

# 3Q12

**Quarterly Investment Monitor**  
Media-Only Briefing  
*October 9, 2012*

**Sponsored by:**

Silicon Valley Bank  
A Member of SVB Financial Group

W&R

Wilson Sonsini Goodrich & Rosati  
PROFESSIONAL CORPORATION

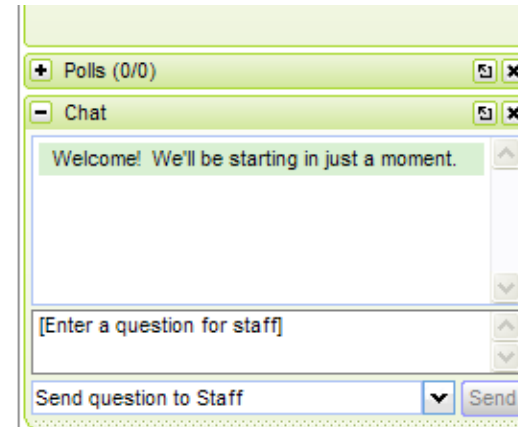
**Presented by:**


Sheeraz Haji  
CEO, Cleantech Group

# Recording and Q/A

1. **We are recording this webinar and will send you the replay and slides.**
2. Please submit your questions at any time during the presentation using the chat window, we'll answer as many as we can in the second half of the hour or follow up afterwards.

Ask your questions here.





# Cleantech Group announced exciting merger with GreenOrder, a leading sustainability consultancy



# About GreenOrder



Since 2004, GreenOrder has been the principal advisor to GE on the creation and ongoing development of its ecomagination program.

**Strategy Development:** Develop strategy to align business units and drive growth through environmental sustainability

**Implementation:** Product innovation, new business model development, employee engagement, and communications

**Verification:** Provide technical analysis/verification of ecomagination marketing claims and ongoing marketing counsel

**Stakeholder Engagement:** Connect GE to critical stakeholders in government, NGOs, and private sector

*“Our long-term partnership with GreenOrder has been essential to the development, implementation and success of ecomagination, GE’s strategy to drive growth through environmental innovation.”*

**-- Jeffrey Immelt**  
**Chairman and CEO, General Electric**

## Results

Over \$21B in sales in 2011

130 qualified products

Revitalized corporate brand

Enhanced innovation processes

Improved BU collaboration

# Top Stories

## 1 VC Activity

- VC activity stabilizing at \$1.6B; fewer deals
- North America dominates, uptick in deals in Europe
- VCs favor “capital-light” deals

## 2 Sector Highlights

- Solar is tough: Both dollar amount and deal count dropped significantly in solar sector
- Transportation & biofuels/chem. top our charts

## 3 M&A Trends

- M&A investment declined, although number of M&A transactions flat
- Big deals in conventional industries

## 4 Changes in IPO Strategy

- IPO window effectively shut: 4 more venture-backed IPO withdrawals
- IPO blues extend to China

# Briefing Agenda

1

## Venture Trends and Highlights

2

## M&A Trends and Highlights

3

## IPO Trends and Highlights

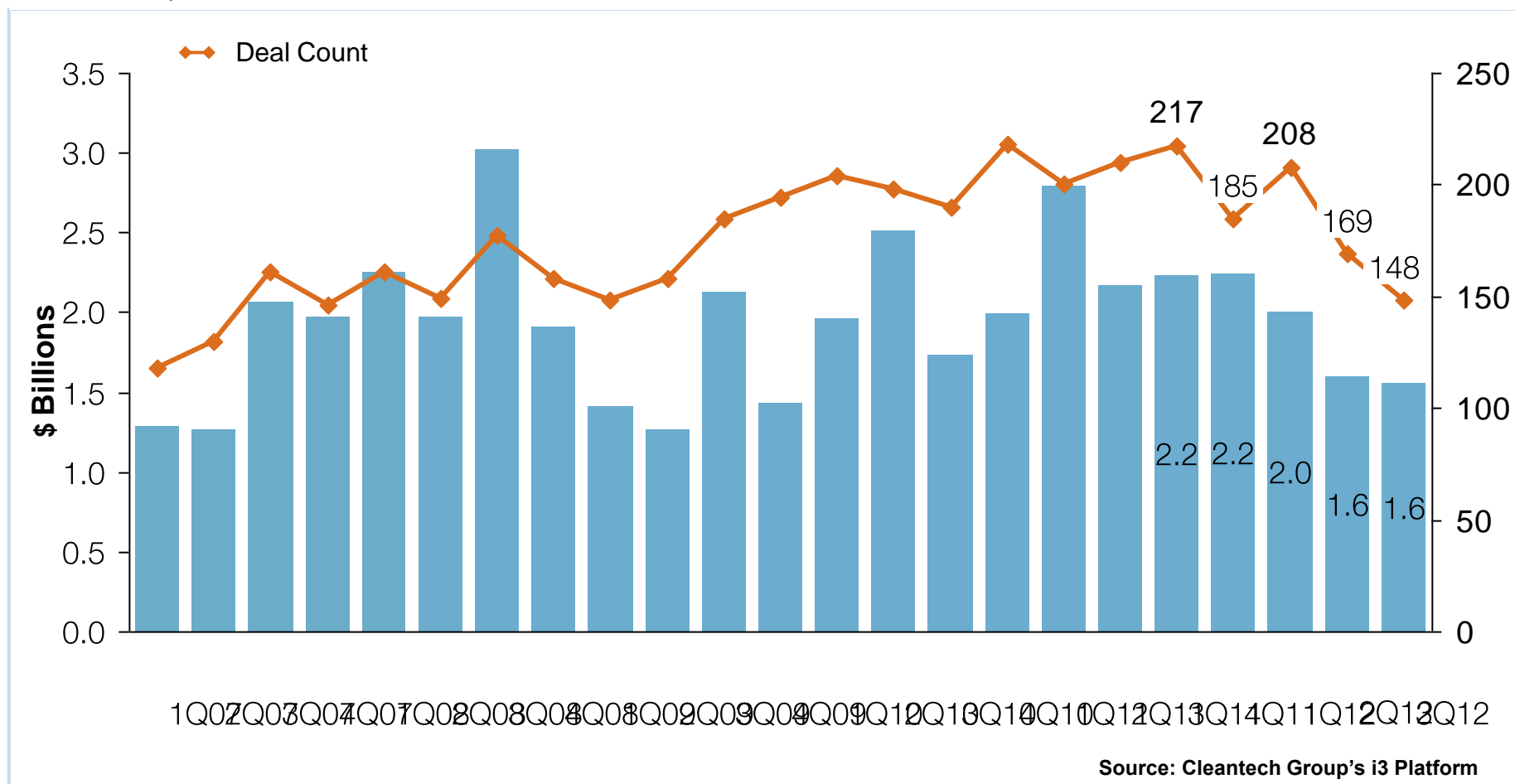
4

## Q&A

# VC Investment Stabilizing; Deal Count Drops

## Global VC Investment in Cleantech by Quarter

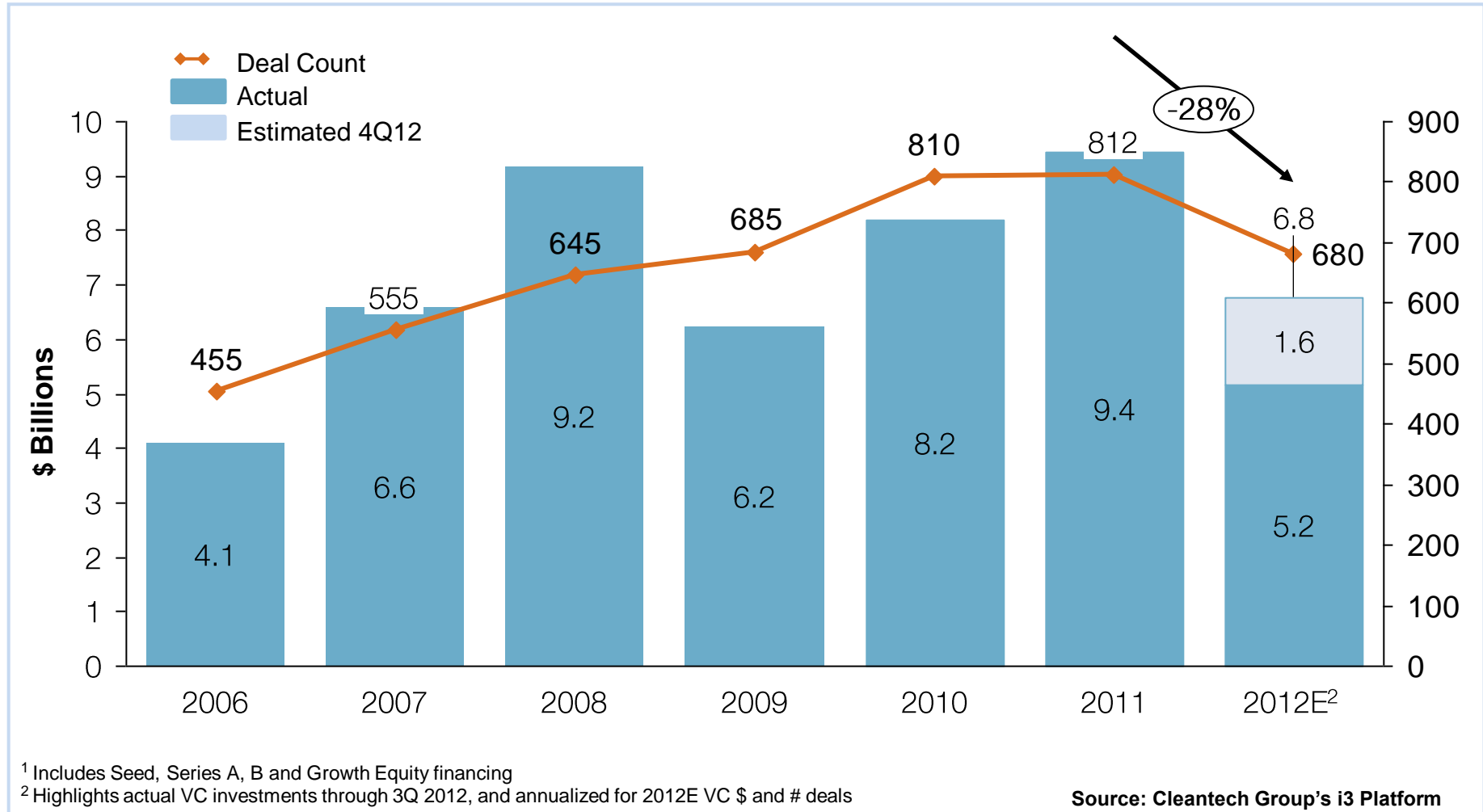
\$ Billions, # of deals



# Annual Numbers Approaching 2009 Level

## Global VC Investment<sup>1</sup> in Cleantech, by Year

\$ Billions, # of deals

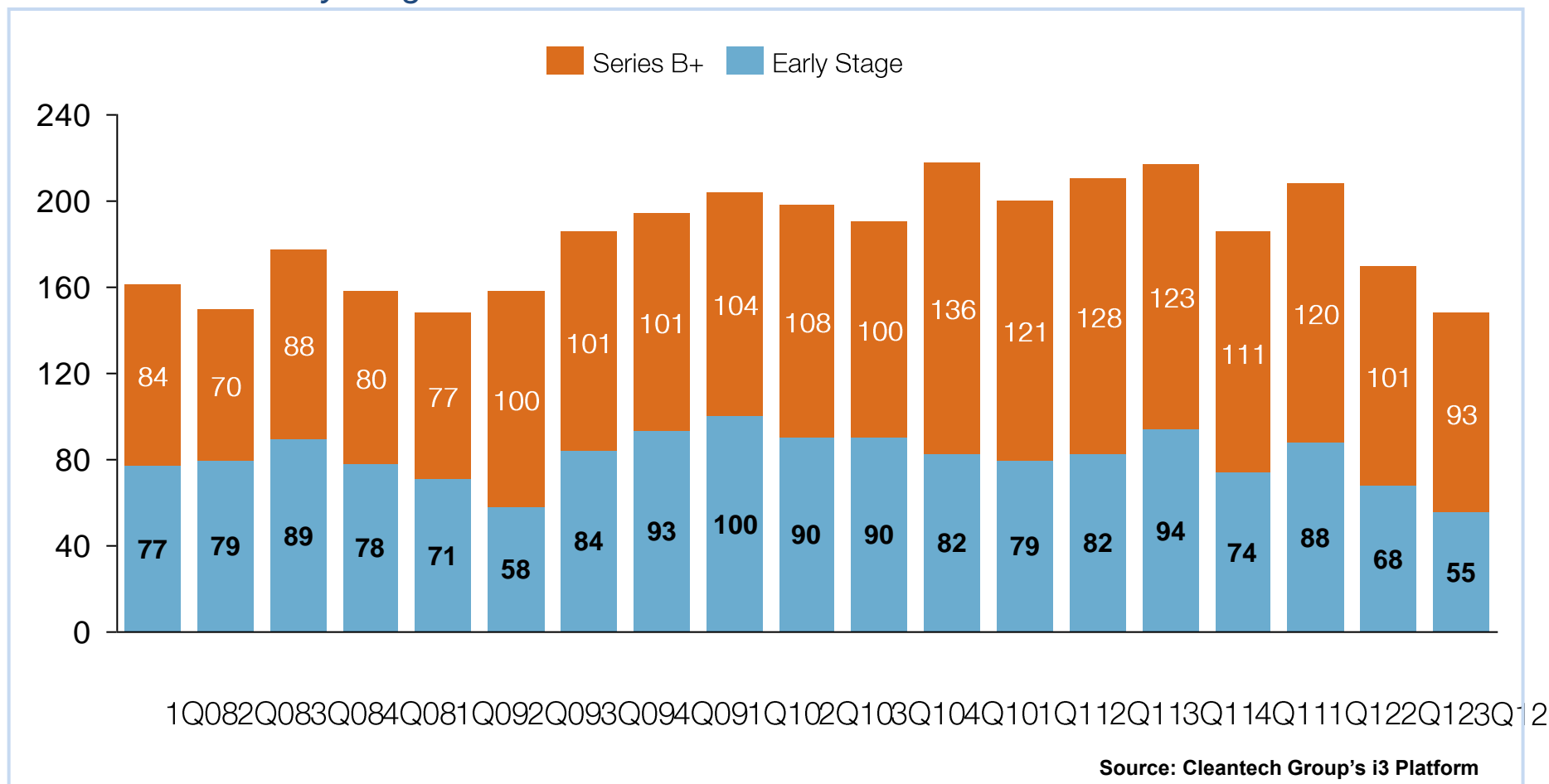


1

# Number of Deals, especially Early-Stage, Declined

## Global Cleantech Venture Deals by Quarter

*Number of Deals by Stage*

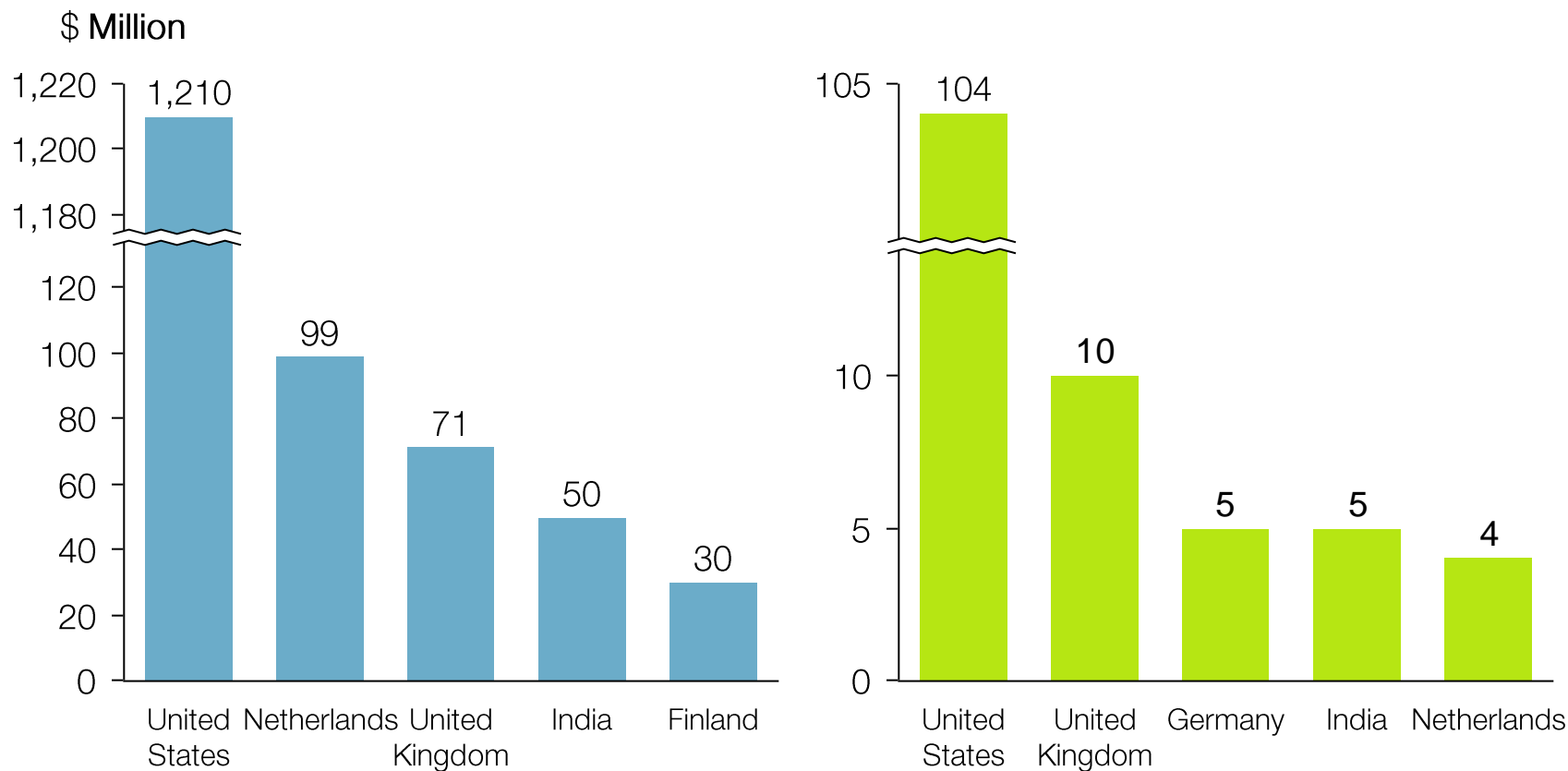


1

# N. American Continues to Lead; Europe & India Moving in Positive Direction

## Cleantech VC Investments by Country

*Total dollar amount (left) and total number of deals (right)*



Source: Cleantech Group's i3 Platform

# Cleantech Innovation More Widespread in US

## Cleantech VC Investments by U.S. States

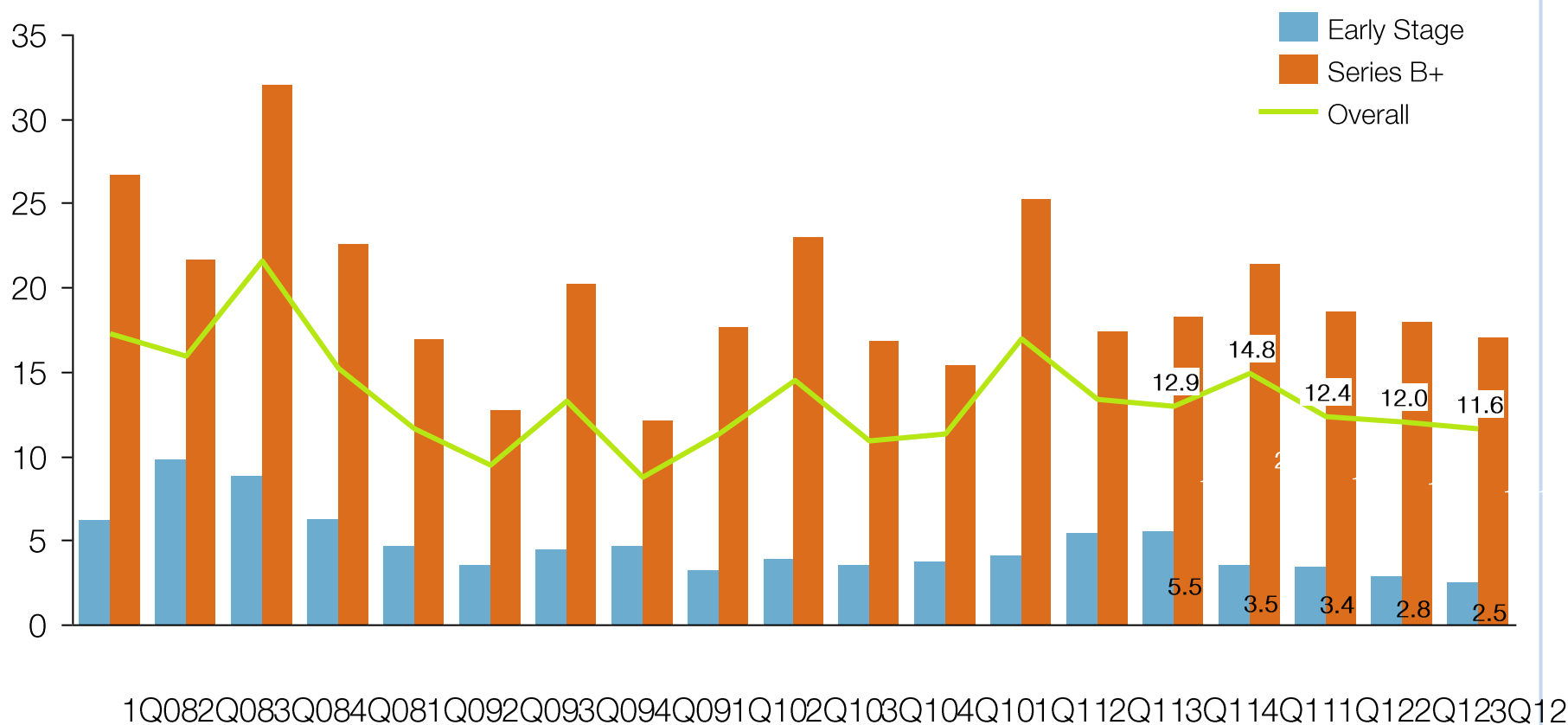
*Total dollar amount (right) and total number of deals (left)*



Source: Cleantech Group's i3 Platform

# Average Deal Size Slowly Dropping

**Average Round Sizes in Cleantech VC Deals by Quarter**  
\$ Millions, by deal stage



Source: Cleantech Group's i3 Platform

# 1 Sector Highlights

## Transportation Getting Stronger

- VC investment in transportation has stayed north of \$250M for all three quarters in 2012
- Great diversity: EVs, electric bikes, car-sharing platform, fleet tracking software, etc.

## Biofuels/chem. Showing Life

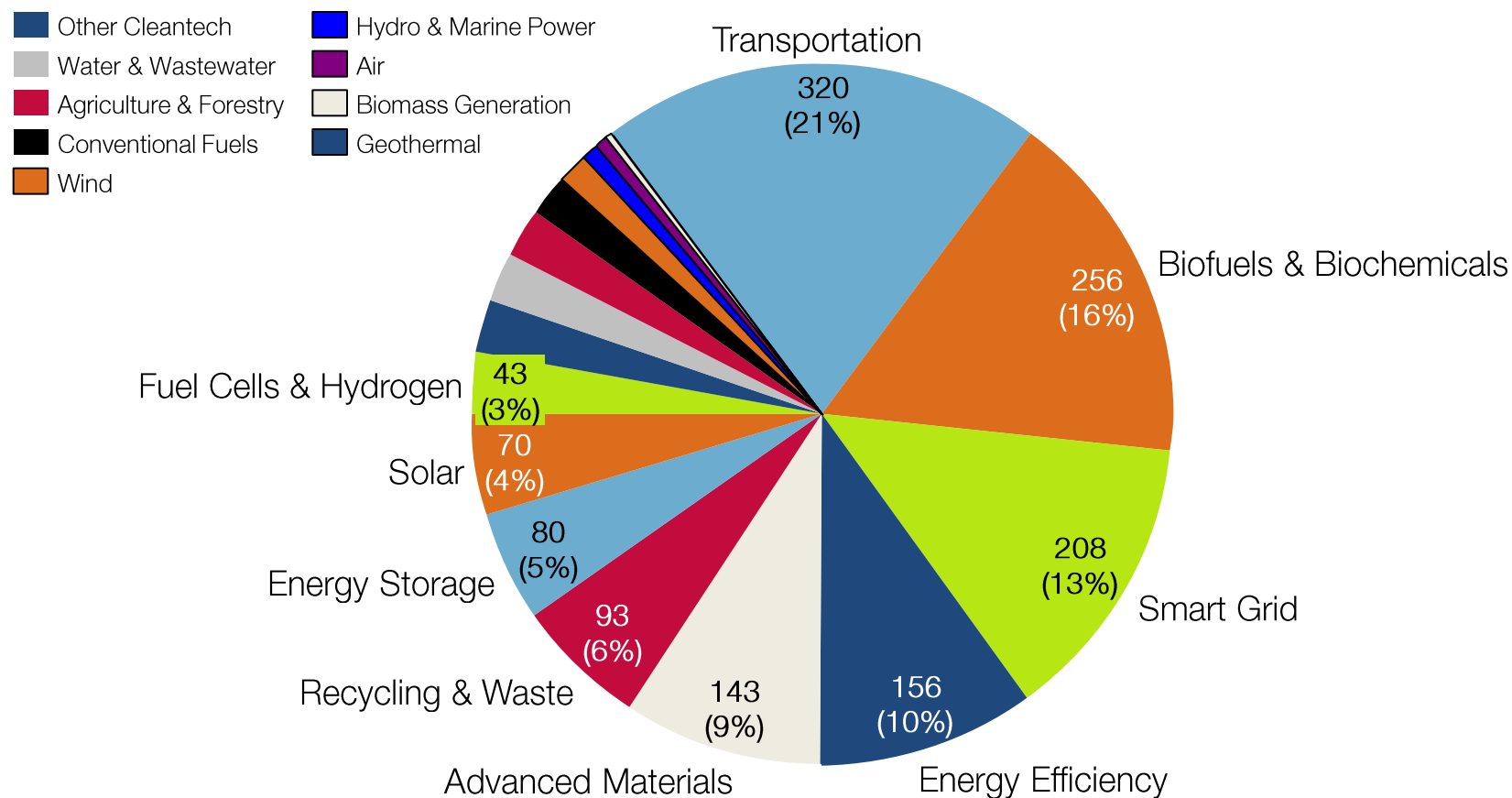
- Amid IPO withdrawals, the sector still finished strong with \$256M over 10 deals
- IPO plans were pulled for more private funding rounds

## Solar and EE Falling Back?

- Traditionally strong sectors have seen significant pullback from investors in 3Q
- Encouraging to see other sectors fill the void as overall number is still relatively strong despite less funding in solar and EE

# Big Shifts in Sector League Table

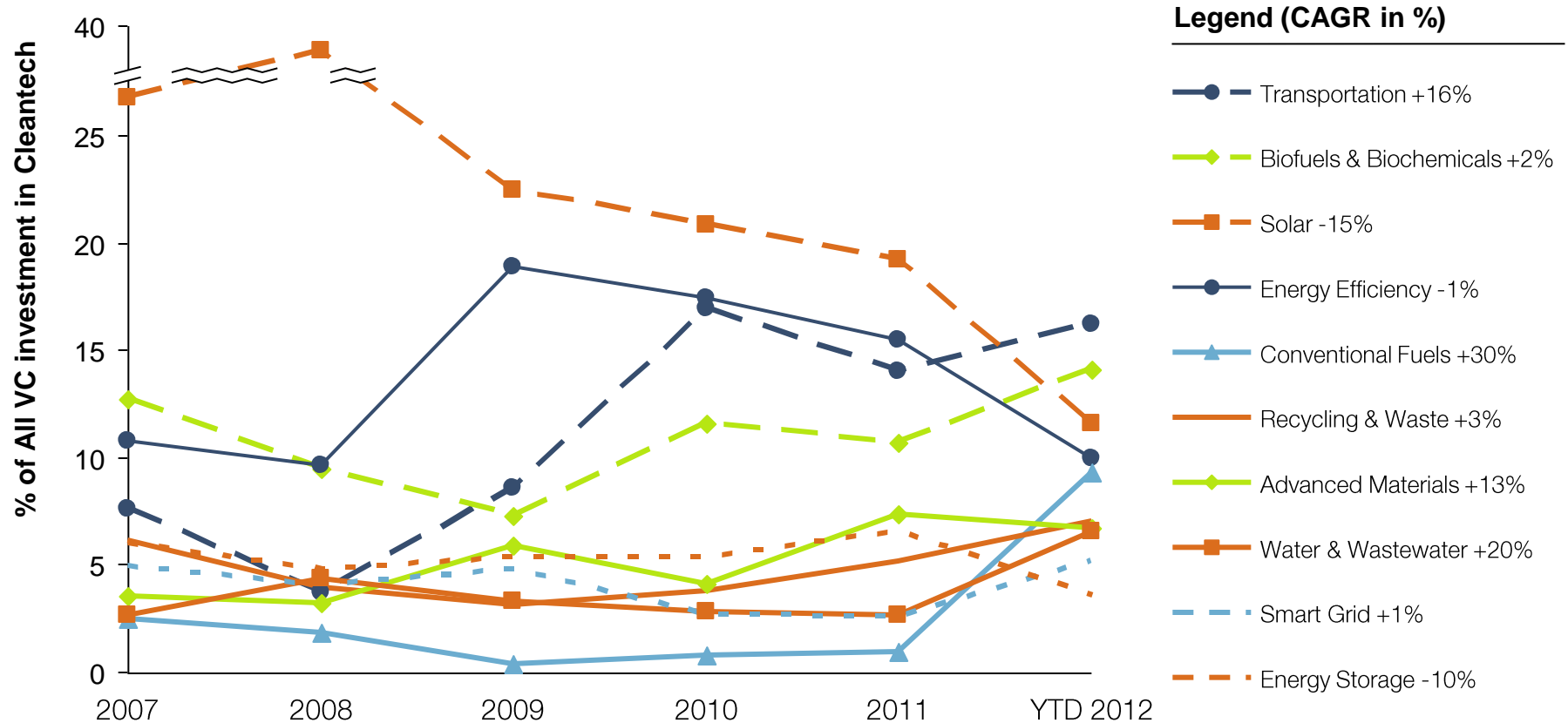
## Global Cleantech Venture Investment by Sector, 3Q12 \$ Millions and percentage



Source: Cleantech Group's i3 Platform

# Less Funding for Traditionally Strong Sectors

**Cleantech VC investment breakdown, Top 10 Sectors YTD 2012**  
*% of dollars invested*



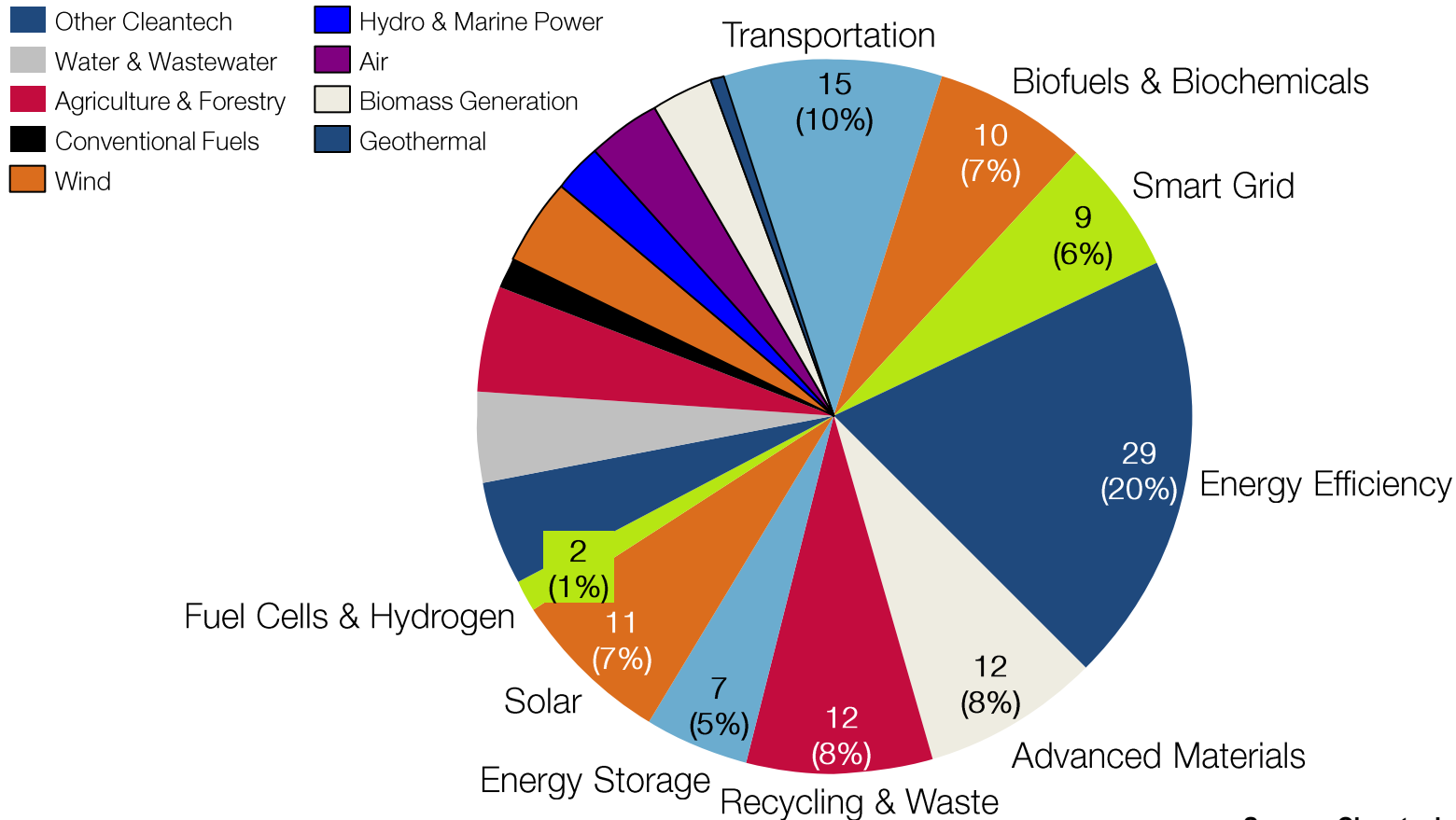
Source: Cleantech Group's i3 Platform

1

# Investors Favor Capital Efficiency (aka Energy Efficiency)











## Global Cleantech Venture Deals by Sector

*# of deals and percentage*



Source: Cleantech Group's i3 Platform

# Large Investments Persist Despite Headwinds

Company	Sector	Country	Round Size	Top Investors
 <b>ALARM.COM</b>	Smart Grid	USA	\$136M	ABS Capital Partners Technology Crossover Ventures
 <b>Elevance</b> RENEWABLE SCIENCES	Biofuels & Biochemicals	USA	\$104M	Total Energy Ventures Genting Berhad
	Transportation	USA	\$104M	Kleiner Perkins Caufield & Byers New Enterprise Associates
 <b>element</b>	Advanced Materials	The Netherlands	\$93M	(Undisclosed)
 <b>Protean</b> ELECTRIC	Transportation	USA	\$84M	GSR Ventures Oak Investment Partners
	Energy Efficiency	USA	\$60M	Brightpath Capital Partners Skagen Group
 <b>genomatica</b> sustainable chemicals	Biofuels & Biochemicals	USA	\$46M	VantagePoint Capital Partners Draper Fisher Jurvetson
	Fuel Cells & Hydrogen	USA	\$40M	Kleiner Perkins Caufield & Byers Intel Capital
 <b>EcoMotors International</b>	Transportation	USA	\$33M	Braemar Energy Ventures Khosla Ventures
 <b>SOLIX</b>	Biofuels & Biochemicals	USA	\$31M	Bohemian Ventures I2BF Global Ventures

## The Company

- Producer of high-performance waxes, functional oils, anti-microbials, lubricants, additives and other chemicals using olefin metathesis technology
- Based in IL, USA

## The Deal

- The company raised \$104M from **Genting Berhad** (Malaysia) and **Total Energy Ventures**
- The new funding round expands Elevance's international footprint in Asia Pacific

## Key Observations

- The deal was closed in July, and one month later, Elevance pulled its \$100M IPO plan
- Fellow biochemical process companies **Genomatica** and **Coskata** both pulled IPO in favor of private funding as well



## The Company

- Developer of an integrated in-wheel motor for electric and hybrid-electric (EV and HEV) vehicles
- Based in MI, USA

## The Deal

- The company raised \$84M from **GSR Ventures, Oak Investment Partners** and others
- The new funding round will be used to establish manufacturing facilities in Liyang, China

## Key Observations

- The company has a technology partnership with **Boston-Power**, which also owns manufacturing facilities in China
- One of three Michigan-based transportation companies (**EcoMotors, Satki3**) funded in 3Q, all developing vehicle technologies

# Company Focus: Lilliputian Systems



## The Company

- Developer of a micro-fuel cell based power supply for handheld electronics
- Product is still in development
- Based in MA, USA

## The Deal

- The company raised \$40M in a \$60M round led by **Rusnano**
- The new funding round will be used to scale manufacturing operations and launch its initial product

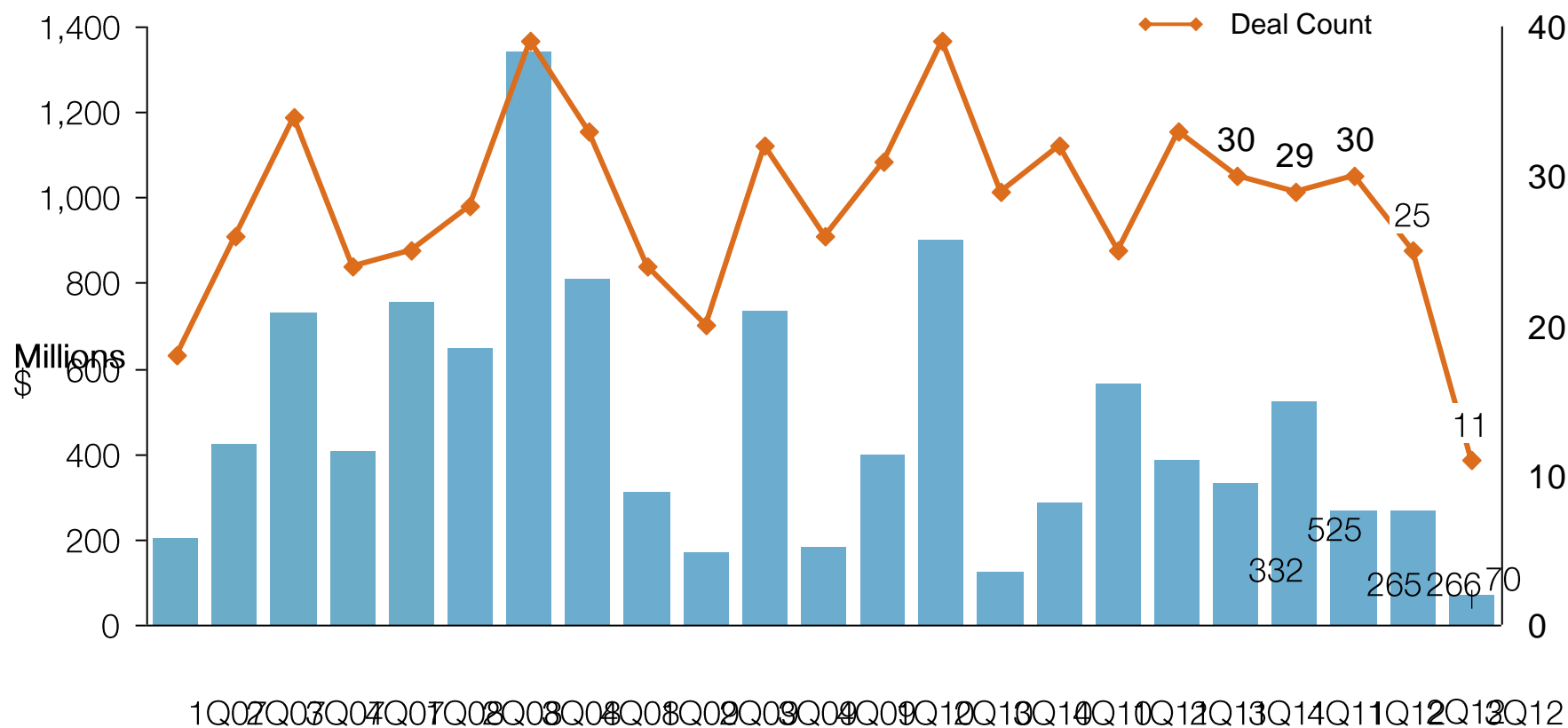
## Key Observations

- The company has raised ~\$150M in venture capital to date, quite a lot for a fuel cell company
- The company also plans to open a business development office and a R&D and manufacturing facility in Moscow, with help from **Rusnano**

# VC Funding in Solar Hits Rock Bottom

## Global VC Investment in Solar by Quarter

\$ Millions, # of deals



Source: Cleantech Group's i3 Platform

# Tough Time for Chinese Solar Companies



- Solar wafer maker **LDK** will have a portion of its debts (~\$80M) paid by its home City of Xinyu in July
- The company has reported four straight quarterly losses and needed bailout



- Solar giant **Suntech** got an emergency \$31.7 million loan from the local government in late September
- The company announced a downsizing initiative that will affect approximately 1,500 workers



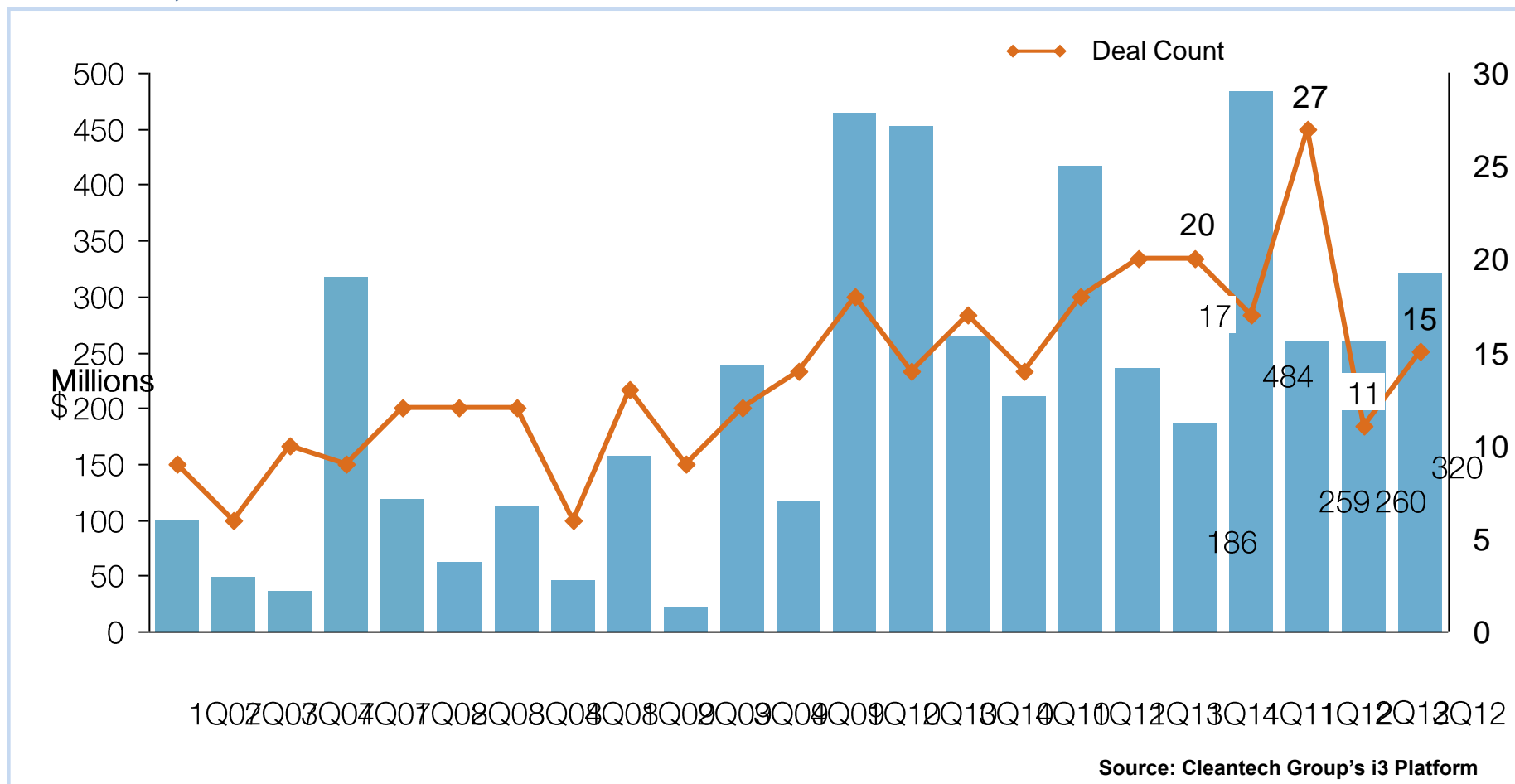
- Once-prominent solar hot water system maker **Himin Solar** was involved in a corruption scandal
- Its IPO was suspended by the China Securities Regulatory Commission due to the scandal in July

1

# Transportation Still Getting Some Dollars

## Global VC Investment in Transportation by Quarter

\$ Millions, # of deals



# Briefing Agenda

1 Venture Trends and Highlights

2 **M&A Trends and Highlights**

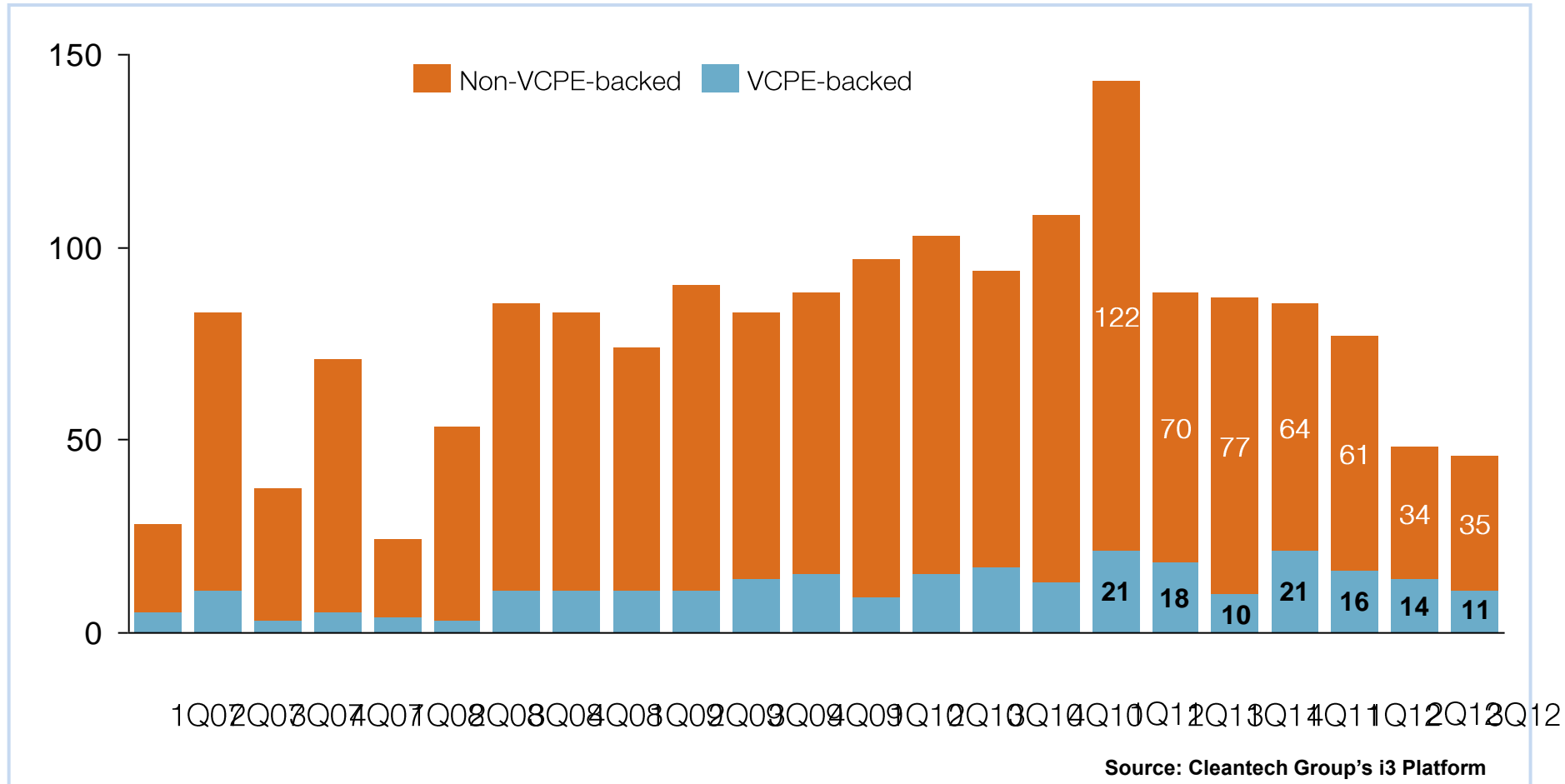
3 IPO Trends and Highlights

4 Q&A

# Global Cleantech M&A Down Slightly

## Mergers and Acquisitions in Clean Technology Sectors

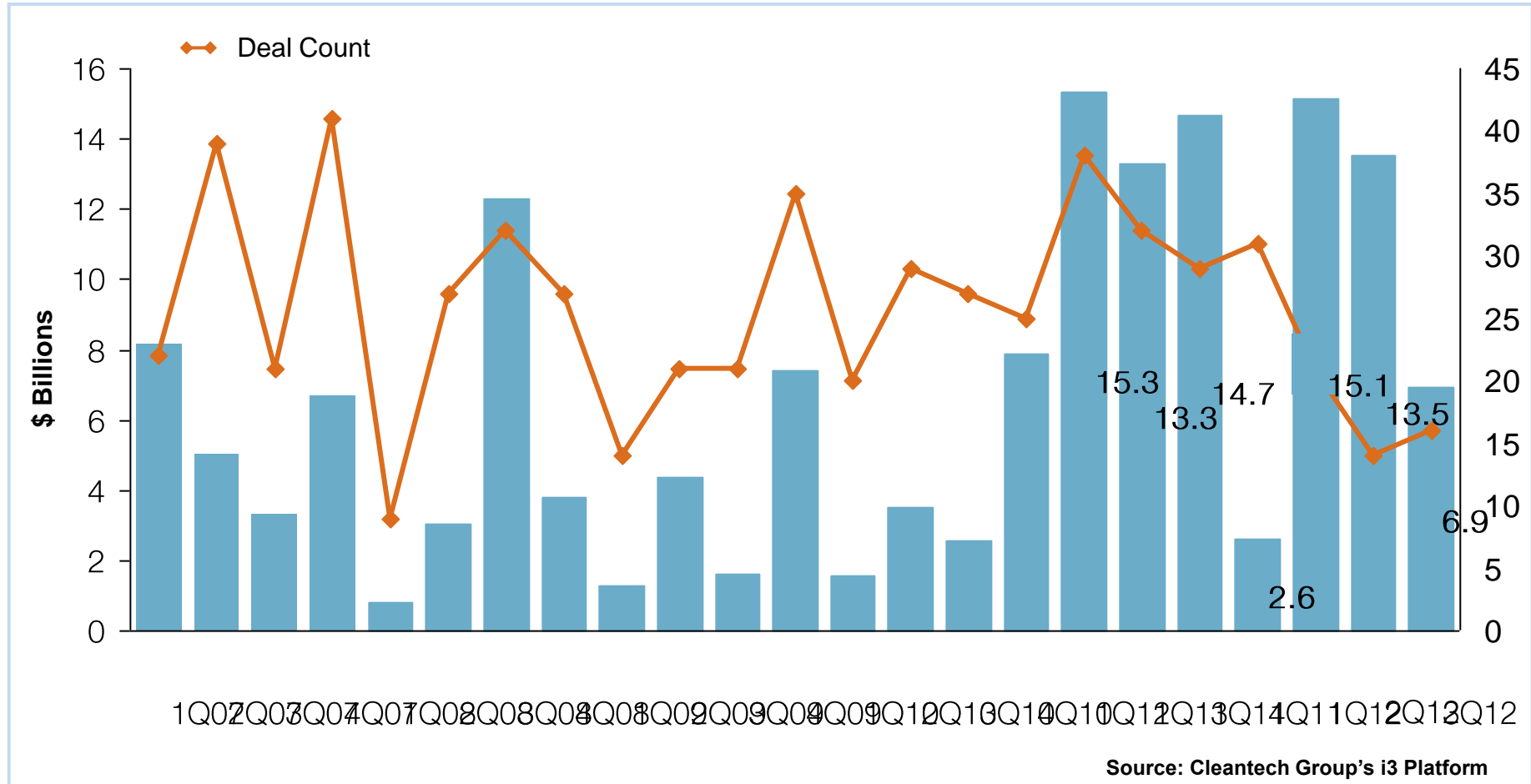
*Number of deals, by type of company*



# Total Size of the Deals Not as Large

## Global Mergers & Acquisitions in Cleantech by Quarter

\$ Billions, # of deals with disclosed amount



# Notable VCPE-backed Companies Acquired

Target Company	Sector	Buyer	Country	Target 's VCPE Investors
	Solar		United States	New Enterprise Associates
	Energy Storage		United States	Braemar Energy Ventures CMEA Capital
	Energy Storage		United States	Applied Ventures Google Ventures
	Agriculture & Forestry		United States	Emerald Technology Ventures Boldcap Ventures
	Energy Efficiency		Taiwan	VantagePoint Capital Partners
	Agriculture & Forestry		United States	Advantage Capital Partners Gordon River Capital
	Solar		Germany	Apax Partners Bregal Energy
	Solar		United States	Austin Ventures

# Oct. Update: MiaSolé Acquired in Emergency Deal

## MiaSolé

[Edit Profile](#)
[Admin](#)
[PDF](#)
[Follow](#)

Developer of copper indium gallium selenide (CIGS) thin-film photovoltaic (PV) solar modules

MiaSolé was acquired by [Hanergy](#) for \$30M on 10/01/2012.

ACQUIRED - WIDE COMMERCIAL AVAILABILITY - 315 EMPLOYEES

**10** RELATIONSHIPS **7** INVESTMENTS **0** MERGER & ACQUIS. **\$470M** PAID-IN CAPITAL

### Overview

Formerly known as Raycom Technologies, MiaSole manufactures photovoltaic (PV) solar modules utilizing the copper indium gallium selenide (CIGS) thin-film semiconductor. The company's goal is to enable grid parity of solar energy through high-volume manufacturing of low cost, high-efficiency thin-film solar modules by 2012.



Is this your company?

[Own this Profile](#)

Founded in 2001

[Website](#)

+1 (408) 919-5700

### M&A History

Date ▼	Type	Company	Amount
10/01/2012	Acquisition	<a href="#">MiaSolé</a> Chinese renewable energy developer Hanergy is set to purchase troubled solar business MiaSolé for around \$30 million. ( <a href="#">source</a> )	\$30M

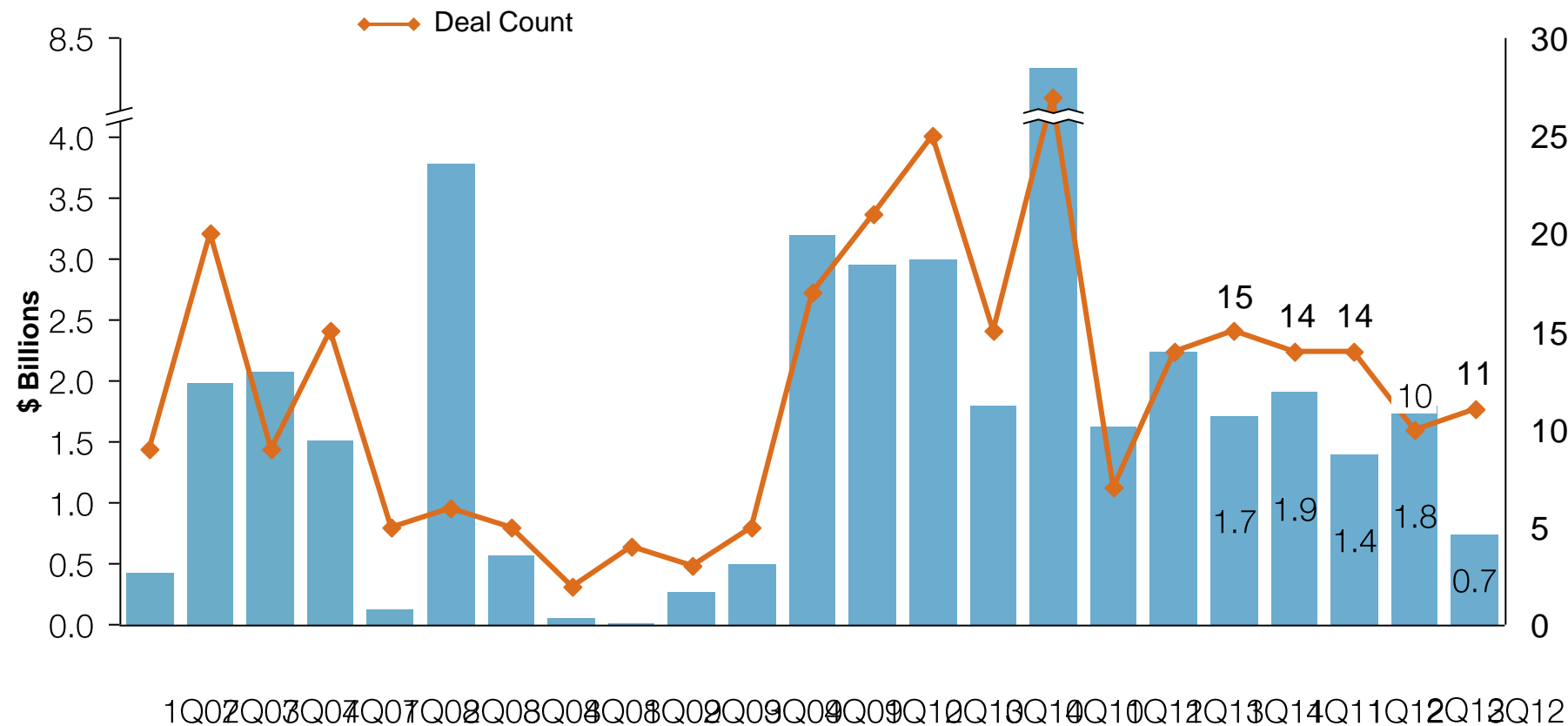
# Briefing Agenda

- 1 Venture Trends and Highlights
- 2 M&A Trends and Highlights
- 3 **IPO Trends and Highlights**
- 4 Q&A

# IPO Aggregate Amount Shrinks in 3Q12

## Global IPOs for Clean Technology Companies

\$ Billions, # of offerings



Source: Cleantech Group's i3 Platform

# Still China-centric; No Multi-Million Dollar Offerings

Company	Sector	City/ Province	Raised (US\$ equiv.)	Exchange
Jiangsu Nata Opto-electronic Material	Advanced Materials -- LED & solar materials	Jiangsu	\$130M	Shenzhen Stock Exchange
Jiangmen KanHoo Industry	Energy Efficiency -- LED components	Guangdong	\$94M	Shenzhen Stock Exchange
Loncin Industries	Transportation -- low-emission cars	Chongqing	\$77M	Shanghai Stock Exchange
Tianjin Motimo Membrane Technology	Water & Wastewater -- membrane technology	Tianjin	\$76M	Shenzhen Stock Exchange
Devotion Thermal Technology	Biomass Generation -- biomass-converted fuels	Guangdong	\$76M	Shenzhen Stock Exchange
Goldcard Science & Technology	Smart Grid -- smart meters	Zhejiang	\$72M	Shenzhen Stock Exchange
Beijing Taikong Panel Industry	Energy Efficiency -- building materials	Beijing	\$66M	Shenzhen Stock Exchange
Monsod Drought-Resistance	Agriculture & Forestry -- environmental design	Inner Mongolia	\$64M	Shenzhen Stock Exchange
Lecron	Advanced Materials -- low-carbon polyurethane	Shandong	\$44M	Shenzhen Stock Exchange

# Cleantech Public Stocks Still Underperforming

## Performance of S&P 500 vs. the Cleantech Index *% change since Oct 2011*



# IPO Window Effective Shut ...



- Biomaterials producer **Elevance Renewable Sciences** pulled its \$100M IPO in late August
- The company raised \$104M in Series E financing in July right before officially pulling its IPO plans



- Green chemicals producer **Genomatica** announced that it has pulled its \$100M IPO in early August
- In the same announcement, the company said that it has raised a \$46M Series D round



- Biofermentation process developer **Coskata** shelved its \$100M IPO plan in late July, and said it will seek private funding
- The company did close a \$12M debt financing round in August, according to a regulatory filing



- Electric delivery vehicle maker **Smith Electric Vehicles** announced that it's withdrawing its planned \$77M IPO in favor of private financing options

# ... but SolarCity Reveals its IPO Plans



## The Company

- “One-service” provider of solar installations for residential & commercial customers
- Partnership with banks to create tax-equity funds to finance home/commercial projects

## The Filing

- SolarCity plans to raise \$201.25M on the NASDAQ
- The company has raised more than \$160M in VC to date
- Key backers: **DFJ**, **Silver Lake**, **DBL Investors**, etc.

## Key Observations

- According to the filing, SolarCity had a revenue of \$60M in 2011, and \$71M in first half 2012
- Profit comes from leases, not sales of solar systems
- The company is still not yet profitable: net loss at the end of 2011 (-\$74M) and 1H 2012 (-\$49M)

# Briefing Agenda

1 Venture Trends and Highlights

2 M&A Trends and Highlights

3 IPO Trends and Highlights

4 Q&A

# A word on our new firm...

Energy	Utilities & Power	Consumer & Retail	Tech & Industrial	Investors	Service Providers
					
					
					
					
					
					

# Our offerings...

**We help clients grow through sustainability and innovation**



# Cleantech meets sustainability

We help clients grow through sustainability and innovation



## What sets us apart

- **Pioneers** in cleantech and sustainability
- **Insight** into innovation
- **Global** network



# Q&A



# Thank You to Our Sponsors

Silicon Valley Bank >

A Member of SVB Financial Group



Wilson Sonsini Goodrich & Rosati

PROFESSIONAL CORPORATION

We note that the sponsors did not participate in the preparation of this report and are not responsible for the information contained in the report. Additionally, the sponsors may have relationships with the entities discussed in this report.

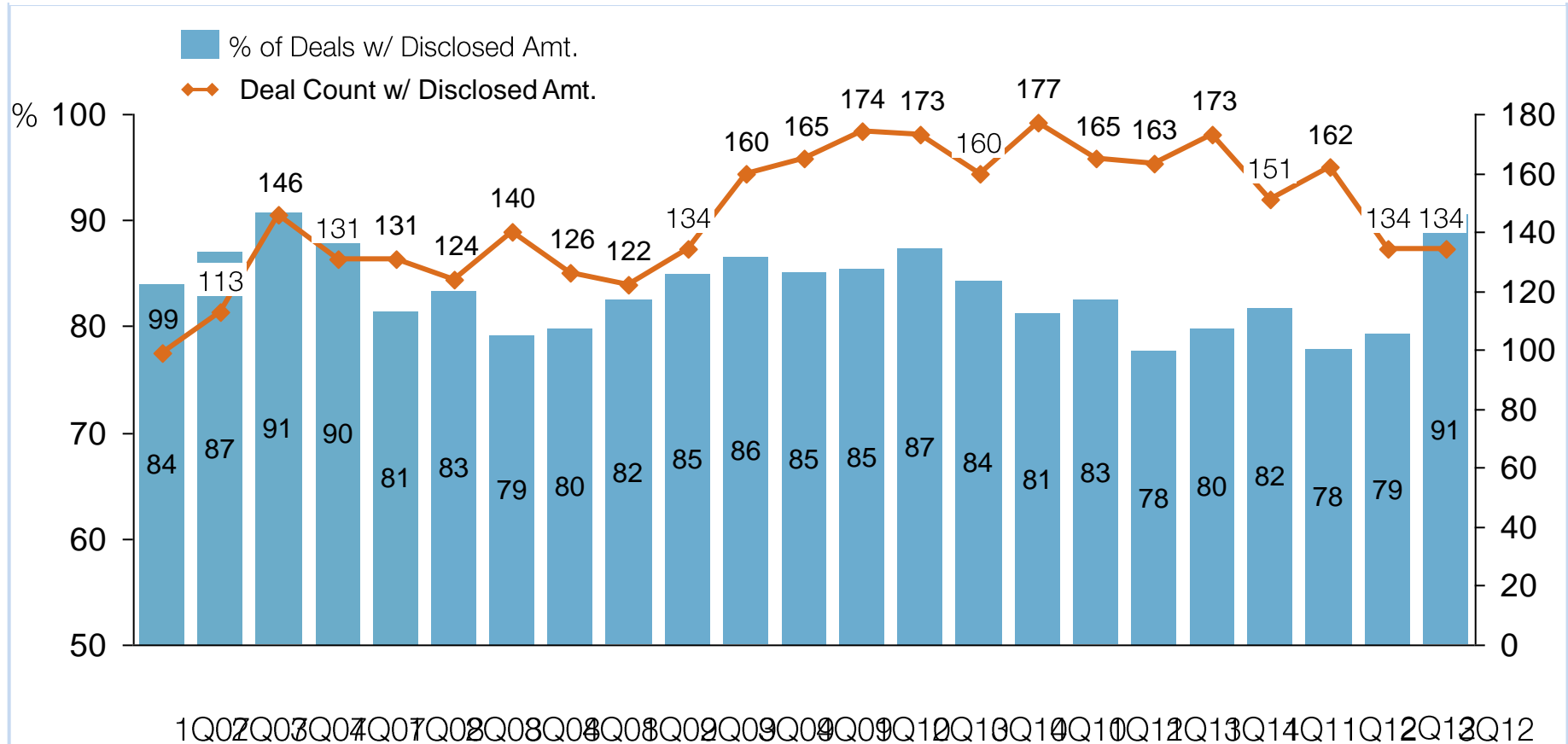
# APPENDIX: ADDITIONAL CHARTS

- VC deals with disclosed amount
- Cleantech VC deal distribution by number of deals
- Cleantech fundraising data 2010 to present
- Cleantech VC data by quarter in specific sectors and regions

# Investors Not Afraid of Disclosing Cleantech Deals

## Cleantech VC Investments with Disclosed Amount

*Number and the percentage of deals with disclosed amount*

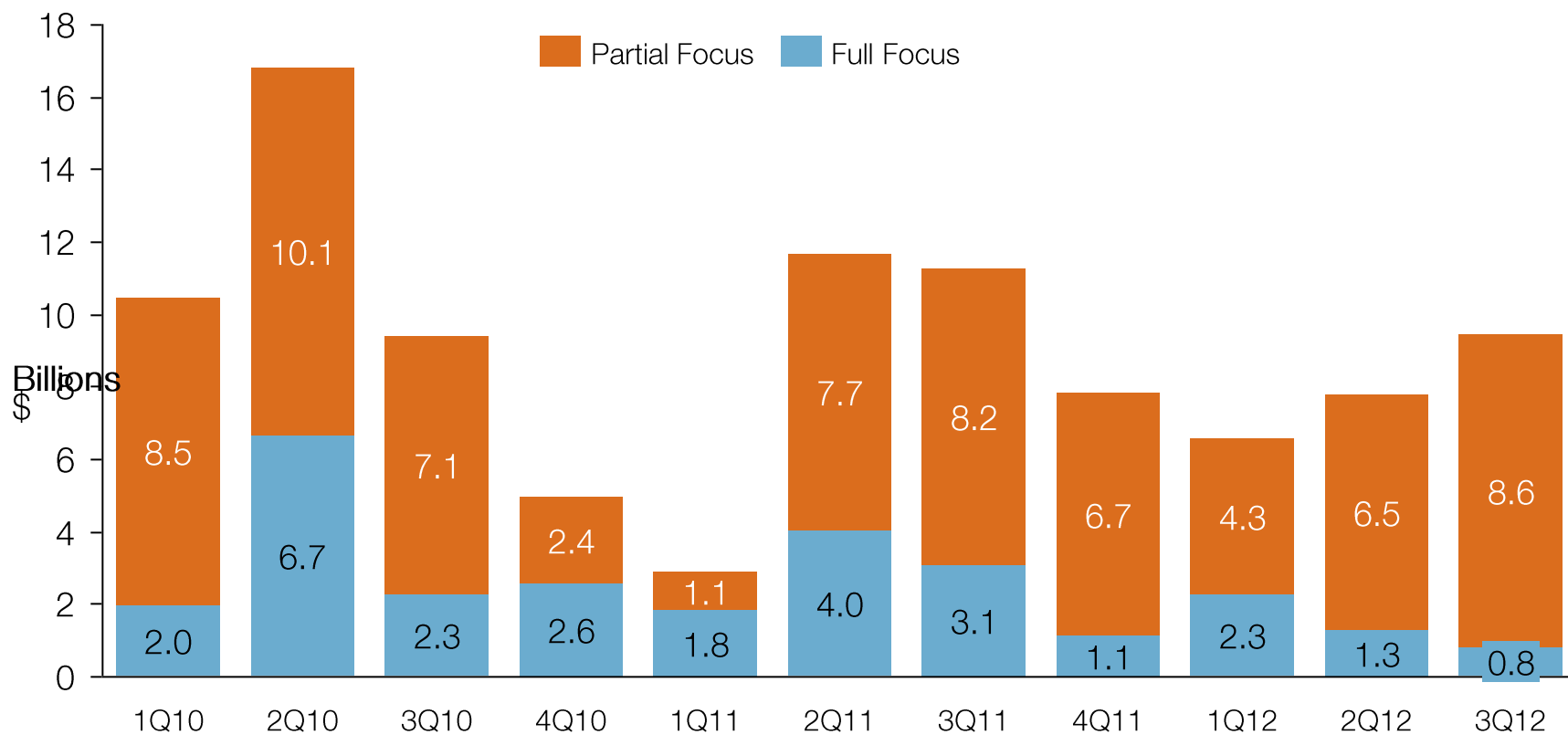


Source: Cleantech Group's i3 Platform

# Fundraising Activity in 3Q12

## Global Cleantech Funds Closed by Quarter

*\$ Billions, by cleantech focus*



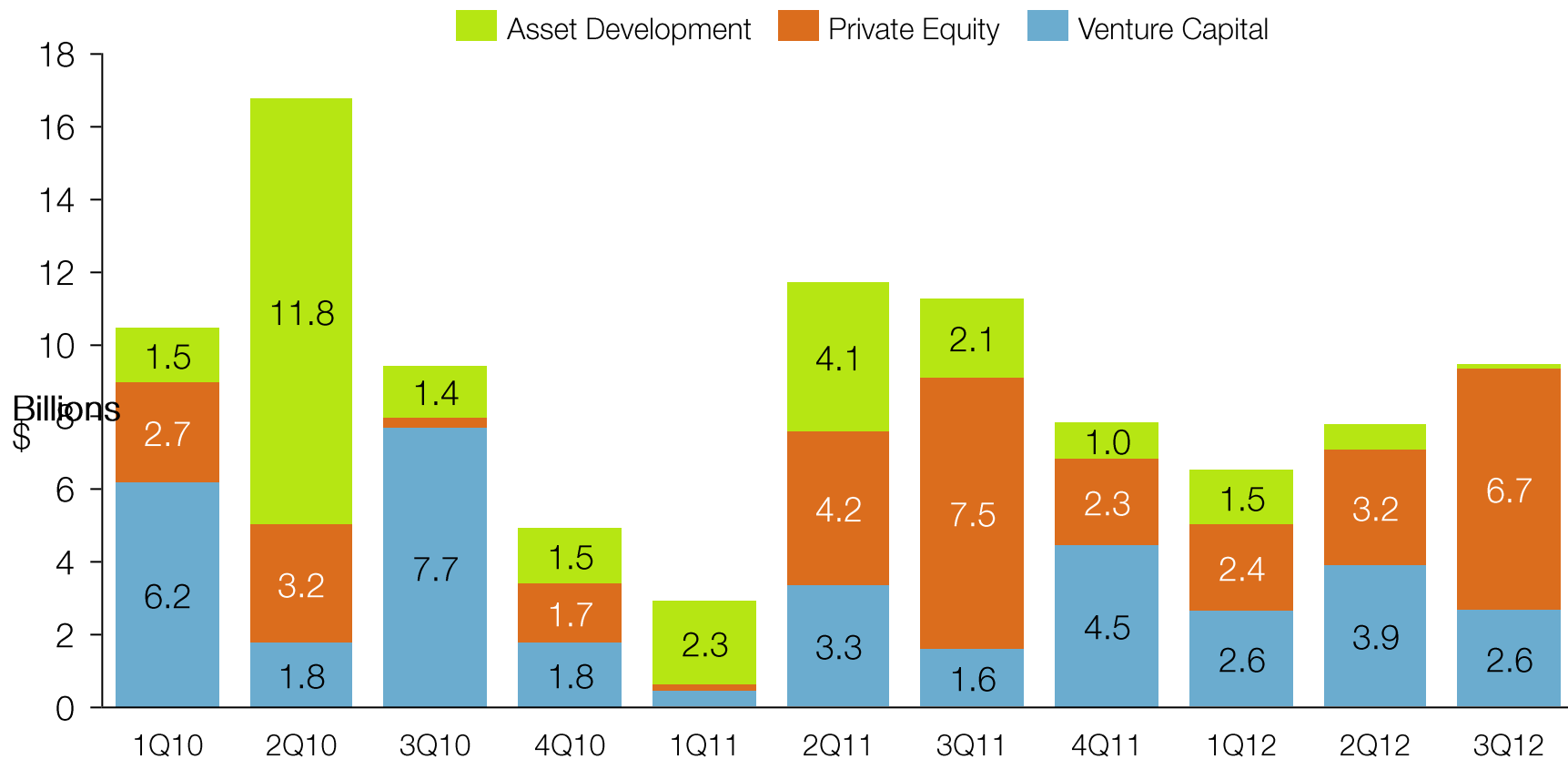
Source: Cleantech Group Research

A

# Fundraising Activity in 2Q12

## Global Cleantech Funds Closed by Quarter

*\$ Billions, by type of fund*



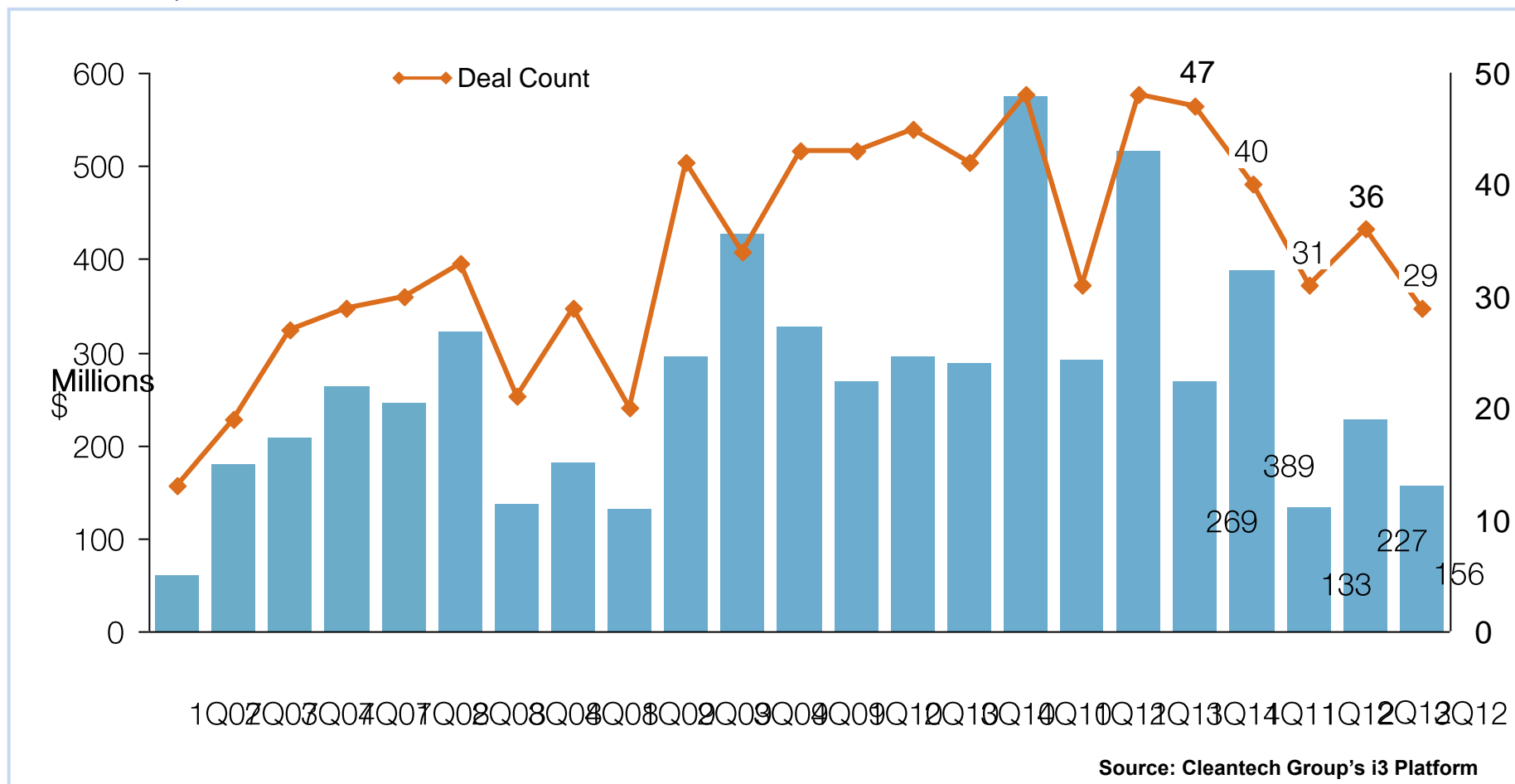
Source: Cleantech Group Research

A

# Efficiency Continues Downward Fluctuation

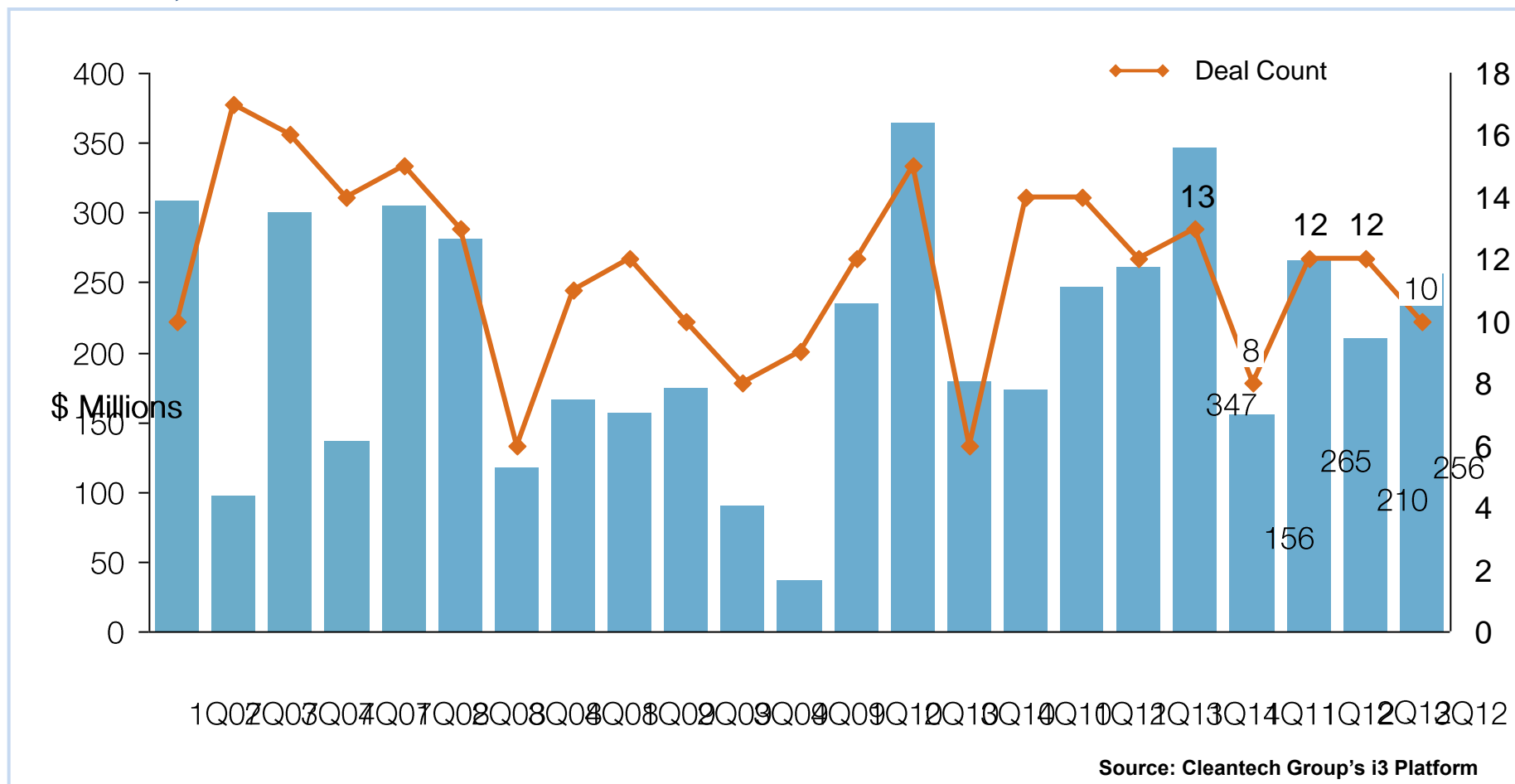
## Global VC Investment in Energy Efficiency by Quarter

\$ Millions, # of deals



# Biofuels & Biochemicals Still Strong

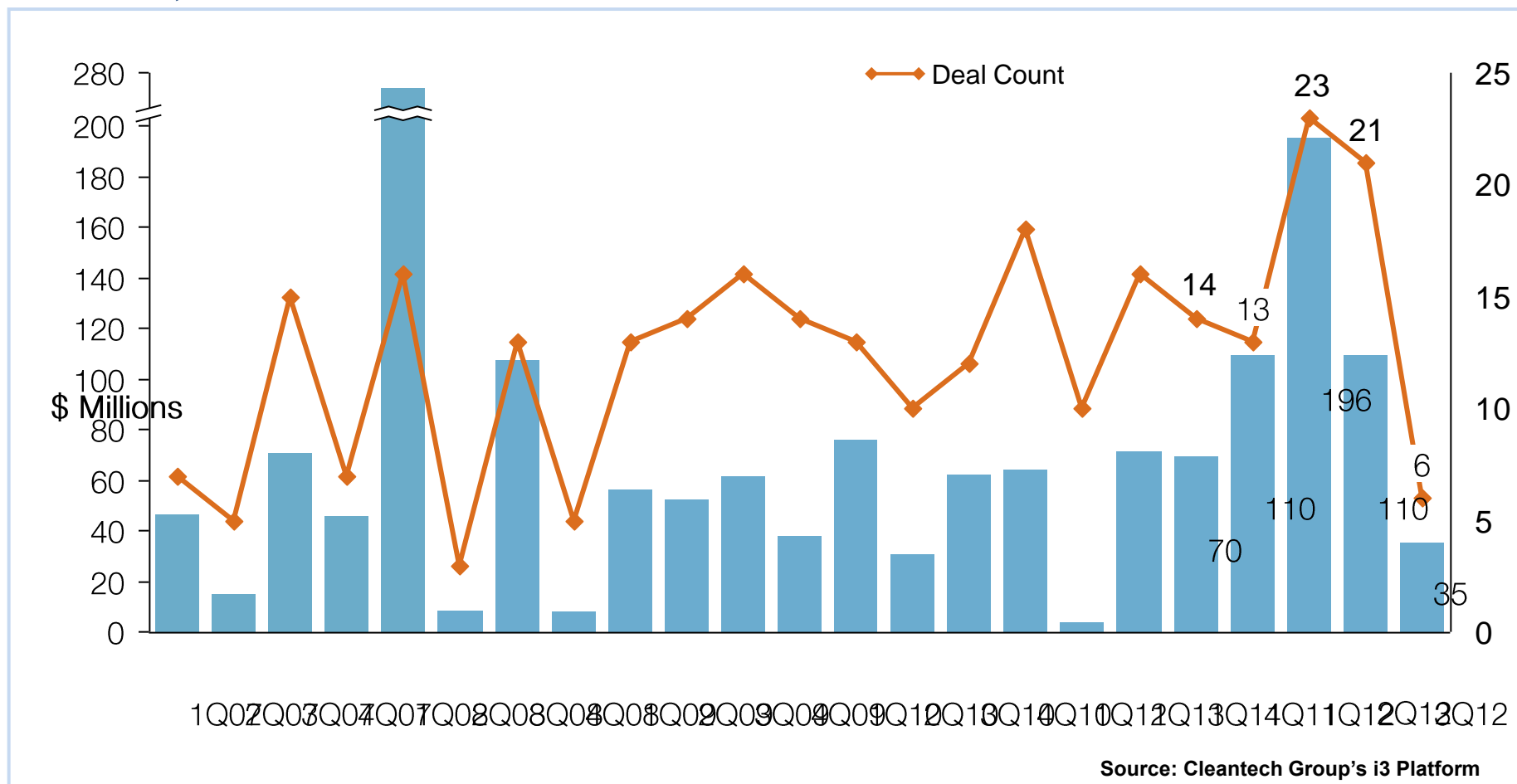
**Global VC Investment in Biofuels & Biochemicals by Quarter**  
*\$ Millions, # of deals*



# VC Investment in Water Back Down

## Global VC Investment in Water & Wastewater by Quarter

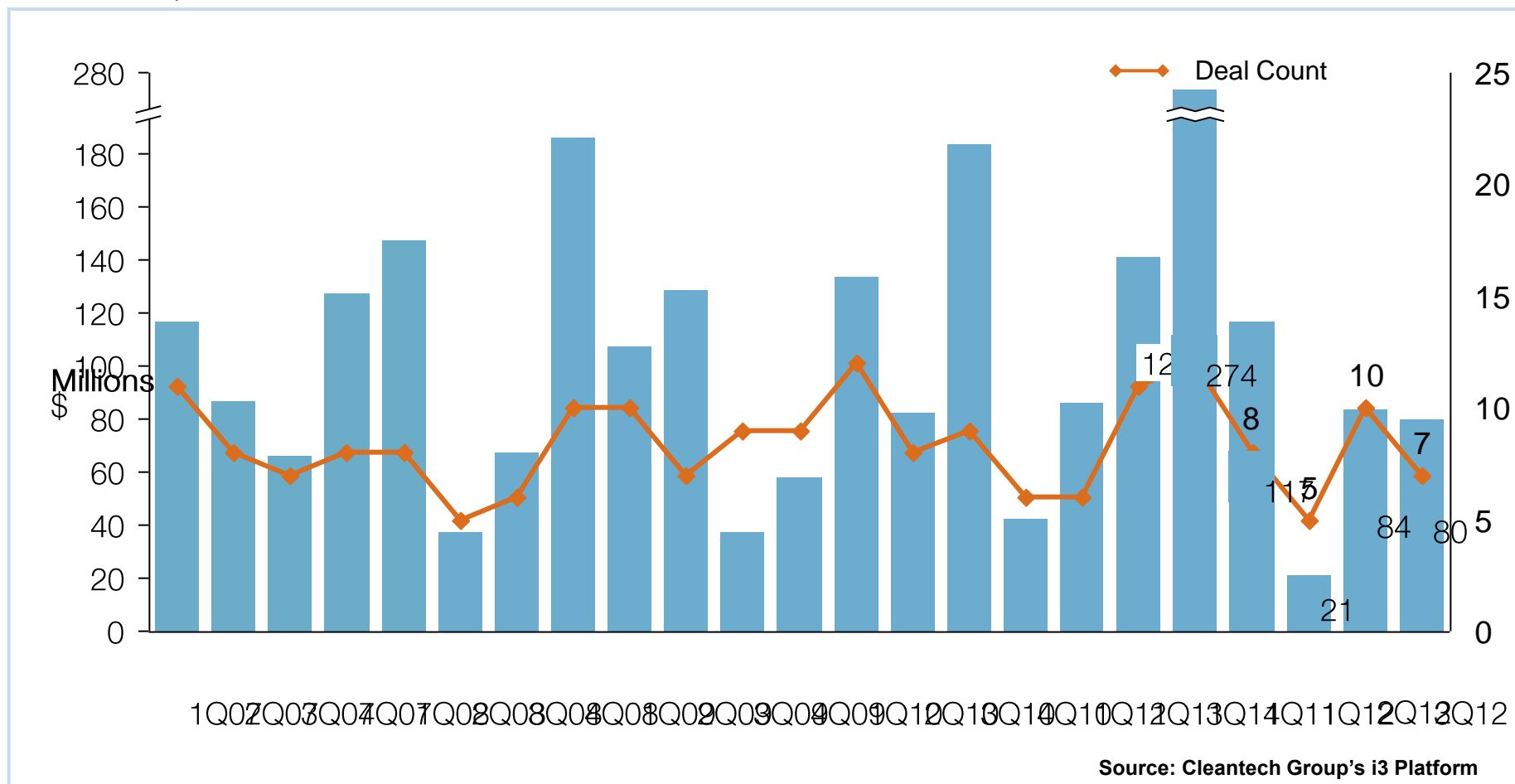
\$ Millions, # of deals



# Funding in Storage Back to Relevance

## Global VC Investment in Energy Storage by Quarter

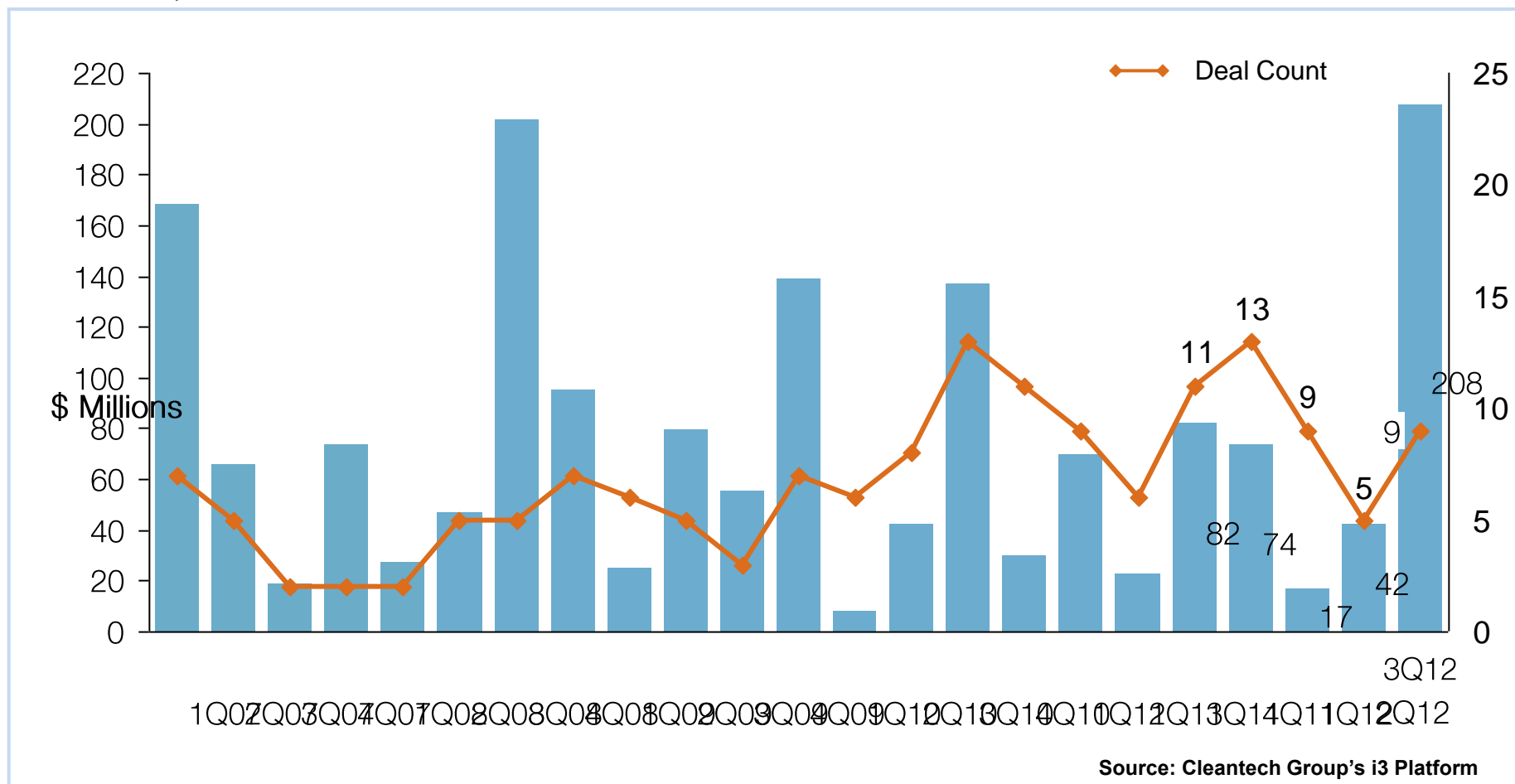
\$ Millions, # of deals



# Smart Grid Benefitted by Big Funding Rounds

## Global VC Investment in Smart Grid by Quarter

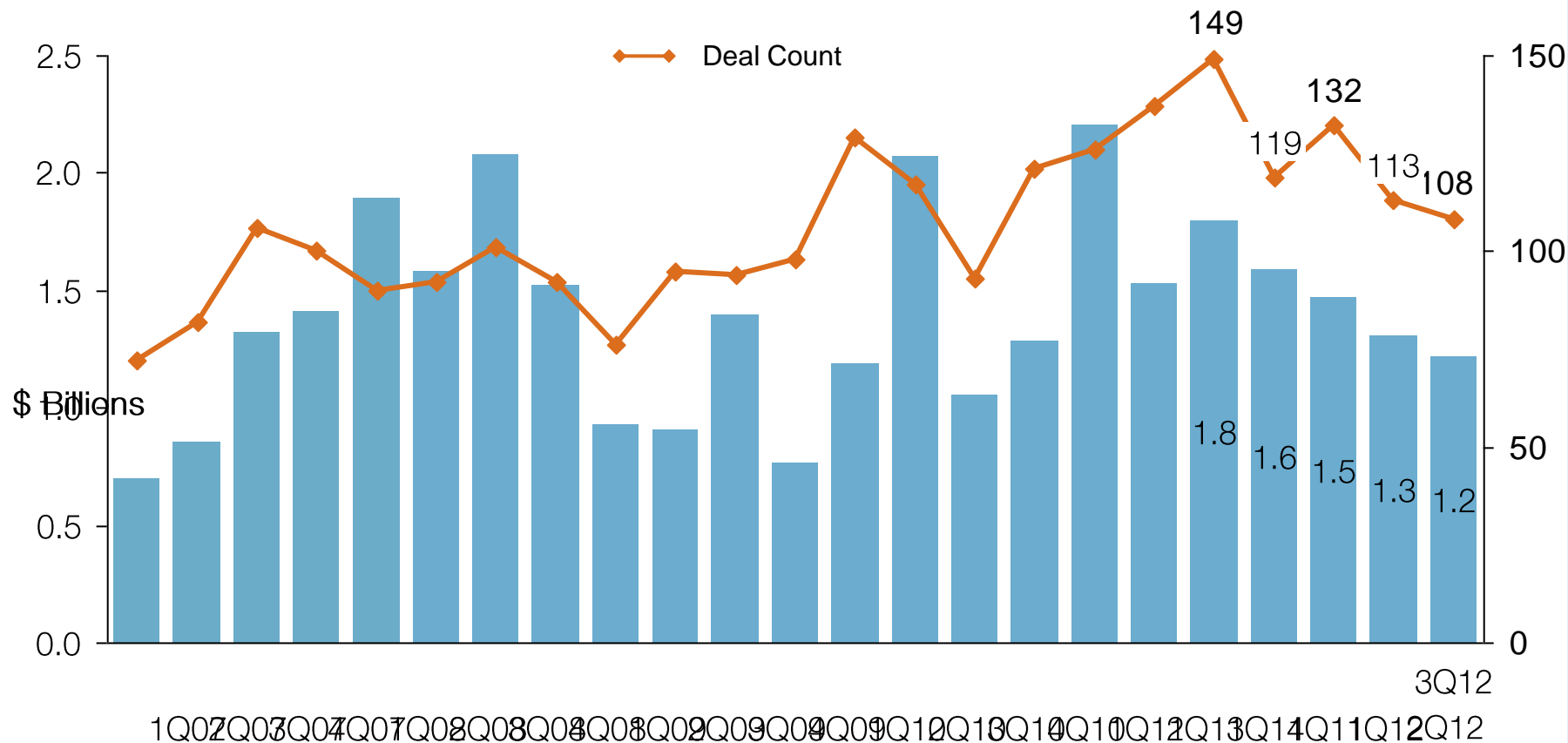
\$ Millions, # of deals



A

# VC Dollar Amount Down Again in N. America

**North America VC Investment in Cleantech by Quarter**  
*\$ Billions, # of deals*

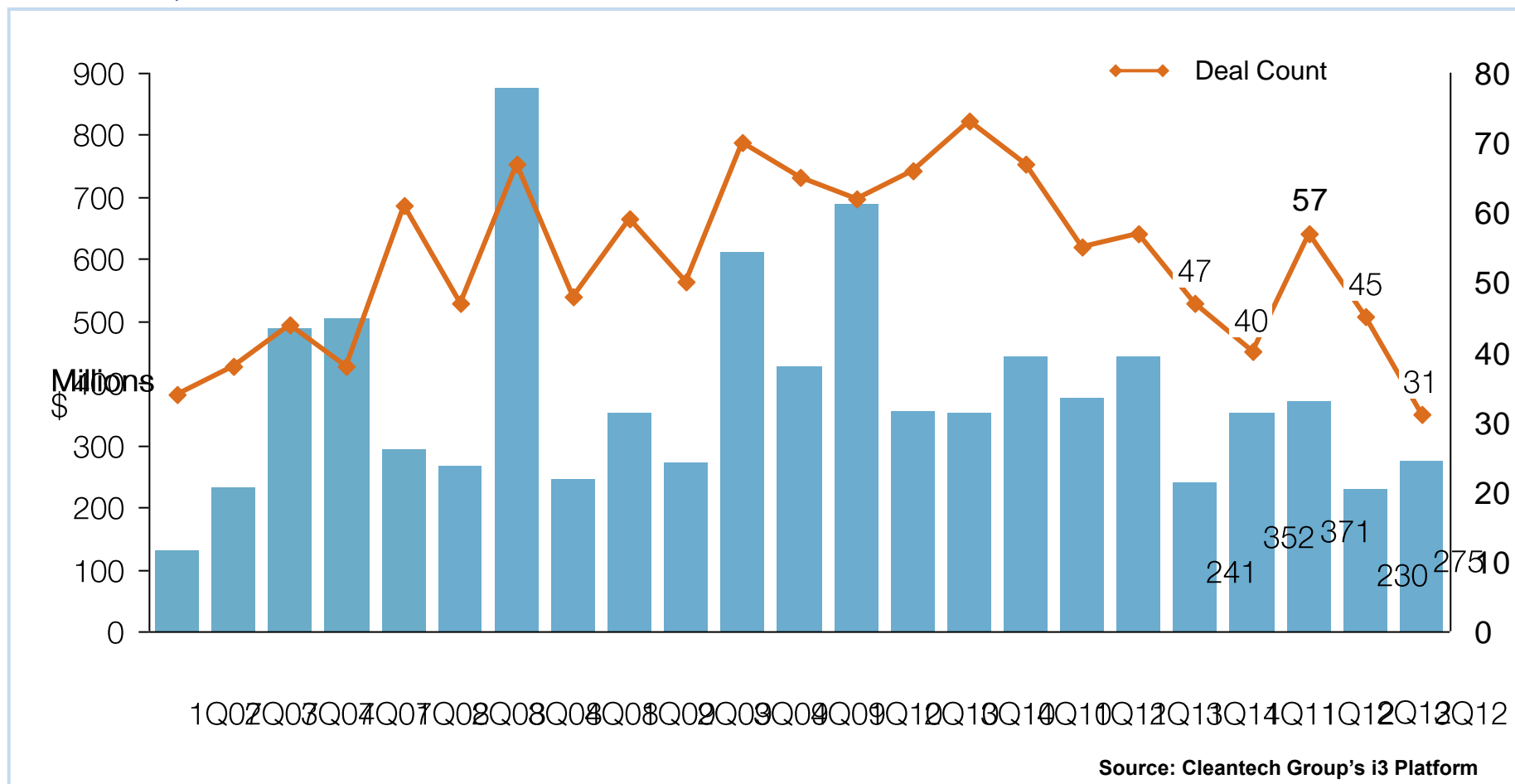


Source: Cleantech Group's i3 Platform

A

# Europe & Israel Rebounds a Little

**Europe & Israel VC Investment in Cleantech by Quarter**  
*\$ Millions, # of deals*



# Disclosure % Slightly Up from 2Q12

## Cleantech Mergers and Acquisitions with Disclosed Amount

*Number and the percentage of deals with disclosed amount*

