



BUREAU VAN DIJK

Monthly M&A Activity Report

Cleantech, July 2016

zephyr

m&a research
catalyst



The following report details mergers and acquisitions activity in the cleantech sector in July 2016 using data from the Zephyr database.

It focuses on deal activity by target company.

Click [here](#) to access the raw data in an Excel spreadsheet.

Cleantech PE, VC and DC value plummets in July, despite increase in volume

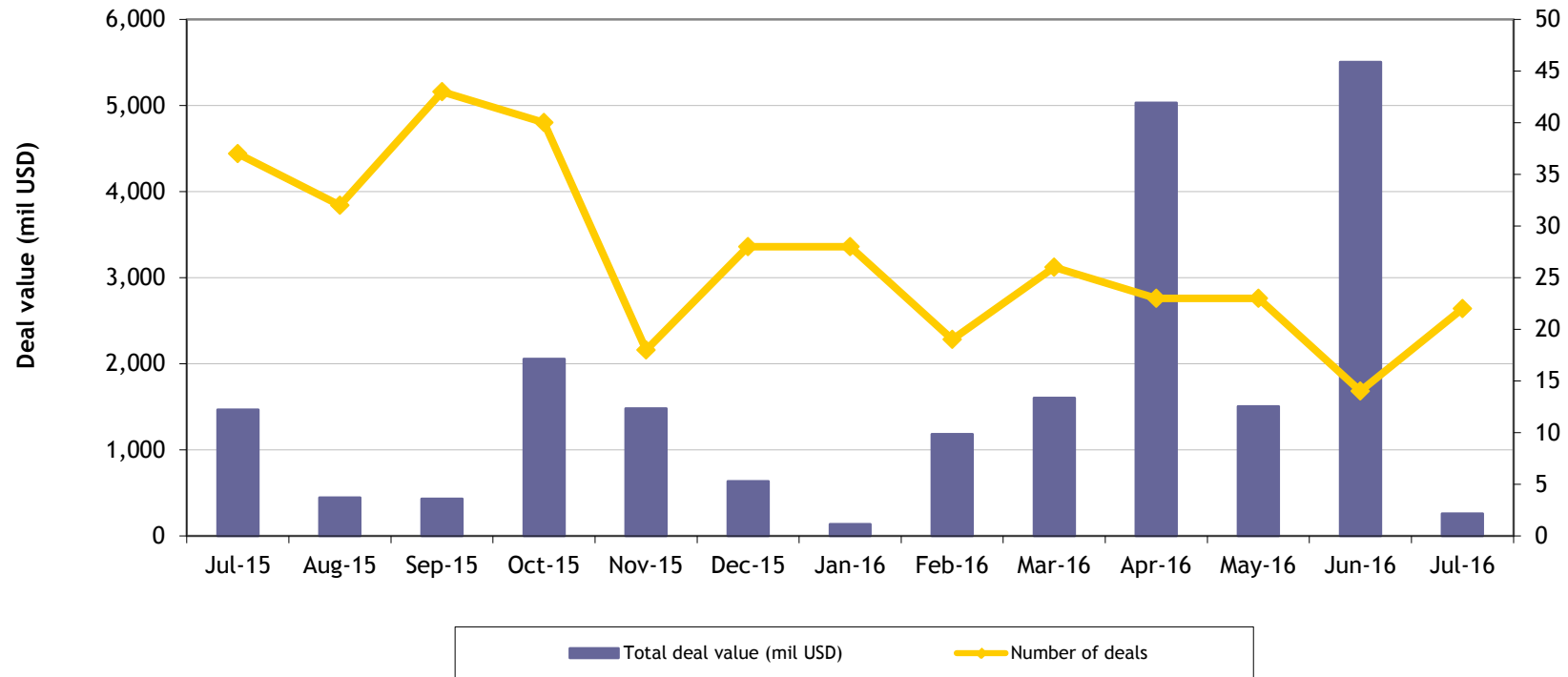
The value of private equity, venture capital and development capital (PE, VC and DC) investment in cleantech companies declined significantly in July despite the fact that volume actually increased month-on-month. In all there were 22 deals worth a combined USD 259 million announced during the month, compared to 14 worth USD 5,505 million in June. The increase in volume against a decline in value suggests low individual considerations during the month.

Year-on-year the situation was no better; although value declined at a slower rate volume also dropped over the 12 months. In July 2015 USD 1,467 million was invested across 37 deals.

Private equity, venture capital and development capital deals by volume and value

Announced date	No of deals	Total deal value (mil USD)
Jul-16	22	259
Jun-16	14	5,505
May-16	23	1,503
Apr-16	23	5,030
Mar-16	26	1,601
Feb-16	19	1,181
Jan-16	28	136
Dec-15	28	635
Nov-15	18	1,481
Oct-15	40	2,055
Sep-15	43	430
Aug-15	32	445
Jul-15	37	1,467

Private equity, venture capital and development capital deals by volume and value





French company targeted in largest PE, VC and DC deal

The largest PE, VC and DC deal targeting global cleantech companies in July involved French wind farm company Valorem, which has reached an agreement that will see it secure USD 77 million from 3i Group. The private equity company will pick up a 29 per cent share of the business as a result.

July's second-largest deal was worth USD 60 million and took the form of a capital increase by Chinese flue gas purification and dust elimination equipment manufacturer Wuxi Xuelang Environmental Technology. Participants in the deal include Harvest Fund Management, Xinhua Fund Management, Wuxi Jinhe Venture Investment and Yang Jianping.

The majority of PE, VC and DC investments signed off during July took the form of minority stake deals. There were two institutional buyouts announced over the course of the month. Only one of these had a disclosed value as CVC Capital Partners agreed to up its holding in Belgian wire fence maker Betafence for USD 28 million.

France led PE, VC and DC investment by value in July

France attracted the most investment of all countries in July with EUR 85 million, although it is worth noting that a large portion of this amount was attributable to the USD 77 million Valorem transaction. There were two other deals featuring targets in the country as Kyotherm and eLichens were targeted to the tune of USD 5 million and USD 3 million, respectively.

Other countries which performed well by value include China (USD 60 million), the UK (USD 31 million), the US (USD 30 million), Belgium (USD 28 million) and Slovenia (USD 20 million).

In terms of volume the US led the field with five deals, followed by France and the UK with three each. Canada was targeted in two deals while nine countries, including Slovenia, Austria and Ireland, all notched up one each.

Private equity, venture capital and development capital deals by value

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	General Partner/Fund Manager	Deal status
1.	77	Minority stake 29%	Valorem SAS	Wind farm construction services	FR	3i Group plc	Announced
2.	60	Capital Increase 10%	Wuxi Xuelang Environmental Technology Co., Ltd	Flue gas purification and dust elimination equipment manufacturer	CN	Harvest Fund Management Co., Ltd; Wuxi Jinhe Venture Investment Co., Ltd	Pending
3.	28	IBO	Betafence Holding SA	Crash barrier and bollard manufacturer holding company, Engineering services provider holding company, Risk assesment and project management services provider holding company, Security system monitoring services provider holding company, Solar powered potential induced degradation equipment manufacturer, Wire fence manufacturer holding company	BE	CVC Capital Partners Ltd	Completed
4.	26	Minority stake	Moixa Energy Holdings Ltd	Residential LED lights and lighting equipment manufacturer holding company, Residential battery energy storage system manufacturer holding company	GB		Announced
5.	24	Minority stake	Alphabet Energy Inc.	Silicon-based thermoelectric semiconductors developer	US	Schlumberger NV; Claremont Creek Management LLC; VantagePoint Venture Partners Inc.; Nth Power LLC; Element Partners LLC; General Motors Ventures LLC; Osceola Capital Management LLC; TPG Capital Advisors LLC	Completed
6.	20	Capital Increase	Paloma, Higieniski Papirji dd	Hygienic paper products manufacturer	SI	Eco-Invest AS	Pending
7.	5	Minority stake	Kyotherm SAS	Energy efficiency projects investment services	FR	Johes SAS; StarQuest Capital SAS	Completed
8.	5	Minority stake	AVID Technology Group Ltd	Electric vehicle powertrain parts and components manufacturer, Electric vehicle transmission cooling fans manufacturer, Electric vehicle transmission pumps manufacturer, Electrical vehicle control equipment research and design services, Other electric vehicle transmission equipment manufacturer	GB	Downing LLP; NVM PE Ltd; Top Technology Ventures Ltd	Completed
9.	3	Minority stake	eLichens SAS	Miniaturized sensors to digitalize air quality online Software-as-a-Service (SaaS) provider	FR	I-Source Gestion SA; Sofimac Partners SA; France Angels; BPI Groupe SA; Emertec Gestion SA; Aereco SA	Completed
10.	3	Minority stake	Watty AB	Online mobile energy savings monitoring application developer	SE	EQT Partners AB; Cleantech Invest Oyj	Completed

Private equity, venture capital and development capital deals by value (Cont'd)

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	General Partner/Fund Manager	Deal status
11.	3	Minority stake	Black Bear Energy Inc.	Energy monitoring projects services provider	US	Rocky Mountain Institute	Completed
12.	2	Minority stake	Space Race LLC	Web series for teaching children about space and the solar system platform operator	US		Completed
13.	2	Minority stake	Geostellar Inc.	Solar panel analytics online platform operator	US		Completed
14.	0	Minority stake	Teraloop Oy	Kinetic energy storage system developer	FI		Completed
15.	0	Minority stake	Aurora Solar Technologies Inc.	Photovoltaic industry semiconductor devices research and development services, Photovoltaic industry semiconductor inline measurement devices manufacturer	CA		Completed
16.	0	Minority stake 7%	Green Lagoon Technology Sdn Bhd	Renewable energy engineering design services	MY		Completed
17.	0	Minority stake	Solar Alliance Energy Inc.	Residential solar system installation services provider	CA		Completed
18.	n.a.	IBO 100%	ReneSola Ltd's 4 UK-based operational photovoltaic assets	Solar panels manufacturer	GB	Equitix Holdings Ltd	Completed
19.	n.a.	Minority stake 19%	Green Bio Energy Ltd	Charcoal briquette manufacturer	UG	Rassembleurs d'Energies SAS	Completed
20.	n.a.	Minority stake 40%	Global Hydro Energy GmbH	Hydropower turbine manufacturer	AT	Invest Unternehmensbeteiligungs AG	Completed
21.	n.a.	Minority stake	Array Technologies Inc.	Solar tracking and racking systems manufacturer	US	Oaktree Capital Management LP	Completed
22.	n.a.	Acquisition 100%	GE Energy Financial Services Inc.'s two wind farms in Ireland	Wind farm operator	IE		Completed



Target countries by volume: private equity, venture capital and development capital deals

Target country	Jul-15	Jun-16	Jul-16
US	22	5	5
France	0	1	3
UK	1	3	3
Canada	0	1	2
Slovenia	0	0	1
Austria	0	0	1
Ireland	0	0	1
Belgium	0	0	1
Uganda	0	0	1
Finland	1	0	1
China	4	0	1
Sweden	0	0	1
Malaysia	0	0	1

Target countries by value: private equity, venture capital and development capital deals

Target country	Jul-15 (mil USD)	Jun-16 (mil USD)	Jul-16 (mil USD)
France	0	2	85
China	21	0	60
UK	0	68	31
US	469	5,408	30
Belgium	0	0	28
Slovenia	0	0	20
Sweden	0	0	3

Private equity, venture capital and development capital investors

	Private equity firm	Number of deals	Number with consideration	Total deal value (mil USD)	Average deal value (mil USD)
1	3i Group plc	1	1	77	77
2	Wuxi Jinhe Venture Investment Co., Ltd	1	1	60	60
3	Harvest Fund Management Co., Ltd	1	1	60	60
4	CVC Capital Partners Ltd	1	1	28	28
5	Claremont Creek Management LLC	1	1	24	24
6	Element Partners LLC	1	1	24	24
7	TPG Capital Advisors LLC	1	1	24	24
8	Osceola Capital Management LLC	1	1	24	24
9	VantagePoint Venture Partners Inc.	1	1	24	24
10	Nth Power LLC	1	1	24	24
11	General Motors Ventures LLC	1	1	24	24
12	Eco-Invest AS	1	1	20	20
13	StarQuest Capital SAS	1	1	5	5
14	Top Technology Ventures Ltd	1	1	5	5
15	NVM PE Ltd	1	1	5	5
16	Downing LLP	1	1	5	5
17	France Angels	1	1	3	3
18	BPI Groupe SA	1	1	3	3
19	Emertec Gestion SA	1	1	3	3
20	I-Source Gestion SA	1	1	3	3
21	Sofimac Partners SA	1	1	3	3
22	EQT Partners AB	1	1	3	3
23	Cleantech Invest Oyj	1	1	3	3
24	BVIM LLC	1	1	3	3
25	Oaktree Capital Management LP	1	0	n.a.	n.a.



M&A volume and value down month-on-month

Both the volume and value of mergers and acquisitions (M&A) declined in July. In all there were 182 deals worth a combined USD 13,968 million signed off over the course of the month, compared to 198 worth USD 18,077 million in June.

In terms of volume the decline was steeper year-on-year, although value actually increased over the same timeframe; in July 2015 there were 235 transactions worth USD 9,254 million.

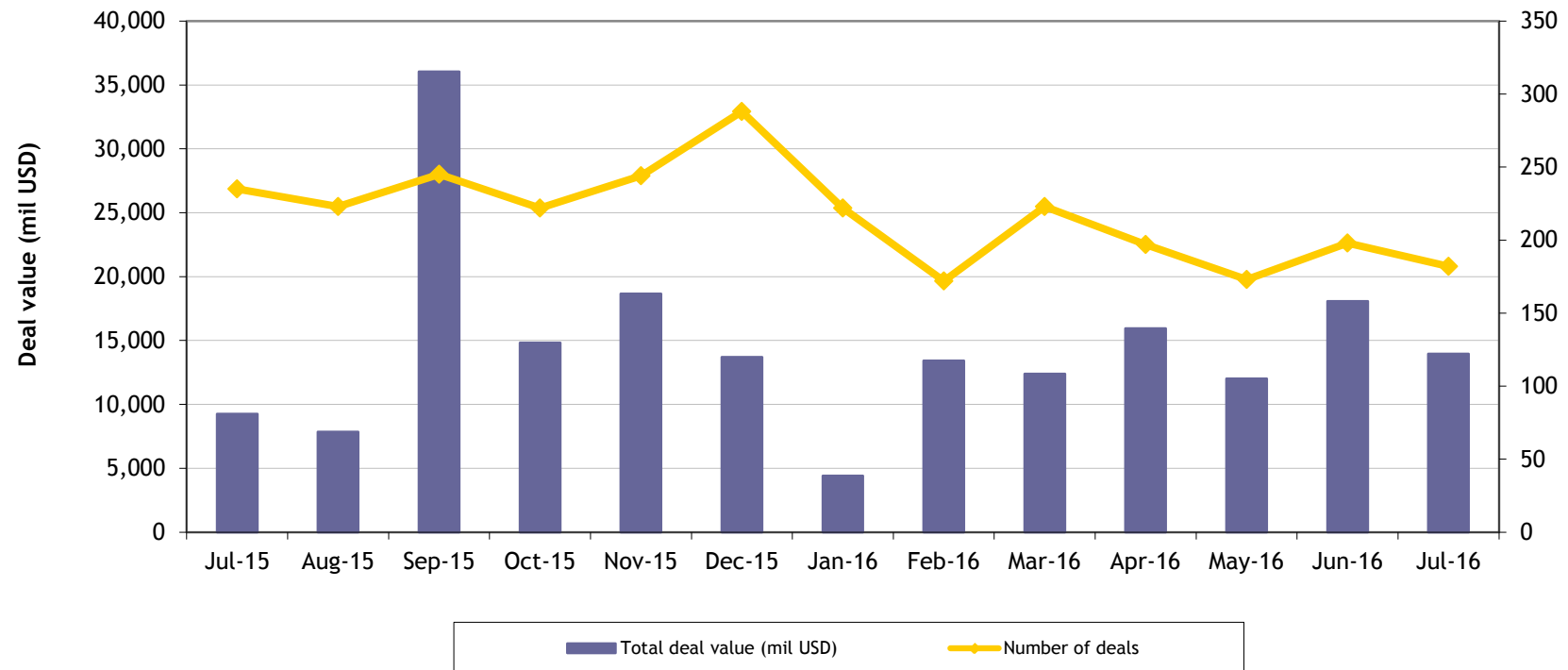
Despite the month-on-month drop in value there were actually a few significant deals announced in July. The largest by some distance involved Indian civil construction player Lanco Infratech, in which lenders are to convert debt to the tune of USD 6,100 million into a 60 per cent shareholding. Completion of that deal is expected to follow at some point in December.

Three other deals broke the USD 1,000 million-barrier in July; CPFL Energia, Dongxu New Energy Investment and Enel Green Power Espana were targeted in transactions worth USD 1,821 million, USD 1,421 million and USD 1,326 million, respectively.

Deals by volume and value

Announced date	No of deals	Total deal value (mil USD)
Jul-16	182	13,968
Jun-16	198	18,077
May-16	173	12,015
Apr-16	197	15,952
Mar-16	223	12,392
Feb-16	172	13,424
Jan-16	222	4,405
Dec-15	288	13,695
Nov-15	244	18,661
Oct-15	222	14,813
Sep-15	245	36,038
Aug-15	223	7,848
Jul-15	235	9,254

Deals by volume and value



Top 20 deals by value

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	Acquiror	Deal status
1.	6,100	Acquisition 60%	Lanco Infratech Ltd	Civil construction services, Coal and minerals trading services, Coal mining services, Hydro power generation services, Infrastructure development services, Metal ore trading services, Property development services, Solar power generation services, Solar project development services, Thermal power generation services, Wind power generation services	IN	Lenders	Announced
2.	1,821	Minority stake 23%	CPFL Energia SA	Electricity distribution services holding company, Electricity transmission services holding company, Energy consultancy services, Hydroelectric, thermal, biomass, and wind power electricity generation services holding company	BR	State Grid International Development Co., Ltd	Pending
3.	1,421	Acquisition increased to 100%	Dongxu New Energy Investment Co., Ltd	Engineering survey and design services, Investment management services	CN	Baoan Hongji Real Estate Group Co., Ltd	Announced
4.	1,326	Acquisition increased from 40% to 100%	Enel Green Power Espana SL	Biomass electric power generation services, Geothermal electric power generation services, Hydroelectric power generation services, Renewable energy producer, Solar electric power generation services, Wind electric power generation services	ES	Endesa Generacion SA	Completed
5.	352	Acquisition 100%	CHORUS Clean Energy AG	Asset management services, Solar park operator, Wind park operator	DE	Capital Stage AG	Announced
6.	320	Minority stake increased from 12% to 23%	Acea SpA	Electricity distribution services, Gas distribution services, Multi-utility supply services, Renewable energy production services, Waste management services	IT	Suez Environnement SA	Announced
7.	149	Joint venture 100%	China Chemical Engineering Group Environmental Protection Co., Ltd	Waste gas management services, Waste gas project construction services, Wastewater and solid waste management services, Wastewater and solid waste treatment project construction services	CN	China National Chemical Engineering Group Corporation; China National Chemical Engineering Co., Ltd	Announced
8.	142	Capital Increase 9%	Infore Environmental Technology Group Co., Ltd	Industrial refrigerating product manufacturing holding company, Industrial ventilating equipment manufacturing holding company	CN	Investors	Pending
9.	131	Acquisition 50%	Kandi Electric Vehicles Group Co., Ltd	Auto parts manufacturer, Auto parts wholesaler, Electric vehicle manufacturer, Electric vehicle wholesaler	CN	Zhejiang Geely Holding Group Co., Ltd	Announced
10.	120	Acquisition increased to 100%	Beijing BOE Energy Technology Co., Ltd	Photovoltaic system and components design services	CN	BOE Technology Group Co., Ltd	Announced

Top 20 deals by value (Cont'd)

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	Acquiror	Deal status
11.	105	Capital Increase 9%	Hangxiao Steel Structure Co., Ltd	Steel structure manufacturer	CN	Investors	Pending
12.	100	Acquisition 50%	Galaxy NewSpring Pte Ltd	Wastewater treatment plants operator, Water supply plant operator	SG	Yunnan Water (Hong Kong) Co., Ltd	Announced
13.	99	Acquisition 90%	GD Solar Co., Ltd	Solar cells manufacturer, Solar power station system integration services	CN	Tianjin Zhonghuan Semiconductor Co., Ltd	Pending
14.	89	Capital Increase 14%	Beijing Enterprises Clean Energy Group Ltd	Cigarette packages printing services holding company, Photovoltaic power plant operator holding company	KY	Tuspark Technology Innovation Ltd	Announced
15.	77	Minority stake 29%	Valorem SAS	Wind farm construction services	FR	3i Infrastructure plc	Announced
16.	74	Capital Increase 13%	Create Technology & Science Co., Ltd	Air purifying equipments manufacturer, Power transmission high voltage insulators manufacturer	CN	Suzhou City Construction Investment Development Co., Ltd; Suzhou Culture & Tourism Development Group Co., Ltd	Pending
17.	69	Capital Increase	SK D&D Co., Ltd	Furniture retailer, Property developer, Renewable energy plants building services, Renewable energy production services	KR		Completed
18.	67	Acquisition increased to 100%	Shijiazhuang Haosheng Solar Power Technology Co., Ltd	Solar power system installation services	CN	Qingdao New Energy Solutions Inc.	Announced
19.	65	Acquisition 100%	Thai Future Energy Holding Co., Ltd	Photovoltaic power plants operator holding company	TH	Star Sanitaryware PCL	Pending
20.	60	Capital Increase 10%	Wuxi Xuelang Environmental Technology Co., Ltd	Flue gas purification and dust elimination equipment manufacturer	CN	Harvest Fund Management Co., Ltd; Mr Yang Jianping; Xinhua Fund Management Co., Ltd; Wuxi Jinhe Venture Investment Co., Ltd	Pending

Target countries by volume

Target country	Jul-15	Jun-16	Jul-16
China	48	56	44
US	39	20	16
UK	15	18	13
Germany	15	13	11
Italy	6	5	8
Canada	4	8	8
Spain	8	7	7
Japan	10	3	6
Cayman Islands	1	2	6
Republic of Korea	8	4	6
Switzerland	1	1	5
France	7	5	5
Australia	11	5	5
British Virgin Islands	0	2	4
Poland	8	4	3
Singapore	5	3	3
Finland	3	2	2
India	7	7	2
Hungary	3	0	2
Taiwan	1	0	2
Indonesia	0	2	2
Sri Lanka	1	0	2

Target countries by value

Target country	Jul-15 (mil USD)	Jun-16 (mil USD)	Jul-16 (mil USD)
India	957	1,546	6,100
China	440	3,021	2,818
Brazil	250	0	1,821
Spain	1,262	2,234	1,348
Italy	7	475	389
Germany	45	1,944	368
Cayman Islands	225	40	232
British Virgin Islands	0	47	109
US	3,163	5,926	103
Singapore	111	42	101
France	14	6	85
South Korea	113	158	73
UK	105	308	66
Thailand	121	14	65
Canada	82	30	48
Japan	1,468	23	47
Australia	105	73	28
Belgium	0	226	28
Taiwan	16	0	25
Slovenia	32	0	20
Pakistan	0	0	20



IPOs by volume and value

Announced date	No of deals	Total deal value (mil USD)
Jul-16	2	3
Jun-16	8	1,357
May-16	3	2,839
Apr-16	3	156
Mar-16	3	424
Feb-16	1	18
Jan-16	4	15
Dec-15	4	284
Nov-15	2	1
Oct-15	1	0
Sep-15	5	223
Aug-15	1	2
Jul-15	4	196



July IPOs

Target name	China Jinjiang Environment Holding Co., Ltd	Perpetual Power Holdings Ltd
Deal value (mil USD)	3	n.a
Deal type	IPO on Singapore Stock Exchange	Planned IPO on Growth Enterprise Market of Hong Kong Stock Exchange
Target country	KY	KY
Target business	Electricity and steam power generation services, Waste-to-energy plant and project management	Hydropower generation services holding company, Hydropower plant construction services holding company
Announced date	25/07/2016	05/07/2016
Deal status	Completed	Pending

Notes to editors

The search criteria uses a key word system based on the targets' business description

The key words and phrases are: "alternative energy" OR "alternative power" OR "biomass" OR "bioenergy" OR "bio energy" OR "bio-energy" OR "biofuel" OR "fuel cell" OR "hydrogen" OR "photovoltaic" OR "renewable energy" OR "reusable energy" OR "re-usable energy" OR "solar" OR "waste to energy" OR "wind power" OR "wind farm" OR "wave power" OR "geothermal" OR "geothermal" OR "hydropower" OR "hydro-power" OR "bio-diesel" OR "biodiesel" OR "energy resource management" OR "electric vehicle" OR "water purification" OR "intelligent power" OR "air quality" OR "energy efficiency" OR "thin film energy" OR "thin-film energy" OR "energy efficiency software" OR "energy storage" OR "battery power" OR "water treatment" OR "waste management" OR "biogas" OR "anaerobic digestion" OR "wastewater" OR "green construction" OR "green buildings" OR "smart meter" OR "smart grid" OR "energy monitoring" OR "marine energy" OR "solar thermal" OR "algae" OR "green energy" OR "cleantech" OR "clean tech" OR "environmental technology" OR "greentech" OR "charging station" OR "green infrastructure" OR "clean energy" OR "tidal power" OR "tidal energy" OR "biodegradable" OR "alternative fuel"

Activity is based on the activity of the target company

Deal status is announced, completed, pending or unconditional