

# 2Q09 Cleantech Investment Trends

## Member Webinar

July 7, 2009

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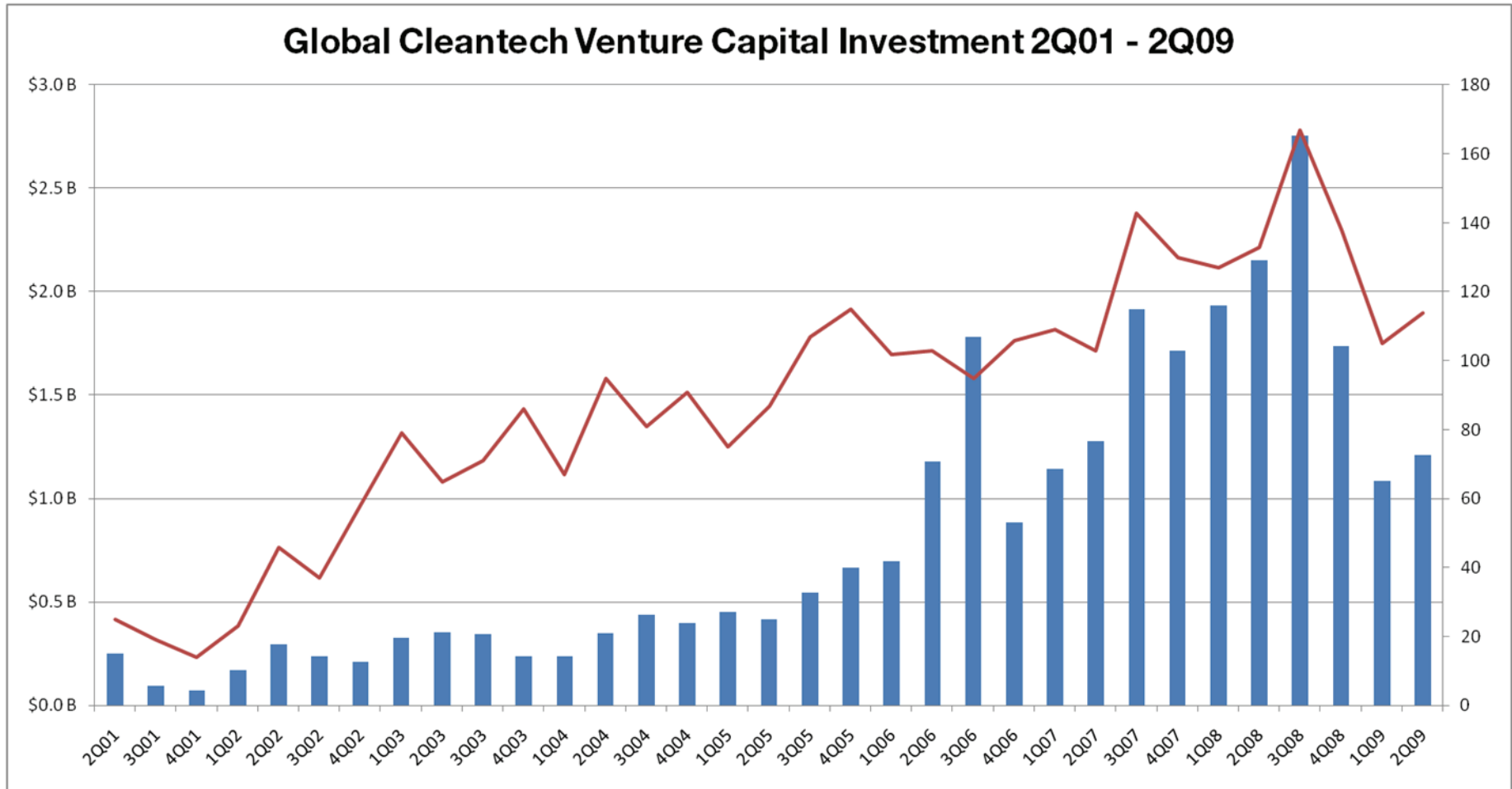
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Scott Smith, Partner and U.S. Cleantech Leader, Deloitte & Touche LLP

# Key takeaways

- Cleantech investment activity is rebounding after two sharp, consecutive quarterly declines
  - Venture investment up 12% sequentially
  - M&A activity rebounding
  - Anecdotally: solar tax equity coming back
- Transportation technologies (vehicles, advanced batteries) were the main focus of investors in 2Q09
  - Attention on automotive sector by governments, auto manufacturers, investors, entrepreneurs
- Solar has fallen from \$1.2 billion invested in 3Q08 to \$115 million 2Q09
  - Number of deals and average deal size has fallen
  - Big thin-film CIGS PV and CSP rounds fallen out of favor as investors look for more capital-efficient business models
- Starting to see the impact of government stimulus and loan guarantees
  - Solyndra, Tesla, many others
  - Numerous RFPs in progress: wind and solar projects, advanced batteries, geothermal, smart grid, etc.

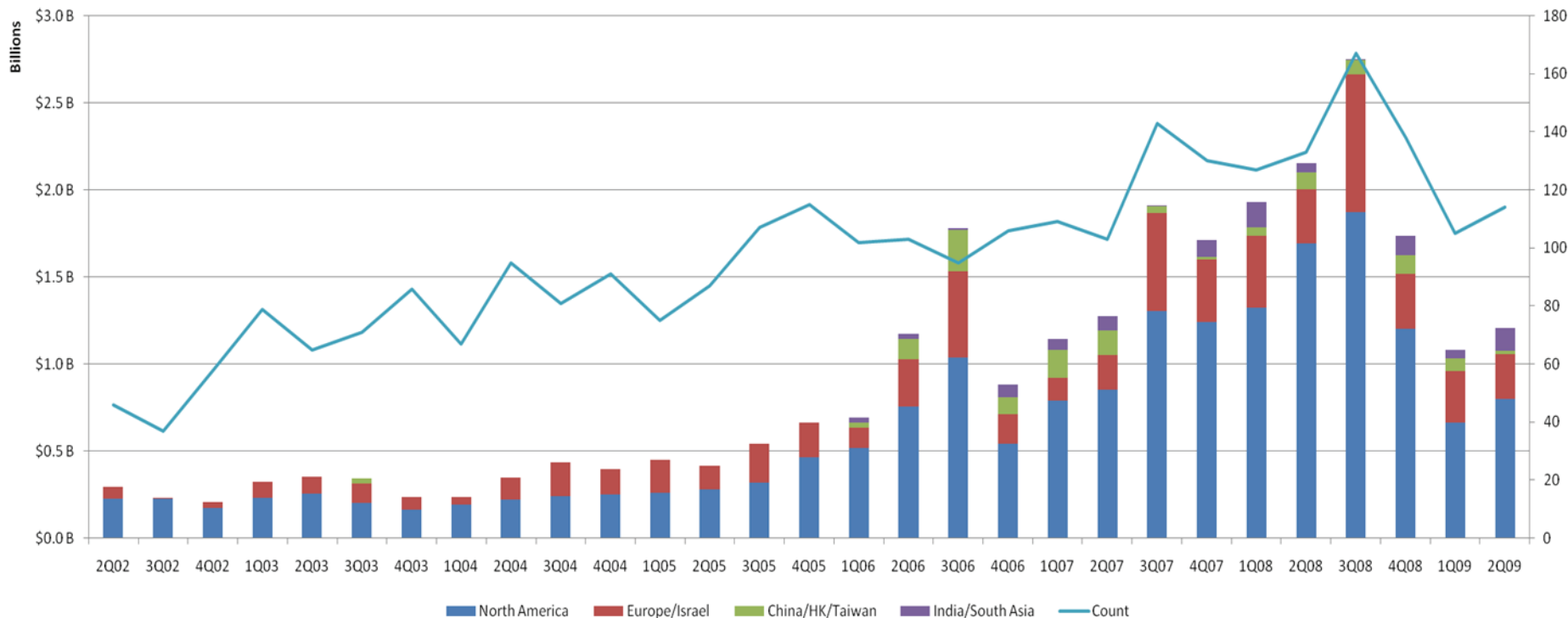
# Cleantech VC rebounding after consecutive declines



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

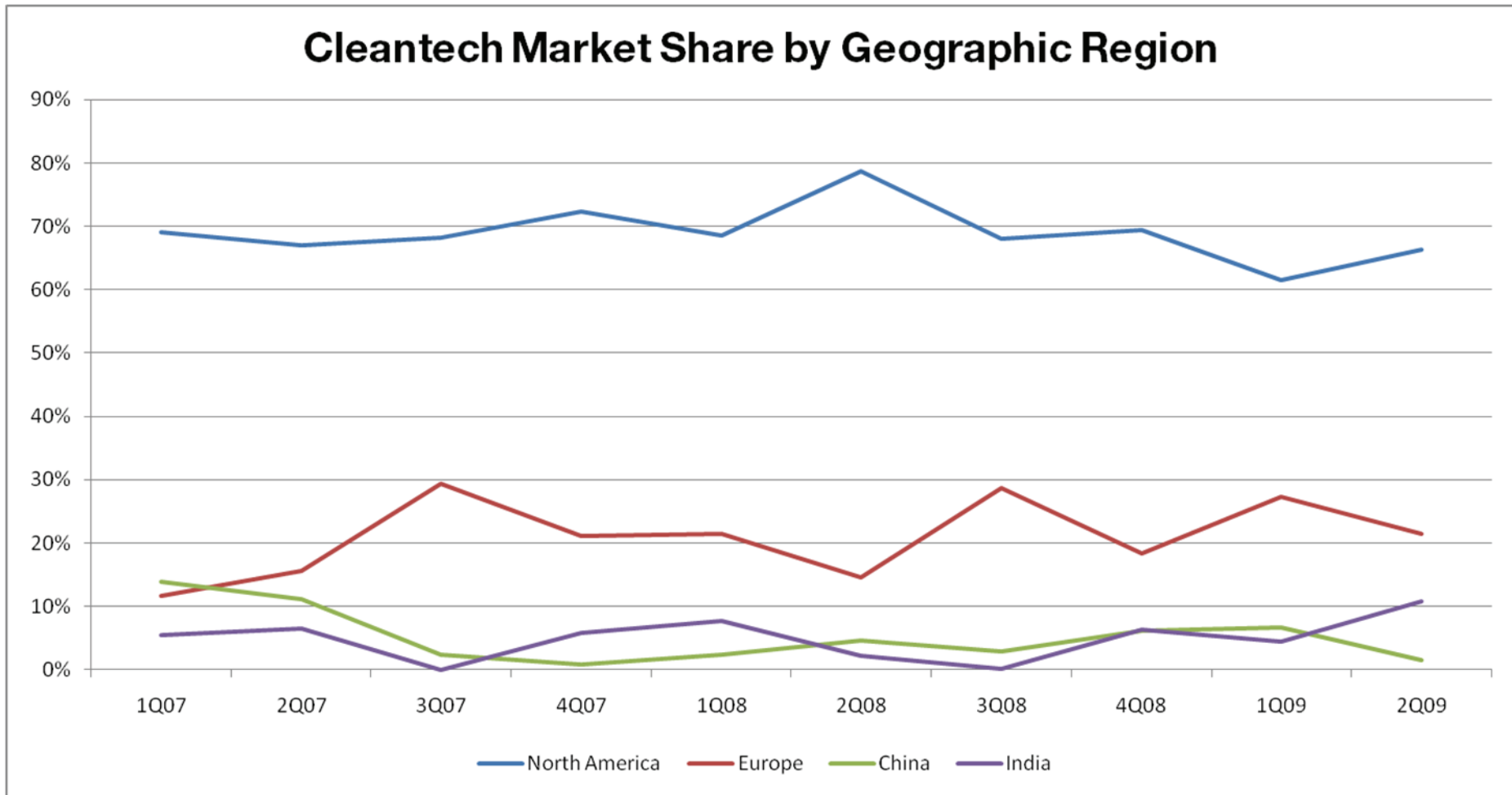
# By geography

## Venture Investment in Cleantech by Geography



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

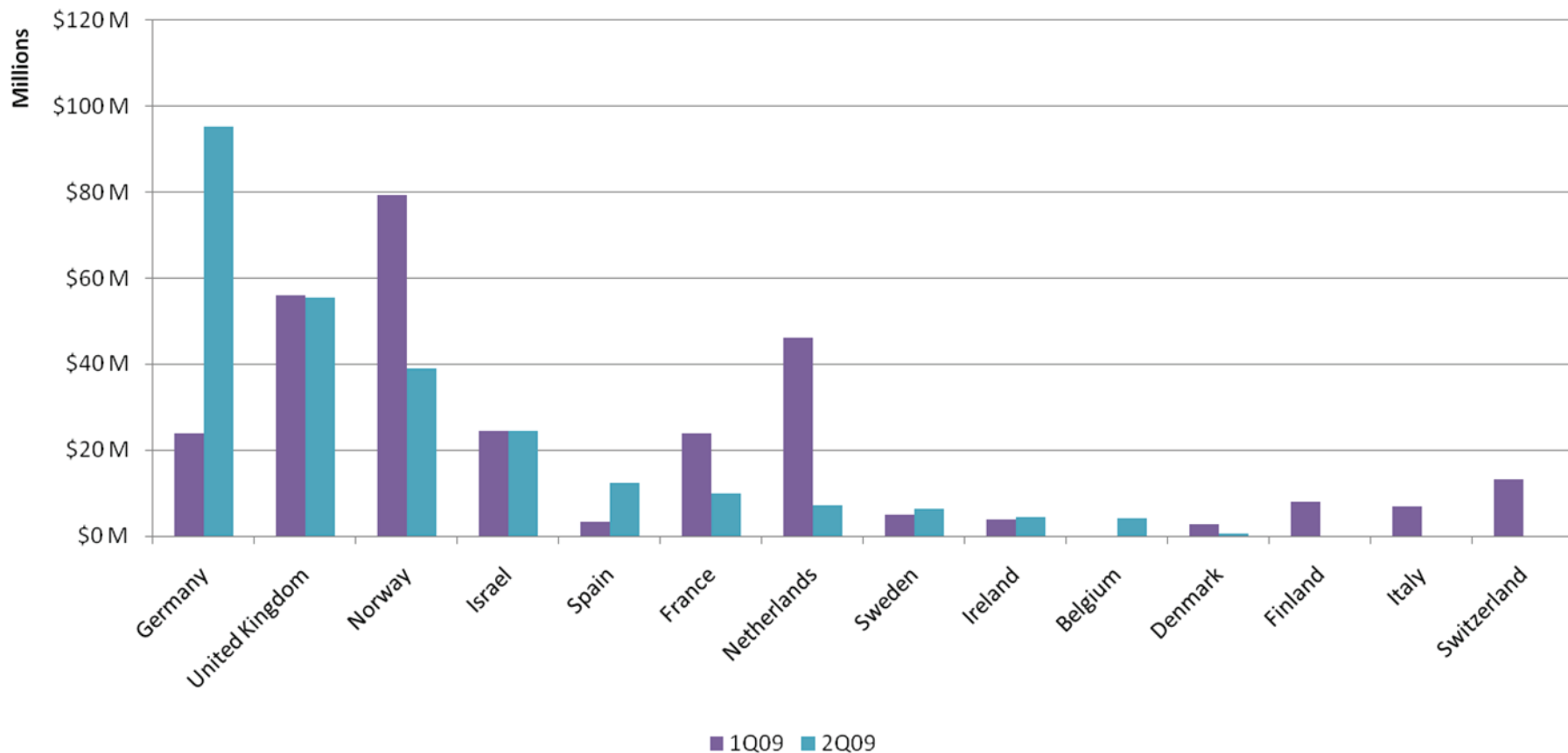
# Long-term geographic market shares stable



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Europe league table

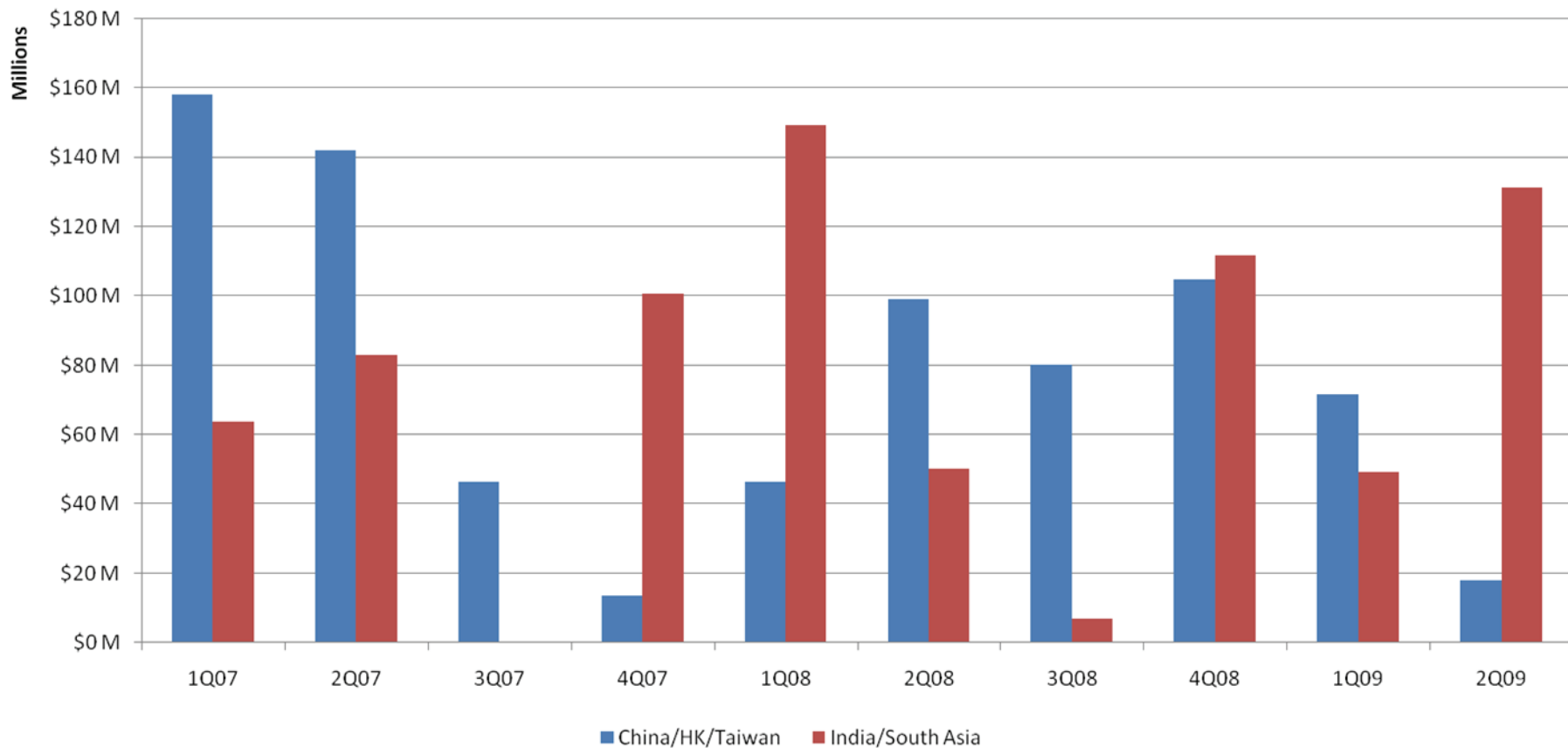
## Cleantech Investment in Europe by Country



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

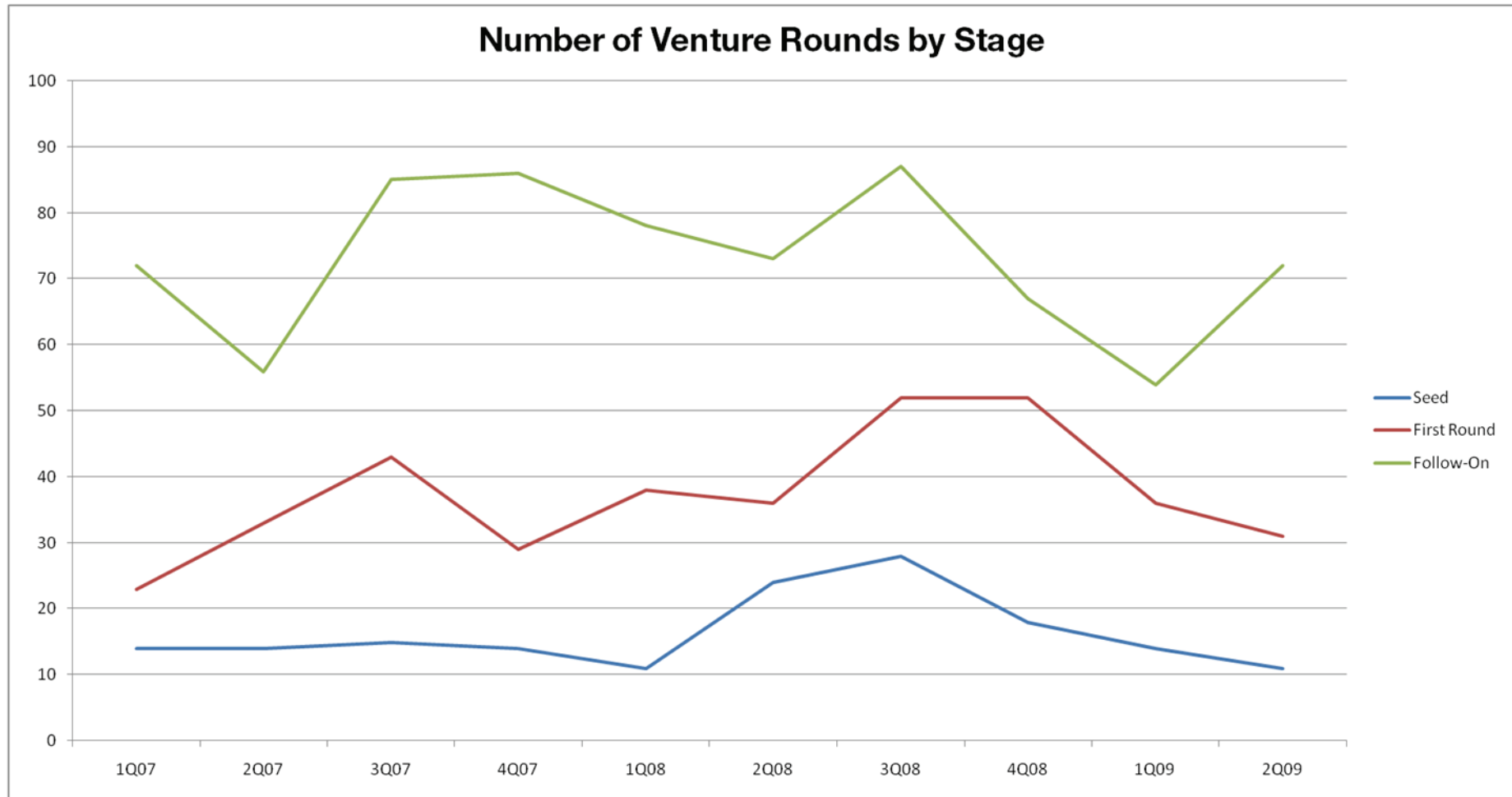
# Investment in Chinese/Indian companies volatile

## Cleantech Venture Investment in Asia



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

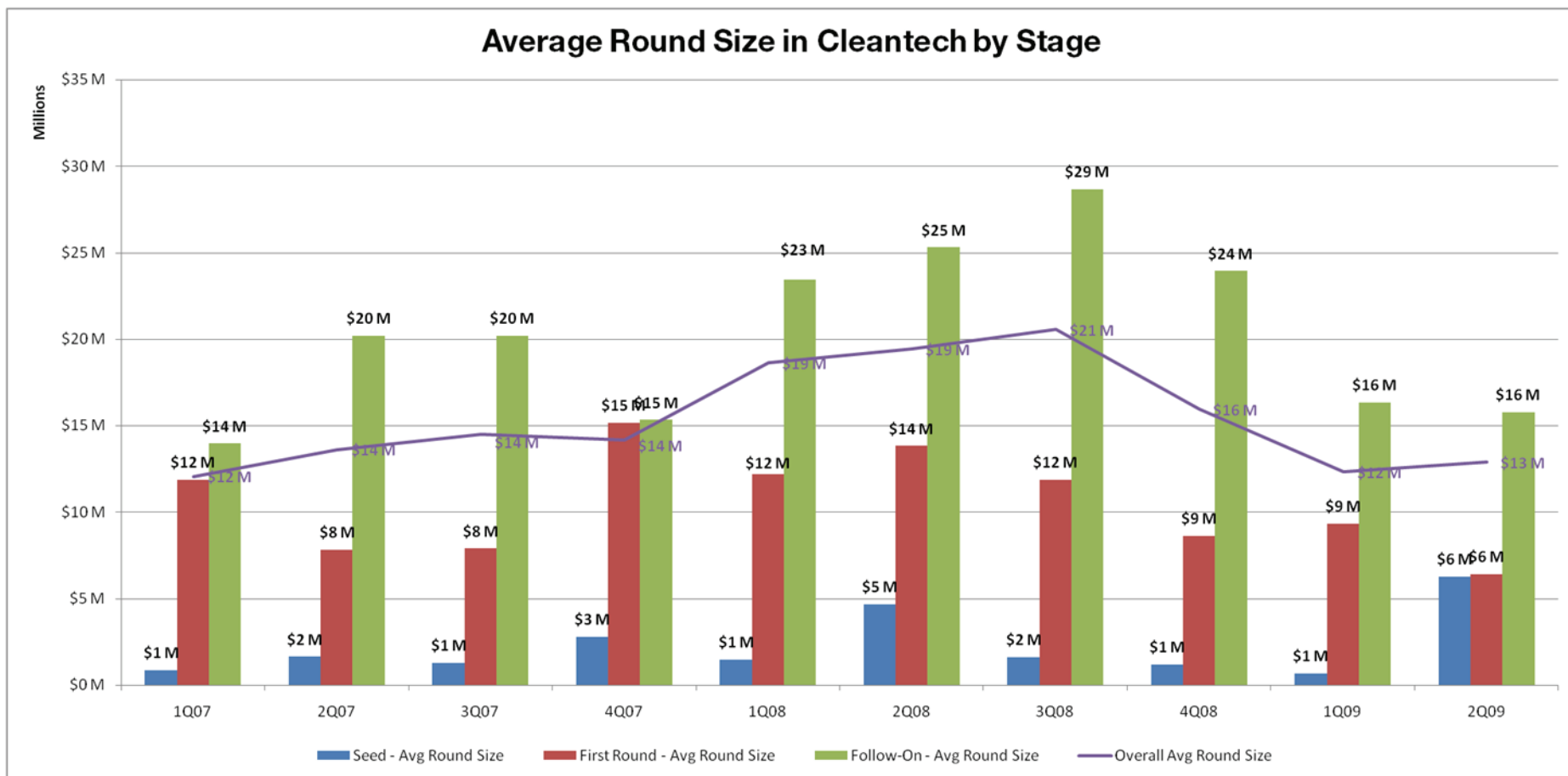
# With a rebound in number of follow-on deals



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

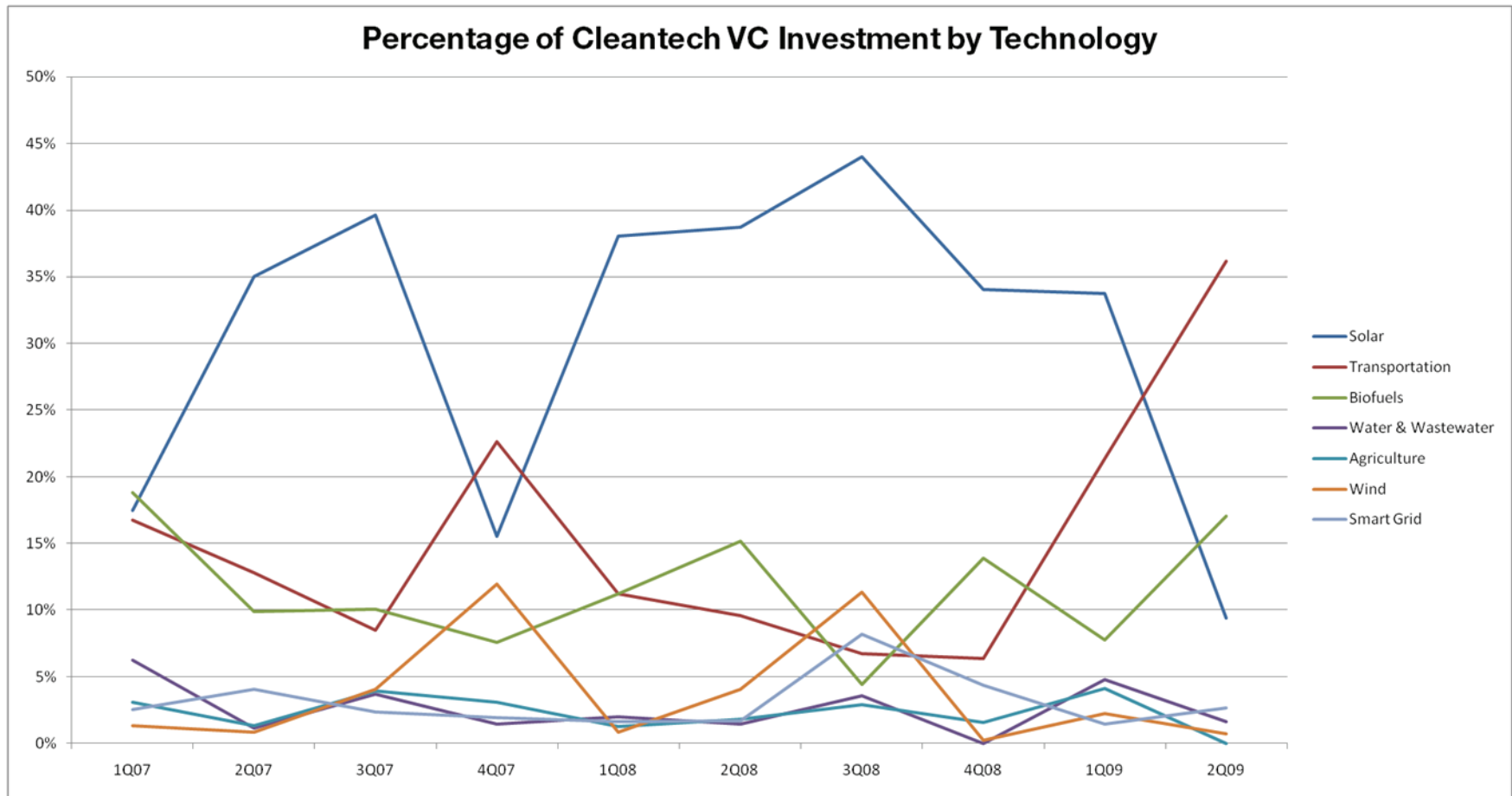


# Round sizes resetting at lower levels



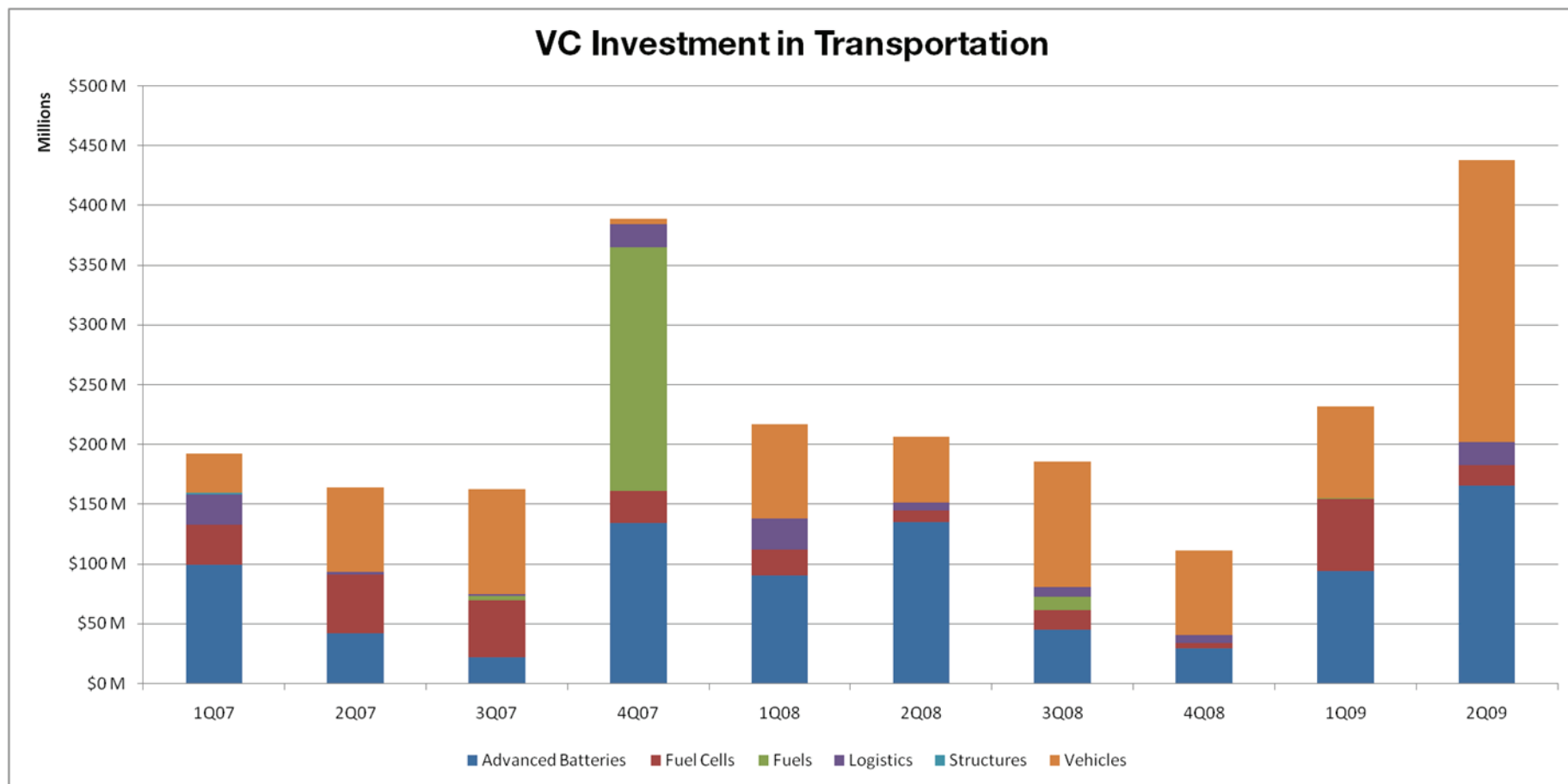
Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Transportation and biofuels up; solar down



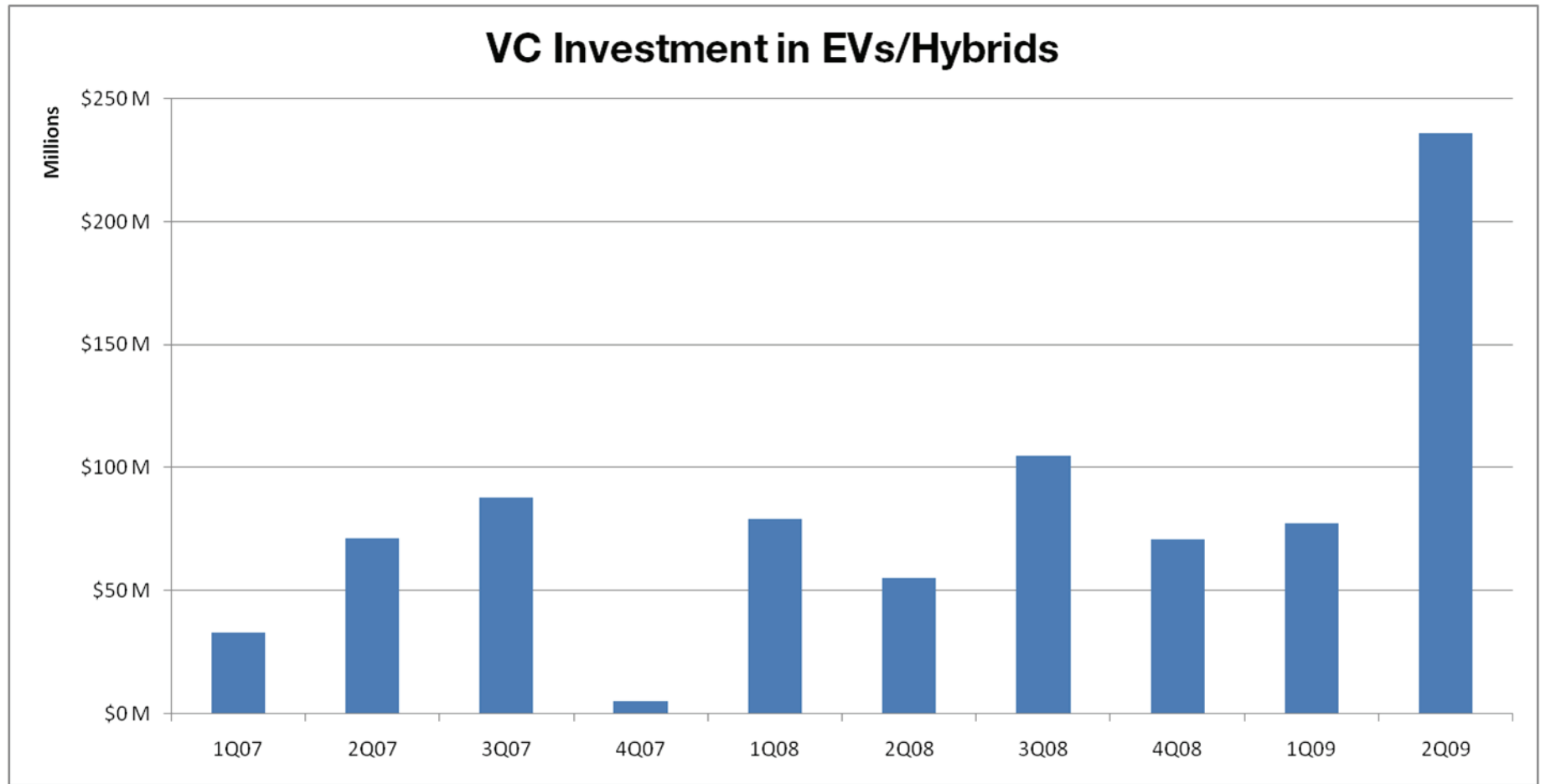
Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Transportation at all-time high



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Led by investment in vehicles



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

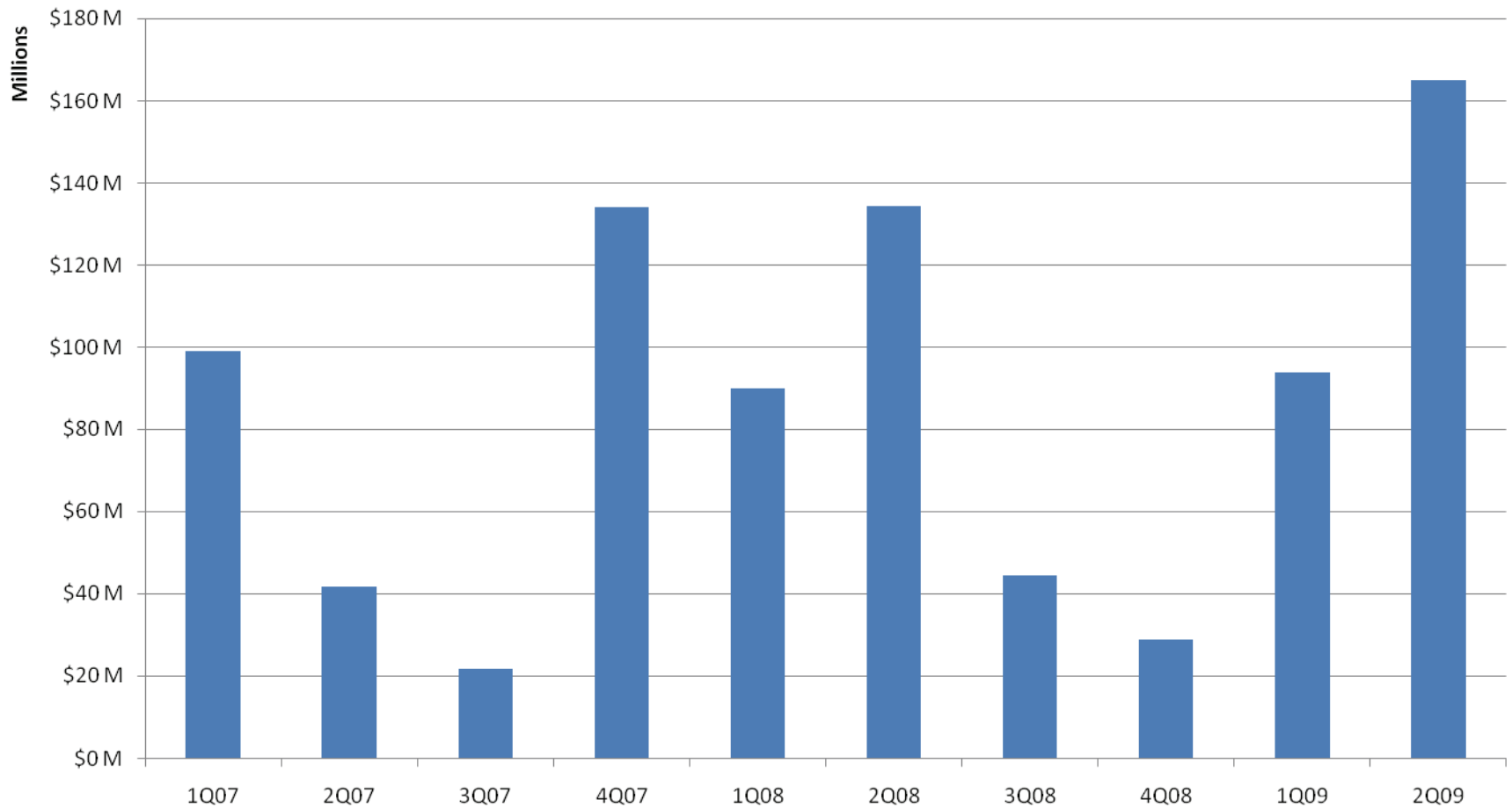
# Top Vehicle Rounds

<b>Company</b>	<b>Amount</b>	<b>Stage</b>	<b>Investors</b>
V-Vehicle	\$100,000,000	Follow-On	BP Capital LLC, Kleiner Perkins, Undisclosed Investors
Fisker Automotive, Inc.	\$85,000,000	Follow-On	Eco-Drive Capital Partners, Kleiner Perkins
Think Global AS	\$39,000,000	Seed	Undisclosed
ETV Motors	\$12,000,000	First Round	21 Ventures, Quercus Trust

Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# And investment in advanced batteries

## VC Investment in Advanced Batteries



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

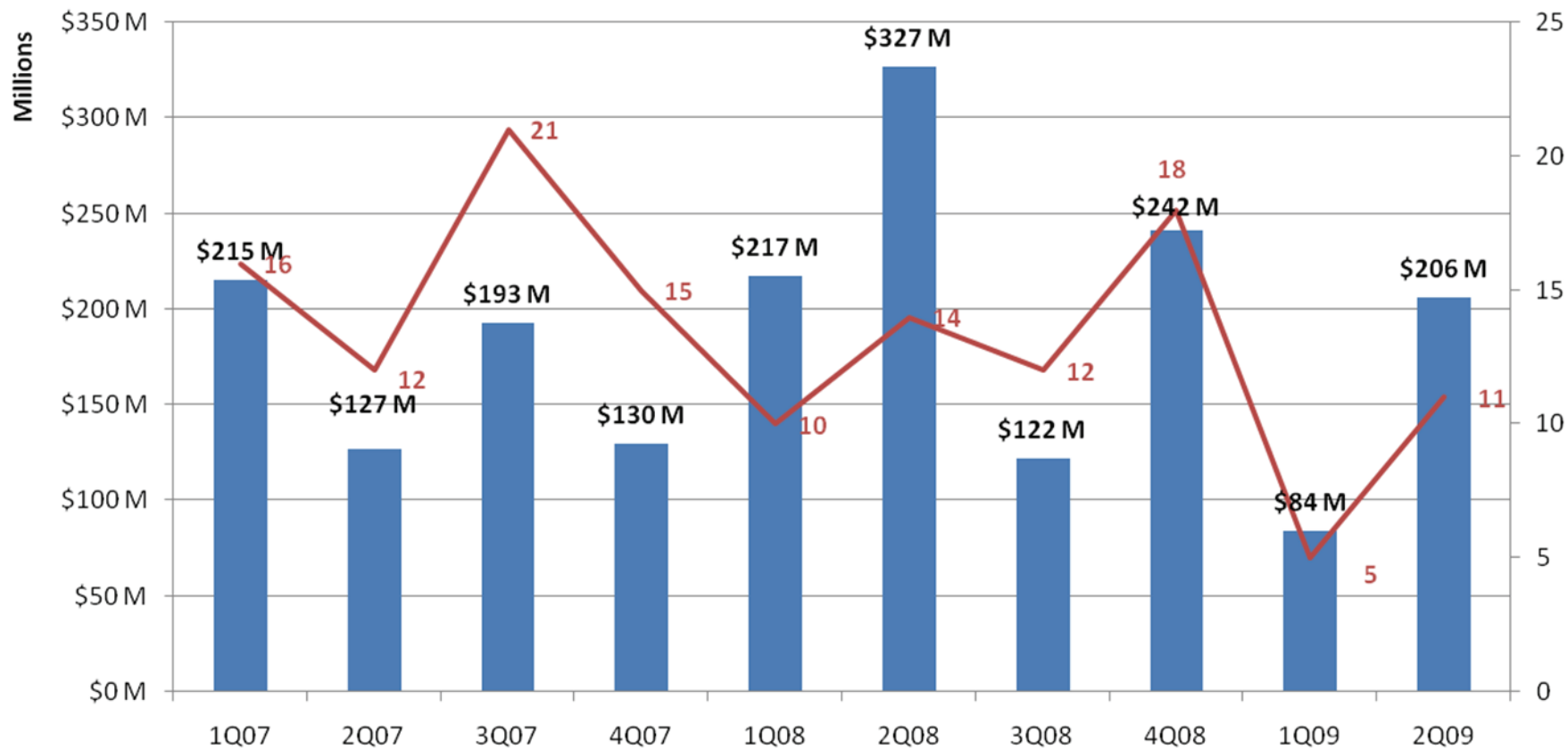
# Top Advanced Battery Rounds

Company	Amount	Stage	Investors
A123 Systems, Inc.	\$100,000,000	Follow-On	GE Energy Financial Services, GE Equity, Undisclosed Investors
Deeya Energy, Inc.	\$30,000,000	Follow-On	Blue Run Venture, DFJ, Element Partners, NEA, Technology Partners
Firefly Energy, Inc.	\$15,000,000	Follow-On	Undisclosed
Advanced Battery Technologies	\$10,000,000	Follow-On	Undisclosed
International Battery, Inc.	\$10,000,000	Follow-On	Digital Power Capital, Undisclosed Investors

Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Biofuels investment remains volatile

## Venture Investment in Biofuels



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)



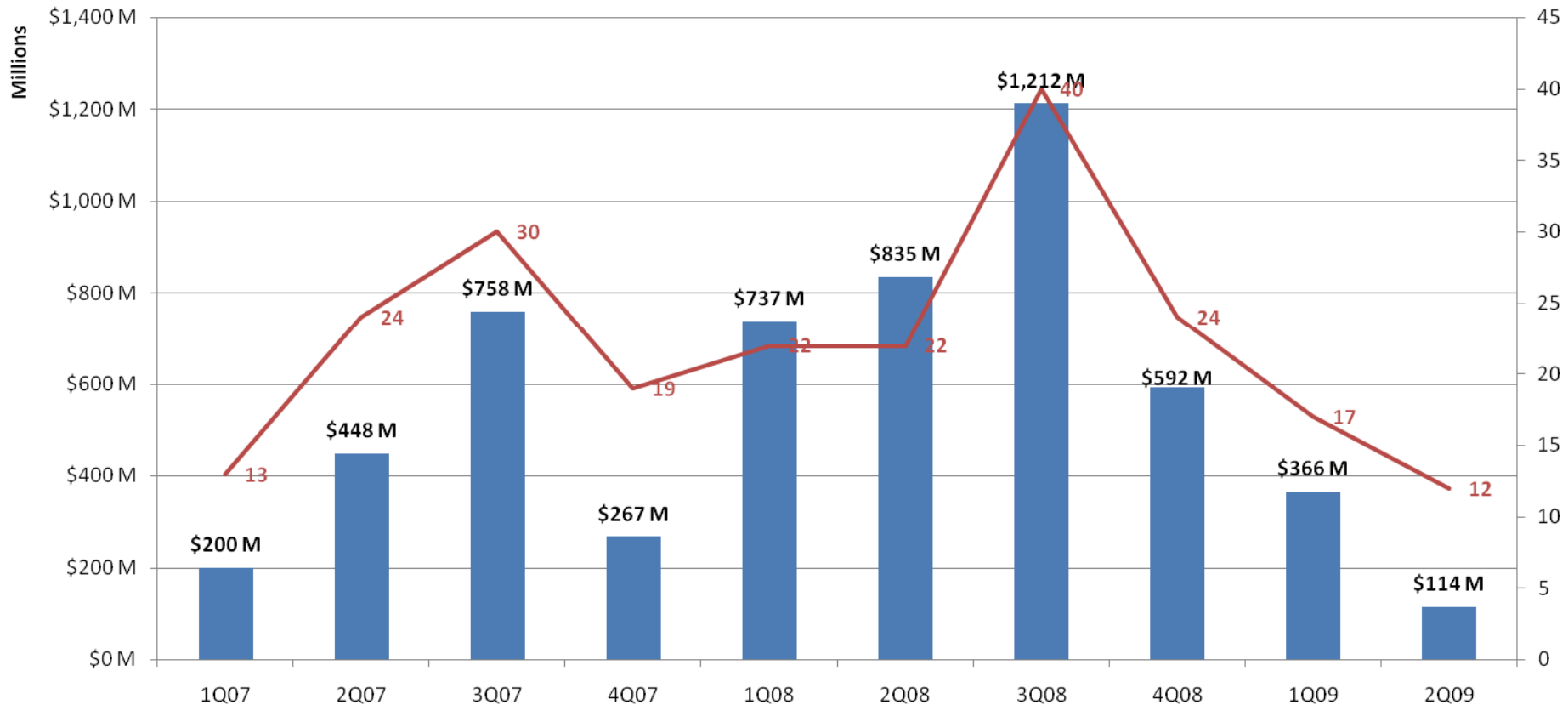
# Top Biofuels Rounds

Company	Amount	Stage	Investors
agri.capital	\$81,670,000	Follow-On	Altima Partners, Green Partners, Halcyon Asset Management, Ludgate Environmental, TCW Investment Corp.
Solazyme, Inc.	\$57,000,000	Follow-On	Braemar Energy Ventures, Harris & Harris Group, Lightspeed Venture Partners, Roda Group, VantagePoint Venture Partners, Undisclosed Investors
Shalivahana Projects Ltd	\$19,000,000	Follow-On	AXIS PE Ltd., Infrastructure Leasing & Financial Services Ltd
OPX Biotechnologies, Inc.	\$17,500,000	Follow-On	Altira Group, Braemar Energy Ventures, MDV
Cello Energy	\$12,500,000	First Round	Khosla Ventures
Shalivahana Projects Ltd	\$10,000,000	Follow-On	Kuwait Investment Company

Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Solar investment at lowest level in 3 years

## Venture Investment in Solar



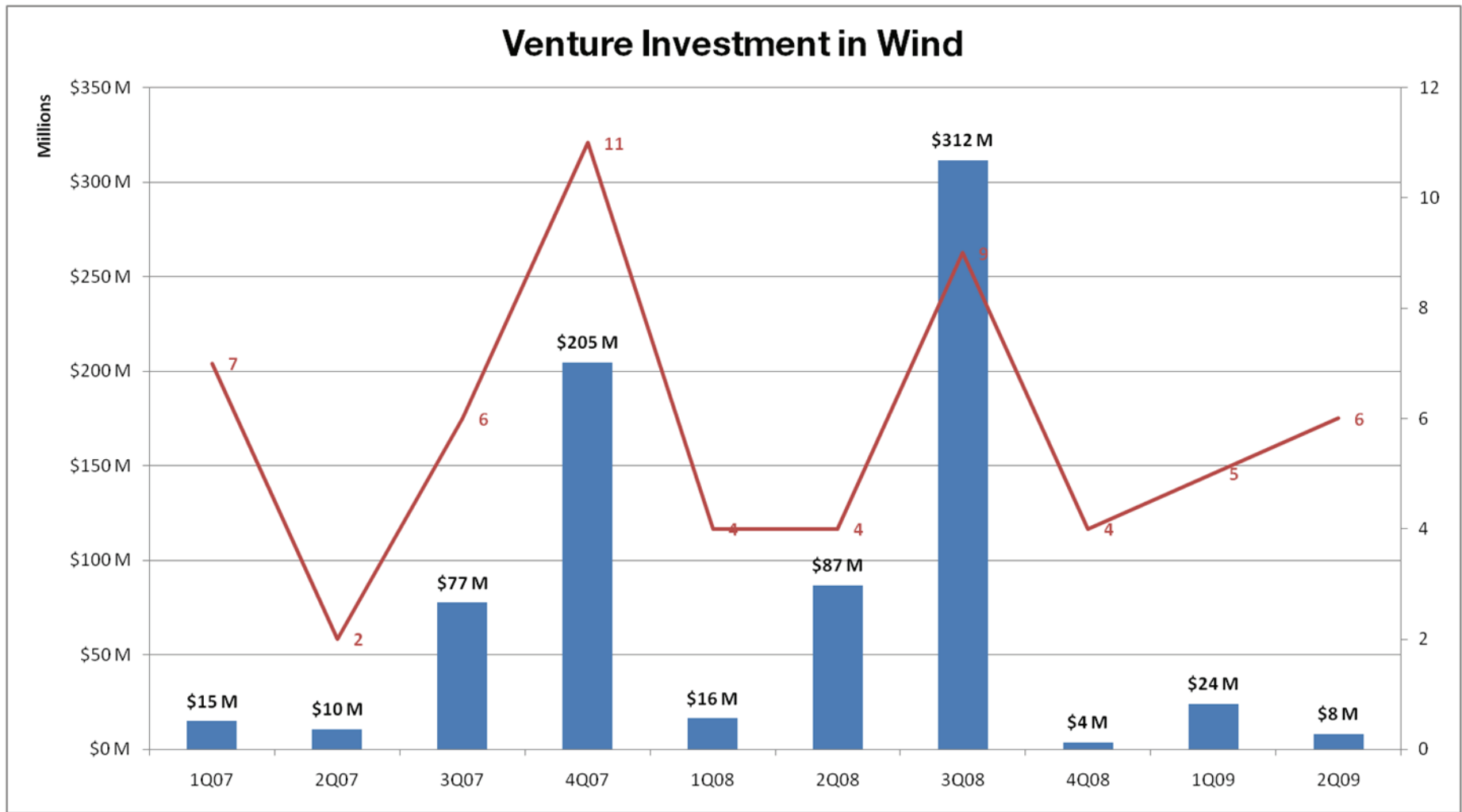
Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Top 10 Solar Rounds

Company	Amount	Stage	Investors
Cobol Technologies	\$30,000,000	First Round	Pangea Capital Ltd Generation Investment Management, KERN Partners, Khosla Ventures, Kleiner Perkins, Starfish Ventures
Ausra, Inc.	\$25,500,000	Follow-On	Undisclosed
Infinia Corp.	\$14,100,000	Follow-On	Undisclosed
Tigo Energy, Inc.	\$10,000,000	Follow-On	Israel Cleantech Ventures, Matrix Partners, OVP Venture Partners
Enecsys	\$9,730,000	Seed	BankInvest New Energy Solutions, Wellington Partners Venture Capital Applied Venture, ARCH Venture Partners, GVC Investment Fund, Illinois Ventures, In-Q-Tel, Intersouth Partners
Semprius	\$6,400,000	Follow-On	Counter Point Ventures, I2BF Venture Capital, Merrimaker Corporation, Undisclosed Investors
Prism Solar Technologies, Inc.	\$5,000,000	Follow-On	Undisclosed Investors
NovoPolymers	\$4,000,000	First Round	Capricorn Venture Partners, GIMV NV
QuantaSol, Ltd.	\$3,250,000	Follow-On	Imperial Innovations, Low Carbon Accelerator, NetScientific, Numis, Sheffield University Enterprise
B-Solar	\$3,000,000	First Round	Genesis Partners

Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

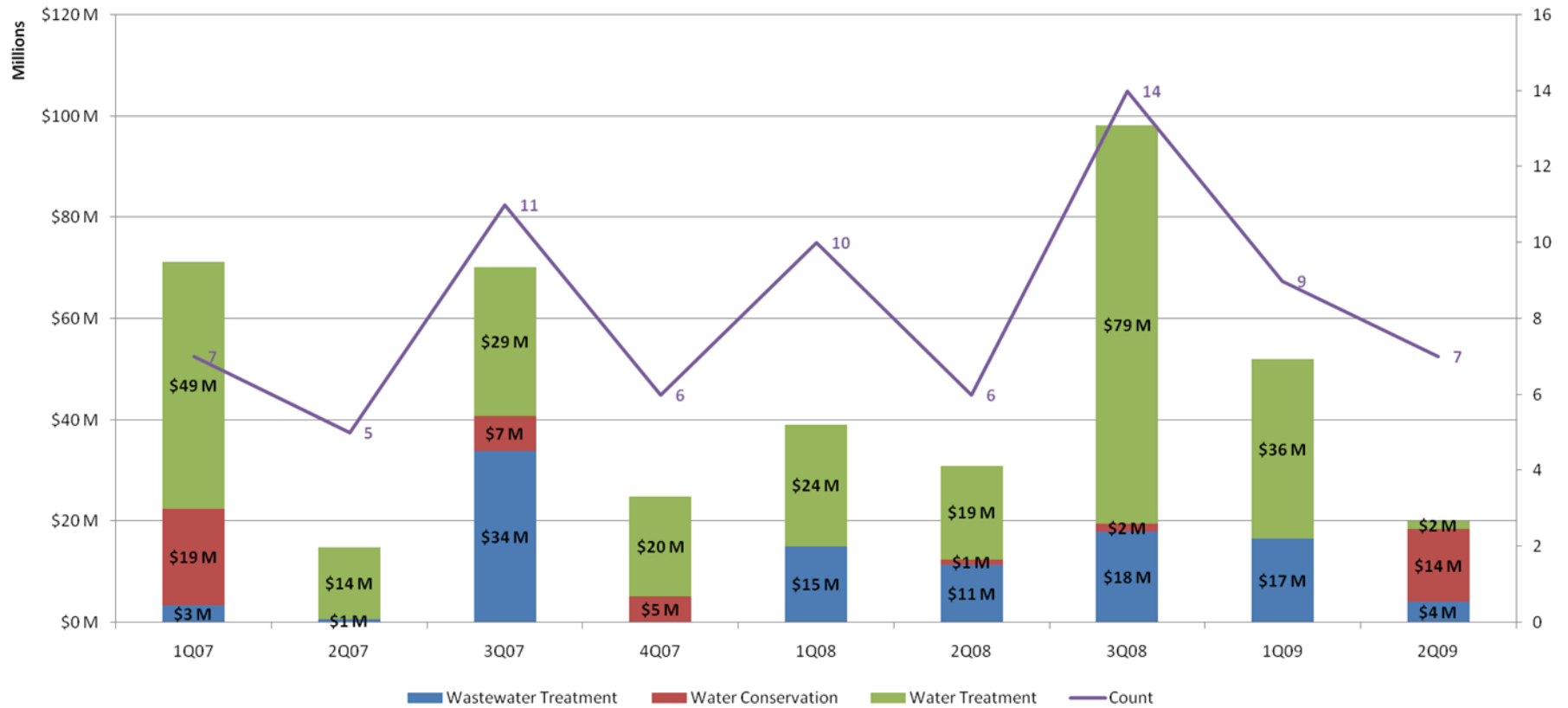
# Wind investment at low since extraordinary 3Q08



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

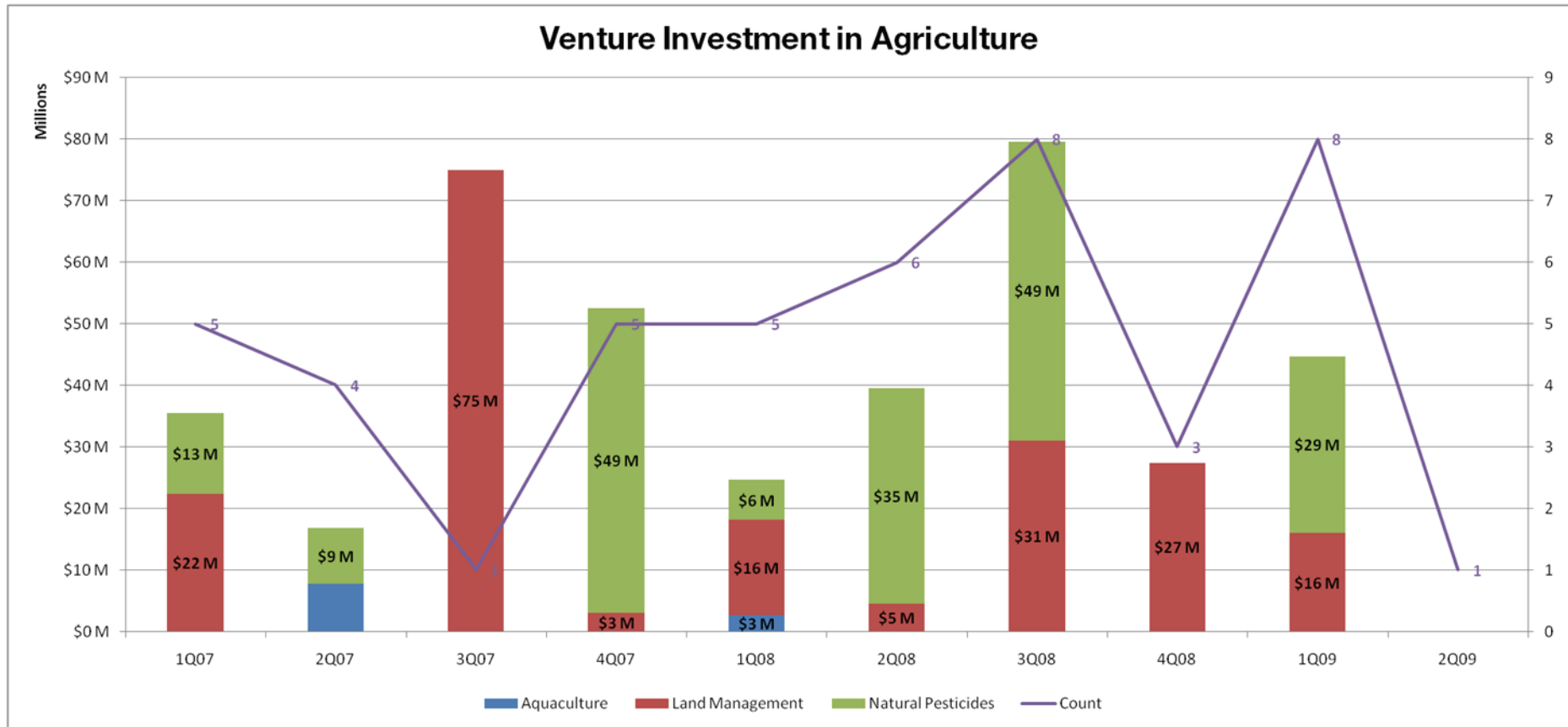
# Water

## Venture Investment in Water Technologies



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

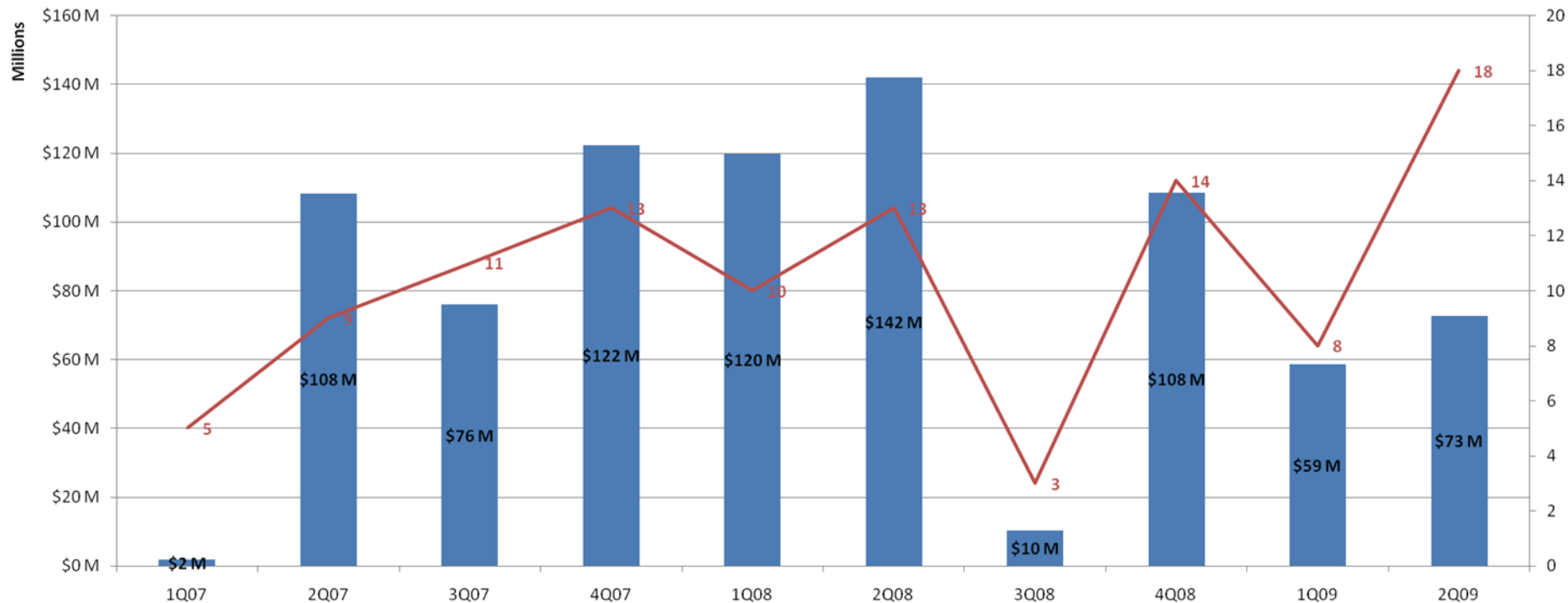
# Agriculture



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Green Buildings (buildings, glass, and lighting)

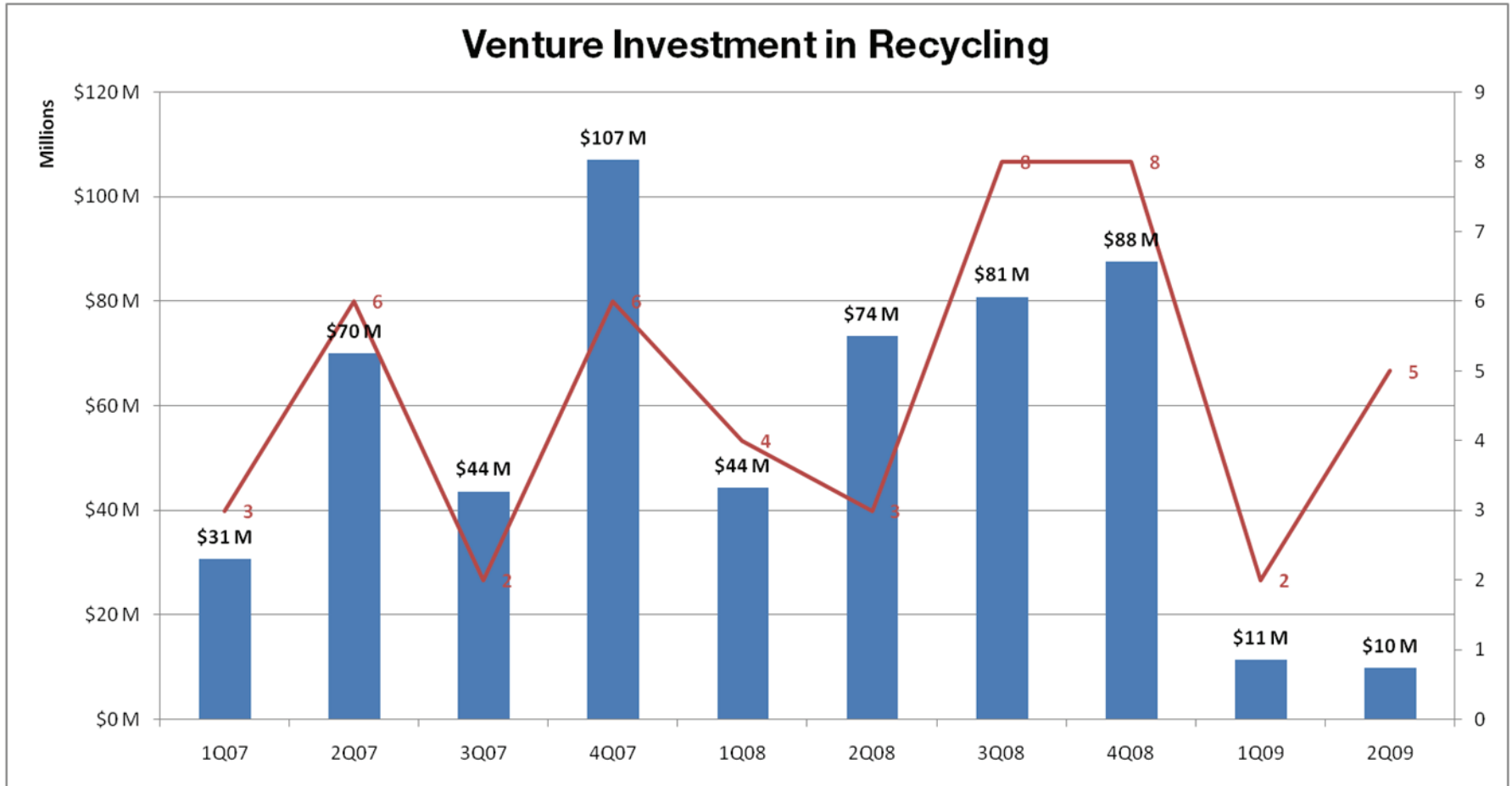
## Venture Investment in Green Buildings



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Recycling

## Venture Investment in Recycling

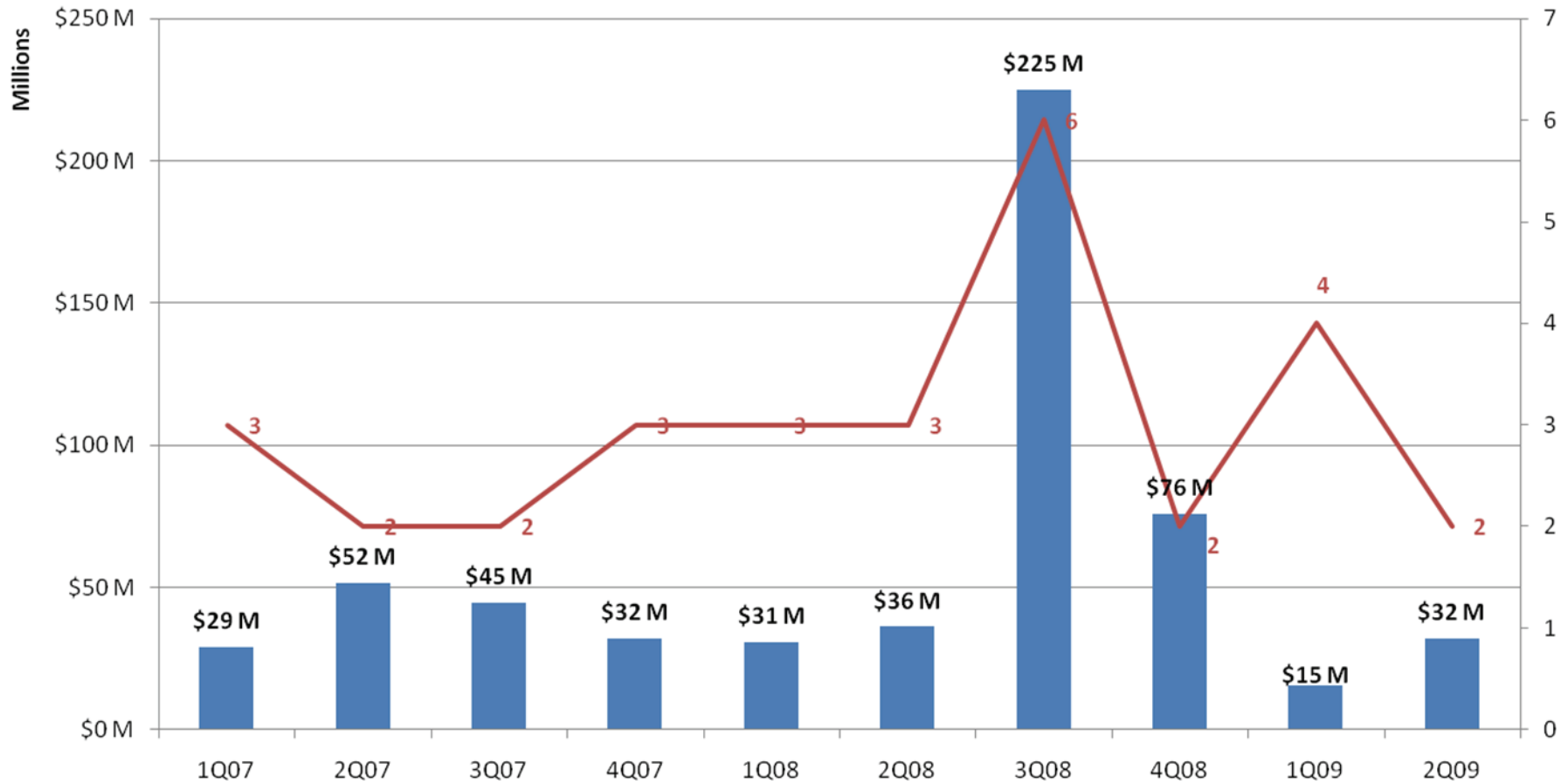


Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)



# Smart grid

## Venture Investment in Smart Grids



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

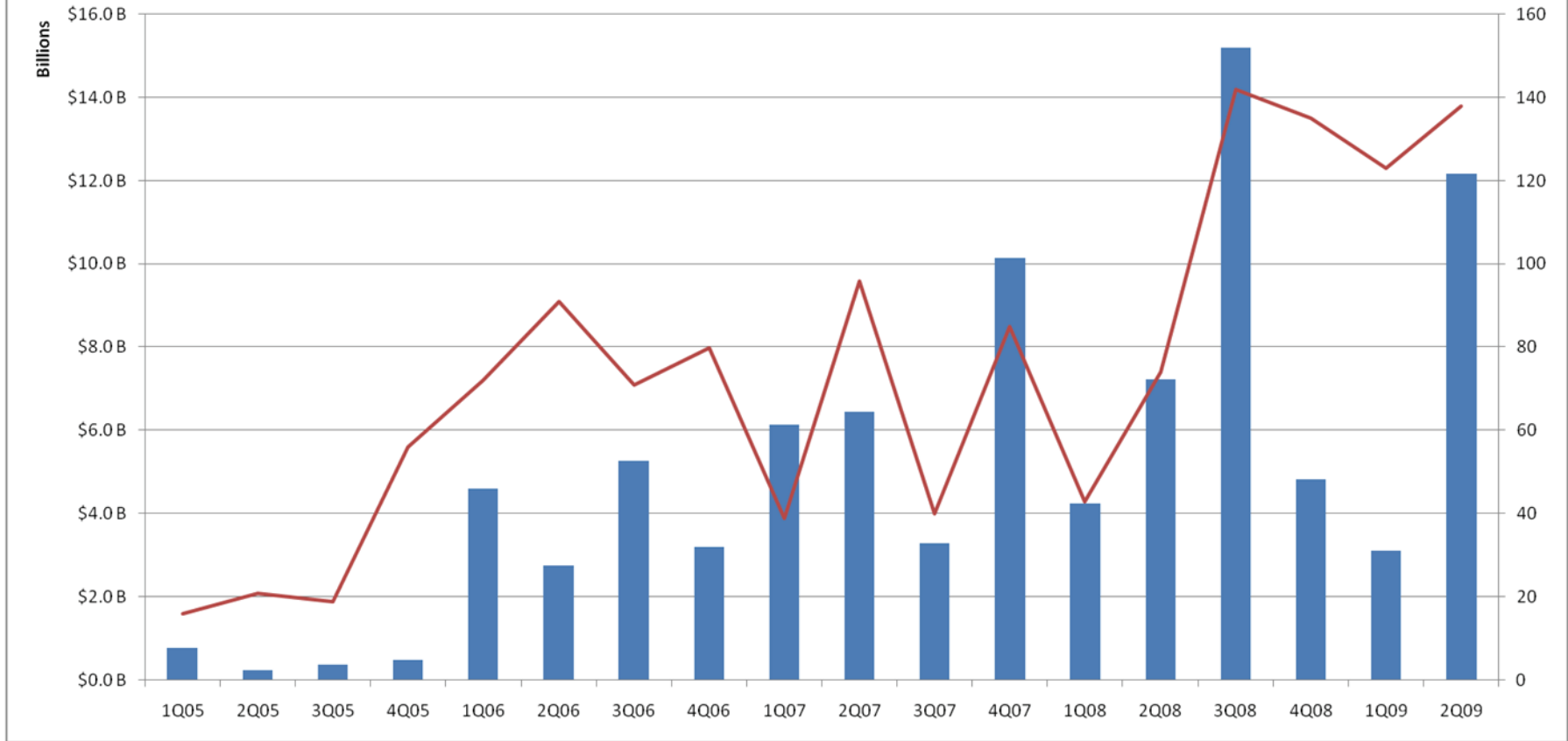
# 2Q09 Investor League Table

Investor	Number of Investments
Kleiner Perkins Caufield & Byers	5
Khosla Ventures	4
Braemar Energy Ventures	4
Robeco Alternative Investments	3
Draper Fisher Jurvetson	3
VantagePoint Venture Partners	3
Polaris Venture Partners	2
BASF Venture Capital GmbH	2
RRE Ventures	2
Amadeus Capital Partners	2
Low Carbon Accelerator	2
Element Partners	2
Chevron Technology Ventures	2
Expansion Capital Partners, LLC	2
Sustainable Technology Partners	2
GIMV NV	2
Altira Group LLC	2
Good Energies Inc.	2
NGEN Partners, LLC	2
Applied Ventures, LLC	2
Capricorn Venture Partners NV	2
Infrastructure Leasing & Financial Services Limited (IL&FS)	2
RockPort Capital Partners	2
In-Q-Tel	2
Scottish Enterprise	2
Intersouth Partners	2
DAG Ventures	2
Israel Cleantech Ventures	2
Wellington Partners Venture Capital	2
Virgin Green Fund	2

Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

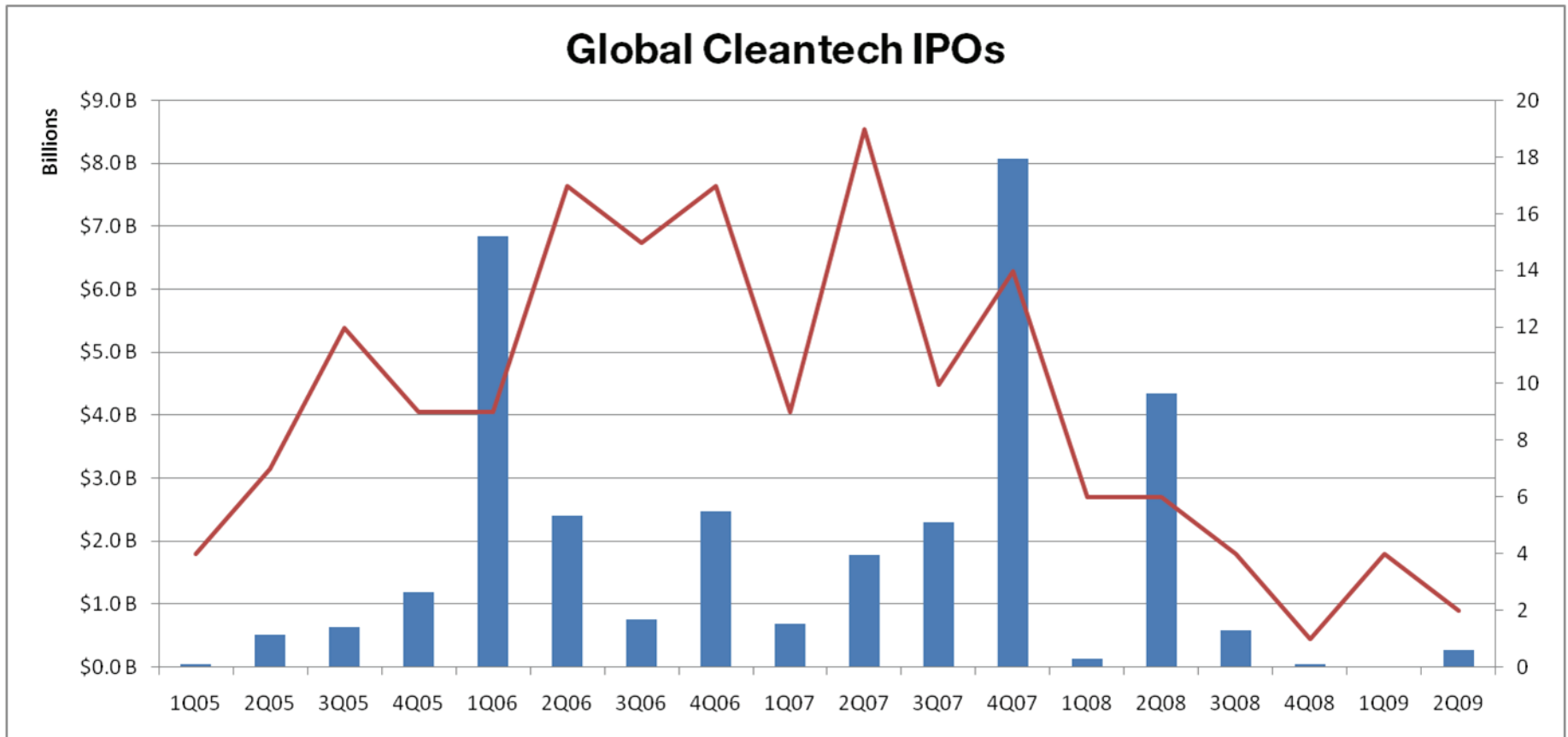
# Cleantech M&A activity is rebounding

## Global Cleantech M&A



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

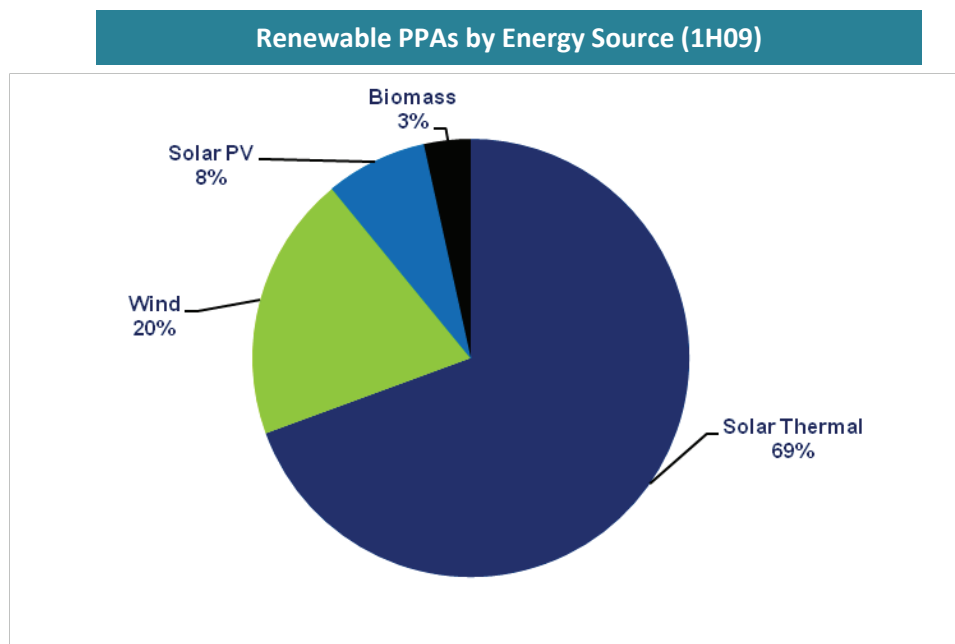
# While IPOs remain dormant



Source: Cleantech Group [www.cleantech.com](http://www.cleantech.com)

# Renewable Power Purchase Agreements

Solar thermal energy was the leading energy source procured through PPAs in 1H09

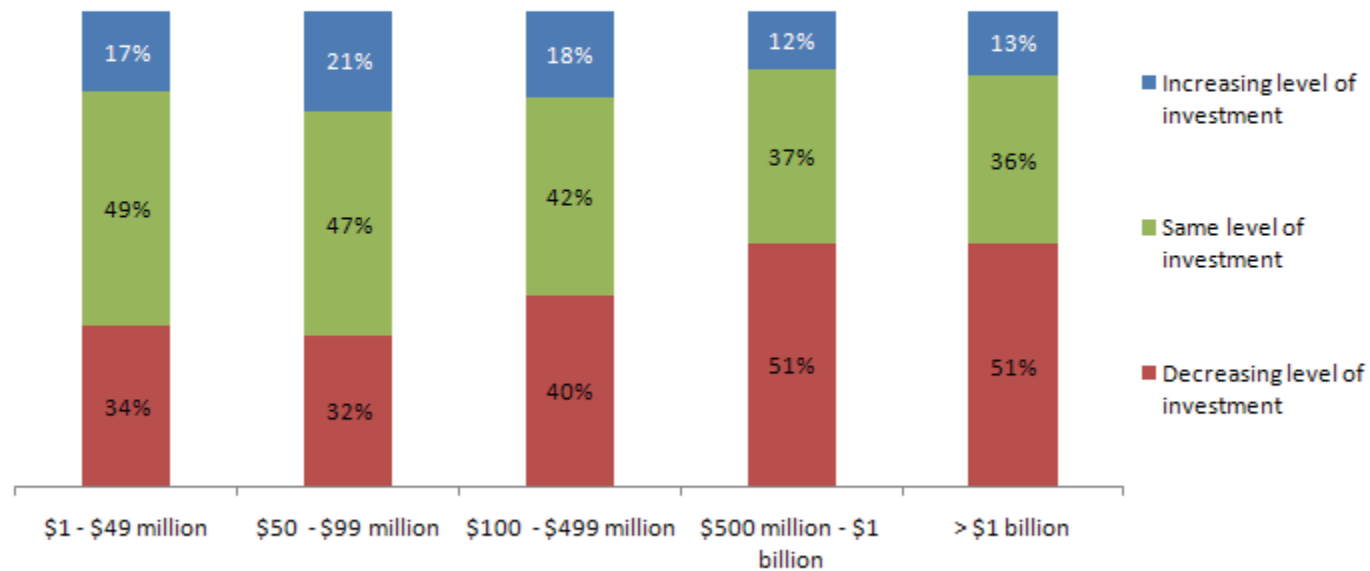


- Solar thermal, at 3.3 GW, constituted the largest energy source procured through PPAs during 1H09
- Solar thermal was followed by wind power (946 MW), solar PV (359 MW), and biomass (166 MW)
- Among the electric utilities assessed, Edison International and PG&E were the most active buyers of energy at 2.0 GW and 1.7GW, respectively

Source: Deloitte, Factiva news articles and company releases

# VCs Adjust Investment Strategies in Response to Global Recession - Level of Investment in Terms of Capital

Impact of the global recession on investment strategies – level of investment in terms of capital (by assets under management)

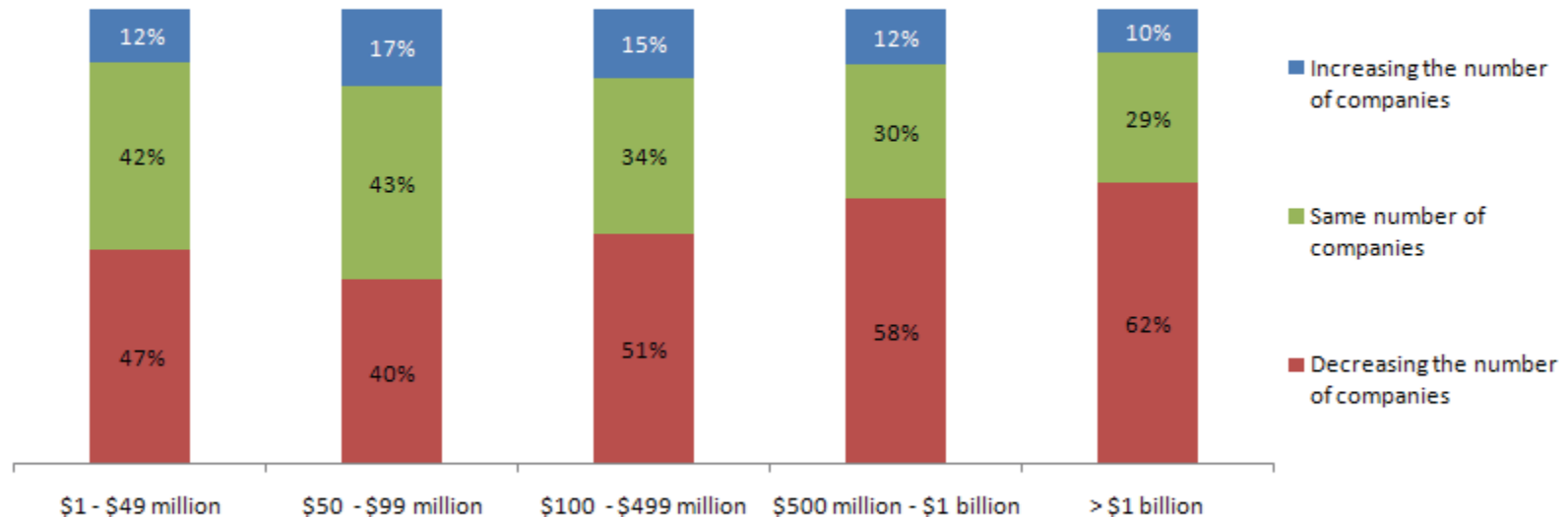


- Significant percentage of VCs globally plan to decrease their level of investment overall
- Uncertainty of the capital markets and exits generally are causing a significant pull back in the VC community as it relates to new investments, reflecting a new conservatism in investment strategy

Source: Deloitte & NVCA - Global Trends in Venture Capital 2009 Global Report

# VCs Adjust Investment Strategies in Response to Global Recession – Level of Investment in Terms of Companies

Impact of the global recession on investment strategies – level of investment in terms of number of companies (by assets under management)

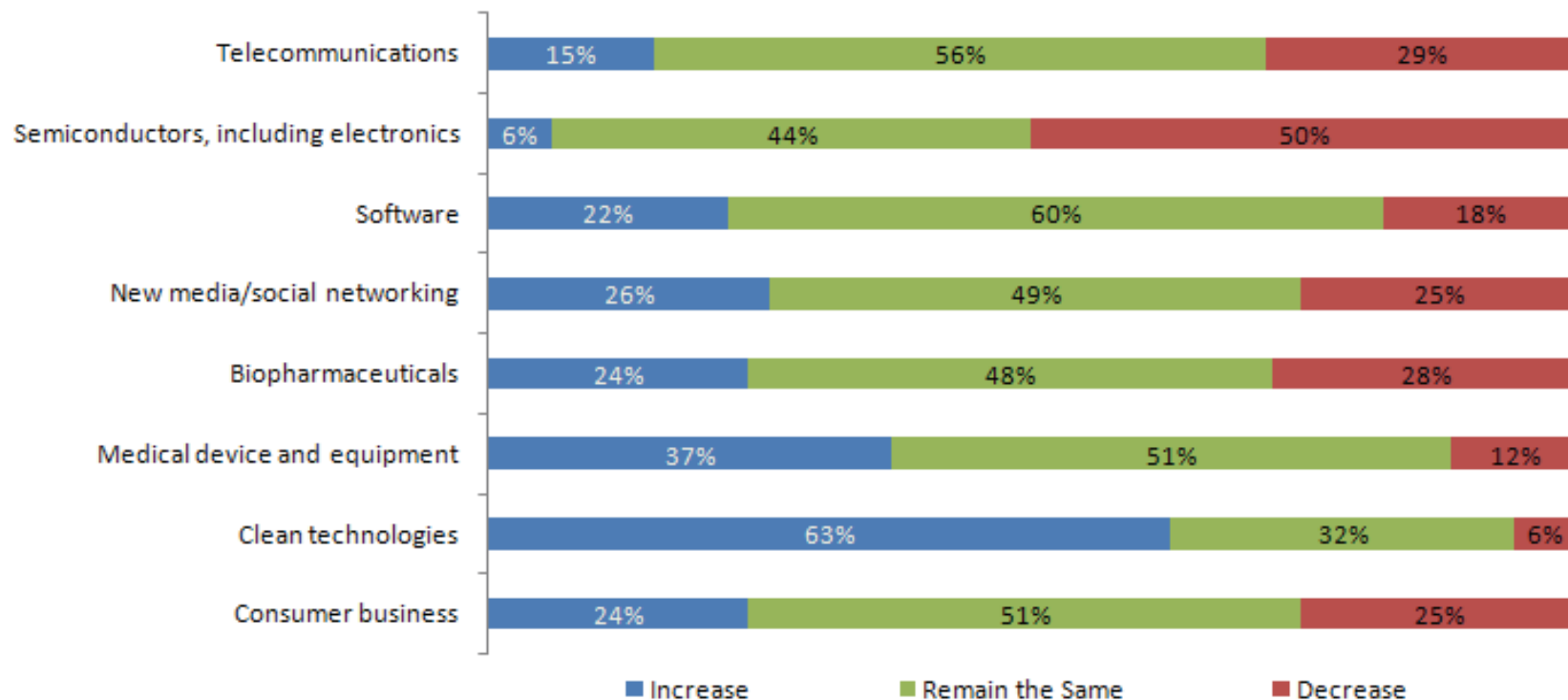


- VCs plan to invest in a lower number of companies overall. They plan to adequately fund the companies they do invest in but the decrease in investment will result in a lower number of companies receiving venture capital overall
- VCs are focusing on their existing portfolio and need to assure the existing portfolio that they can fund them to positive cash flow

Source: Deloitte & NVCA - Global Trends in Venture Capital 2009 Global Report

# Clean Technology Garnerers Most Interest – Some Sectors Wane

**In terms of total capital invested, anticipated level  
of investment change in select sectors, over the next three years**



- By sector, there is great interest in the cleantech space
- 95% of VCs surveyed globally anticipate investment in cleantech to increase or remain same

Source: Deloitte & NVCA - Global Trends in Venture Capital 2009 Global Report



# Q&A



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***2Q09 reviewed in depth in the 2Q09 Investment Monitor, released August 2009***

**Mark Your Calendars - Upcoming Cleantech Forums®:**  
**Cleantech Forum XXIII: Boston – September 8-10 2009**  
**Cleantech Forum XXIV: Delhi, India – October 15-16, 2009**  
**Cleantech Forum XXV: Beijing, China – December 1-2, 2009**

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