



The following report details mergers and acquisitions activity in the cleantech sector in January 2012 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.

1	Private Equity, Venture Capital and Development Capital
2	All deals: Mergers, Acquisitions, Joint Ventures
3	IPOs

Deal value plunges after December high

The value of private equity investment in the cleantech sector has continued to see-saw in the last couple of months, and January 2012 fit in with that trend.

The industry attracted USD 353 million in private equity, venture capital and development capital funding deals, a massive 87 per cent drop from the USD 2,696 million recorded in December. That result was in fact the highest since November 2008.

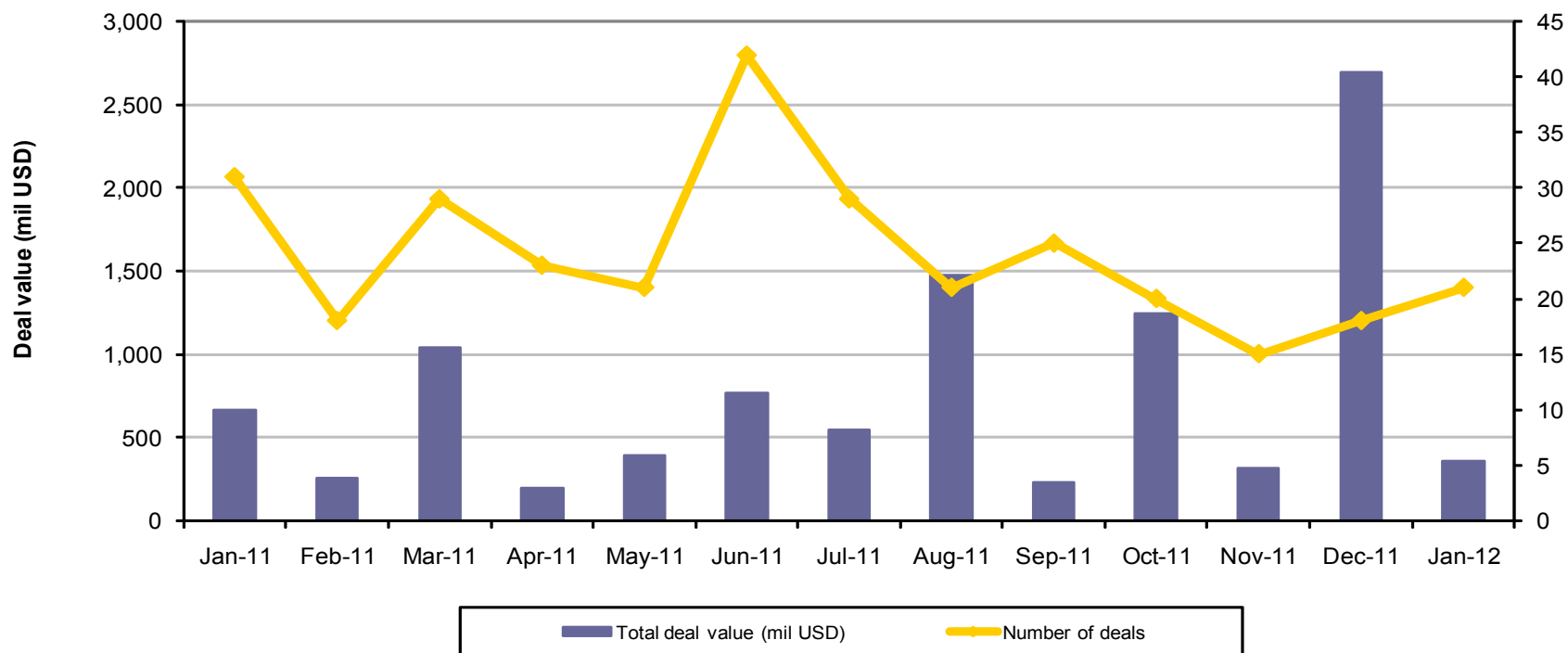
The January 2012 figure was also significantly lower than that of the year-ago period, when businesses operating in the cleantech sector received investment to the tune of USD 668 million.

Volume was up 17 per cent on the preceding month but 32 per cent lower than in January 2011.

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

Announced date	No of deals	Total deal value (mil USD)
Jan-12	21	353
Dec-11	18	2,696
Nov-11	15	314
Oct-11	20	1,240
Sep-11	25	231
Aug-11	21	1,475
Jul-11	29	541
Jun-11	42	768
May-11	21	389
Apr-11	23	199
Mar-11	29	1,040
Feb-11	18	255
Jan-11	31	668

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



US pips Switzerland to lead on value

Companies based in the US brought in the most private equity funding in the month under review, although the USD 136 million total was only just higher than the USD 131 million achieved by businesses in second-placed Switzerland. The gaps then widen, with New Zealand following on USD 56 million and Italy on USD 16 million.

Switzerland's strong showing (it had recorded no deal value for the previous year) was due to just one deal, a renewable energy joint venture between EBM and Energie Wasser Bern. The transaction was January 2012's highest value PE deal and the third largest overall.

The US also led on volume, with ten deals compared to just two each in Italy and Spain.

Top deal features Swiss JV

The USD 131 million Swiss joint venture – which saw the creation of a new company named leading swiss renewals – was by far the month's largest deal and the only one to weigh in at more than USD 100 million.

The next highest deal was the USD 70 million investment in Massachusetts-based Joule Unlimited, a developer of energy generation transformative technology, by Flagship Venture Management and other investors.

Although US companies dominated in terms of volume, a New Zealand business came in at third place with a deal worth USD 56 million. A group of investors led by the Malaysian Life Sciences Capital Fund backed biofuel developer and manufacturer LanzaTech NZ.

Private equity, venture capital and development capital deals by value

Deal value (mil USD)	Deal type	Target	Target business description	Target country	Equity provider	Deal status
131	Joint venture 100%	leading swiss renewables AG	Renewable energy services	CH	Aravis SA	Completed
70	Minority stake	Joule Unlimited Inc.	Energy generation transformative technology developer	US	Flagship Ventures Management Inc.	Completed
56	Minority stake	LanzaTech NZ Ltd	Biofuel manufacturer, Biofuel research and development services	NZ	Burrill & Company LLC; Dialog Group Bhd; Malaysian Technology Development Corporation Sdn Bhd; K One W One Ltd; Qiming Weichang Venture Capital Management (Shanghai) Co., Ltd; Khosla Ventures LLC; PETRONAS Technology Ventures Sdn Bhd	Completed
19	Minority stake	AQT Solar Inc.	CIGS thin-film solar cells manufacturer	US		Completed
17	Minority stake	Super Green Biofuels Inc.	Jatropha hybrid seeds for bioenergy use developer	US	Flint Hills Resources LLC; Thomas McNerney & Partners LLC; Finistere Partners LLC; Life Technologies Corporation	Completed
16	IBO 100%	E.R. Energia Rinnovabile Srl	Photovoltaic energy plants construction services	IT	Antin Infrastructure Partners SAS	Announced
12	Minority stake	Sungevity Inc.	Solar power generation systems installation services, Solar power generation systems wholesaler	US		Completed
10	Minority stake	Gadhia Solar Energy Systems Pvt Ltd	Solar energy generation services	IN	Zephyr Peacock Management India Pvt Ltd	Completed
7	Minority stake	Relume Technologies Inc.	Outdoor LED lighting products manufacturer, Outdoor LED lighting smart grid control systems manufacturer	US	Western Technology Advisors Inc.; Beringea LLC	Completed
7	Minority stake	MicroPower Technologies Inc.	Wireless and solar-powered video technology developer	US	Motorola Solutions Venture Capital	Completed

Private equity, venture capital and development capital deals by value

Deal value (mil USD)	Deal type	Target	Target business description	Target country	Equity provider	Deal status
5	Minority stake	Cambrios Technologies Corporation	Electronic nanotechnology products developer	US	Samsung Ventures America	Completed
4	Minority stake	Vizimax Inc.	Energy grid automation and remote control services	CA	BDC Venture Capital; Yaletown Venture Partners Inc.	Completed
n.a.	Acquisition 100%	Kinetic Systems Inc.	Chemical dispensing systems manufacturer, Mechanical engineering, design, and preconstruction services, Water purification systems manufacturer	US	Quadriga Capital Eigenkapitalservices GmbH	Completed
n.a.	Minority stake 20%	N2S Broadband Network Solutions SL	Broadband services, Electric transmission services, Electric vehicle charging services, Energy efficiency services	ES	Gamesa Venture Capital	Completed
n.a.	MBO 100%	GMT Europe BV	Waste management software developer	NL	Nedvest Capital BV	Completed
n.a.	Minority stake	Natural Systems Utilities LLC	Sewage system construction services, Water systems construction services, Water treatment consulting services	US	XPV Capital Corporation; American Refining and Biochemical Inc.	Completed
n.a.	Minority stake	Rioglass Solar Holding SA	Thermo electrical equipment manufacturer	ES	Ventizz Capital Partners AG; Partners Group AG	Completed
n.a.	Minority stake	abakus Solar AG	Photovoltaic system and project developer	DE	Crédit Agricole Private Equity SA	Completed
n.a.	Minority stake	HydroNovation Inc.	Water electrodeionisation equipment manufacturer	US	Clean Pacific Ventures Management LLC; 3M New Ventures	Completed
n.a.	Minority stake	SOLID Gesellschaft für Solarinstallation und Design mbH	Solar plants developer and operator	AT	aws-mittelstandsfonds Management GmbH	Completed

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

Target country	Jan-11	Dec-11	Jan-12
US	16	8	10
Italy	0	0	2
Spain	0	0	2
Austria	0	0	1
Netherlands	1	0	1
New Zealand	0	0	1
Canada	1	2	1
Switzerland	0	0	1
India	3	2	1
Germany	2	2	1

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

Target country	Jan-11 (mil USD)	Dec-11 (mil USD)	Jan-12 (mil USD)
US	301	646	136
Switzerland	0	0	131
New Zealand	0	0	56
Italy	0	0	16
India	66	4	10
Canada	0	16	4

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	Aravis SA	1	1	131	131
2	Flagship Ventures Management Inc.	1	1	70	70
3	K One W One Ltd	1	1	56	56
4	Qiming Weichang Venture Capital Management (Shanghai) Co., Ltd	1	1	56	56
5	Khosla Ventures LLC	1	1	56	56
6	PETRONAS Technology Ventures Sdn Bhd	1	1	56	56
7	Burrill & Company LLC	1	1	56	56
8	Dialog Group Bhd	1	1	56	56
9	Malaysian Technology Development Corporation Sdn Bhd	1	1	56	56
10	Thomas McNerney & Partners LLC	1	1	17	17
11	Flint Hills Resources LLC	1	1	17	17
12	Life Technologies Corporation	1	1	17	17
13	Finistere Partners LLC	1	1	17	17
14	Antin Infrastructure Partners SAS	1	1	16	16
15	Zephyr Peacock Management India Pvt Ltd	1	1	10	10
16	Beringea LLC	1	1	7	7
17	Western Technology Advisors Inc.	1	1	7	7
18	Motorola Solutions Venture Capital	1	1	7	7
19	Samsung Ventures America	1	1	5	5
20	Yaletown Venture Partners Inc.	1	1	4	4
21	BDC Venture Capital	1	1	4	4
22	3M New Ventures	1	0	n.a.	n.a.
23	Partners Group AG	1	0	n.a.	n.a.
24	American Refining and Biochemical Inc.	1	0	n.a.	n.a.
25	Equiter SpA	1	0	n.a.	n.a.

January highly disappointing for cleantech dealmaking

January was a dismal month for dealmaking as a whole in the cleantech sector. Value fell to USD 1,939 million, its lowest point since August 2005. The result was 67 per cent lower than the USD 5,915 million recorded for the preceding month and 68 per cent lower than the USD 6,019 million achieved in the year-ago period.

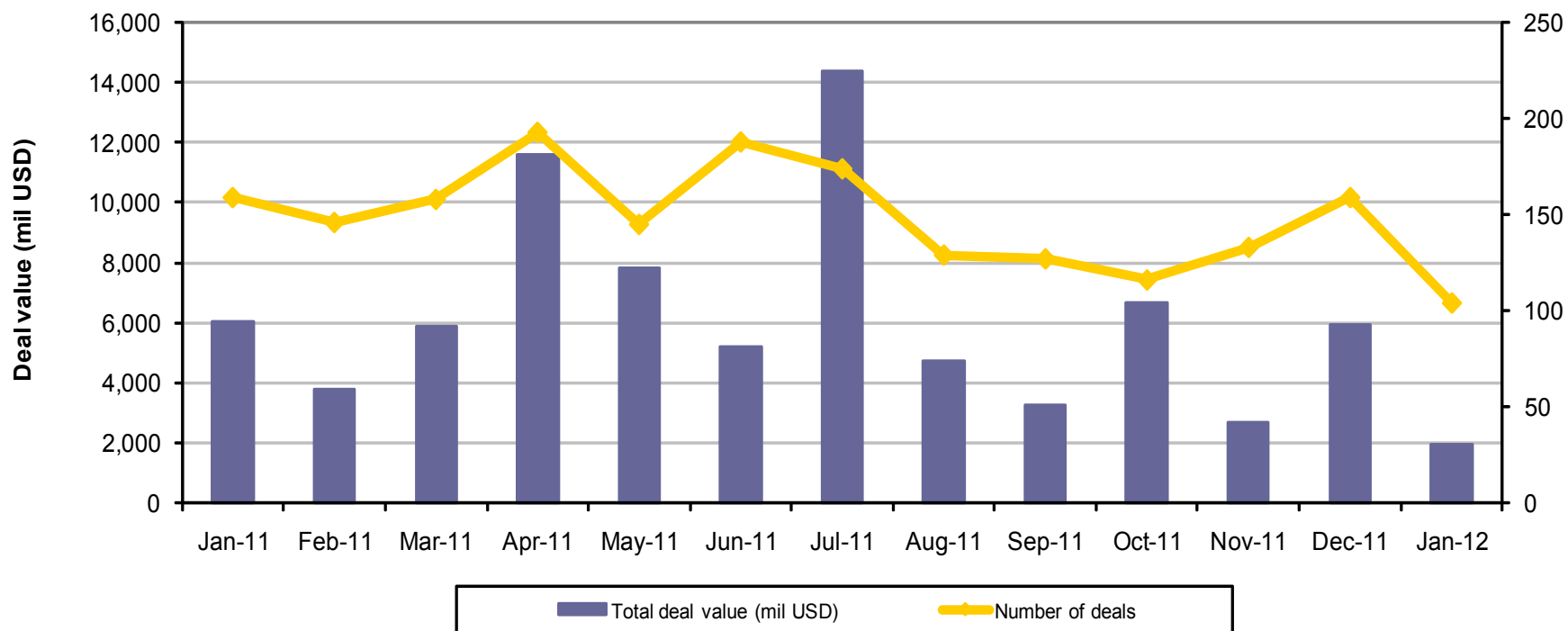
The number of transactions was also down: 35 per cent from both December and January 2011. Volume was at its lowest ebb since early 2006.

No deal was valued at more than USD 1,000 million and only four topped USD 100 million. The largest was KCC Corporation's disposal of shares worth USD 605 million in Hyundai Heavy Industries.

Deals by volume and value

Announced date	No of deals	Total deal value (mil USD)
Jan-12	104	1,939
Dec-11	159	5,915
Nov-11	133	2,699
Oct-11	116	6,656
Sep-11	127	3,259
Aug-11	129	4,727
Jul-11	174	14,376
Jun-11	188	5,211
May-11	145	7,805
Apr-11	193	11,593
Mar-11	158	5,882
Feb-11	146	3,797
Jan-11	159	6,019

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	605	Minority stake 3%	Hyundai Heavy Industries Co., Ltd	Construction equipment manufacturer, Electronic components manufacturer, Green energy provider, Industrial equipment manufacturer, Offshore and engineering services, Ship builder	KR		Completed
2	300	Minority stake 9%	Brookfield Renewable Energy Partners LP	Renewable energy services provider	BM		Announced
3	131	Joint venture 100%	leading swiss renewables AG	Renewable energy services	CH	EBM; Energie Wasser Bern	Completed
4	123	Minority stake 1%	Ferrovial SA	Airport operator, Engineering services, Municipal and industrial cleaning services, Toll road operator, Transport infrastructure operator, Waste management services	ES	Undisclosed acquiror	Completed
5	85	Acquisition 100%	HiRel Systems LLC	Transformers and power supplies manufacturer, Transformers and power supplies wholesaler	US	Vishay Intertechnology Inc.	Completed
6	70	Minority stake	Joule Unlimited Inc.	Energy generation transformative technology developer	US	Flagship Ventures Management Inc.; Investors; Institutional Investors	Completed
7	56	Minority stake	LanzaTech NZ Ltd	Biofuel manufacturer, Biofuel research and development services	NZ	Burrill & Company LLC; Dialog Group Bhd; Malaysian Technology Development Corporation Sdn Bhd; K One W One Ltd; Qiming Weichang Venture Capital Management (Shanghai) Co., Ltd; Khosla Ventures LLC; PETRONAS Technology Ventures Sdn Bhd	Completed
8	49	Acquisition 100%	Aérowatt SA	Wind power generation services	FR	Kleinkraftwerk Birseck AG	Announced
9	46	Acquisition 100%	Charm Team Ltd	Electricity and steam distributor, Electricity and steam generation services, Investment holding company	VG	Macro Pace Ltd	Announced
10	44	Minority stake 11%	Vanguardia Agro SA	Biodiesel manufacturer, Biodiesel wholesaler, Corn, cotton and soybean farming services	BR	Banco BTG Pactual SA	Completed

Top 20 deals by value

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	Acquiror	Deal status
11	41	Minority stake 21%	Capital Stage AG	Venture capital investment services	DE		Announced
12	35	Acquisition increased from 58% to 100%	Kokusai Kogyo Holdings Co., Ltd	Aerial and geological surveying services holding company, Engineering consulting service holding company, Green energy generation services holding company, Systems developer holding company	JP	Japan Asia Group Ltd	Pending
13	32	Minority stake 3%	Gamesa Corporación Tecnológica SA	Wind power plants construction services, Wind turbines manufacturer	ES	Dimensional Fund Advisors LP	Completed
14	24	Minority stake 5%	Vanguardia Agro SA	Biodiesel manufacturer, Biodiesel wholesaler, Corn, cotton and soybean farming services	BR	Mr Salo Davi Seibel	Completed
15	20	Minority stake	NPC Inc.	Solar cell manufacturing and vacuum packaging machinery wholesaler, Solar cell manufacturing equipment manufacturer, Vacuum packaging machinery manufacturer	JP		Announced
16	19	Acquisition	Leap Green Energy Pvt Ltd	Power producer	IN	JP Morgan	Completed
17	19	Minority stake	AQT Solar Inc.	CIGS thin-film solar cells manufacturer	US	Investors	Completed
18	17	Minority stake	Super Green Biofuels Inc.	Jatropha hybrid seeds for bioenergy use developer	US	Flint Hills Resources LLC; Thomas McNerney & Partners LLC; Finistere Partners LLC; Life Technologies Corporation	Completed
19	16	IBO 100%	E.R. Energia Rinnovabile Srl	Photovoltaic energy plants construction services	IT	Antin Solar Investments SpA	Announced
20	15	Minority stake less than 1%	Ferrovial SA	Airport operator, Engineering services, Municipal and industrial cleaning services, Toll road operator, Transport infrastructure operator, Waste management services	ES		Completed

Target countries by volume

Target country	Jan-11	Dec-11	Jan-12
US	39	24	27
Canada	2	14	7
South Korea	7	9	6
Australia	4	14	6
China	31	26	6
Spain	8	5	6
Germany	4	9	5
Brazil	0	6	5
UK	9	8	4
Italy	3	4	4
India	3	4	4
Japan	1	1	3
Netherlands	1	1	3
France	0	2	3
Sweden	5	2	2

Target countries by value

Target country	Jan-11 (mil USD)	Dec-11 (mil USD)	Jan-12 (mil USD)
South Korea	29	53	623
Bermuda	290	270	300
US	1,260	1,080	240
Spain	204	0	169
Switzerland	5	0	131
Brazil	0	649	94
New Zealand	0	2	56
Japan	0	0	55
France	0	165	49
British Virgin Islands	17	1	46
Germany	27	7	44
India	66	4	41
China	957	671	24
Italy	38	39	18
Canada	20	478	17

IPOs by volume and value

Announced date	No of deals	Total deal value (mil USD)
Jan-12	2	72
Dec-11	2	304
Nov-11	5	129
Oct-11	2	41
Sep-11	3	115
Aug-11	3	454
Jul-11	7	2,420
Jun-11	5	452
May-11	5	969
Apr-11	5	278
Mar-11	4	95
Feb-11	4	267
Jan-11	3	40

January IPOs

Target name	Renewable Energy Group Inc.	Hidroelectrica SA
Deal value (mil USD)	72	n.a.
Deal type	IPO on NASDAQ	Planned IPO 10% on Belex
Target country	US	Romania
Target business	Biodiesel producer and wholesaler	Hydropower producer
Announced date	03/01/12	18/01/12
Deal status	Completed	Announced

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 "reuseable energy" OR "re-usable energy" OR "solar" OR "waste to energy" OR "wind power" OR "wind farm" OR "wave power" OR "geothermal" OR "geo-thermal" 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