

# **M&A Review**

Cleantech

May 2017



The following report details mergers and acquisitions activity in the cleantech sector in May 2017 using data from the Zephyr database.

It focuses on global deals activity by target company within the cleantech sector.

Click here to access the raw data in an Excel spreadsheet.

Bureau van Dijk recently expanded its definition of the "Cleantech" industry, which has resulted in increased deal volumes and aggregated deal values.

### PE, VC and DC value down in May

The value of private equity, venture capital and development capital (PE, VC and DC) investment in Cleantech companies fell in May, despite an increase in volume month-on-month. In all there were 19 deals valued at a combined USD 1,690 million announced in May, compared to 16 deals worth USD 4,404 million announced during April.

The opposite trend occured year-on-year, as volume was down 24 per cent on the 25 deals announced during May 2016, while value increased by 6 per cent on the USD 1.593 invested across the same timeframe.

The top two PE, VC and DC deals for May were valued at a combined USD 1,595 million, accounting for more than 94 per cent of overall investment for the month.

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

Announced date	No of deals	Total deal value (mil USD)
May-17	19	1,690
Apr-17	16	4,404
Mar-17	22	8,391
Feb-17	24	322
Jan-17	16	1,611
Dec-16	28	280
Nov-16	21	1,758
Oct-16	31	949
Sep-16	23	291
Aug-16	36	1,898
Jul-16	22	172
Jun-16	19	5,545
May-16	25	1,593



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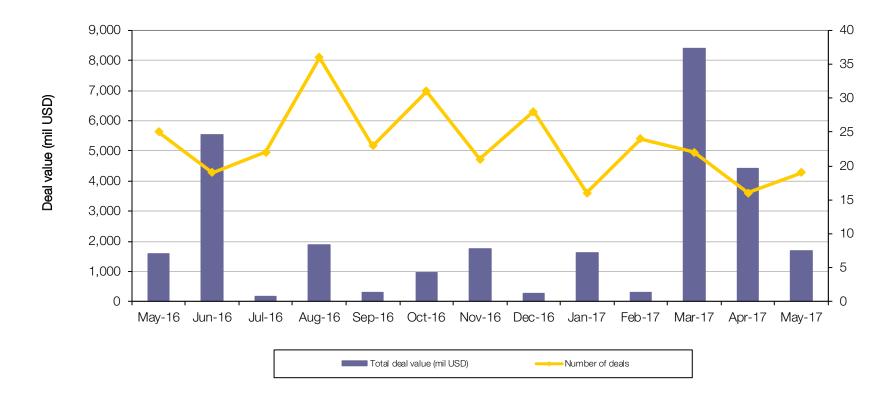
m&a research

catalyst



Combining deal and company data

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







# UK company targeted in month's largest deal

The most valuable PE, VC and DC investment in a cleantech company in May was worth USD 830 million and took the form of an acquisition of UK waste management firm Safety-Kleen Europe by Apax Partners.

This deal was closely followed by Actis' USD 765 million purchase of Gestamp Energias Renovables' Brazilian wind parks. Both deals were significantly greater than Ficont Industry's USD 29 million capital increase in third place.

In all, 16 of the 19 PE, VC and DC deals announced in May had a disclosed value and featured targets in countries including the US, Sweden and China.

## UK leads the way in terms of value for May

It is no shock to see that the UK and Brazil topped the value charts in May given that the countries were involved in the month's top two transactions. The UK was targeted in two other deals as Intelligent Resource Management raised USD 3 million and TWMA Group completed a secondary buyout for an undisclosed amount.

In all the UK and Brazil received investment of USD 833 million and USD 765 million. respectively, placing ahead of China (USD 55 million) and the US (USD 33 million).

In terms of volume, the US topped the rankings with six deals announced during May, followed by China with four and the UK with three. India, Brazil, UAE, Spain, Sweden and Canada were all targeted in one deal 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.	830	IBO 100%	Safety-Kleen Europe Ltd	Hazardous waste management services, Industrial and automotive parts cleaning services, Manual and automatic spray gun cleaners manufacturer, Waste oil collection services	GB	Apax Partners LLP	Announced
2.	765	IBO 100%	Gestamp Energias Renovables SL's wind parks located in Brazil	Wind electrical energy plants operator, Wind energy plants construction services	BR	Actis LLP	Announced
3.	29	Capital Increase 15%	Ficont Industry (Beijing) Co., Ltd	Wind turbine tower special high-altitude service lifts, hoist and crane manufacturer	CN	Hangzhou G&S Capital Co., Ltd	Pending
4.	17	Minority stake	China Great Wall Environment Improving Co., Ltd	Energy-saving and environmental protection technology development services	CN	CITIC Capital Holdings Ltd	Completed
5.	15	Acquisition 100%	SolBright Renewable Energy LLC's assets	Solar photovoltaic sector turnkey development, engineering, procurement and construction (EPC) services	US	AIP Private Capital	Completed
6.	14	Minority stake	Chromatin Inc.	Renewable biomass feedstock and mini-chromosome technology developer, Seed and feedstock manufacturer	US		Completed
7.	7	Minority stake 20%	Dishangtie Car Rental (Shenzhen) Co., Ltd	Logistic industry electric vehicle rental services	CN	Qiming Weichang Venture Capital Management (Shanghai) Co., Ltd	Completed
8.	3	Minority stake	Laboratoire M2 Inc.	Biodegradable and non-toxic disinfectant manufacturer	CA	Cycle Capital Management Inc.; Desjardins Innovatech	Completed
9.	3	Minority stake	Intelligent Resource Management Ltd	End-to-end energy efficiency project management, Energy efficiency advisory services, Online energy saving products retailer	GB	IW Capital Ltd	Completed
10.	3	Minority stake	Changing Environments Inc.	Internet connected and solar energy powered park benches developer	US		Completed
11.	1	Minority stake 5%	Hunan Shinilion Energy Saving Science and Technology Corporation Ltd	Shades, protective shutters and energy saving shutter doors and windows manufacturer	CN	Hunan United Investment Mangement Co., Ltd	Pending
12.	1	Minority stake	Solaris Offgrid	Solar power grid construction services	ES		Completed
13.	1	Minority stake	Anellotech Inc.	Bio-based chemicals production from non-food biomass research and development services	US		Completed



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

Target country	May-16	Apr-17	May-17
US	13	1	6
China	1	2	4
UK	3	4	3
India	1	1	1
Brazil	0	0	1
UAE	0	0	1
Spain	0	0	1
Sweden	1	1	1
Canada	1	0	1

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

Target country	May-16 (mil USD)	Apr-17 (mil USD)	May-17 (mil USD)
UK	1,312	3,235	833
Brazil	0	0	765
China	15	9	55
US	168	1	33
Canada	0	0	3
Spain	0	0	1



# Private equity, venture capital and development capital investors

	Company name	Number of deals	Number with consideration	Total deal value (mil USD)	Average deal value (mil USD)
1	Apax Partners LLP	1	1	830	830
2	Warburg Pincus LLC	1	1	830	830
3	Actis LLP	1	1	765	765
4	Hangzhou G&S Capital Co., Ltd	1	1	29	29
5	CITIC Capital Holdings Ltd	1	1	17	17
6	AIP Private Capital	1	1	15	15
7	Qiming Weichang Venture Capital Management (Shanghai) Co., Ltd	1	1	7	7
8	Cycle Capital Management Inc.	1	1	3	3
9	Desjardins Innovatech	1	1	3	3
10	IW Capital Ltd	1	1	3	3
11	Hunan United Investment Mangement Co., Ltd	1	1	1	1
12	Chalmers Ventures AB	1	1	0	0
13	Almi Invest AB	1	1	0	0
14	KIC InnoEnergy SE	1	1	0	0
15	Masdar Capital	1	0	n.a.	n.a.
16	Buckthorn Partners LLP	1	0	n.a.	n.a.
17	Lime Rock Management LP	1	0	n.a.	n.a.



#### M&A slips marginally month-on-month

The value of mergers and acquisitions (M&A) targeting companies operating in the cleantech sector weakened for the second consecutive month in May despite an increase in volume month-on-month. In all there were 236 deals worth a combined USD 11,885 million, compared to the USD 11,970 million invested across 231 deals in April.

However, the fact that value declined by just 1 per cent, a slower rate than between March and April, is more positive. In addition, value actually increased year-on-year, rising 25 per cent from the USD 9,542 million invested in May 2016.

The largest M&A deal of the month involved Electricite de France agreeing to acquire French firm Areva NP for USD 2,083 million. This was followed by Paris-based Suez's EUR 843 million public offering of common shares in second place. Together these two deals accounted for just under a quarter of all cleantech value in May.

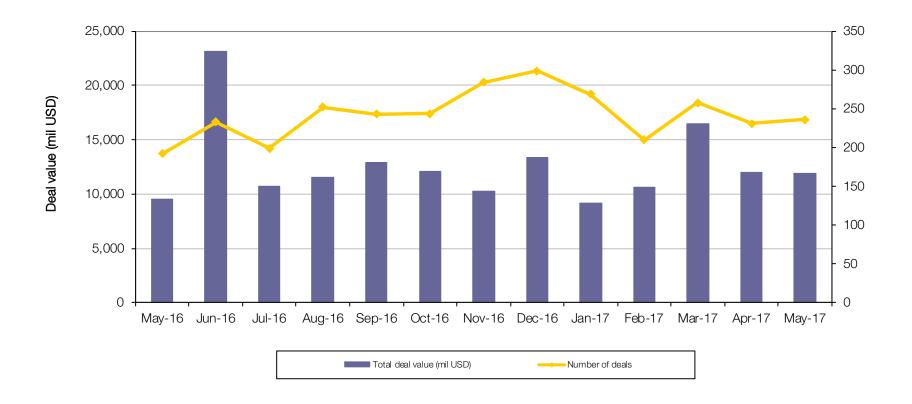
France lead the country ranking by value in May, having featured in deals valued at a combined USD 3,224 million, a significant portion of which is due to the USD 2,083 million acquisition of Areva NP. France was followed by China (USD 2,808 million) and Brazil (USD 1,757 million). In terms of volume, China topped the charts as it featured in 59 deals, more than double the result of second placed Germany (24) and three times the US (17), which placed third.

## Deals by volume and value

Announced date	No of deals	Total deal value (mil USD)
May-17	236	11,885
Apr-17	231	11,970
Mar-17	258	16,451
Feb-17	210	10,630
Jan-17	269	9,137
Dec-16	299	13,353
Nov-16	284	10,282
Oct-16	244	12,061
Sep-16	243	12,953
Aug-16	252	11,541
Jul-16	199	10,748
Jun-16	233	23,170
May-16	192	9,542



## Deals by volume and value





# Top 20 deals by value

developer. Nuclear power electricity generators operator. Nuclear power leveloper in construction services. Recycling services. Such production serv		Deal value (mil USD)	Deal type	Target	Target business description	Target country	Acquiror	Deal status
Waste recycling services, Water purification services institutional Investors: CaixaBank SA; Engie SA; Mr Jean-Louis Chaussade  3. 830 IBO 100% Safety-Kleen Europe Ltd automotive parts cleaning services, Industrial and automotive parts cleaning services, Manual and automatic spray gun cleaners manufacturer, Waste oil collection services  4. 804 Acquisition 100% Casa dos Ventos Energias Renovaveis SA's Tiangua wind farm; Casa dos Ventos Energias Renovaveis SA's Tiangua wind farm operator; Wind farm operator  5. 765 IBO 100% Gestamp Energias Renovables SL's wind parks located in Brazil energy plants construction services  6. 640 Minority stake 20% Chongqing Derun Environment services, Water treatment services, Water treatment services, Water treatment services, Water treatment services, Ceothermal and recovered energy-based power plants construction services. Geothermal and recovered energy-based power plants construction services, Geothermal and recovered energy-based power plants construction services, Geothermal and recovered energy-based power plants operator.  8. 427 Capital Increase 17% GEM Co., Ltd Environmental composite wood board manufacturer, Geothermal and recovered energy-based power plants engineering services,	1.	2,083	Acquisition 75%		developer; Nuclear power electricity generators operator, Nuclear power electricity production services, Nuclear power plant construction services, Recycling services, Uranium ores exploration services, Uranium	FR; FR	Electricite de France SA	Pending
automotive parts cleaning services, Manual and automatic spray gun cleaners manufacturer, Waste oil collection services  4. 804 Acquisition 100% Casa dos Ventos Energias Renovaveis SA's Tiangua wind farm; Casa dos Ventos Energias Renovaveis SA's Sao Clemente wind farm  5. 765 IBO 100% Gestamp Energias Renovables SL's wind parks located in Brazil SL's wind parks located in Brazil energy plants construction services  6. 640 Minority stake 20% Chongqing Derun Environment Co., Ltd Services, Water treatment services, Water treatment services  7. 627 Minority stake 22% Ormat Technologies Inc. Geothermal and recovered energy-based electricity generation products manufacturer, Geothermal and recovered energy-based power plants construction services, Geothermal and recovered energy-based power plants operator  8. 427 Capital Increase 17% GEM Co., Ltd Environmental composite wood board manufacturer, Seculateries, selectronic wastes and other waste collection services, Used batteries, electronic wastes and other waste collection services, Used batteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Datteries, electronic wastes and other waste collection services, Used Dat	2.	843	Capital Increase 8%	Suez SA		FR	Institutional Investors; CaixaBank SA;	Completed
Renovaveis SA's Tiangua wind farm; Casa dos Ventros Energias Renovaveis SA's Sao Clemente wind farm  5. 765 IBO 100% Gestamp Energias Renovables SL's wind parks located in Brazil energy plants operator, Wind energy blased power plants energy energian energy-based electricity generation products manufacturer, Geothermal and recovered energy-based power plants operator.  8. 427 Capital Increase 17% GEM Co., Ltd Environmental composite wood board manufacturer, Used batteries, electronic wastes and other waste collection services, Used batteries, electronic wastes and other waste order of the waste recycling services.  9. 417 Minority stake 3% DONG Energy A/S Bioenergy and thermal energy producer. Energy distributor, Oil and gas exploration services, Wind energy producer.	3.	830	IBO 100%	Safety-Kleen Europe Ltd	automotive parts cleaning services, Manual and automatic spray	GB	Apax Partners LLP	Announced
SL's wind parks located in Brazil energy plants construction services  6. 640 Minority stake 20% Chongqing Derun Environment Co., Ltd Shenzhen Expressway Enviro	4.	804	Acquisition 100%	Renovaveis SA's Tiangua wind farm; Casa dos Ventos Energias Renovaveis SA's	Wind farm operator; Wind farm operator	BR; BR	Echoenergia Participacoes SA	Completed
Co., Ltd services, Water treatment services  Environment Co., Ltd  7. 627 Minority stake 22% Ormat Technologies Inc. Geothermal and recovered energy-based electricity generation products manufacturer, Geothermal and recovered energy-based power plants construction services, Geothermal and recovered energy-based power plants engineering services, Geothermal and recovered energy-based power plants operator  8. 427 Capital Increase 17% GEM Co., Ltd Environmental composite wood board manufacturer, Recyclable plastic tray manufacturer, Used batteries, electronic wastes and other waste collection services, Used batteries, electronic wastes and other waste recycling services  9. 417 Minority stake 3% DONG Energy A/S Bioenergy and thermal energy producer, Energy distributor, Oil and gas exploration services, Wind energy producer	5.	765	IBO 100%	1 0		BR	Actis LLP	Announced
products manufacturer, Geothermal and recovered energy-based power plants construction services, Geothermal and recovered energy-based power plants engineering services, Geothermal and recovered energy-based power plants operator  8. 427 Capital Increase 17% GEM Co., Ltd Environmental composite wood board manufacturer, Sectional Performance of the Co., Ltd Environmental composite wood board manufacturer, Used batteries, electronic wastes and other waste collection services, Used batteries, electronic wastes and other waste recycling services  9. 417 Minority stake 3% DONG Energy A/S Bioenergy and thermal energy producer, Energy distributor, Oil and gas exploration services, Wind energy producer	6.	640	Minority stake 20%	010		CN		Pending
Recyclable plastic tray manufacturer, Used batteries, electronic wastes and other waste collection services, Used batteries, electronic wastes and other waste recycling services  9. 417 Minority stake 3% DONG Energy A/S Bioenergy and thermal energy producer, Energy distributor, DK Institutional Investors Co Oil and gas exploration services, Wind energy producer	7.	627	Minority stake 22%	Ormat Technologies Inc.	products manufacturer, Geothermal and recovered energy-based power plants construction services, Geothermal and recovered energy-based power plants engineering services, Geothermal	US	Orix Corporation	Announced
Oil and gas exploration services, Wind energy producer	8.	427	Capital Increase 17%	GEM Co., Ltd	Recyclable plastic tray manufacturer, Used batteries, electronic wastes and other waste collection services, Used batteries,	CN	Investors	Pending
10 3/0 Minority stake 5% Coway Co. Ltd. Rethroom appliances manufacturer. Food waste KR. Institutional Invastore Co.	9.	417	Minority stake 3%	DONG Energy A/S		DK	Institutional Investors	Completed
treatment machine manufacturer, Water and air purifiers manufacturer, Water purifiers rental services	10.	340	Minority stake 5%	Coway Co., Ltd		KR	Institutional Investors	Completed



# Top 20 deals by value (cont'd)

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	Acquiror	Deal status
11.	333	Capital Increase 17%	Dongjiang Environmental Co., Ltd	Industrial hazardous waste collection and management services, Industrial hazardous waste treatment services	CN	Investors; Guangdong Rising Assets Management Co., Ltd	Pending
12.	299	Acquisition 100%	Velocita Energy Developments (France) Ltd's 3 French wind farms	Wind electric power generation services	FR	Guangdong Rising Assets Management Co., Ltd	Announced
13.	293	Minority stake 3%	ACS Actividades de Construccion y Servicios SA	Applied engineering services, Civil engineering construction services provider, Residential and non-residential building construction services provider, Waste management services	ES	Innergex Renewable Energy Inc.	Completed
14.	281	Capital Increase 8%	Huaneng Renewables Corporation Ltd	Wind power plant construction services, Wind power services	CN		Completed
15.	260	Minority stake 19%	Shuangliang Eco-Energy Systems Co., Ltd	Air conditioning equipment manufacturer, Heat exchanger manufacturer, Sewage treatment equipment manufacturer	CN	Investors	Announced
16.	255	Acquisition 84%	Ningxia Jiangnan Integration Technology Co., Ltd	Photovoltaic power station construction services	CN	Jiangyin Tongsheng Enterprise Management Centre (LP)	Pending
17.	189	Acquisition 100%	Alto Sertao II	Wind energy generation services	BR	Suzhou Hailu Heavy Industry Co., Ltd	Completed
18.	129	Acquisition 100%	Renewable Energy Systems Ltd's Garreg Lwyd Hill Wind Farm	Wind energy production services	GB	AES Tiete SA	Completed
19.	118	Acquisition 100%	Eolus Vind AB's wind farm Jenasen	Wind energy producer	SE	Renewables Infrastructure Group Ltd, The	Announced
20.	86	Minority stake 5% to 11%	Sacyr SA	Building maintenance services, Construction services, Healthcare services, Motorway and dual carriageway construction services, Motorway and dual carriageway maintenance services, Property and real estate developer, Waste management services, Water management services	ES	Munchener Ruckversicherungs- Gesellschaft AG	Completed



# **Target countries by volume**

Target country	May-16	Apr-17	May-17
China	49	75	59
Germany	10	13	24
US	26	13	17
Spain	5	15	15
Japan	4	9	13
South Korea	7	15	10
Australia	15	6	9
Canada	6	7	8
Singapore	2	2	7
Italy	7	4	7
UK	11	11	6
France	6	9	6
Belgium	0	1	6
Sweden	3	8	5
India	4	3	4
Poland	4	2	4
Taiwan	1	2	4
Brazil	0	2	3
Denmark	0	0	3
Malaysia	2	6	3
Netherlands	1	1	3

# **Target countries by value**

Target country	May-16 (mil USD)	Apr-17 (mil USD)	May-17 (mil USD)
France	223	345	3,224
China	2,915	1,800	2,808
Brazil	0	226	1,757
UK	1,349	3,265	995
US	1,360	708	717
South Korea	145	206	426
Spain	174	2,639	424
Denmark	0	0	418
Germany	30	386	256
Australia	175	521	149
Sweden	27	35	146
Taiwan	136	10	87
Italy	74	0	84
Japan	69	301	79
India	313	609	65
Singapore	28	1	50
Poland	13	13	48
Portugal	0	39	38
Canada	343	31	34
Bermuda	152	149	28
Austria	0	0	16
Cayman Islands	98	198	8







# IPOs by volume and value

Announced date	No of deals	Total deal value (mil USD)
May-17	10	1,952
Apr-17	7	344
Mar-17	2	0
Feb-17	3	37
Jan-17	5	49
Dec-16	2	53
Nov-16	2	0
Oct-16	1	66
Sep-16	6	709
Aug-16	4	216
Jul-16	3	37
Jun-16	9	1,796
May-16	2	2,790







# **May IPOs**

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	Announced date	Deal status
1.	1,915	IPO 29% on Tel Aviv Stock Exchange	Lesico Ltd	Gas pipeline construction services holding company, Operating holding company, Railway construction services holding company, Wastewater purification plant construction services holding company, Wastewater purification plant operator holding company	IL	21/05/2017	Completed
2.	29	Planned IPO 25% on Shenzhen Stock Exchange ChilNext Board	Shanghai Guanglian Environmental & Geotechnical Engineering Co., Ltd	Industrial waste treatment services, Sewage treatment design services	CN	05/05/2017	Pending
3.	8	IPO 19% on Catalist of Singapore Stock Exchange	Sanli Environmental Ltd	Waste incineration plant operator holding company, Water and waste management engineering services holding company, Water treatment plant operator holding company	SG	15/05/2017	Completed
4.	n.a.	Planned IPO	Madhya Bhotekoshi Hydropower Co., Ltd	Hydropower generation services	NP	05/05/2017	Announced
5.	n.a.	Planned IPO on BM&F Bovespa	Omega Geracao SA	Biomass electric power producer, Hydroelectric power producer, Wind electric energy producer	BR	12/05/2017	Announced
6.	n.a.	Planned IPO on National Equities Exchange and Quotations	Shandong BORI Biomass Energy Co., Ltd	Biomass gas extraction services	CN	15/05/2017	Announced
7.	n.a.	IPO on National Equities Exchange and Quotations	Guizhou Wuling Mountain Hydropower Development Co., Ltd	Hydropower generation services	CN	08/05/2017	Completed
8.	n.a.	Planned IPO on National Equities Exchange and Quotations	Jiangsu Desun Electric Co., Ltd	Air-conditioning and geothermal equipment installation services, Household air-conditioning and geothermal equipment wholesaler	CN	26/05/2017	Announced
9.	n.a.	Planned IPO on National Equities Exchange and Quotations	Henan Aierfuke Chemicals Co., Ltd	Water treatment plants polyaluminium chloride chemicals manufacturer	CN	31/05/2017	Announced
10.	n.a.	Planned IPO 24% on KOSDAQ	mPlus Corporation	Secondary battery and fuel cell manufacturing machine manufacturer	KR	26/05/2017	Announced

#### Notes to editors

The search criteria uses a key word system based on the targets' busines 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 "reuseable 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" OR "landfill" OR "wind electric power generation" OR "wind power generation" OR "wind turbine" OR "desalination" OR "membrane bioreactor" OR "energy storage" OR "energy saving" OR "water resources surveying" OR "water resources mapping" OR "photovoltaic power" OR "hydroelectric power" OR "waste electric power generation" OR "sewage treatment" OR "green industry" OR "electric vehicle maintenance" OR "water treatment" OR "environmental protection technology" OR "waste treatment" OR "solar power project construction" OR "solar power" OR "solar electric power" OR "Water quality analyser" OR "Water quality analyzer" OR "Air pollution control equipment" OR "Air pollution control technology" OR "solar energy generation" OR "waste to energy" OR "waste-to-energy" OR "recycling" OR "hydro electric power" OR "hydro-electric power" OR "wind energy" OR "solar photovoltaic energy generation" OR "wind park"

Activity is based on the activity of the target company

Deal status is announced, completed, pending or unconditional