

Global Trends in Sustainable Energy Investment 2009

Analysis of Trend and Issues in the Financing of Renewable Energy and Energy Efficiency

Data Table - See Figure List and Notes for each Figure

#### Methodology

All figures in this report, unless otherwise credited, are based on the output of the Desktop database of Bloomberg New Energy Finance – an online portal to the world's most comprehensive database of investors, projects and transactions in clean energy.

The Bloomberg New Energy Finance Desktop collates all organisations, projects and investments according to transaction type, sector, geography and timing. It covers 32,500 organisations (including start-ups, corporates, venture capital and private equity providers, banks and other investors), 21,500 projects and 17,000 transactions

#### Definitions

Bloomberg New Energy Finance tracks deals across the financing continuum, from R&D funding and venture capital for technology and early-stage companies, through to debt and equity financing for renewable energy projects. Investment categories are defined as follows:

Venture capital and private equity (VC/PE): all money invested by venture capital and private equity funds in the equity of companies developing renewable energy and efficiency technology. Similar investment in companies setting up generating capacity through special purpose vehicles is counted in the asset financing figure.

Public markets: all money invested in the equity of publicly quoted companies developing renewable energy technology, efficiency and clean power generation. Investment in companies setting up generating capacity is included in the asset financing figure.

Asset financing: all money invested in renewable energy generation projects, whether from internal company balance sheets, from debt finance, or from equity finance. This excludes re-financings.

Mergers and acquisitions (M&A): the value of existing equity purchased by new corporate buyers in companies developing renewable technology or operating renewable energy projects.

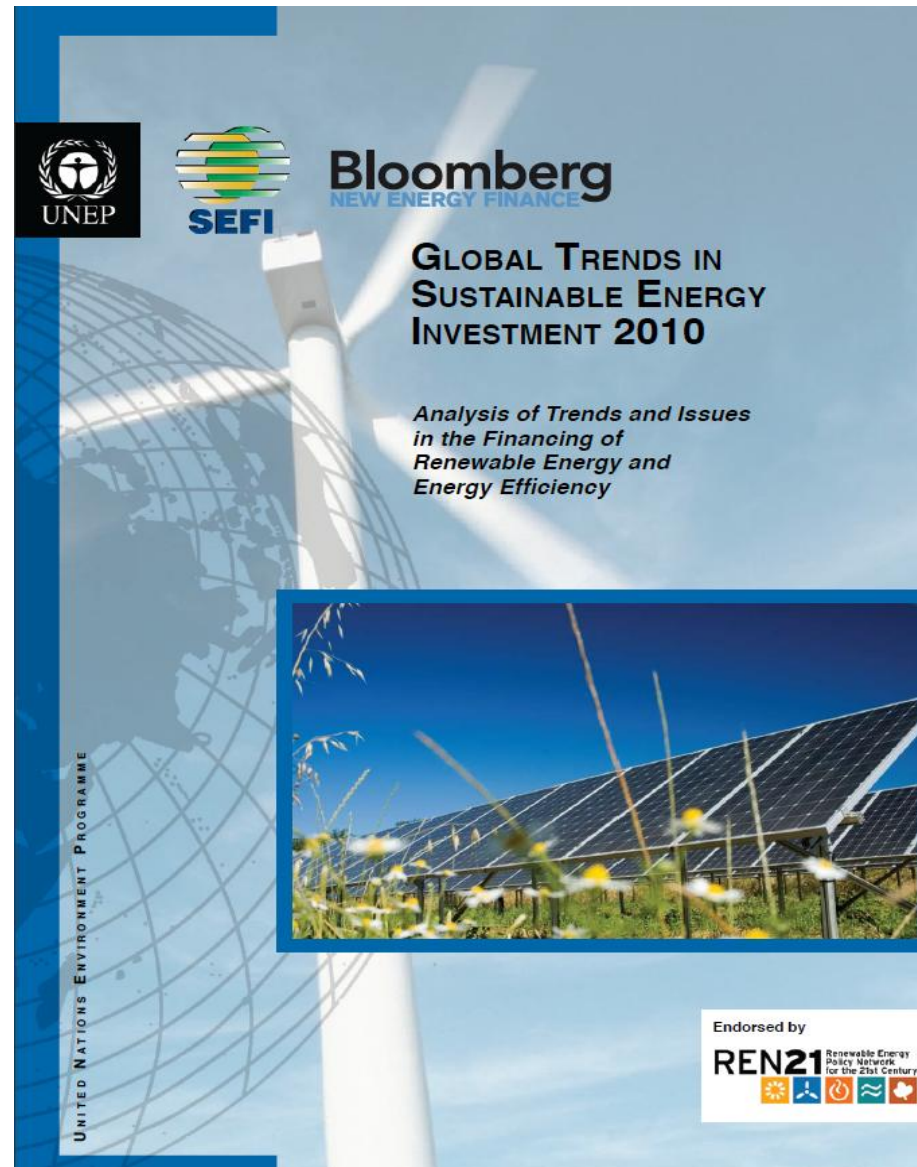


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Figure 1 & 7

Global new investment in sustainable energy, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Third party investment	18	41	76	116	130	119
SDC, corp RD&D, gov R&D	28	31	33	42	44	43
Total	46	72	109	157	173	162
% Growth		56%	52%	44%	10%	-7%

Footnote: SDC = small distributed capacity. New investment volume adjusts for re-invested equity. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

Figure 2

Global transactions in sustainable energy, 2009  
\$bn

Data:

Units: \$bn	2009
VC	3
Corp RD&D	15
Gov R&D	10
PE	4
Public markets new equity	14
<b>Total company investment</b>	<b>46</b>
Re-invested	2
Asset finance	101
SDC*	18
<b>Total investment</b>	<b>162</b>
M&A/buy-outs etc.	61
<b>Total transactions</b>	<b>223</b>

Footnote: SDC = small distributed capacity. Total values include estimates for undisclosed deals. \* data based on estimates from various industry sources

Source: Bloomberg New Energy Finance

Figure 3 & 16

proportion of global power, 2004-2009  
%

Data:

Units: %	2004	2005	2006	2007	2008	2009
Renewable power as a % of global power generation	3.1%	3.4%	3.7%	4.2%	4.8%	5.5%
Renewable power as a % of global power capacity	4.0%	4.5%	4.9%	5.5%	6.2%	7.0%
Renewable power generation increase as a % of global power generation increase	6%	10%	12%	14%	28%	32%
Renewable power capacity addition as a % of global power capacity addition	10%	16%	15%	21%	31%	36%

Footnote:

\*Excluding large hydro. Renewable capacity figures based on known commissioned projects logged on the Bloomberg New Energy Finance desktop.

Source:

EIA, IEA, Bloomberg New Energy Finance, REN21, UNEP SEFI

Figure 4A. SEFI Global trends in sustainable energy investment 2009 data table, \$bn

Category	Year	2004	2005	2006	2007	2008	2009	2008-09 Growth	2004-09 CAGR
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	%	%
<b>1 Total Investment</b>									
1.1 New Investment		46	72	109	157	173	162	-7%	29%
1.2 Total Transactions		57	102	149	220	239	223	-7%	32%
<b>2 New Investment by Value Chain</b>									
<b>2.1 Technology Development</b>									
2.1.1 Venture capital		1.2	1.4	2.2	3.9	4.3	2.7	-36%	19%
2.1.2 Government R&D*		4.3	4.6	5.1	5.9	6.5	9.7	49%	18%
2.1.3 Corporate RD&D*		15.4	15.0	15.8	16.7	17.7	14.9	-16%	-1%
<b>2.2 Equipment Manufacturing</b>									
2.2.1 Private equity expansion capital		0.3	1.0	3.3	3.7	7.5	4.1	-45%	65%
2.2.2 Public markets		0.9	5.0	12.9	24.6	14.0	14.1	0%	74%
<b>2.3 Projects</b>									
2.3.1 Asset finance		15.8	33.4	58.7	89.2	108.4	100.9	-7%	45%
Of which re-invested equity		0.0	0.0	1.1	5.7	4.5	2.4		
2.3.3 Small distributed capacity*		8.2	11.6	12.5	19.0	19.5	18.1	-7%	17%
Total Financial Investment		18	41	76	116	130	119	-8%	46%
Gov'n R&D, Corporate RD&D, Small project		28	31	33	42	44	43	-2%	9%
<b>Total New Investment</b>		46	72	109	157	173	162	-7%	29%
<b>3 M&amp;A Transactions</b>									
3.1 Private equity buy-outs		0.9	3.6	2.0	3.6	5.8	3.5	-39%	30%
3.2 Public markets investor exits		0.0	1.5	2.0	5.0	1.0	1.9	93%	167%
3.3 Corporate M&A		4.0	13.2	16.9	23.8	20.2	18.7	-7%	36%
3.4 Project acquisition & refinancing		5.4	11.8	18.5	30.3	38.7	36.6	-5%	47%
<b>4 Financial New Investment by Technology</b>									
4.1 Wind		11.0	20.6	29.9	51.9	58.8	67.3	14%	44%
4.2 Solar		0.6	3.2	10.3	21.9	33.0	24.3	-27%	107%
4.3 Biofuels		1.5	6.0	19.7	19.7	18.4	6.9	-62%	36%
4.4 Biomass & Waste		2.4	6.2	9.0	11.5	9.4	10.8	14%	35%
4.5 Energy smart technologies		1.3	1.8	2.9	3.9	3.2	4.4	34%	28%
4.6 Small Hydro		0.5	1.9	2.0	3.5	4.1	3.8	-9%	48%
4.7 Geothermal		0.8	0.4	1.2	1.6	2.1	1.5	-28%	14%
4.8 Low carbon services & support*		0.0	0.6	0.7	1.3	0.4	0.3	-40%	46%
4.9 Marine		0.0	0.0	0.5	0.4	0.1	0.2	110%	66%
<b>Total</b>		18	41	76	116	130	119	-8%	46%
<b>5 Financial New Investment by Geography</b>									
<b>5.1 Global</b>									
5.1.1 Europe		9.2	18.7	28.1	48.4	48.4	43.7	-10%	37%
5.1.2 North America		4.6	11.3	27.1	32.9	33.3	20.7	-38%	35%
5.1.3 South America		0.5	2.8	4.5	8.0	14.6	11.6	-21%	91%
5.1.4 Asia & Oceania		3.7	7.9	14.9	24.4	31.3	40.8	30%	61%
5.1.5 Middle East & Africa		0.2	0.2	1.5	2.0	2.1	2.5	20%	61%
<b>Total</b>		18	41	76	116	130	119	-8%	46%
<b>5.2 Selected Developing Countries/Regions</b>									
5.2.1 Brazil		0.4	1.8	4.0	6.7	12.8	7.8	-39%	85%
5.2.2 China		0.9	2.6	7.2	13.3	22.1	33.7	53%	105%
5.2.3 India		1.1	2.8	3.7	4.7	3.4	2.7	-21%	19%
5.2.5 Africa		0.2	0.1	0.6	1.2	1.0	0.9	-12%	34%

Footnote: New investment volume adjusts for re-invested equity. Total values include estimates for undisclosed deals.

Figure 4B. SEFI Global trends in renewable energy investment 2004 - 2009 data table, \$bn

Category	Year	2004	2005	2006	2007	2008	2009	2008-09 Growth	2004-09 CAGR
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	%	%
<b>1 Total Investment</b>									
1.1 New Investment		29	54	89	134	151	139	-8%	36%
1.2 Total Transactions		57	102	149	220	239	223	-7%	32%
<b>2 New Investment by Value Chain</b>									
<b>2.1 Technology Development</b>									
2.1.1 Venture capital		0.4	0.6	1.2	1.8	2.8	1.5	-45%	33%
2.1.2 Government R&D*		0.9	1.0	1.1	1.4	1.6	2.5	57%	22%
2.1.3 Corporate RD&D*		3.3	2.8	3.0	3.2	3.7	3.1	-17%	-2%
<b>2.2 Equipment Manufacturing</b>									
2.2.1 Private equity expansion capital		0.3	0.8	2.8	3.1	6.7	2.9	-56%	55%
2.2.2 Public markets		0.4	3.6	10.9	22.0	12.8	12.0	-6%	102%
<b>2.3 Projects</b>									
2.3.1 Asset finance		15.8	33.4	58.7	89.2	108.4	100.9	-7%	45%
Of which re-invested equity		0.0	0.0	1.1	5.7	4.5	2.4		
2.3.3 Small distributed capacity*		8.2	11.6	12.5	19.0	19.5	18.1	-7%	17%
Total Financial Investment		17	38	73	110	126	115	-9%	47%
Gov'n R&D, Corporate RD&D, Small projects		12	15	17	24	25	24	-5%	14%
<b>Total New Investment</b>		29	54	89	134	151	139	-8%	36%
<b>3 M&amp;A Transactions</b>									
3.1 Private equity buy-outs		0.8	3.3	1.6	3.1	5.4	2.9	-47%	28%
3.2 Public markets investor exits		0.0	1.3	2.0	4.1	0.9	1.9	102%	372%
3.3 Corporate M&A		2.8	8.9	13.1	19.1	18.5	17.1	-8%	44%
3.4 Project acquisition & refinancing		5.4	11.8	18.5	30.3	38.7	36.6	-5%	47%
<b>4 Financial Sector New Investment by Technology</b>									
4.1 Wind		11.0	20.6	29.9	51.9	58.8	67.3	14%	44%
4.2 Solar		0.6	3.2	10.3	21.9	33.0	24.3	-27%	107%
4.3 Biofuels		1.5	6.0	19.7	19.7	18.4	6.9	-62%	36%
4.4 Biomass & Waste		2.4	6.2	9.0	11.5	9.4	10.8	14%	35%
4.5 Small Hydro		0.5	1.9	2.0	3.5	4.2	3.8	-9%	48%
4.6 Geothermal		0.8	0.4	1.2	1.6	2.2	1.5	-29%	14%
4.7 Marine		0.0	0.0	0.5	0.4	0.1	0.2	110%	66%
<b>Total</b>		17	38	73	110	126	115	-9%	47%
<b>5 Financial New Investment by Geography</b>									
<b>5.1 Global</b>									
5.1.1 United States		2.8	8.4	23.2	25.6	28.6	13.9	-52%	38%
5.1.2 Brazil		0.4	1.8	4.0	6.7	12.8	7.8	-39%	85%
5.1.3 AMER (excl. Brazil & US)		0.9	2.6	2.3	5.0	3.8	7.4	93%	51%
5.1.4 Europe		8.9	17.7	26.9	46.8	48.0	43.1	-10%	37%
5.1.5 Middle East & Africa		0.2	0.1	1.4	1.9	2.0	2.5	26%	61%
5.1.6 China		0.9	2.5	7.2	13.2	22.0	33.7	53%	105%
5.1.7 India		1.1	2.8	3.7	4.7	3.3	2.7	-20%	19%
5.1.8 ASOC (excl. China & India)		1.6	2.5	4.0	6.3	5.6	3.9	-31%	19%
<b>Total</b>		17	38	73	110	126	115	-9%	47%

Footnote: Includes biofuels. Excludes energy smart technologies, CCS and other low carbon technologies and services. New investment volume adjusts for re-invested equity. Total values include estimates for undisclosed deals.

Figure 5

Global financial new investment quarterly trend, Q1 2004-Q2 2010  
\$bn

Data:

Units: \$bn	Q1 '04	Q2 '04	Q3 '04	Q4 '04	Q1 '05	Q2 '05	Q3 '05	Q4 '05	Q1 '06	Q2 '06	Q3 '06	Q4 '06	Q1 '07	Q2 '07	Q3 '07	Q4 '07	Q1 '08	Q2 '08	Q3 '08	Q4 '08	Q1 '09	Q2 '09	Q3 '09	Q4 '09	Q1 '10	Q2 '10	
Total		5	4	4	6	8	10	9	13	13	21	17	27	21	24	28	42	27	37	36	29	19	34	33	33	33	32
4Q running average					5	5	7	8	10	12	14	16	19	21	22	25	29	30	34	36	32	31	30	29	30	33	33

Footnote: New investment volume adjusts for re-invested equity. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

Figure 6

Global acquisition transactions quarterly trend, Q1 2004-Q2 2010  
\$bn

Data:

Units: \$bn	Q1 '04	Q2 '04	Q3 '04	Q4 '04	Q1 '05	Q2 '05	Q3 '05	Q4 '05	Q1 '06	Q2 '06	Q3 '06	Q4 '06	Q1 '07	Q2 '07	Q3 '07	Q4 '07	Q1 '08	Q2 '08	Q3 '08	Q4 '08	Q1 '09	Q2 '09	Q3 '09	Q4 '09	Q1 '10	Q2 '10
Total	2	3	2	4	5	5	10	10	8	10	7	14	9	18	17	18	19	13	17	17	8	18	17	18	16	14
4Q running average				3	3	4	6	8	8	9	9	10	10	12	15	16	18	17	17	16	14	15	15	15	15	17

Footnote:

Total values include estimates for undisclosed deals

Source:

Bloomberg New Energy Finance

Figure 8

Financial new investment by technology, 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009	% growth on 2008
Marine	0.2	110%
Low carbon services & support*	0.3	-40%
Geothermal	2	-28%
Small Hydro	4	-9%
Energy smart technologies	4	34%
Biofuels	7	-62%
Biomass & Waste	11	14%
Solar	24	-27%
Wind	67	14%

Footnote: New investment volume adjusts for re-invested equity. Total values include estimates for undisclosed deals. \* Includes CCS

Source: Bloomberg New Energy Finance

Figure 9

Acquisition transactions by technology, 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009	% growth on 2008
Marine	0.2	38%
Low carbon services & support*	1	-33%
Biomass & Waste	1	-5%
Geothermal	2	-35%
Energy smart technologies	2	31%
Small Hydro	2	-1%
Biofuels	6	52%
Solar	14	33%
Wind	33	-23%

Footnote:

Total values include estimates for undisclosed deals. \* Includes CCS

Source:

Bloomberg New Energy Finance

Figure 10

VC/PE new investment by technology, 2009  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Energy smart technologies	2.1	4%
Solar	1.8	-61%
Biofuels	1.1	-35%
Wind	1.0	-44%
Biomass & w-t-e	0.4	-31%
Low carbon services & support*	0.3	-32%
Geothermal	0.1	-59%
Marine	0.1	-31%
Small Hydro	0.02	-95%

Footnote: VC/PE new investment excludes PE buy-outs. Total values include estimates for undisclosed deals. \* Includes CCS

Source: Bloomberg New Energy Finance

Figure 11

Public markets new investment by technology, 2009  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Solar	5.9	-12%
Wind	4.9	37%
Energy smart technologies	2.3	0 in 2008
Geothermal	0.4	0 in 2008
Biofuels	0.3	-81%
Small Hydro	0.1	0 in 2008
Biomass & w-t-e	0.1	-68%
Low carbon services & support*	0.0	-100%
Marine	0.0	-100%

Footnote:

\* Includes CCS

Source:

Bloomberg New Energy Finance

Figure 12

Asset finance new build by technology, 2009  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Wind	62.7	13%
Solar	17.1	-25%
Biomass & w-t-e	10.4	16%
Biofuels	5.6	-63%
Small Hydro	3.8	-8%
Geothermal	1.1	-33%
Marine	0.2	408%

Footnote:

Total values include estimates for undisclosed deals

Source:

Bloomberg New Energy Finance

Figure 13

Financial new investment by region, 2009  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Europe	43.7	10%
Asia & Oceania	40.8	219%
North America	20.7	-29%
South America	11.6	-44%
Middle East & Africa	2.5	52%

Footnote: New investment volume adjusts for re-invested equity. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

Figure 14

Financial new investment by region, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009	Total
Europe	9.2	18.7	28.1	48.4	48.4	43.7	196.6
North America	4.6	11.3	27.1	32.9	33.3	20.7	129.8
Asia & Oceania	3.7	7.9	14.9	24.4	31.3	40.8	123.0
South America	0.5	2.8	4.5	8.0	14.6	11.6	42.0
Middle East & Africa	0.2	0.2	1.5	2.0	2.1	2.5	8.5

Footnote: New investment volume adjusts for re-invested equity. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

Figure 15

Acquisition transactions by region, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Europe	5.2	15.9	20.8	26.1	35.6	28.0
North America	4.3	11.1	13.4	24.1	20.1	18.0
Asia & Oceania	0.5	3.0	3.6	6.9	5.6	9.9
South America	0.3	0.1	1.4	5.4	3.1	4.1
Middle East & Africa	0.1	0.0	0.1	0.2	1.3	0.7

Footnote:

Total values include estimates for undisclosed deals

Source:

Bloomberg New Energy Finance

Figure 19

R&D investment in sustainable energy, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Corporate R&D	15	15	16	17	18	15
Government R&D	4	5	5	6	7	10
Total	20	20	21	23	24	25
% Growth		-1%	7%	8%	7%	2%

Source: Bloomberg, Bloomberg New Energy Finance, IEA, IMF, various government agencies

Figure 20

Corporate and Government R&D investment by technology, 2009, and total growth on 2008  
\$bn

Data:

	Corporate R&D		Government R&D		Total	
	2009	% growth on 2008	2009	% growth on 2008	2009	% growth on 2008
Units: \$bn						
Small hydro	0.02	3%	0.02	0%	0.02	2%
Marine	0.19	-17%	0.04	2%	0.23	-14%
Geothermal	0.17	-18%	0.07	2%	0.24	-13%
Biomass & waste	0.19	-17%	0.19	2%	0.38	-9%
Biofuels	0.18	-2%	0.64	88%	0.82	57%
Wind	0.56	-13%	0.34	40%	0.90	1%
CCS & low carbon services	0.27	-12%	2.03	6%	2.30	4%
Solar	1.77	-19%	1.19	73%	2.96	3%
Energy smart technologies	11.55	-16%	5.21	71%	16.76	0%

Source: Bloomberg, Bloomberg New Energy Finance, IEA, IMF, various government agencies

Figure 21

Corporate and Government R&D investment by region, 2009, and growth on 2008  
\$bn

Data:

	Corporate R&D		Government R&D		Total	
	2009	% growth on 2008	2009	% growth on 2008	% growth on 2008	
Units: nominal \$bn						
Middle East & Africa	0.00	0%	0.01	2%	2%	
India	0.02	471%	0.06	-11%	8%	
Brazil	No data	No data	0.09	96%	n/a	
China	0.09	-12%	No data	No data	n/a	
AMER (exc. US & Brazil)	0.02	-60%	0.34	42%	27%	
ASOC (exc. China & India)	3.33	-20%	1.67	7%	-13%	
United States	3.34	-6%	4.01	27%	9%	
Europe	8.12	-17%	3.55	145%	3%	

Source: Bloomberg, Bloomberg New Energy Finance, IEA, IMF, various government agencies

Figure 22

VC/PE new investment by stage, 2004 - 2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
VC early stage	0.65	0.83	1.02	2.24	1.99	1.09
VC late stage	0.51	0.59	1.23	1.63	2.28	1.64
PE expansion capital	0.34	0.96	3.32	3.66	7.53	4.11
<b>Total</b>	<b>1.5</b>	<b>2.4</b>	<b>5.6</b>	<b>7.5</b>	<b>11.8</b>	<b>6.8</b>
<b>% Growth</b>		<b>59%</b>	<b>134%</b>	<b>36%</b>	<b>57%</b>	<b>-42%</b>
Disclosed deal count	146	163	255	361	353	281
Total deal count	179	204	300	410	411	324

Footnote: Buy-outs are not included as new investment. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

Figure 23

VC/PE new investment by stage, 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009	% growth on 2008	Disclosed deal count	Total deal count
PE buy-out	3.54	-39%	18	37
PE expansion capital	4.11	-45%	95	111
VC bridge/interim	0.21	-51%	<b>30</b>	33
VC further rounds	0.90	-7%	19	21
VC series C	0.52	-40%	18	19
VC series B	0.59	-49%	44	50
VC series A	0.45	-40%	63	77
VC seed/spin-off	0.05	-35%	12	13

Footnote:

Buy-outs are not included as new investment. Total values include estimates for undisclosed deals

Source:

Bloomberg New Energy Finance

Figure 24

VC/PE new investment by sector, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Solar	0.21	0.46	1.45	2.39	4.66	1.82
Energy smart technologies	0.78	0.91	1.41	2.09	2.01	2.09
Biofuels	0.07	0.50	1.32	1.28	1.66	1.08
Wind	0.35	0.20	0.78	0.49	1.80	1.01
Biomass & w-t-e	0.06	0.15	0.34	0.48	0.60	0.41
Low carbon services & support*	0.01	0.10	0.10	0.49	0.37	0.25
Small hydro	0.00	0.00	0.05	0.05	0.45	0.02
Geothermal	0.00	0.05	0.05	0.11	0.17	0.09
Marine	0.01	0.01	0.06	0.16	0.09	0.06
<b>Total</b>	<b>1.5</b>	<b>2.4</b>	<b>5.6</b>	<b>7.5</b>	<b>11.8</b>	<b>6.8</b>

Footnote: Buy-outs are not included as new investment. Total values include estimates for undisclosed deals. \* includes CCS

Source: Bloomberg New Energy Finance

Figure 25

VC/PE new investment by sector, 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009	% growth on 2008
Small Hydro	0.02	-95%
Marine	0.06	-31%
Geothermal	0.1	-46%
Low carbon services & support*	0.3	-32%
Biomass & w-t-e	0.4	-31%
Wind	1.0	-44%
Biofuels	1.1	-35%
Solar	1.8	-61%
Energy smart technologies	2.1	4%

Footnote: Buy-outs are not included as new investment. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

Figure 26

VC/PE new investment by region, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Europe	0.63	0.61	1.66	1.76	2.73	1.67
North America	0.75	1.60	2.87	4.33	6.63	3.89
Asia & Oceania	0.11	0.13	1.01	0.82	1.52	0.37
South America		0.00		0.56	0.47	0.87
Middle East & Africa	0.01	0.03	0.02	0.07	0.44	0.05

Footnote: Buy-outs are not included as new investment. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

Figure 27

VC/PE new investment by region, 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Middle East & Africa	0.05	-89%
Asia & Oceania	0.37	-76%
South America	0.87	86%
Europe	1.67	-39%
North America	3.89	-41%

Footnote: Buy-outs are not included as new investment. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

Figure 28

Public market new investment by stage, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
IPO	0.4	3.0	7.7	13.2	3.5	3.4
Secondary & PIPE	0.3	1.4	3.8	6.1	3.1	7.8
Convertible & Other	0.1	0.5	0.7	4.9	7.0	2.4
OTC	0.1	0.2	0.7	0.4	0.5	0.4
Secondary&PIPE/Convertible&Other/OTC/IPO deal count	(27/12/14/14)	(75/45/30/45)	(87/61/64/51)	(128/64/57/60)	(96/70/43/22)	(112/52/30/12)

Footnote:

<none>

Source:

Bloomberg New Energy Finance

Figure 30

Public market new investment by sector, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Solar	0.06	1.74	4.81	7.84	6.74	5.95
Wind	0.05	0.87	1.51	10.75	3.60	4.94
Energy smart technologies	0.49	0.93	1.44	1.82	1.23	2.26
Biofuels	0.08	0.72	3.51	1.42	1.74	0.34
Biomass & Waste	0.01	0.25	0.55	1.33	0.20	0.06
Low carbon services & support*	0.03	0.49	0.55	0.83	0.05	0.00
Geothermal	0.14	0.03	0.47	0.36	0.49	0.37
Small Hydro	0.02	0.01	0.02	0.16	0.00	0.13
Marine	0.00	0.00	0.00	0.12	0.00	0.00
Total	0.9	5.0	12.9	24.6	14.0	14.1
Total deal count	67	195	263	309	231	206

Footnote:

<none>

\*incldes CCS

Source:

Bloomberg New Energy Finance

Figure 31

Public market new investment by sector, 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Marine	0.00	n/a
Low carbon services & support*	0.00	n/a
Small Hydro	0.13	0 in 2008
Biomass & Waste	0.06	-68%
Geothermal	0.37	-25%
Biofuels	0.34	-81%
Energy smart technologies	2.26	84%
Wind	4.94	37%
Solar	5.95	-12%

Footnote:

<none>

\*includes CCS

Source:

Bloomberg New Energy Finance

Figure 32

Public market new investment by region of exchange, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Europe	0.2	2.5	7.7	14.9	6.1	2.8
North America	0.6	1.7	4.4	7.1	5.8	4.5
Asia & Oceania	0.1	0.4	0.7	2.6	0.8	6.7
South America	0.0	0.4	0.2	0.1	1.4	0.0
Middle East & Africa	0.0	0.0	0.0	0.0	0.0	0.0

Footnote:

<none>

Source:

Bloomberg New Energy Finance

Figure 33

Public market new investment by exchange, 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Deutsche Börse	0.37	-75%
Tokyo Stock Exchange	0.56	986%
Taiwan Stock Exchange	0.61	481%
NASDAQ Global Select Market	0.66	-12%
Toronto Stock Exchange	0.66	541%
New York Stock Exchange	1.01	-52%
Copenhagen Stock Exchange	1.05	1420%
Oslo Stock Exchange	1.19	0 in 2008
NASDAQ Global Market	1.39	-32%
Hong Kong Stock Exchange	3.99	2984%

Footnote:

Top 10 exchanges

Source:

Bloomberg New Energy Finance

Figure 34

Public market new investment by company nationality, 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Germany	0.4	-76%
Japan	0.6	986%
India	0.7	599%
Taiwan	0.7	199%
Canada	0.8	86%
Denmark	1.1	1420%
Norway	1.2	0 in 2008
Hong Kong	1.4	0 in 2008
United States	2.5	-20%
China	4.2	57%

Footnote:

Top 10 countries

Source:

Bloomberg New Energy Finance

Figure 35

Asset financing new investment by type of security, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Balance sheet	11.2	17.6	31.4	50.2	55.2	68.8
Debt	4.4	15.2	27.0	37.8	52.5	31.6
Bond/other	0.2	0.5	0.3	1.2	0.7	0.6
Disclosed deal count	154	411	553	818	859	681
Total deal count	374	712	890	1350	1354	1134

Footnote:

Total values include estimates for undisclosed deals.

Source:

Bloomberg New Energy Finance

Figure 36

Asset financing new investment by sector, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Wind	11	20	28	43	56	63
Biofuels	1	5	15	20	15	6
Solar	0	1	4	12	23	17
Biomass & Waste	2	6	8	10	9	10
Small Hydro	1	2	2	3	4	4
Geothermal	1	0	1	2	2	1
Marine	0	0	0	0	0	0
Disclosed deal count	154	411	553	818	859	681
Total deal count	374	712	890	1350	1354	1134

Footnote:

Total values include estimates for undisclosed deals.

Source:

Bloomberg New Energy Finance

Figure 37

Asset financing new investment by region, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Europe	8.4	15.6	19.2	34.4	42.0	40.2
Asia & Oceania	3.6	7.3	13.4	21.4	30.1	34.1
North America	3.2	8.0	20.3	23.7	21.4	13.2
South America	0.5	2.4	4.4	7.6	13.3	11.0
Middle East & Africa	0.2	0.1	1.4	2.0	1.7	2.5
Disclosed deal count	154	411	553	818	859	681
Total deal count	374	712	890	1350	1354	1134

Footnote:

Total values include estimates for undisclosed deals.

Source:

Bloomberg New Energy Finance

Figure 38

Acquisition transactions by type, 2004-2009  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
PE buy-outs	1	4	2	4	6	4
Public market investor exits	0	2	2	5	1	2
Corporate M&A	4	13	17	24	20	19
Asset acquisitions & refinancing	5	12	18	30	39	37
Total	10	30	39	63	66	61
Disclosed deal count	62	180	198	314	300	278
Total deal count	189	478	622	821	755	685

Footnote:

Total values include estimates for undisclosed deals.

Source:

Bloomberg New Energy Finance

Figure 39

Acquisition transactions by sector, 2004-2010  
\$bn

Data:

Units: \$bn	2004	2005	2006	2007	2008	2009
Wind	5	16	23	32	43	33
Solar	0	1	4	9	10	14
Energy smart technologies	0	1	5	8	4	6
Biomass & w-t-e	2	2	1	1	2	2
Biofuels	1	5	4	5	1	2
Low carbon services & support*	0	1	0	5	2	2
Geothermal	1	4	2	2	1	1
Small hydro	0	0	1	1	1	1
Marine	0	0	0	0	0	0

Footnote:

Total values include estimates for undisclosed deals. \* Includes CCS

Source:

Bloomberg New Energy Finance

Figure 40

Acquisition transactions by region 2009, and growth on 2008  
\$bn

Data:

Units: \$bn	2009 % growth on 2008	
Middle East & Africa	0.7	-45%
Central & South America	4.1	32%
Asia & Oceania	9.9	75%
North America	18.0	-10%
Europe	28.0	-21%

Footnote:

Total values include estimates for undisclosed deals

Source:

Bloomberg New Energy Finance

Figure 41

Sustainable energy funds by focus and asset class, as at March 2010  
\$bn

Data:

Units: \$bn	Venture Capital	Private Equity	Public Equity	Project Equity	Project Debt	Emission Credits
Private funds						
Climate Change	0.2	0.1	1.8	0.2	0.0	4.2
Environment / Cleantech	7.9	9.7	6.2	0.3	0.3	5.5
Energy & Infrastructure	0.0	10.0	0.0	2.2	0.0	3.2
Clean Energy	4.2	11.9	15.3	11.7	5.0	8.5
Multilateral funds						
Climate Change	0.0	0.0	0.0	0.9	3.4	2.2
Environment / Cleantech	0.0	0.0	0.0	0.1	0.5	0.0
Energy & Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0
Clean Energy	0.0	0.0	0.0	0.6	2.5	0.0
Government funds						
Climate Change	0.0	0.0	0.0	0.0	0.0	0.0
Environment / Cleantech	0.0	0.0	0.0	0.0	0.0	0.0
Energy & Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0
Clean Energy	0.0	0.0	0.0	2.1	8.3	0.0
Total						
Climate Change	0.2	0.1	1.8	1.1	3.5	6.4
Environment / Cleantech	7.9	9.7	6.2	0.4	0.8	5.5
Energy & Infrastructure	0.02	10.0	0.0	2.2	0.0	3.2
Clean Energy	4.2	11.9	15.3	14.4	15.8	8.5

Footnote:

Excludes SRI funds

Source:

Bloomberg New Energy Finance

Figure 42

Sustainable energy funds by asset class, as at March 2010  
%

Data:

Units: \$bn	Venture Capital	Private Equity	Public Equity	Project Equity	Project Debt	Emission Credits	Total
Climate Change	1%	0%	8%	6%	17%	27%	10%
Environment / Cleantech	64%	31%	27%	2%	4%	23%	24%
Energy & Infrastructure	0%	32%	0%	12%	0%	13%	12%
Clean Energy	34%	37%	66%	80%	79%	36%	54%

Footnote: Excludes SRI funds

Source: Bloomberg New Energy Finance

Figure 43

Sustainable energy public equity funds launched, 2004-2009  
units

Data:

Units	2004	2005	2006	2007	2008	2009
Total count	0	3	10	45	20	4

Footnote:

<none>

Source:

Bloomberg New Energy Finance

Figure 44

Value of carbon markets, 2009, and 2010 forecast

Data:

Units: \$bn	2005	2006	2007	2008	2009	2010
EU ETS	8.0	29.0	57.0	103.0	108.0	21.0
sCERs	0.0	0.0	0.0	14.0	14.0	3.0
pCERs	6.0	6.0	8.0	5.0	1.9	0.2
RGGI	0.0	0.0	0.0	0.0	2.1	0.0
AAUs	0.0	0.0	0.0	0.6	1.6	0.1
Forecast						94.0

Footnote:

<none>

Source:

Bloomberg New Energy Finance

Figure 45

Value of carbon markets, 2009, and 2010 forecast

Data:

Units: \$bn	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
US (International) CDM	0.00	0.00	0.00	5.00	7.00	11.00	14.00	27.00	53.00	78.00
EU (International) CDM	24.00	41.00	49.00	42.00	42.00	43.00	24.00	13.00	16.00	18.00
Others (International) CDM	12.00	12.00	8.00	22.00	23.00	33.00	42.00	44.00	51.00	59.00
EU ETS	114.00	146.00	150.00	164.00	131.00	163.00	197.00	248.00	290.00	358.00
US ETS	0.00	0.00	96.00	100.00	115.00	180.00	194.00	210.00	244.00	264.00
Australia ETS	0.00	0.00	18.00	20.00	21.00	22.00	22.00	25.00	28.00	29.00
Japan ETS	0.00	0.00	49.00	51.00	53.00	55.00	57.00	60.00	66.00	68.00

Footnote:

<none>

Source:

Bloomberg New Energy Finance

Figure 46

Project submission to the CER pipeline, monthly  
number of projects and volume 2012 MtCO<sub>2</sub>e

Data:

Month	Project submission number of projects	Volume submission 2012 MtCO <sub>2</sub> e
Apr-07	117	64
May-07	123	73
Jun-07	126	72
Jul-07	170	94
Aug-07	102	44
Sep-07	152	71
Oct-07	141	58
Nov-07	124	55
Dec-07	96	69
Jan-08	106	48
Feb-08	115	38
Mar-08	116	52
Apr-08	137	54
May-08	146	74
Jun-08	128	44
Jul-08	116	48
Aug-08	123	37
Sep-08	155	69
Oct-08	195	79
Nov-08	106	37
Dec-08	118	32
Jan-09	110	39
Feb-09	75	20
Mar-09	116	29
Apr-09	85	31
May-09	132	47
Jun-09	96	27
Jul-09	125	35
Aug-09	101	28
Sep-09	101	26
Oct-09	97	28
Nov-09	92	32
Dec-09	84	22
Jan-10	102	31
Feb-10	83	26

Footnote:  
<none>

Source: Bloomberg New Energy Finance

Figure 47

CER project pipeline, number of projects at each stage, 2005-2010

Data:

Units: number of projects			
Year	Issuing	Registered	At validation
2005	4	64	494
2006	104	471	870
2007	281	898	1734
2008	441	1325	2709
2009	473	1421	2766
2010	666	1396	2906

Footnote:

As at March 2010. 'Registered' includes all projects that are registered but not yet issuing. 'At validation' includes all live projects in the pipeline that are at pre-registration stage. Excludes rejected, terminated and withdrawn projects

Source: Bloomberg New Energy Finance

Figure 48

CER credit issuances, volume by technology, 2005 - March 2010  
MTCO<sub>2</sub>e/yr

Data:

Units: MTCO <sub>2</sub> e/yr	2005	2006	2007	2008	2009	2010
Agriculture & Waste	0.05	2	6	10	14	15
Fugitive	-	-	-	5	7	7
High GWP	-	17	73	181	280	293
Industry	-	1	10	14	20	23
Renewable Energy	0.1	6	15	29	47	50

Footnote:

<none>

Source: Bloomberg New Energy Finance

Figure 49

New financial sector investment by country, 2009, and growth on 2008  
\$bn

Data

Units: \$bn	2009	% growth on 2008
Netherlands	2.3	169%
Italy	2.4	-40%
India	2.7	-21%
Canada	3.2	86%
Germany	4.0	19%
Brazil	7.8	-39%
Spain	10.7	-48%
United Kingdom	11.7	135%
United States	17.0	-45%
China	33.7	53%

Footnote:

Top 10 countries. Adjusted for re-invested equity

Source:

Bloomberg New Energy Finance

Figure 50

Financial new investment in China by sector and asset class, 2009  
\$bn

Data

Units: \$bn	Asset finance	Public markets	VC/PE	Total
Energy smart technologies	0	0.04	0.03	0.1
Other renewables	0.02	0	0.05	0.1
Biomass & w-t-e	3.0	0	0	3.0
Solar	1.6	1.6	0.1	3.3
Wind	24.5	2.8	0.01	27.2

Footnote: 'Other renewables' includes biofuels, geothermal & small hydro. Asset finance adjusts for re-invested equity.

Source: Bloomberg New Energy Finance

Figure 51

Financial new investment in Brazil by sector and asset class, 2009  
\$bn

Data

Units: \$bn	Asset finance	Public markets	VC/PE	Grand Total
Biomass & w-t-e	0.6	0	0	0.6
Small hydro	1.7	0	0	1.7
Wind	2.0	0	0.2	2.2
Biofuels	2.6	0.03	0.67	3.3

Footnote:

Asset finance adjusts for re-invested equity.

Source:

Bloomberg New Energy Finance

Figure 52

Financial new investment in India by sector and asset class, 2009  
\$bn

Data

Sector/asset class	Asset finance	Public markets	VC/PE	Grand Total
Solar	0.05	0.02	0.03	0.1
Biofuels	0.1	0.1	0	0.2
Small hydro	0.2	0	0	0.2
Biomass & w-t-e	0.5	0	0.1	0.6
Wind	1.0	0.5	0	1.6

Footnote:

<none> Asset finance adjusts for re-invested equity.

Source: Bloomberg New Energy Finance

Figure 53

Financial new investment in non-OECD Asia (excluding China and India) by country, 2009  
\$bn

Data

Units: \$bn	2009
Sri Lanka	0.1
Philippines	0.2
Vietnam	0.2
Thailand	0.2
Indonesia	0.3
Pakistan	0.5
Taiwan	0.9

Footnote:

Omits countries with less than \$0.1bn investment

Source:

Bloomberg New Energy Finance

Figure 54

Financial new investment in South America (excluding Brazil) by country, 2009  
\$bn

Data

Units: \$bn	2009
Costa Rica	0.11
Panama	0.14
Nicaragua	0.2
Peru	0.5
Chile	0.7
Mexico	2.0

Footnote:

Omits countries with less than \$0.1bn investment

Source:

Bloomberg New Energy Finance

Figure 55

Financial new investment in Africa by country, 2009  
\$bn

Data

Units: \$bn	2009
Ethiopia	0.1
Uganda	0.1
South Africa	0.1
Egypt	0.5

Footnote:  
Omits countries with less than \$0.1bn investment

Source: Bloomberg New Energy Finance