysis or other current year deals publications. This can arise in the case of updated information or methodological refinements and consequent restatement of the input database.

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