

# GLOBAL TRENDS IN CLEAN ENERGY INVESTMENT

**INVESTMENT IN RENEWABLE ENERGY AND ENERGY SMART  
TECHNOLOGIES DROPS 11% IN 2013**

**FACT PACK AS AT Q4 2013**

**15 JANUARY 2014**



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1. Annual clean energy investment overview

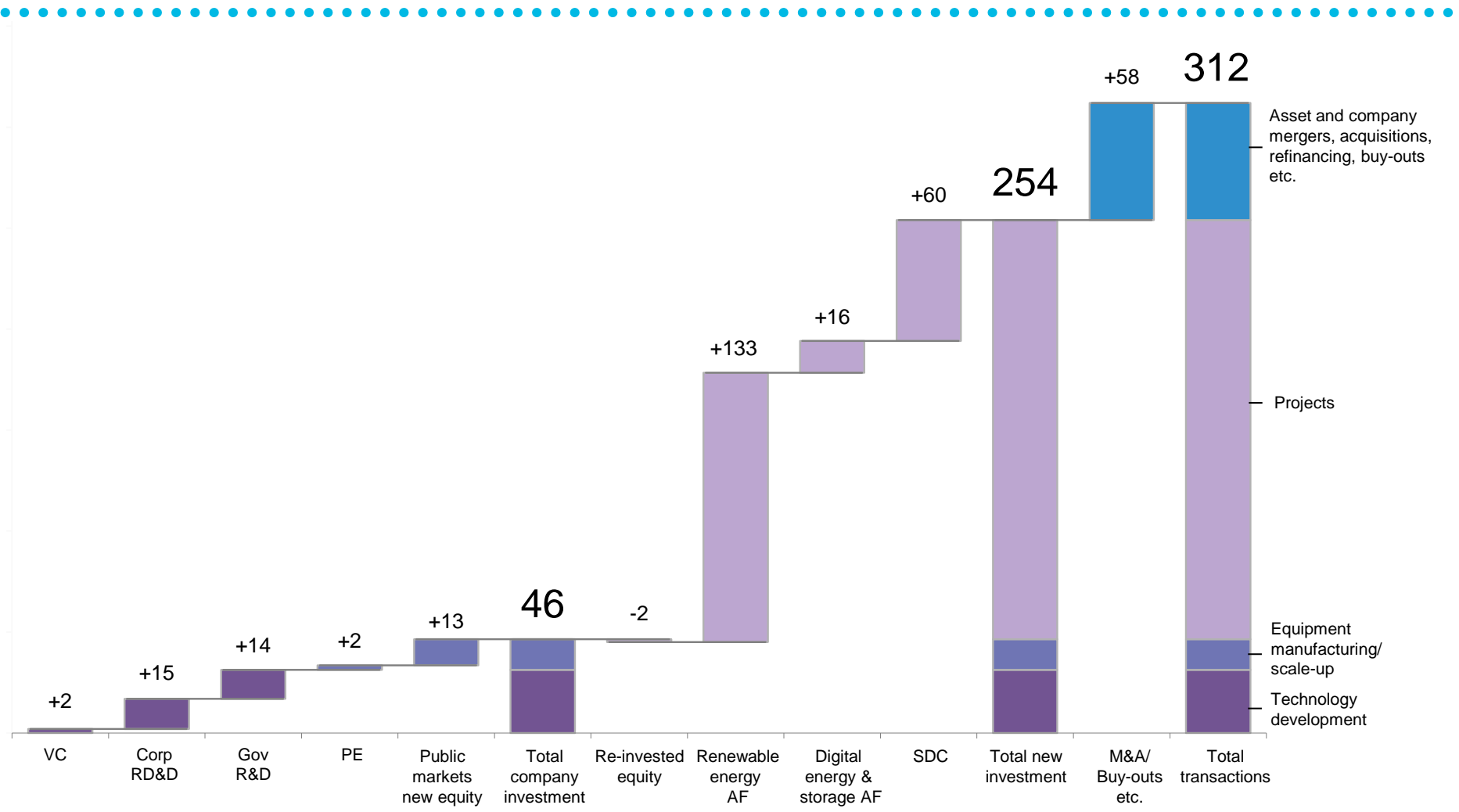
2. Quarterly trends in clean energy: new investment

3. Quarterly trends in clean energy: funds in circulation

4. Clean energy indexes

# CLEAN ENERGY INVESTMENT TYPES & FLOWS

2013 (\$BN)

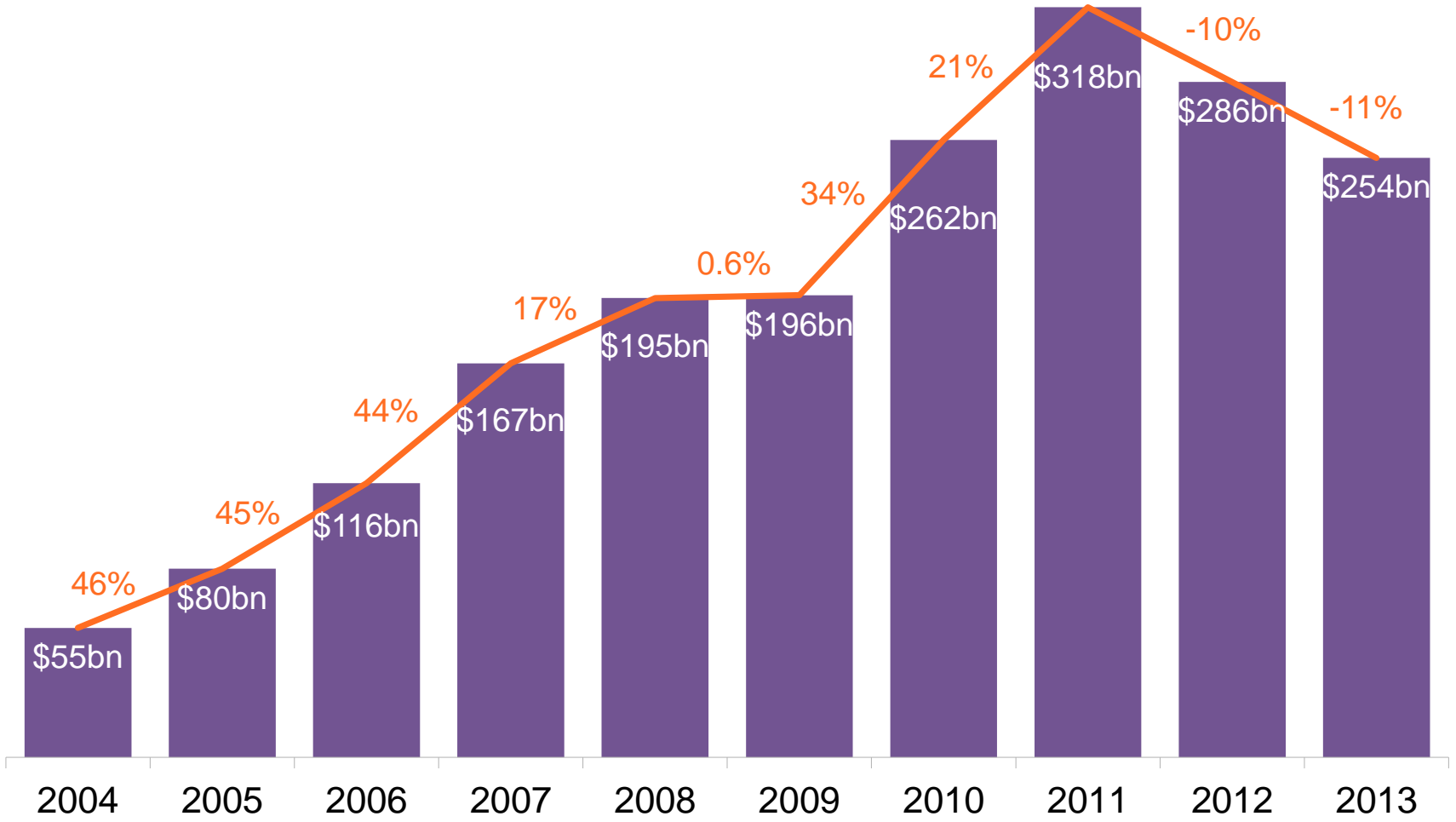


Note: Total values include estimates for undisclosed deals. AF = asset finance, SDC = small distributed capacity.

Source: Bloomberg New Energy Finance

# NEW INVESTMENT IN CLEAN ENERGY

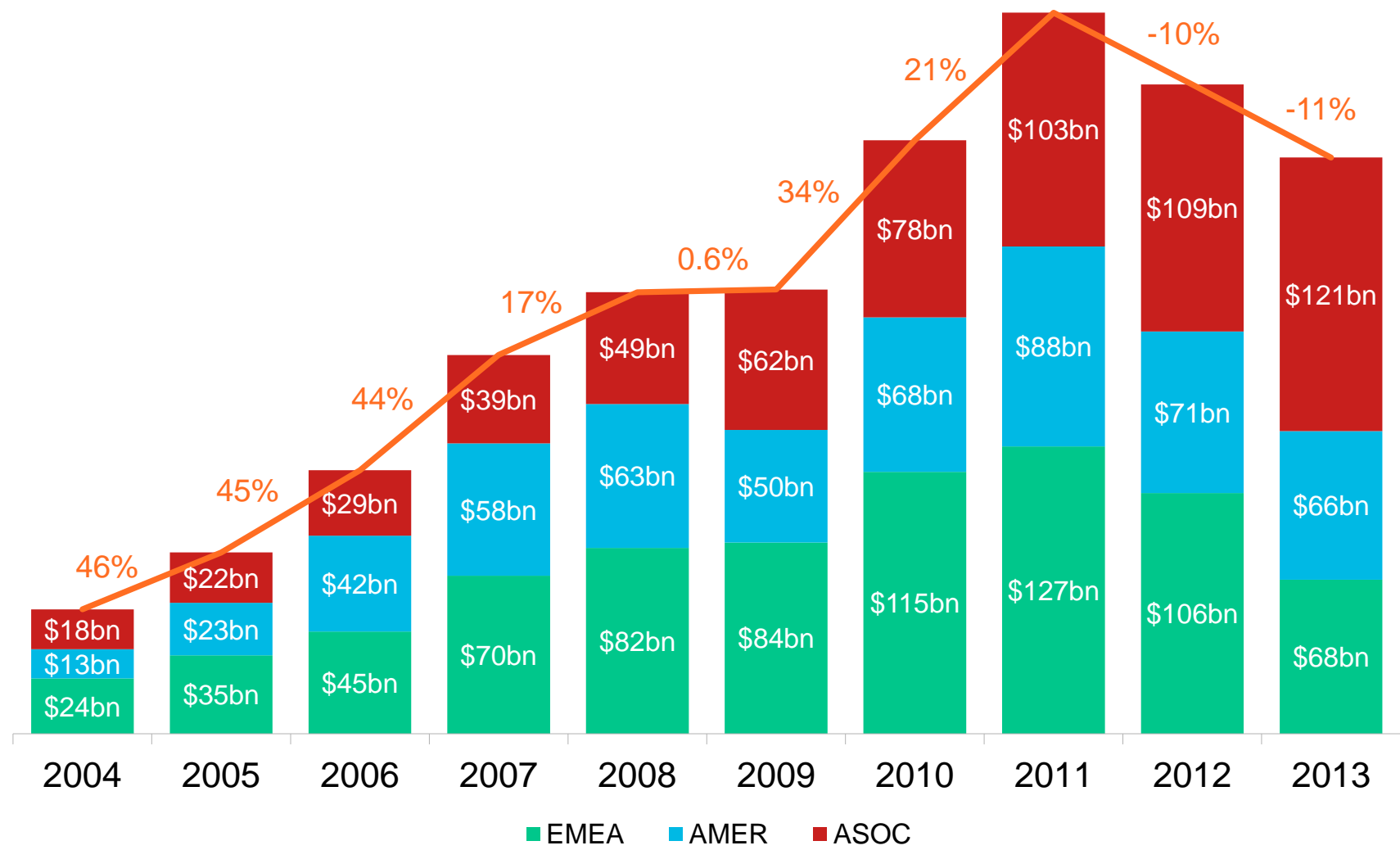
2004–13 (\$BN)



Note: Total values include estimates for undisclosed deals. Includes corporate and government R&D, and spending for digital energy and energy storage projects (not reported in quarterly statistics). Source: Bloomberg New Energy Finance

# NEW INVESTMENT IN CLEAN ENERGY BY REGION

2004–13 (\$BN)



Note: Total values include estimates for undisclosed deals. Includes corporate and government R&D, and spending for digital energy and energy storage projects (not reported in quarterly statistics).

Source: Bloomberg New Energy Finance

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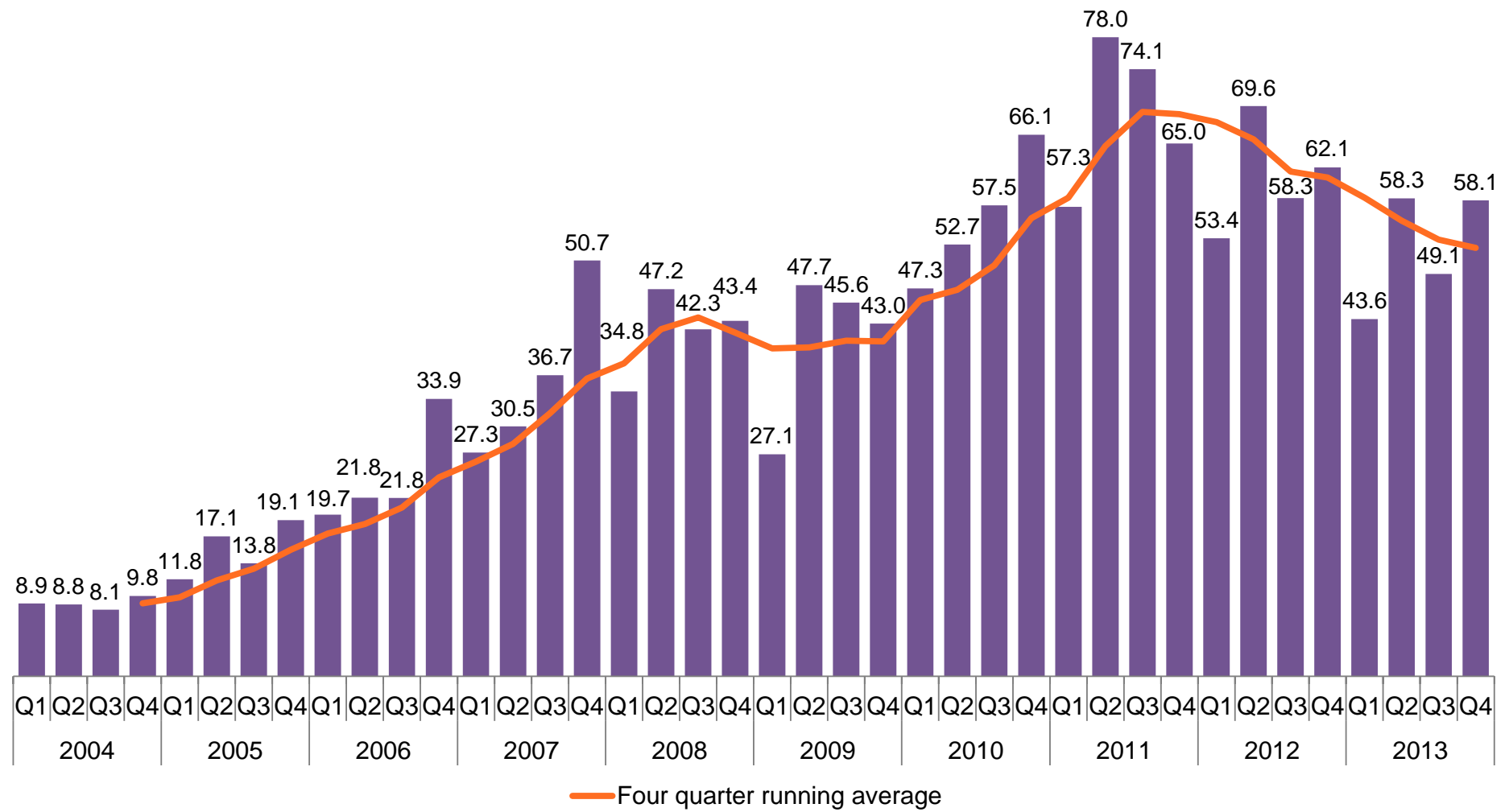
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# NEW INVESTMENT IN CLEAN ENERGY

Q1 2004–Q4 2013 (\$BN)

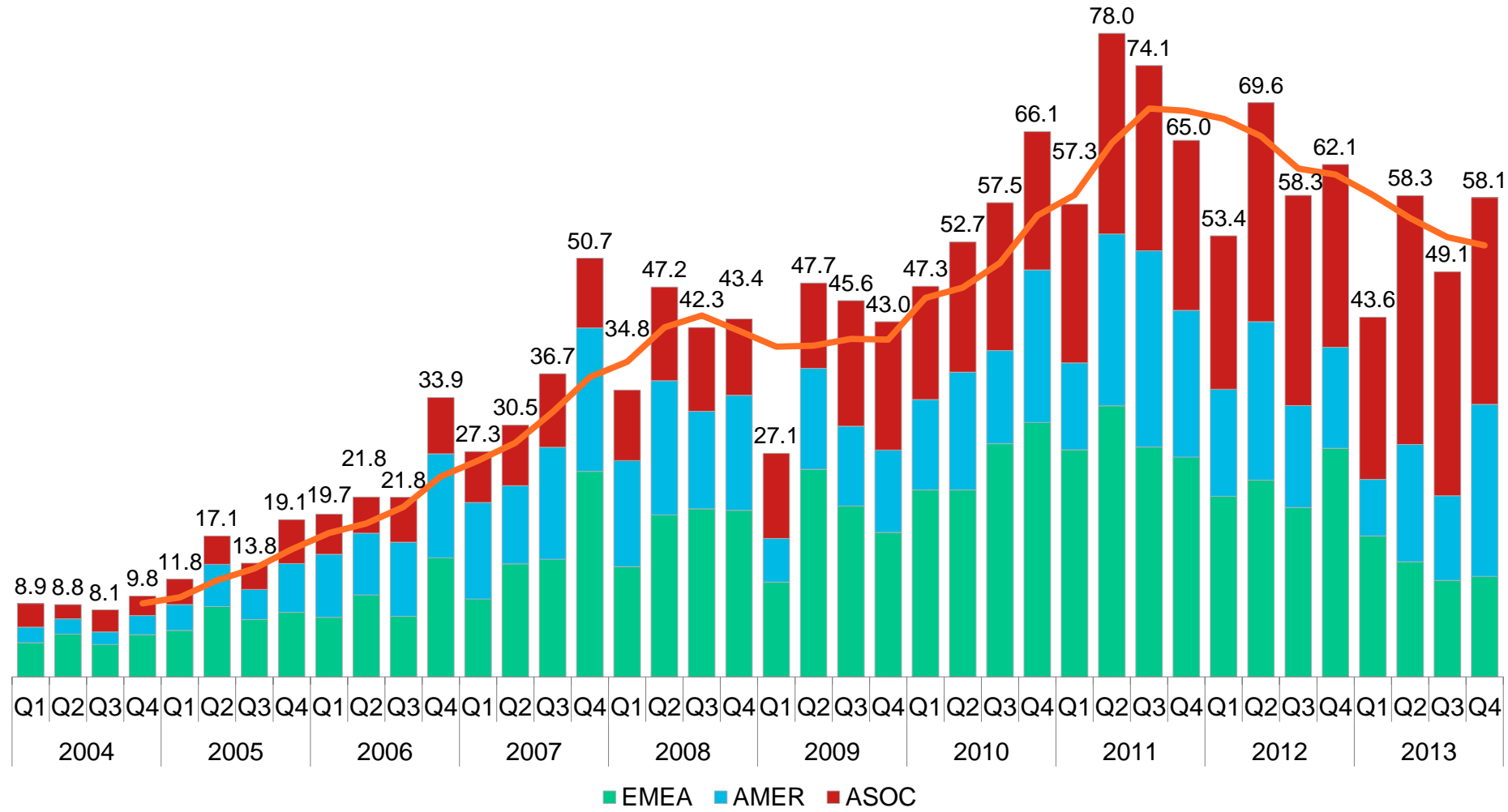


Note: Total values include estimates for undisclosed deals. Excludes corporate and government R&D, and spending for digital energy and energy storage projects (reported in annual statistics only).

Source: Bloomberg New Energy Finance

# NEW INVESTMENT IN CLEAN ENERGY BY REGION

Q1 2004–Q4 2013 (\$BN)

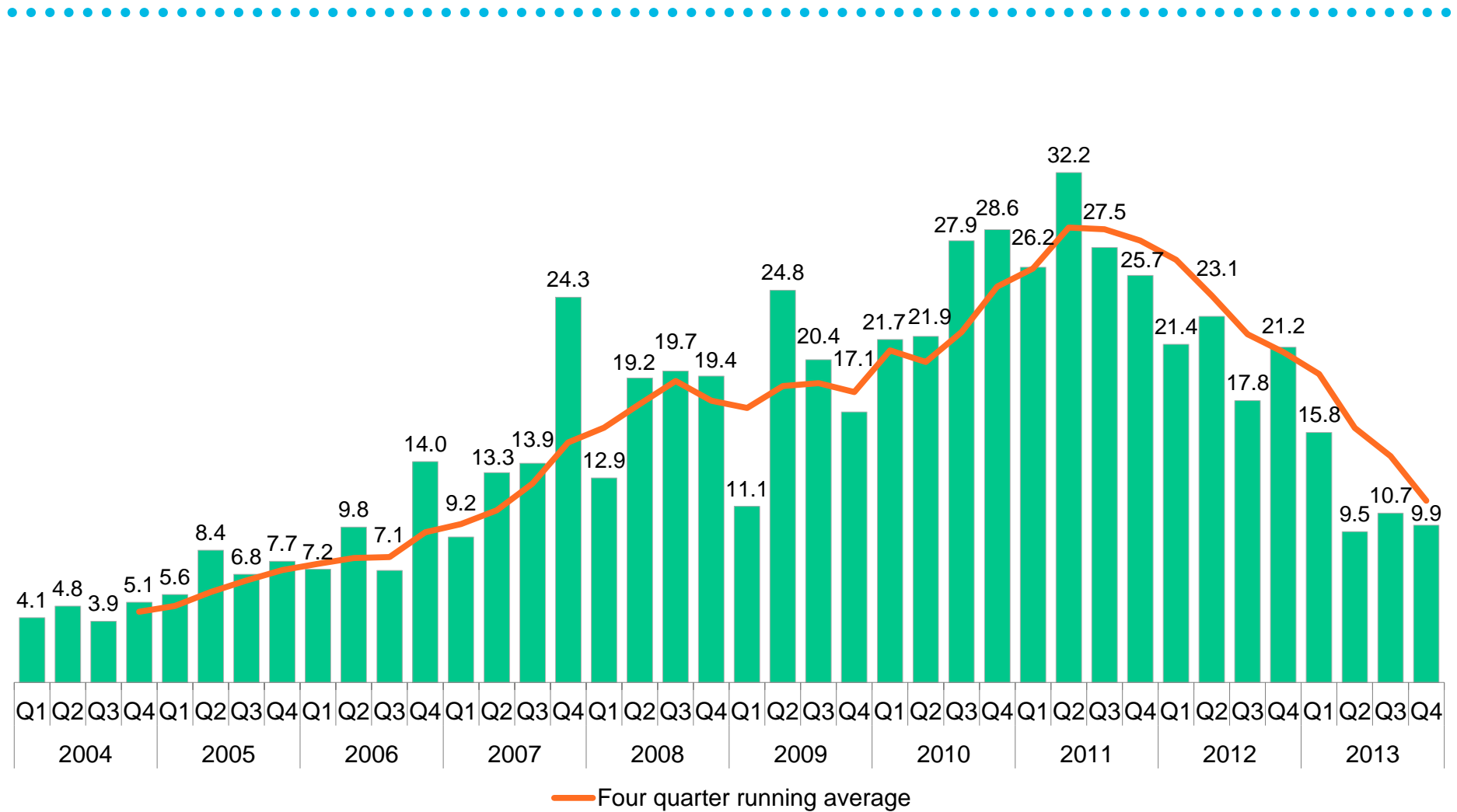


Note: Total values include estimates for undisclosed deals. Excludes corporate and government R&D, and spending for digital energy and energy storage projects (reported in annual statistics only). Source: Bloomberg New Energy Finance



# NEW INVESTMENT IN CLEAN ENERGY IN EUROPE

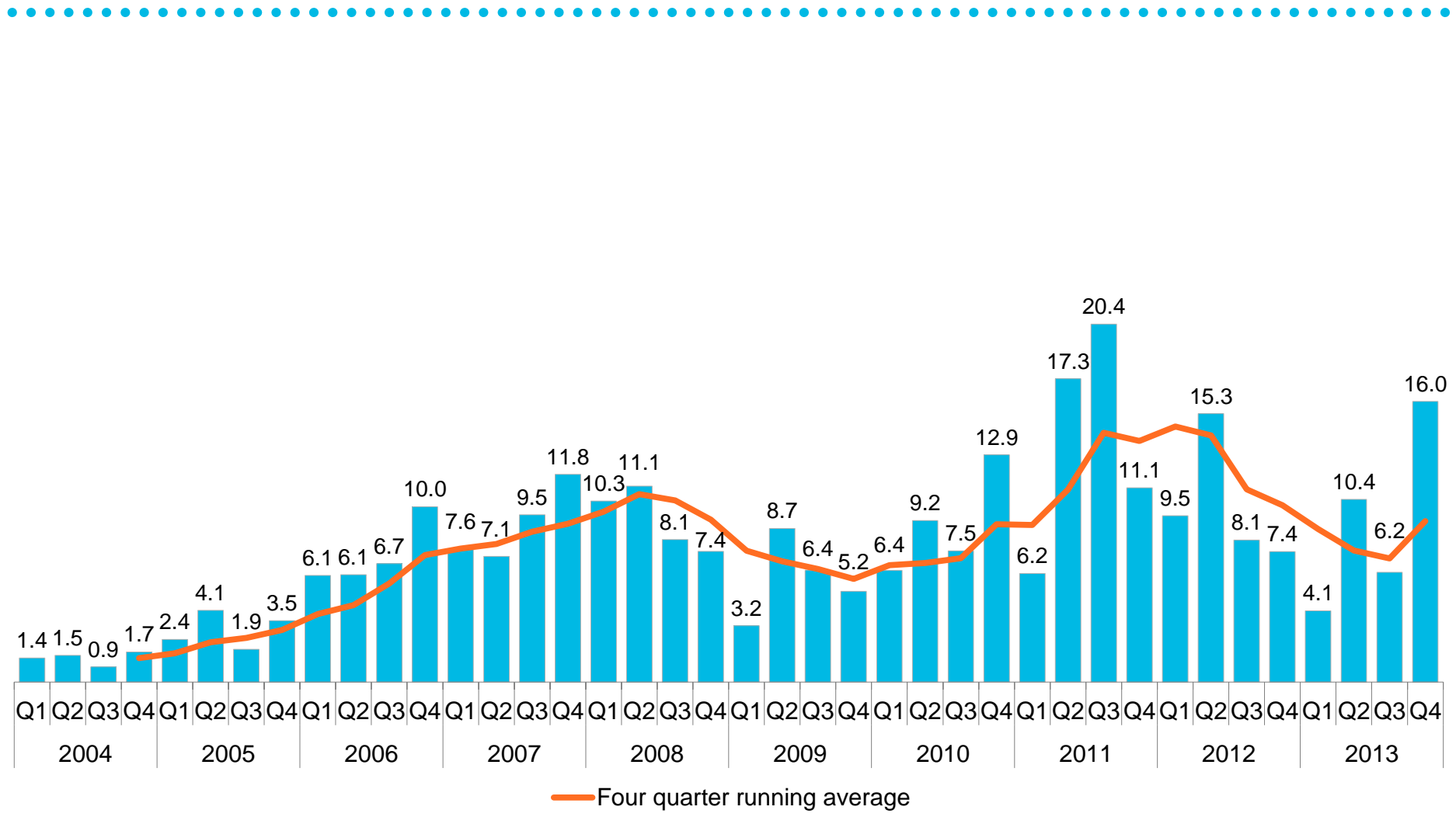
Q1 2004–Q4 2013 (\$BN)



Note: Total values include estimates for undisclosed deals. Excludes corporate and government R&D, and spending for digital energy and energy storage projects (reported in annual statistics only). Source: Bloomberg New Energy Finance

# NEW INVESTMENT IN CLEAN ENERGY IN THE US

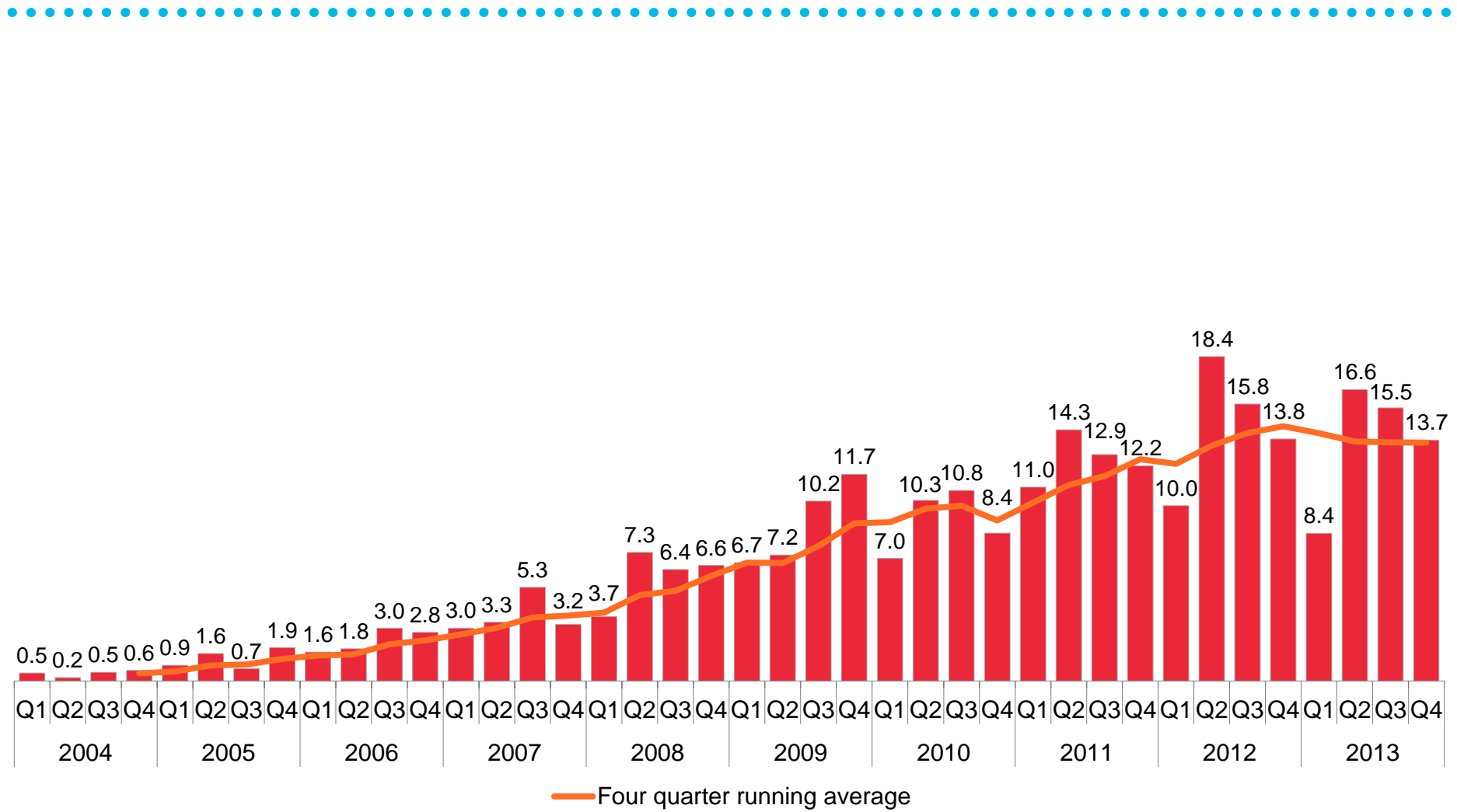
Q1 2004–Q4 2013 (\$BN)



Note: Total values include estimates for undisclosed deals. Excludes corporate and government R&D, and spending for digital energy and energy storage projects (reported in annual statistics only). Source: Bloomberg New Energy Finance

# NEW INVESTMENT IN CLEAN ENERGY IN CHINA

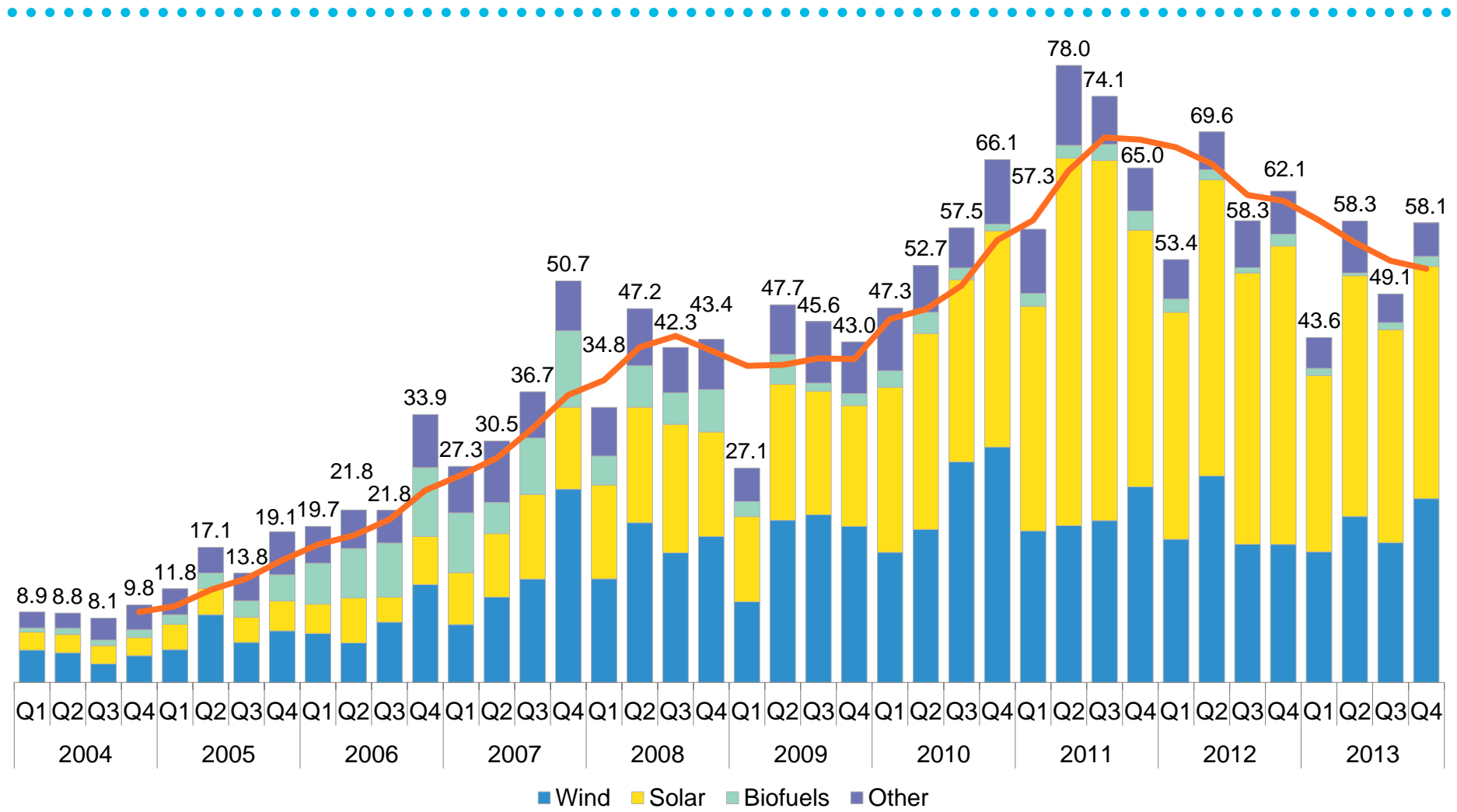
Q1 2004–Q4 2013 (\$BN)



Note: Total values include estimates for undisclosed deals. Excludes corporate and government R&D, and spending for digital energy and energy storage projects (reported in annual statistics only). Source: Bloomberg New Energy Finance

# NEW INVESTMENT IN CLEAN ENERGY BY SECTOR

Q1 2004–Q4 2013 (\$BN)

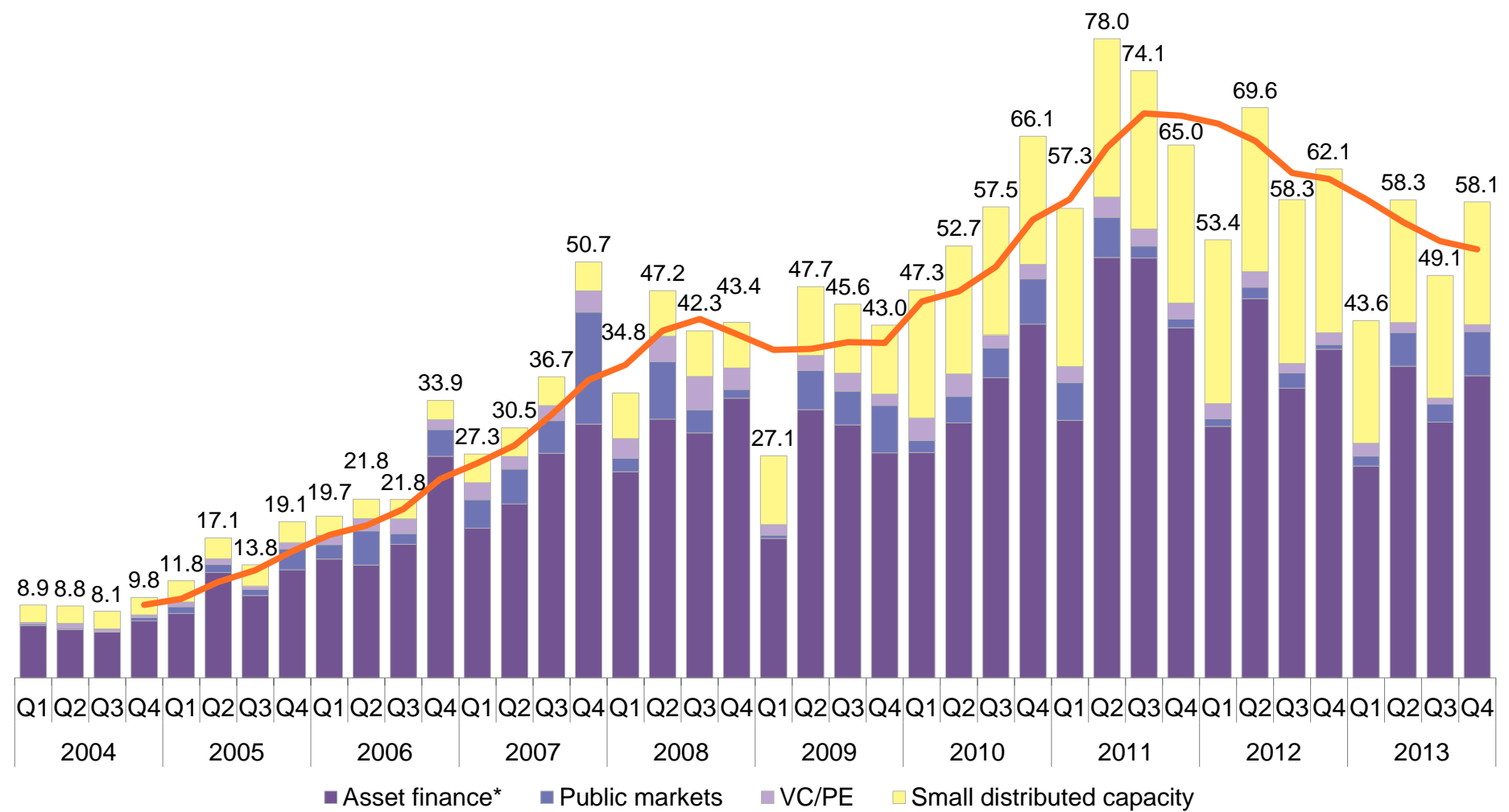


Note: Total values include estimates for undisclosed deals. Excludes corporate and government R&D, and spending for digital energy and energy storage projects (reported in annual statistics only).

Source: Bloomberg New Energy Finance

# NEW INVESTMENT IN CLEAN ENERGY BY ASSET CLASS

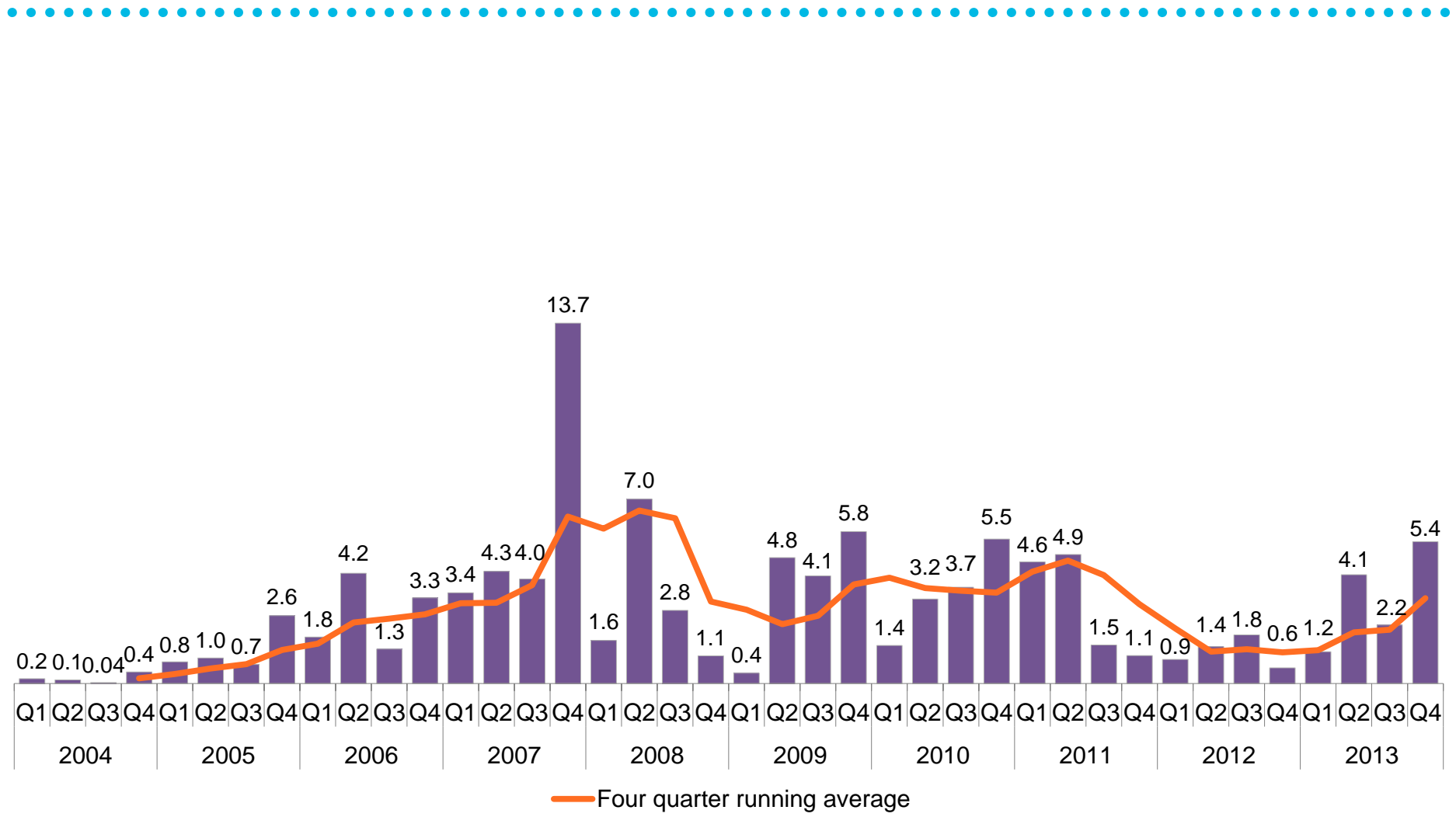
Q1 2004–Q4 2013 (\$BN)



Note: Total values include estimates for undisclosed deals. Excludes corporate and government R&D, and spending for digital energy and energy storage projects (reported in annual statistics only). Source: Bloomberg New Energy Finance

# PUBLIC MARKET NEW INVESTMENT IN CLEAN ENERGY

Q1 2004–Q4 2013 (\$BN)



Source: Bloomberg New Energy Finance

# TOP PUBLIC MARKET TRANSACTIONS OF THE QUARTER

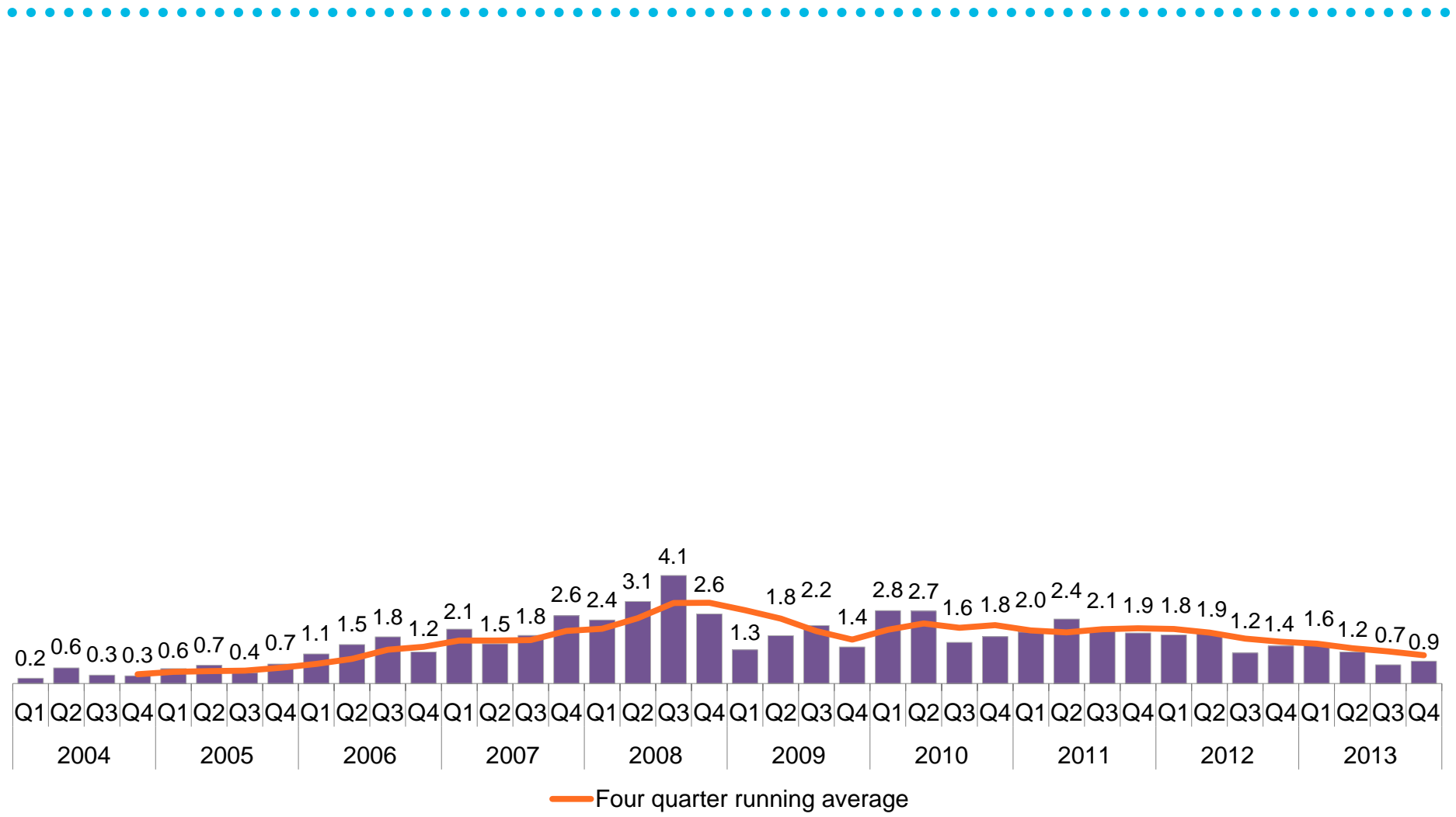
Q4 2013

ORGANISATION	STOCK EXCHANGE	SECTOR	TYPE OF TRANSACTION	NEW EQUITY RAISED	TOTAL OFFERING SIZE
SunEdison Inc*	New York Stock Exchange (NYSE)	Solar	Convertible	\$1200m	\$1200m
Darling International Inc	New York Stock Exchange (NYSE)	Biofuels	Secondary	\$874m	\$874m
China Everbright International Ltd	Hong Kong Stock Exchange (HKEX)	Biomass & Waste	Secondary	\$472.5m	\$472.5m
Foresight Solar Fund LTD	London Stock Exchange	Solar	IPO	\$242.1m	\$242.1m
SolarCity Corp	NASDAQ Global Select Market (GS)	Solar	Convertible	\$230m	\$230m

\*SunEdison Inc issued two convertible bonds of \$600m each with different terms on 20<sup>th</sup> December 2013 Source: Bloomberg New Energy Finance

# VC/PE NEW INVESTMENT IN CLEAN ENERGY

Q1 2004–Q4 2013 (\$BN)



Note: Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance



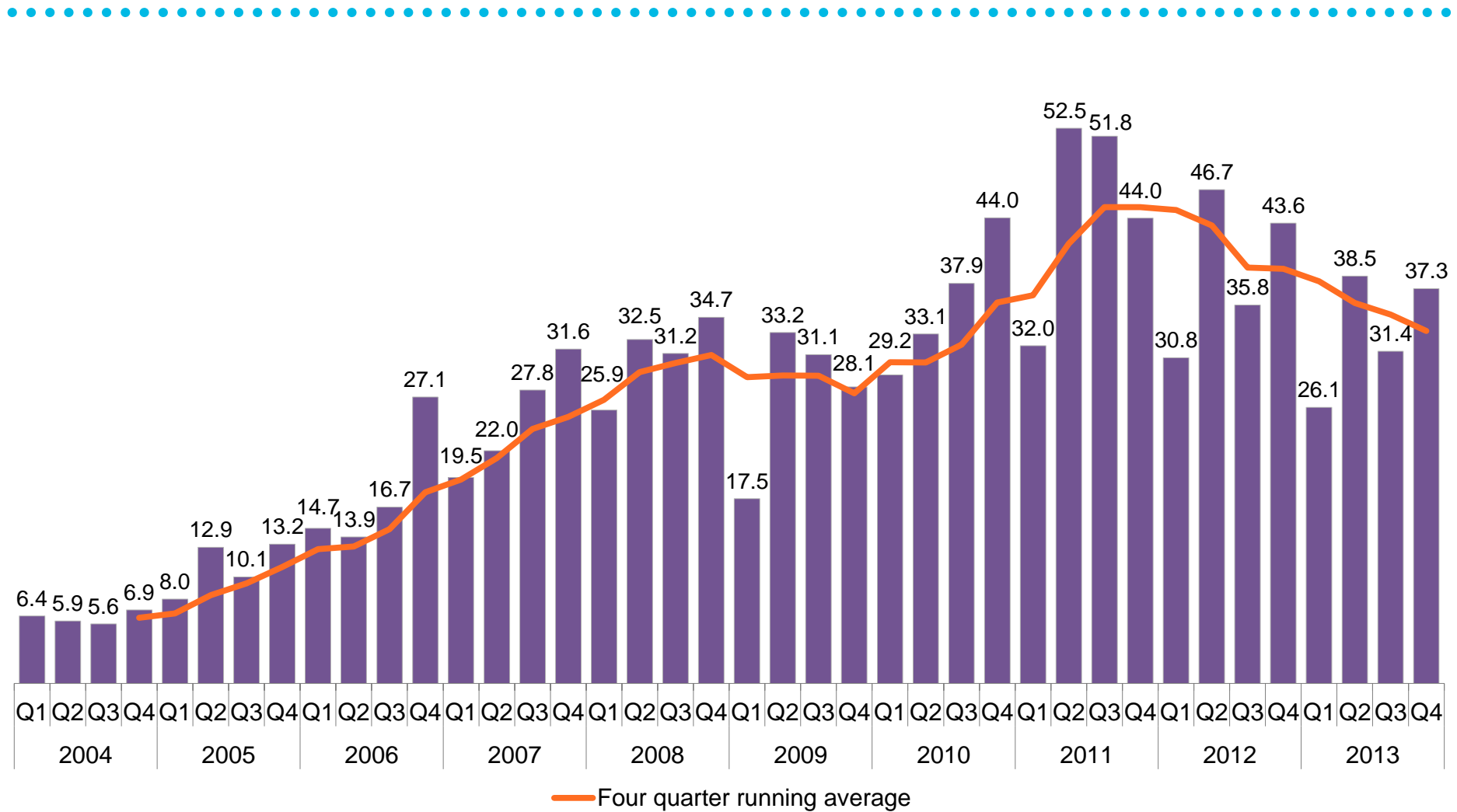
# TOP VC/PE TRANSACTIONS OF THE QUARTER

Q4 2013

ORGANISATION	COUNTRY	SECTOR	TYPE OF TRANSACTION	VALUE
Ogin Inc/dupe	United States	Wind	PE - Expansion capital	\$55m
Intelligent Energy Ltd	United Kingdom	Fuel Cells	PE - Expansion capital	\$51.6m
Gaelectric Holdings PLC	Ireland	Wind	PE - Expansion capital	\$49m
Asteri Energia SA	Brazil	Services & Support (Clean Energy)	VC - Series A / First round	\$44.3m
Achates Power Inc	United States	Advanced Transportation	VC - Series C / Third round	\$35.2m

Source: Bloomberg New Energy Finance

# ASSET FINANCING FOR NEW BUILD RENEWABLE ENERGY ASSETS, Q1 2004–Q4 2013 (\$BN)



Note: Total values include estimates for undisclosed deals. Excludes spending for digital energy and energy storage projects (reported in annual statistics only).

Source: Bloomberg New Energy Finance

# TOP ASSET FINANCE TRANSACTIONS OF THE QUARTER

Q4 2013

PROJECT NAME	COUNTRY	SECTOR	TYPE OF TRANSACTION	CAPACITY	VALUE
Eskom Upington STEG Plant	South Africa	Solar-Thermal	Term loan	100MW	\$818m
Longyuan Jiangsu Dafeng Offshore Wind Farm	China	Wind-Offshore	Balance Sheet	200MW	\$569.61m
Tucannon River Wind Farm	United States	Wind-Onshore	Balance Sheet	266.8MW	\$535m
Baffin Wind Farm	United States	Wind-Onshore	Balance Sheet	202MW	\$400m
ICE Las Pailas II Geothermal Project	Costa Rica	Geothermal-Conventional	Term loan	55MW	\$346.57m

Source: Bloomberg New Energy Finance

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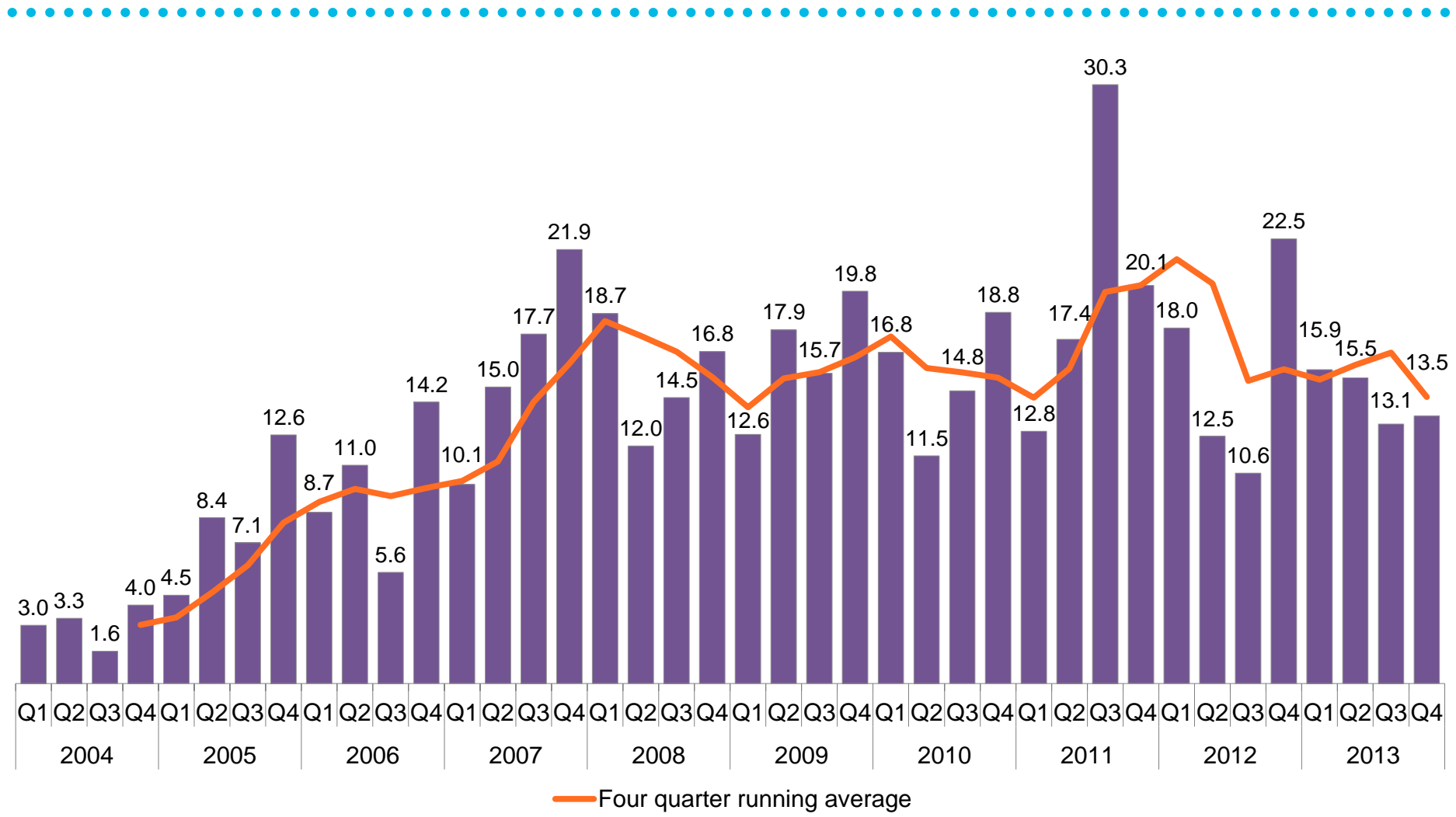
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# FUNDS IN CIRCULATION IN CLEAN ENERGY

Q1 2004–Q4 2013 (\$BN)



Note: This includes asset acquisitions & refinancing, corporate M&A, public market investor exits and private equity buy-outs. Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

# TOP TRANSACTIONS FOR FUNDS IN CIRCULATION

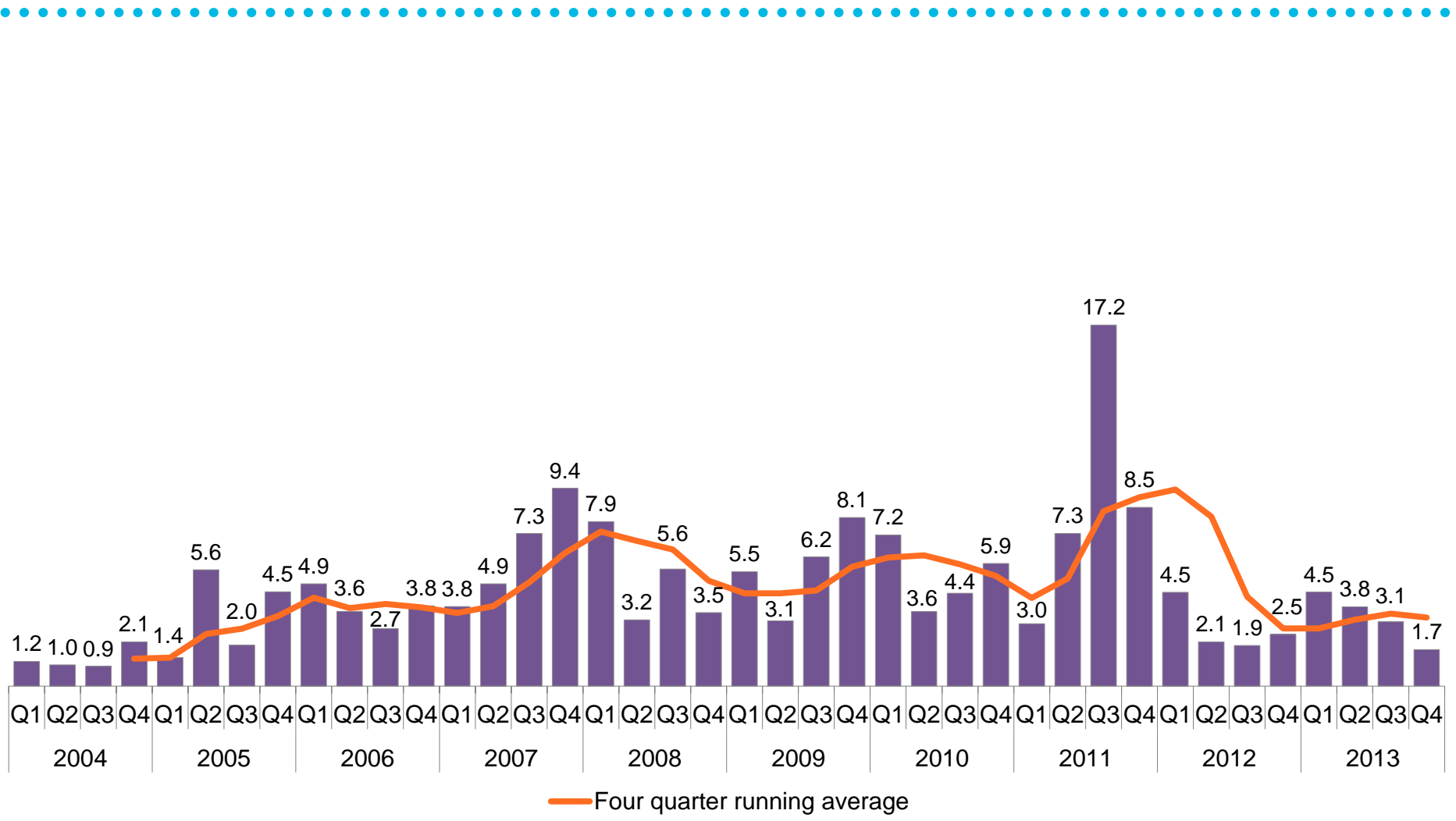
Q4 2013

ORGANISATION	COUNTRY	SECTOR	TYPE OF TRANSACTION	ACQUIRER	VALUE
TenneT Holding BV German Offshore Wind Farm Transmission Portfolio Refinancing	Germany	Wind-Transmission	Asset-refinancing	-	\$685m
Greater Gabbard Offshore Wind Farm Transmission Facilities Belfour AMP and Equitix Acquisition	United Kingdom	Wind-Transmission	Asset-acquisition	Balfour Beatty Capital Ltd, Equitix Ltd, AMP Capital Investors Ltd	\$571.8m
Infinis UK Wind Portfolio Refinancing	United Kingdom	Wind-Onshore	Asset-refinancing	-	\$500.62m
Collgar Wind Farm Refinancing	Australia	Wind-Onshore	Asset-refinancing	-	\$418.2m
Infinis Energy Plc	United Kingdom	Wind-Onshore	IPO-investor exit	-	\$382.2m

Source: Bloomberg New Energy Finance

# CORPORATE M&A TRANSACTIONS IN CLEAN ENERGY

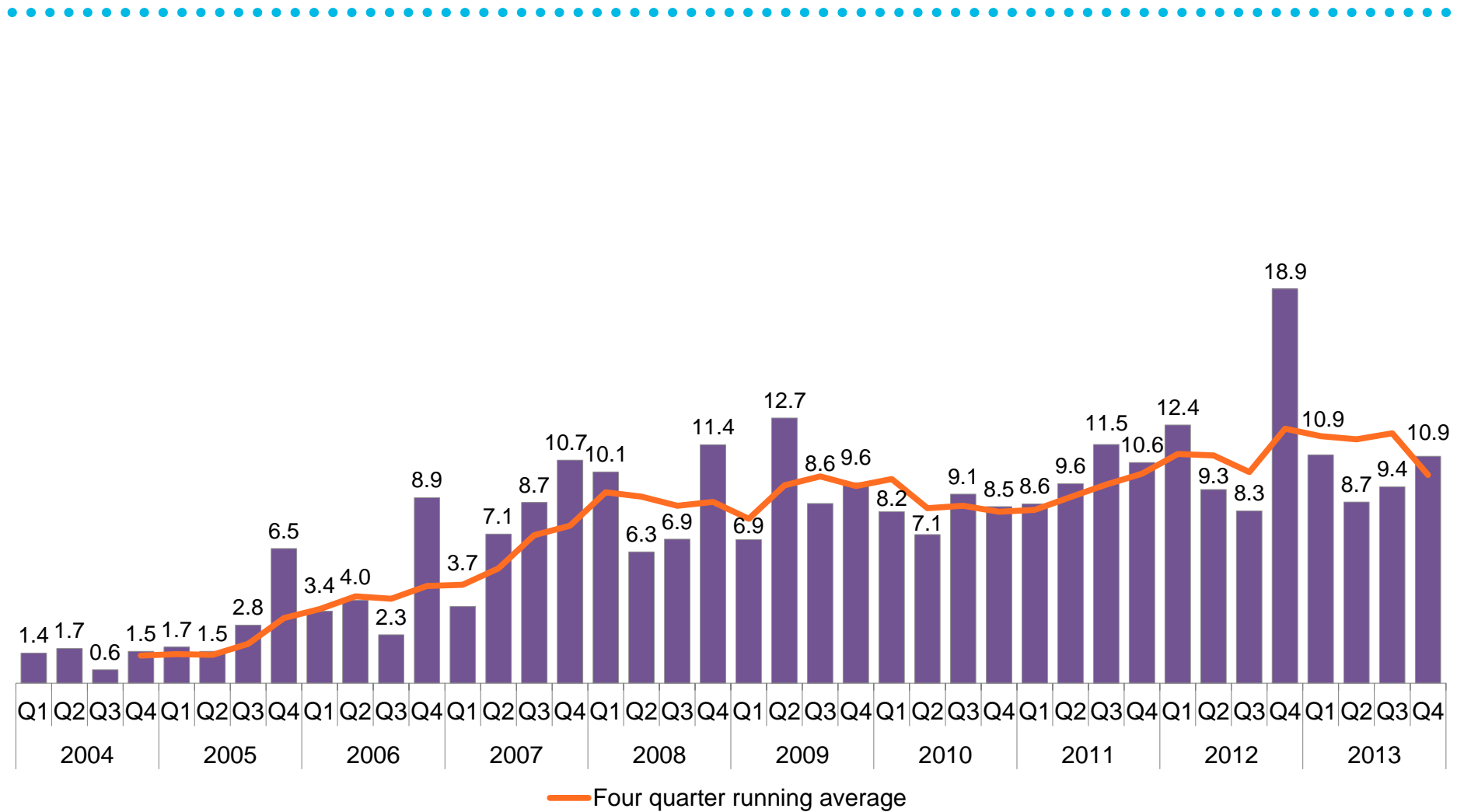
Q1 2004–Q4 2013 (\$BN)



Note: Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance

# RENEWABLE ENERGY ASSET ACQUISITIONS & REFINANCING, Q1 2004–Q4 2013 (\$BN)



Note: Total values include estimates for undisclosed deals

Source: Bloomberg New Energy Finance



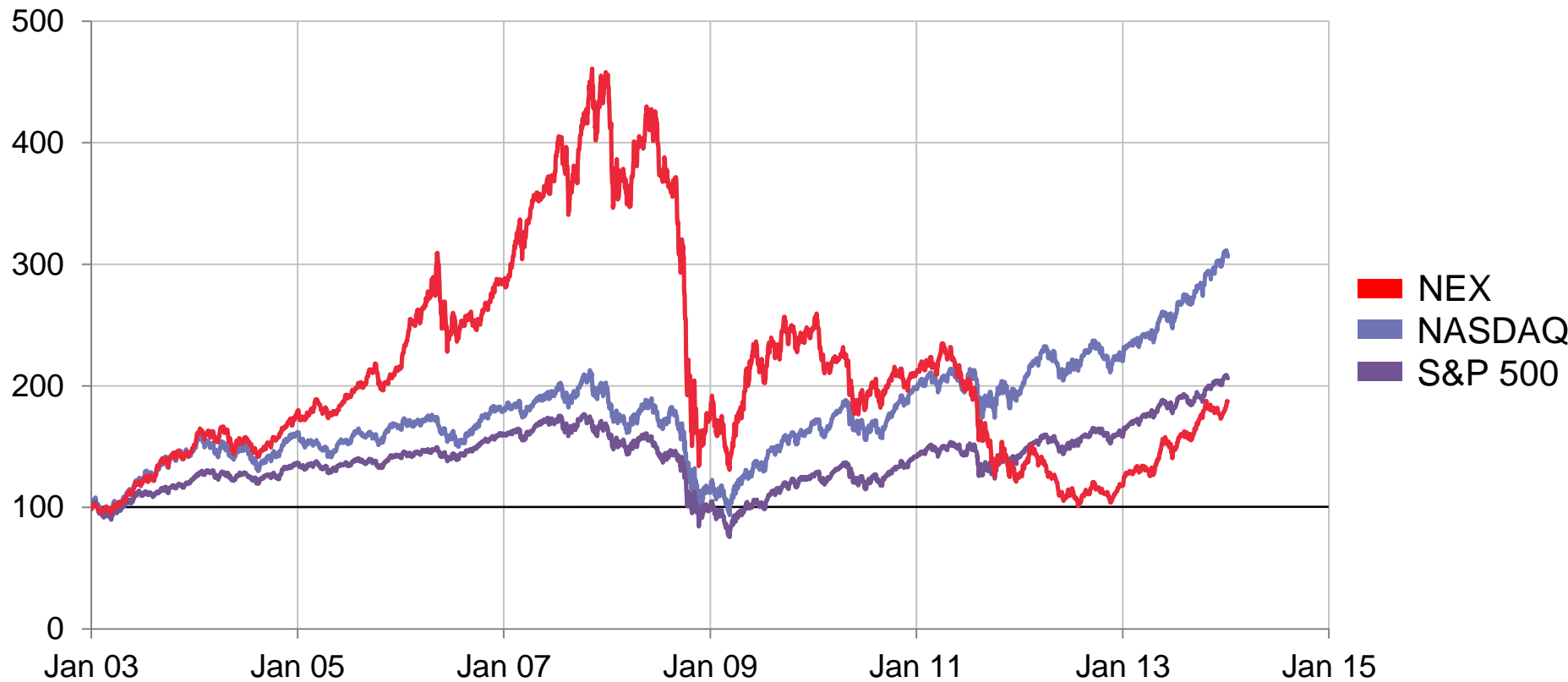
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# NEX CLEAN ENERGY INDEX

2003 – 2014 YTD

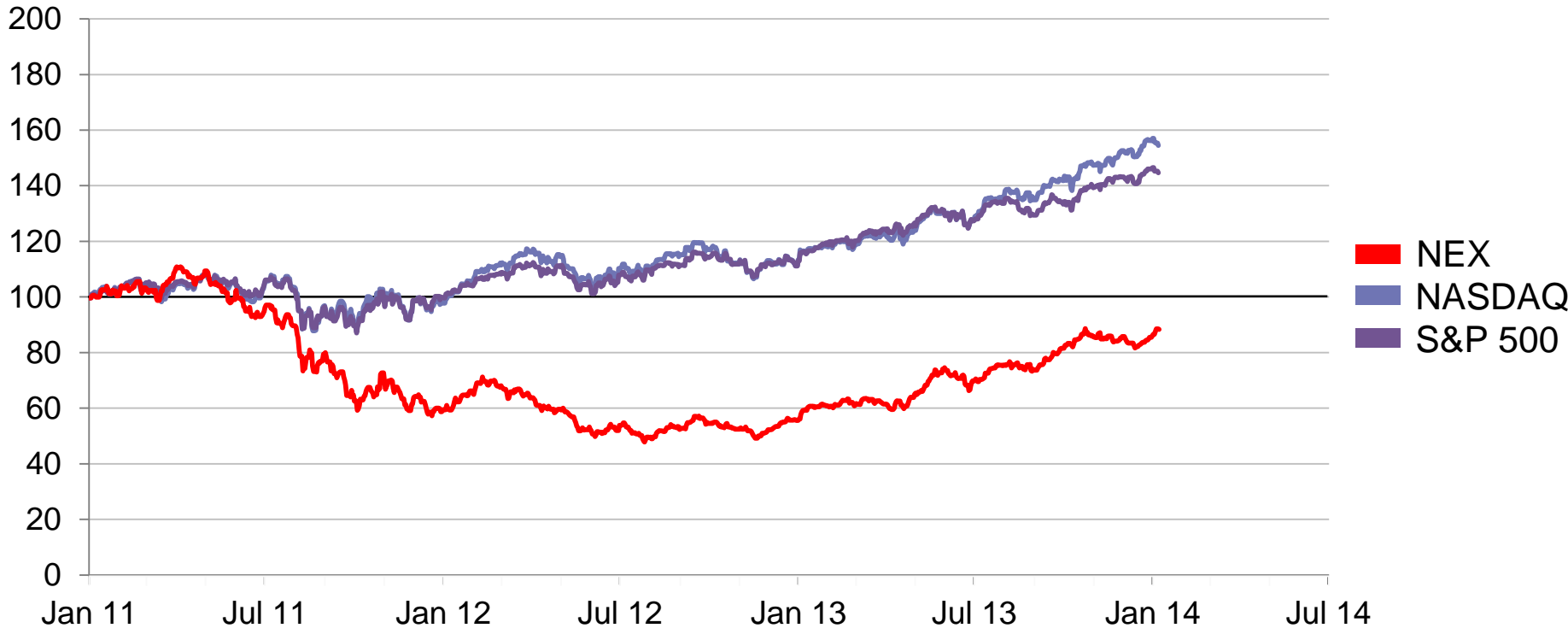


Note: Values as of 06 January 2014; NASDAQ and S&P 500 rebased to 100 on 01 Jan 2003

Source: Bloomberg New Energy Finance

# NEX CLEAN ENERGY INDEX

2011 – 2014 YTD

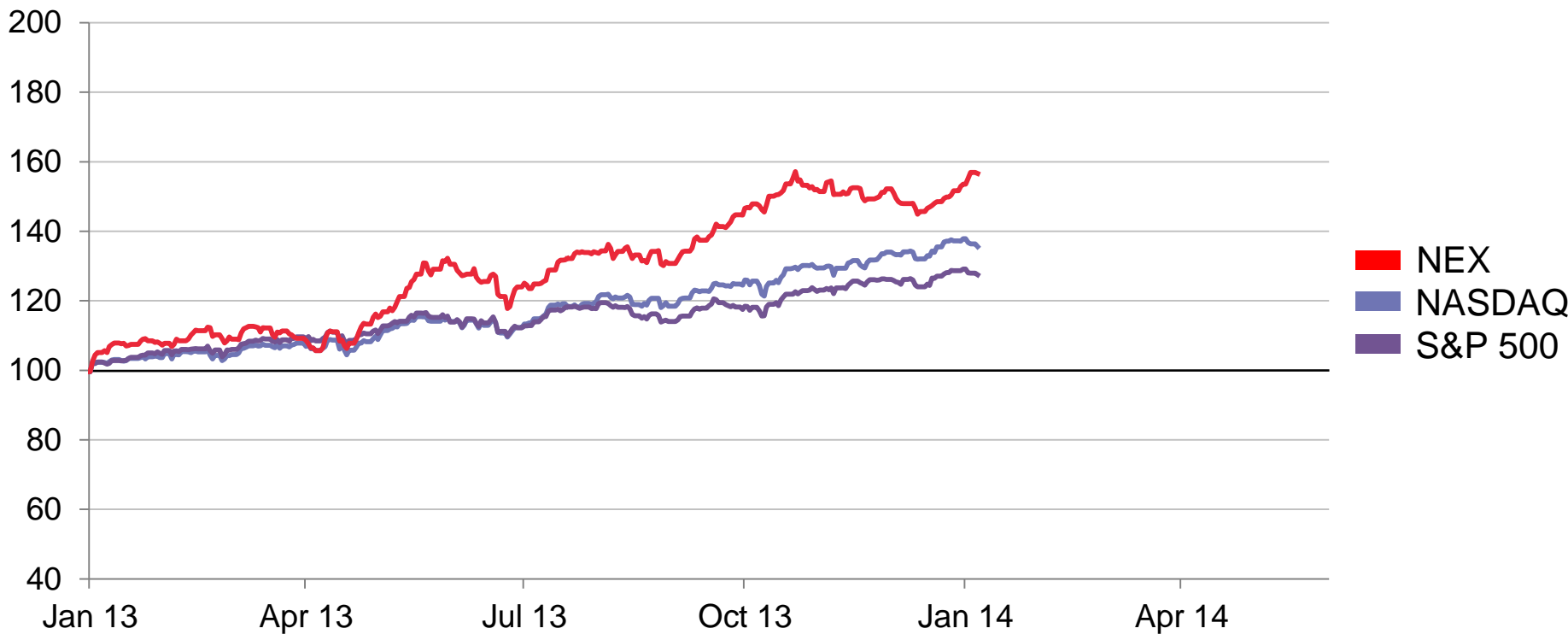


Note: Values as of 06 January 2014; NASDAQ and S&P 500 rebased to 100 on 01 Jan 2011

Source: Bloomberg New Energy Finance

# NEX CLEAN ENERGY INDEX

2013 – 2014 YTD



Note: Values as of 06 January 2014; NASDAQ and S&P 500 rebased to 100 on 01 Jan 2013

Source: Bloomberg New Energy Finance

# NYSE BNEF REGIONAL CLEAN ENERGY INDEXES

2006–14 YTD

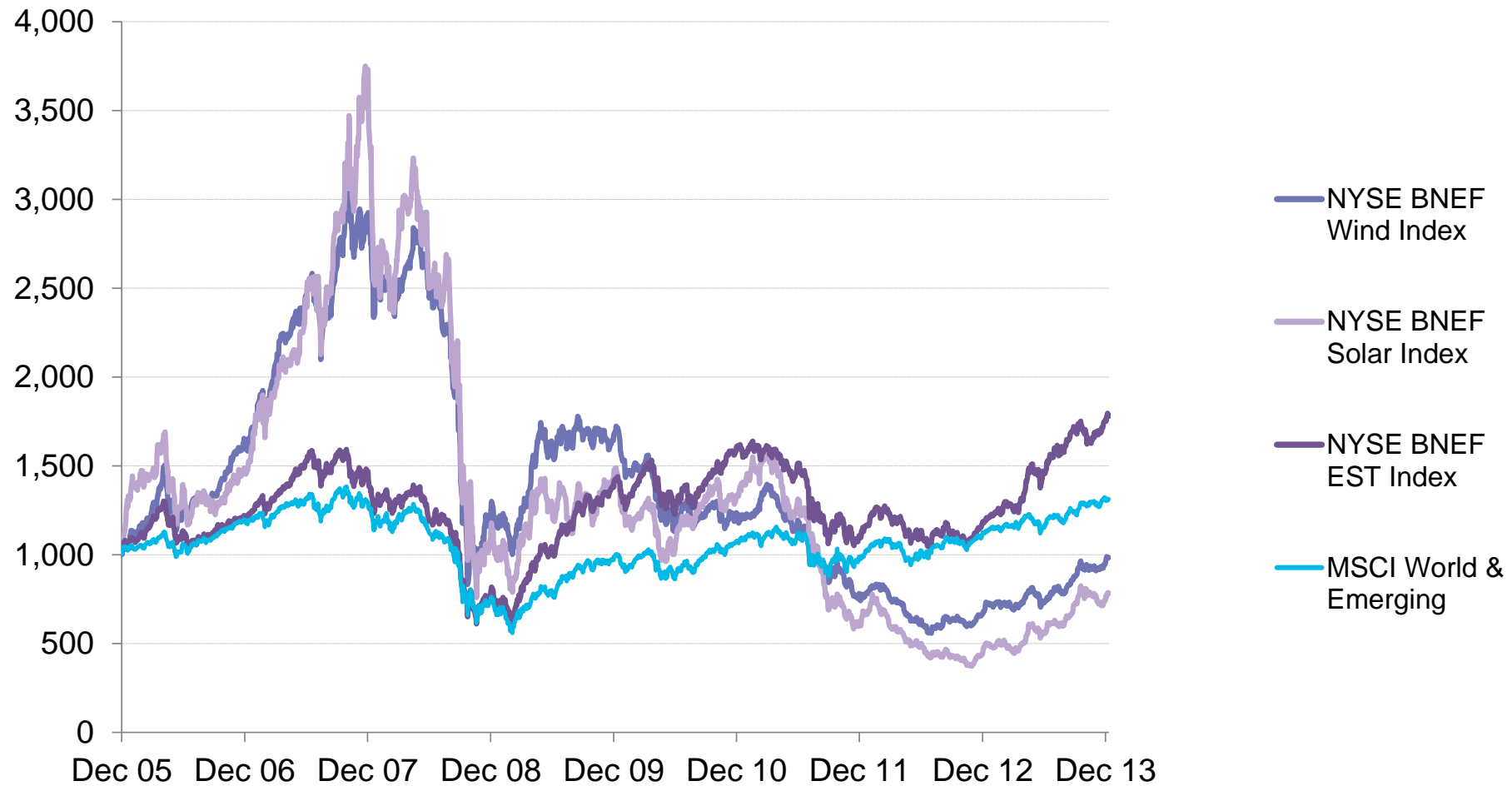


Note: Values as of 13 January 2014; rebased to 1000 on 30 December 2005

Source: NYSE; Bloomberg New Energy Finance

# NYSE GLOBAL CLEAN ENERGY SECTOR INDEXES

2006–14 YTD



Note: Values as of 13 January 2014; rebased to 1000 on 30 December 2005

Source: NYSE; Bloomberg New Energy Finance

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# CONTACTS

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- For further information please contact:

**Angus McCrone**  
Chief Editor (UK)  
[amccrone1@bloomberg.net](mailto:amccrone1@bloomberg.net)  
+44 (0)20 3216 4795

**Nicole Aspinall**  
Data Analyst (UK)  
[naspinall@bloomberg.net](mailto:naspinall@bloomberg.net)  
+44 (0)20 3216 4653

**Ethan Zindler**  
Head of Americas (US)  
[ezindler@bloomberg.net](mailto:ezindler@bloomberg.net)  
+1 202 416 3466

**Luke Mills**  
Data Analyst (UK)  
[lmills9@bloomberg.net](mailto:lmills9@bloomberg.net)  
+44 (0)20 3525 8135



# GLOBAL TRENDS IN CLEAN ENERGY INVESTMENT

## MARKETS

Renewable Energy

Carbon Markets

Energy Smart Technologies

Renewable Energy Certificates

Carbon Capture & Storage

Power

Water

Nuclear

## SERVICES

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