



Venture Insights®

Global Cleantech Investment 2010

Ecosummit 2011

Berlin, 25 March 2011

ERNST & YOUNG
Quality In Everything We Do

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Cleantech: the technology and business model innovation enabling the transition to a resource efficient and low carbon economy

Ernst & Young's cleantech definition

A diverse range of innovative products and services that optimize the use of natural resources or reduce the negative environmental impact of their use while creating value by lowering costs, improving efficiency, or providing superior performance.

Segments

Supply	Demand
<ul style="list-style-type: none">▶ Biofuels▶ Biomass▶ Solar energy▶ Wind energy▶ Hydro energy▶ Geothermal energy▶ Fuel cells▶ Water sourcing	<ul style="list-style-type: none">▶ Energy efficiency (industrial, green buildings)▶ Energy storage (EV, industrial)▶ Monitoring and management systems▶ Water management▶ Emissions reduction
<p>Selected companies</p> <p>Biofuels: BP, Verenium, Codexis, LS9, Cobalt Solar: First Solar, Solar City, BP Solar, Q-Cells, Suntech, BrightSource Wind: Iberdrola Renewables, FPL, GE, Suzlon, Vestas Fuels Cells: Ballard Power Geothermal: Ormat Technologies</p>	<p>Selected companies</p> <p>Energy efficiency: Johnson Controls, Serious Materials Storage – car: GM, Tesla Motors, JCI, A123 Storage – industrial: Black & Decker, Xtreme Power Smart grid tools: GE, Itron, Silver Spring, Tendril Emissions reduction: Hara, C3</p>

Others with significant footprint in cleantech: Applied Materials, Cisco, IBM, PG&E, Siemens, Honeywell, BASF, Bosch

I. Global cleantech investment landscape



Global cleantech financing: all asset classes

Source: Bloomberg New Energy Finance

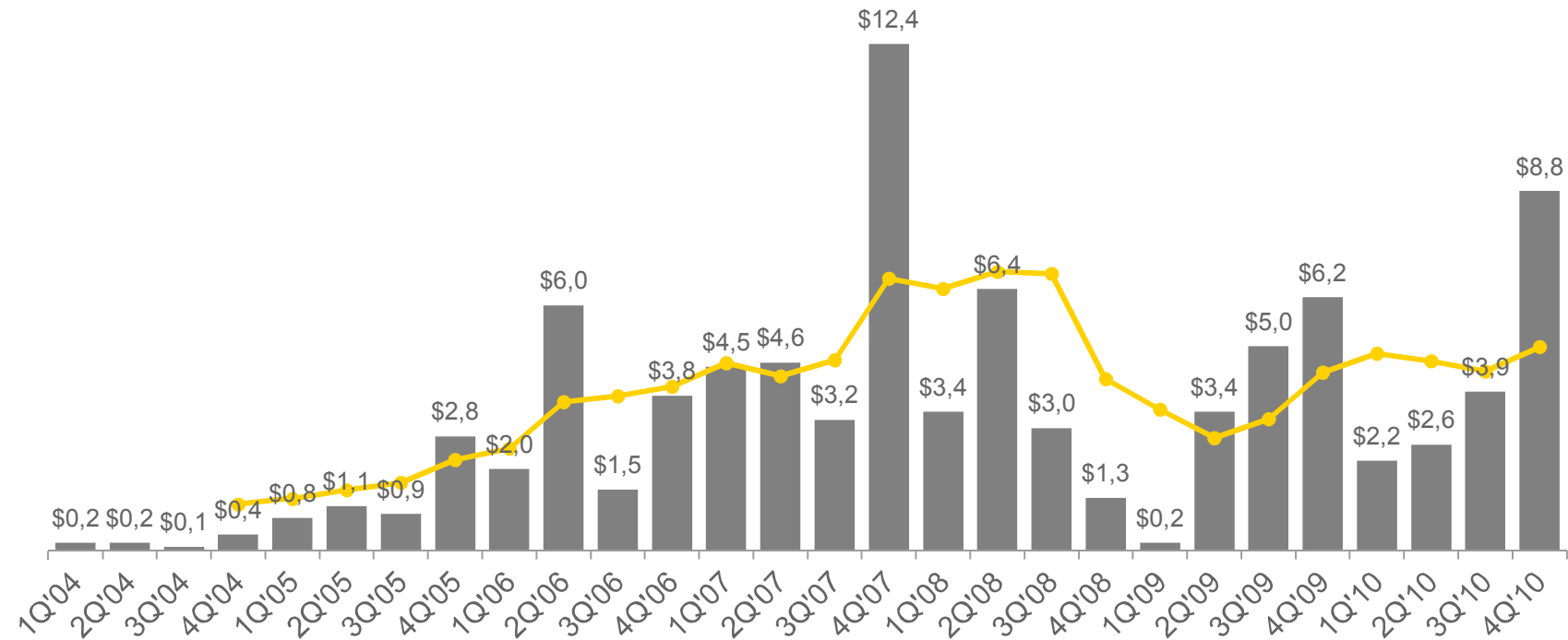
(USD b)



Global public markets new investment in clean energy

A return to pre-crisis levels of investment

■ US\$B ● Four quarter running average



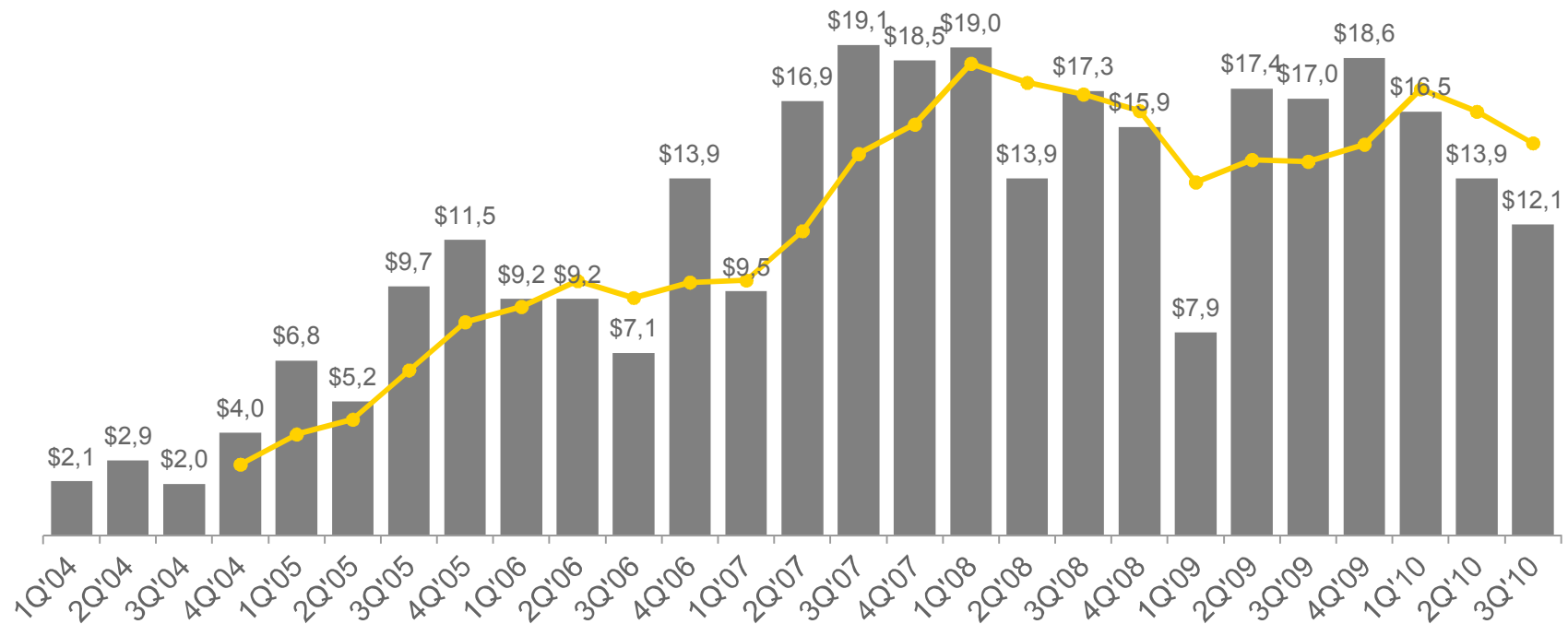
Note: total values include estimates for undisclosed deals.

Source: Bloomberg New Energy Finance

Global acquisition transactions in clean energy

Momentum slowing in 2010

■ US\$B ● Four quarter running average

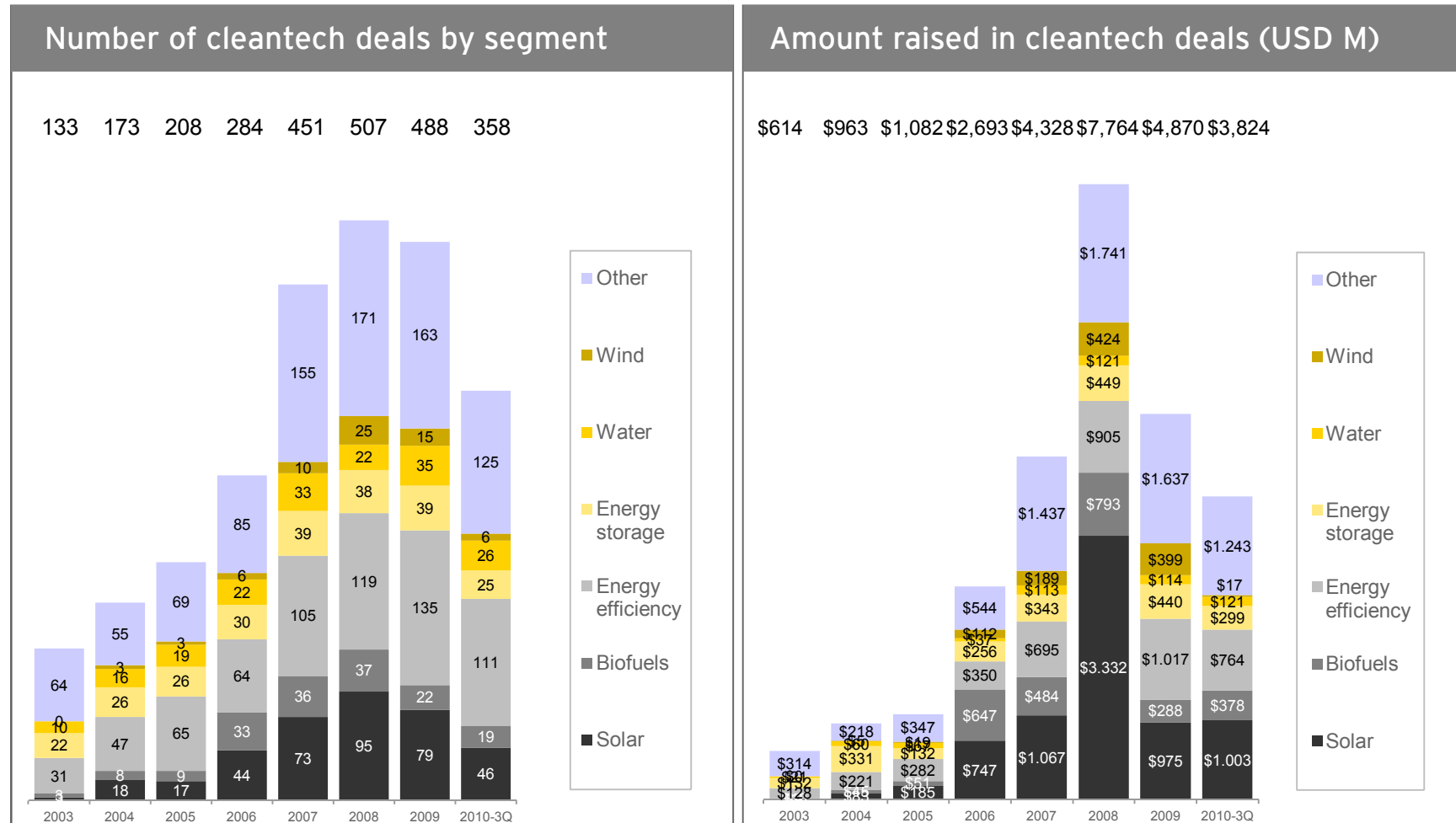


Source: Bloomberg New Energy Finance

Note: Includes corporate & asset acquisitions, refinancing, PE buy-outs and existing public stock changing hands. Total values include estimates for undisclosed deals.

Global VC investment in cleantech

Growing focus on energy efficiency



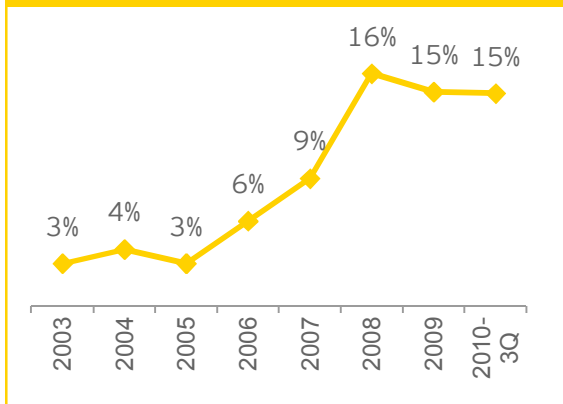
Source: Dow Jones VentureSource

Notes: Includes investments in the US, Europe, Israel, China, India, and Canada; 1 € = US\$1.36 conversion rate used

Cleantech as a percentage of total VC investment

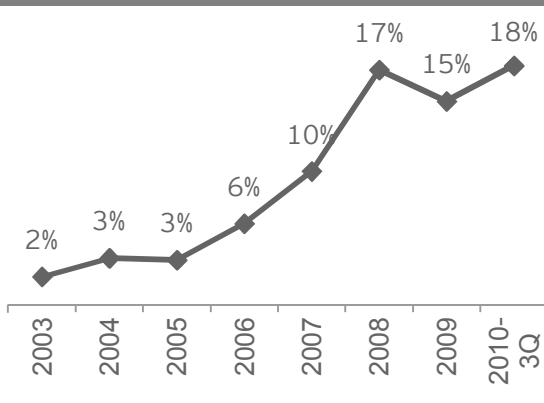
Cleantech captures 15% share of global VC investment dollars

Global*

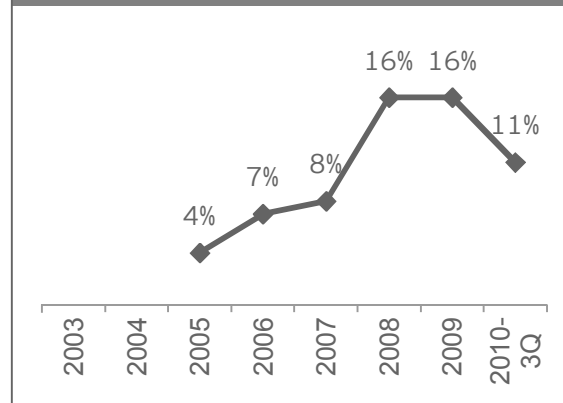


*based on US, Europe, Israel and China

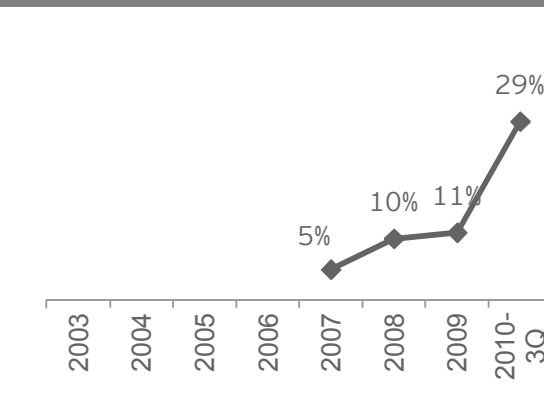
United States



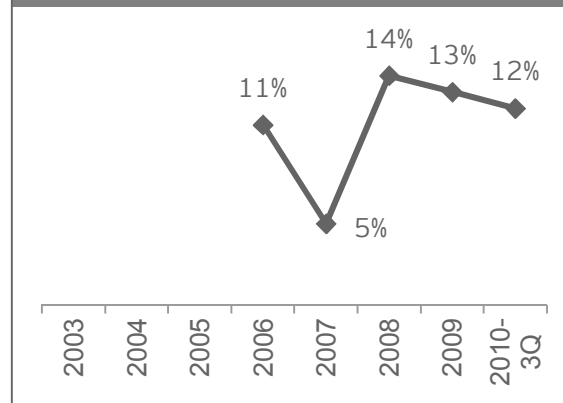
Europe



Israel



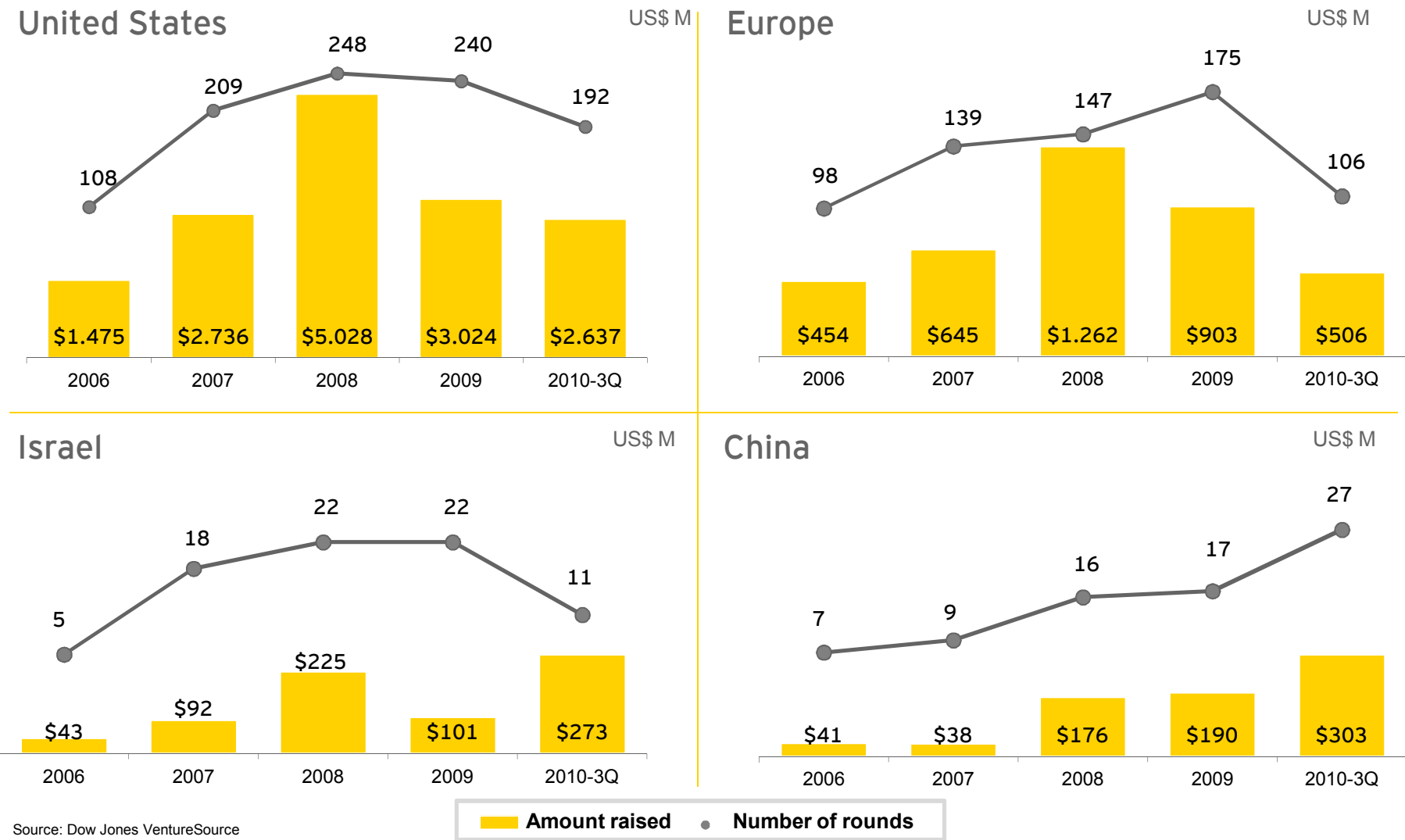
China



Source: Dow Jones VentureSource

Cleantech VC investment by region

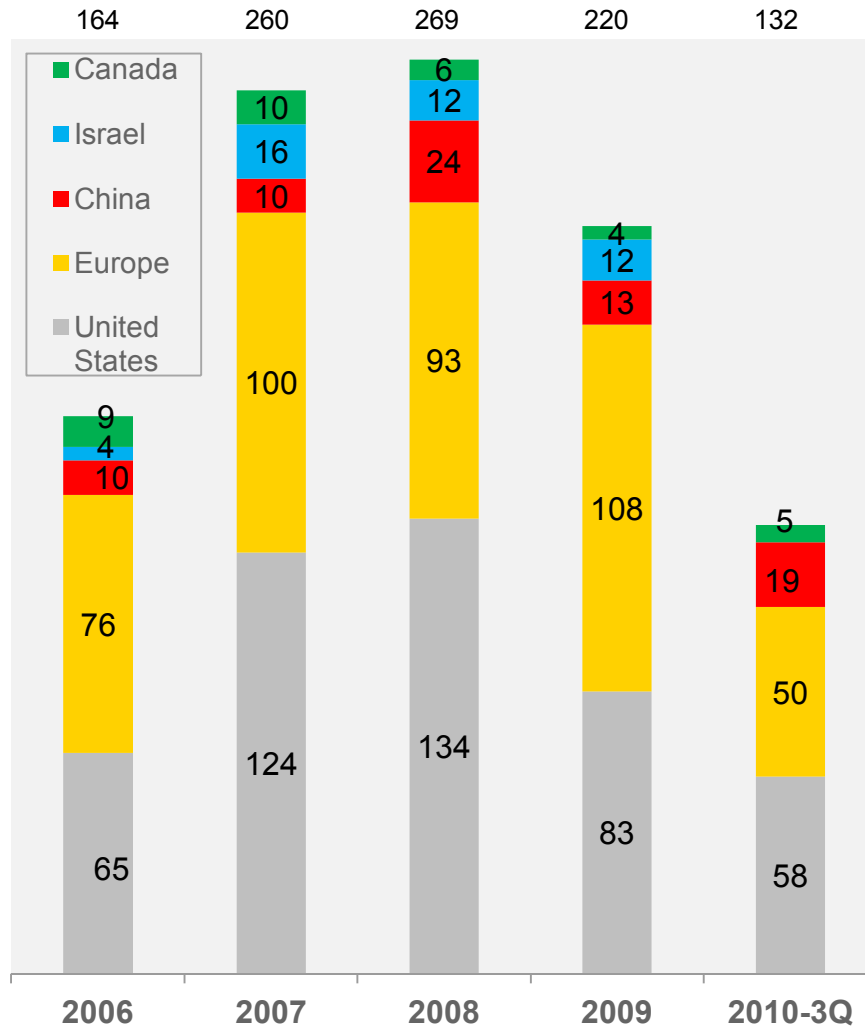
Investment recovering in the US, Israel and China



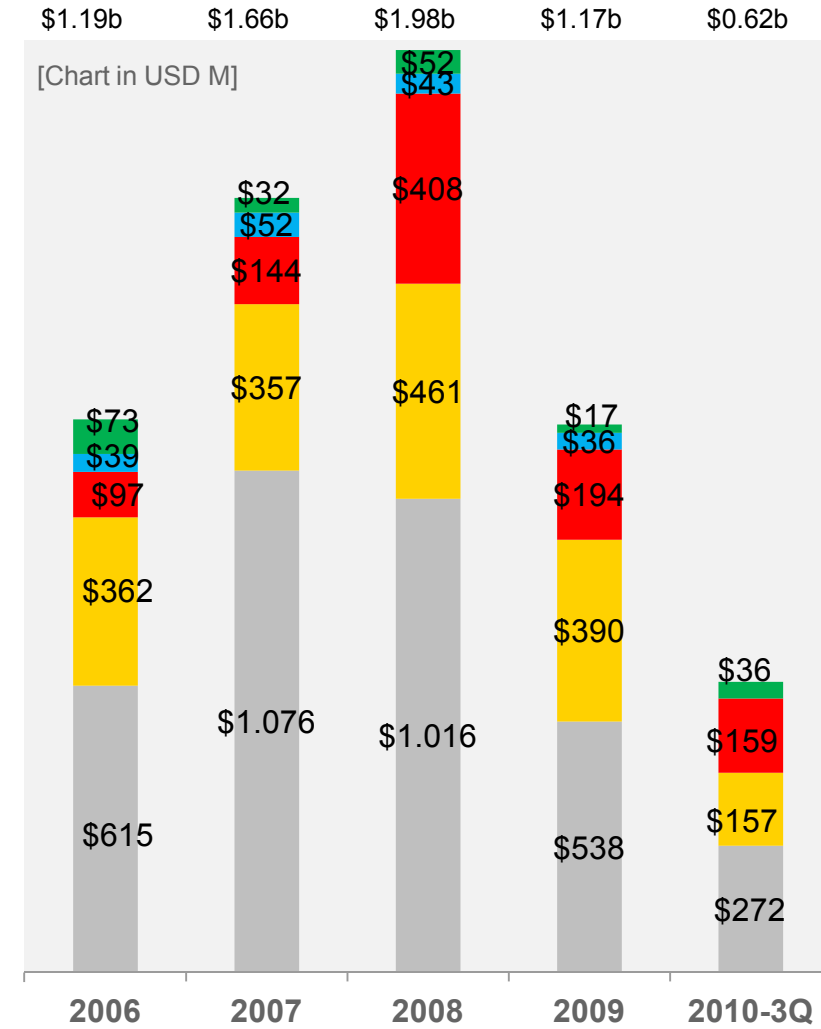
Cleantech initial financings

Initial financings on a slower pace in 2010

Number of financing rounds



Capital invested

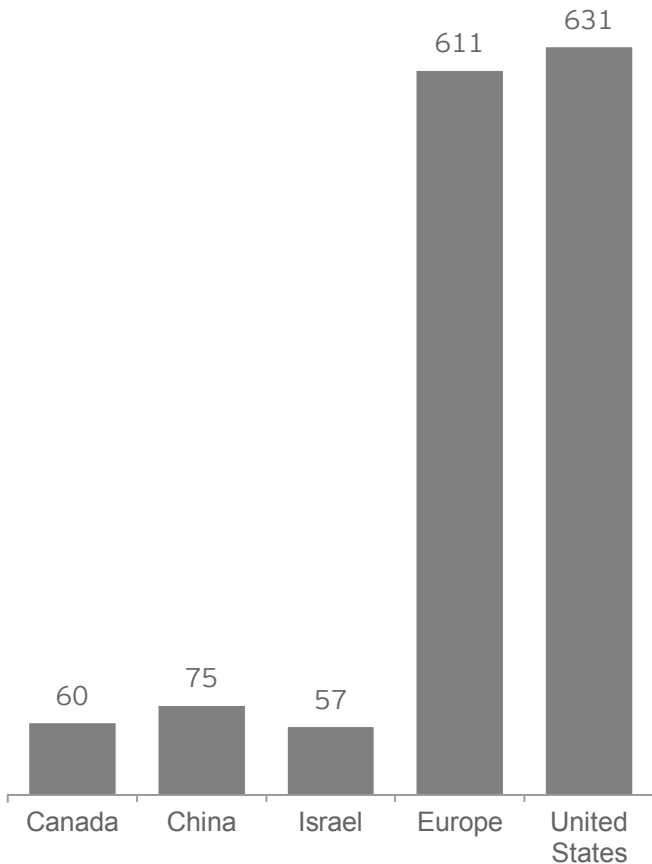


II. Analysis of current population of private VC-backed cleantech companies

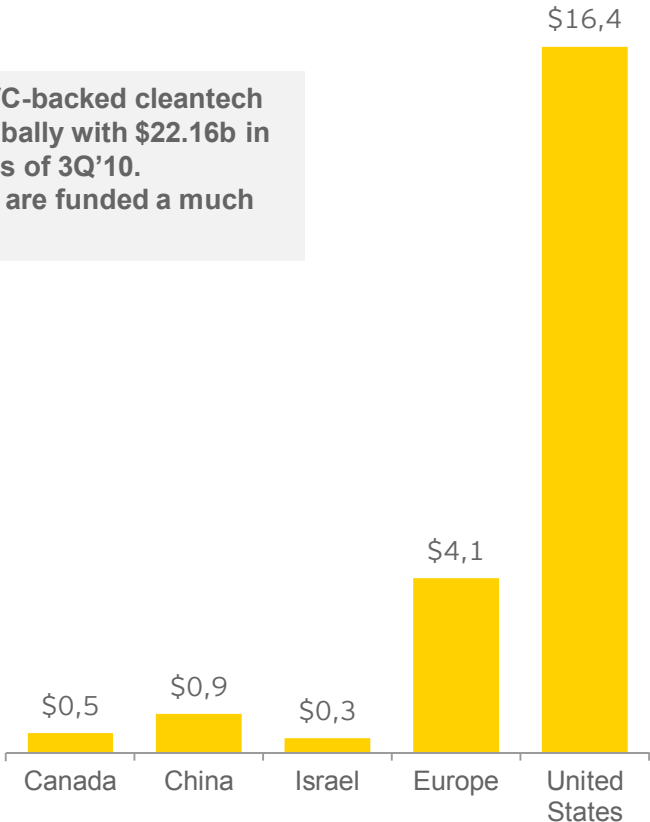


Current population of private VC-backed cleantech companies

Number of private VC-backed companies



Equity invested to date (USD B)



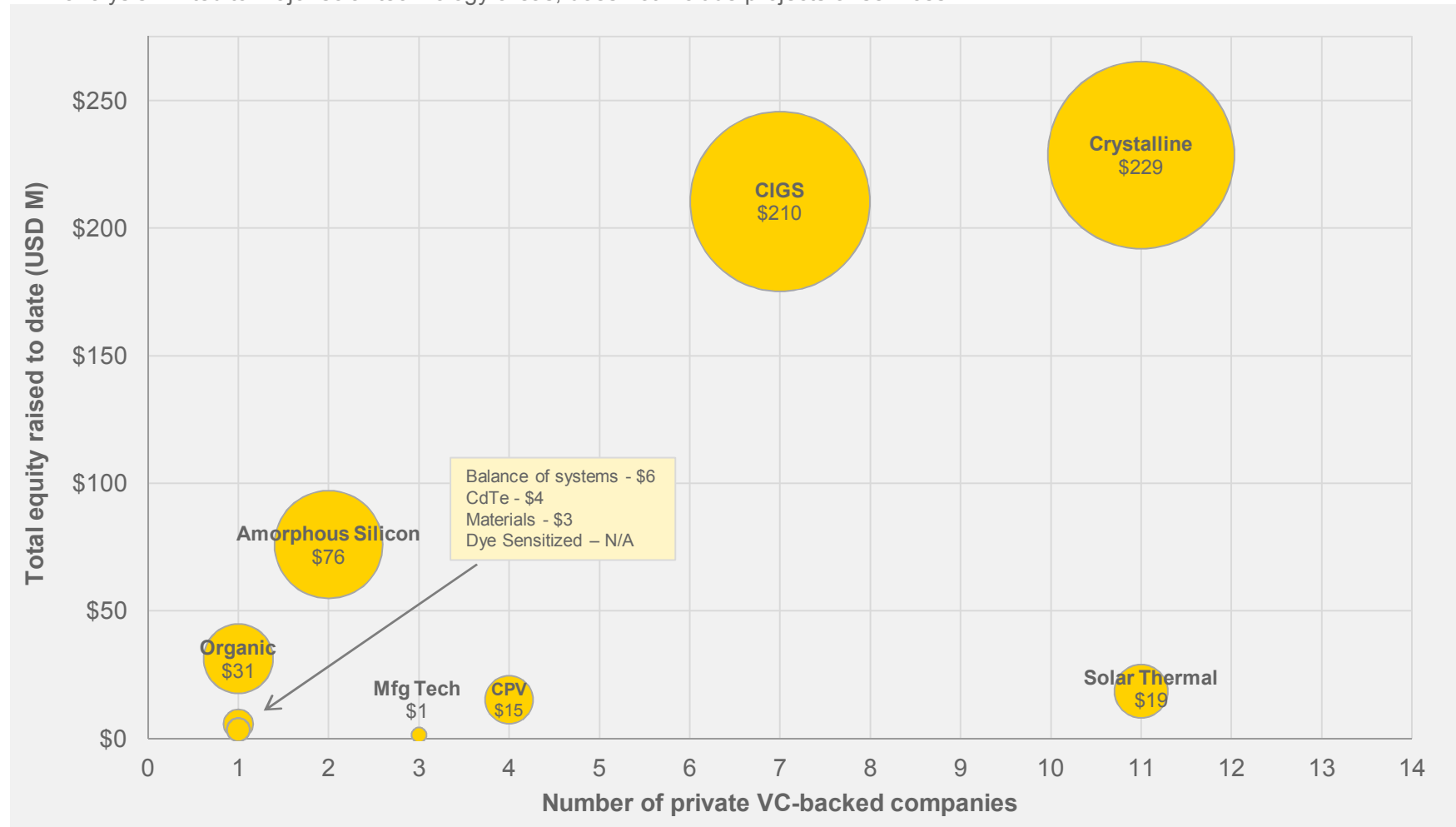
- 1,434 private VC-backed cleantech companies globally with \$22.16b in equity raised as of 3Q'10.
- US companies are funded a much higher level

Source: Dow Jones VentureSource; as of 10/1/2010

European solar technology landscape

Current number of private VC-backed solar companies and total equity invested to date

NB: analysis limited to major solar technology areas; does not include projects or services

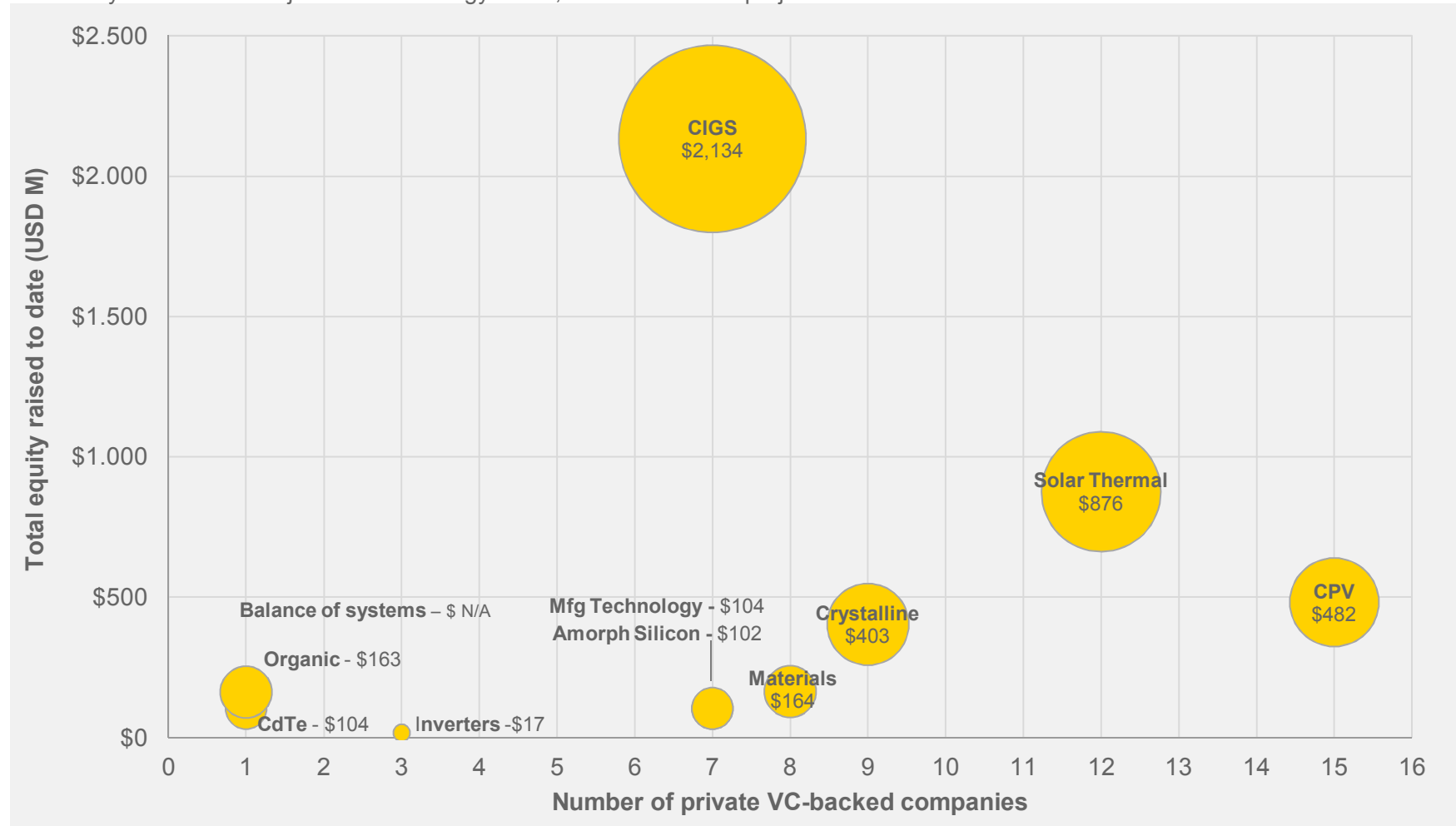


Source: Down Jones VentureSource; Ernst & Young

United States solar technology landscape

Current number of private VC-backed solar companies and total equity invested to date

NB: analysis limited to major solar technology areas; does not include projects or services

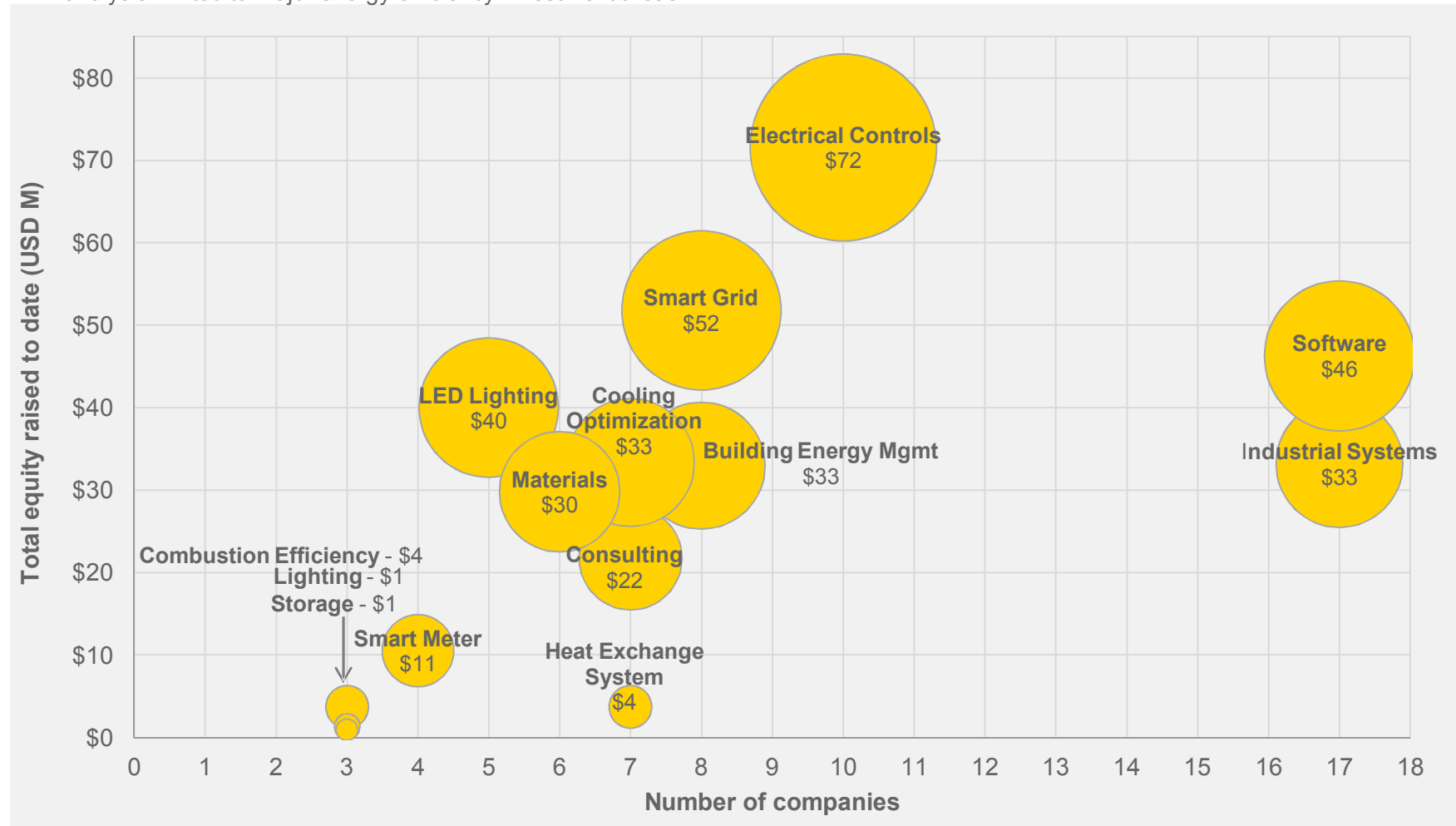


Source: Down Jones VentureSource; Ernst & Young

European energy efficiency technology landscape

Current number of private VC-backed energy efficiency companies and total equity invested to date

NB: analysis limited to major energy efficiency investment areas

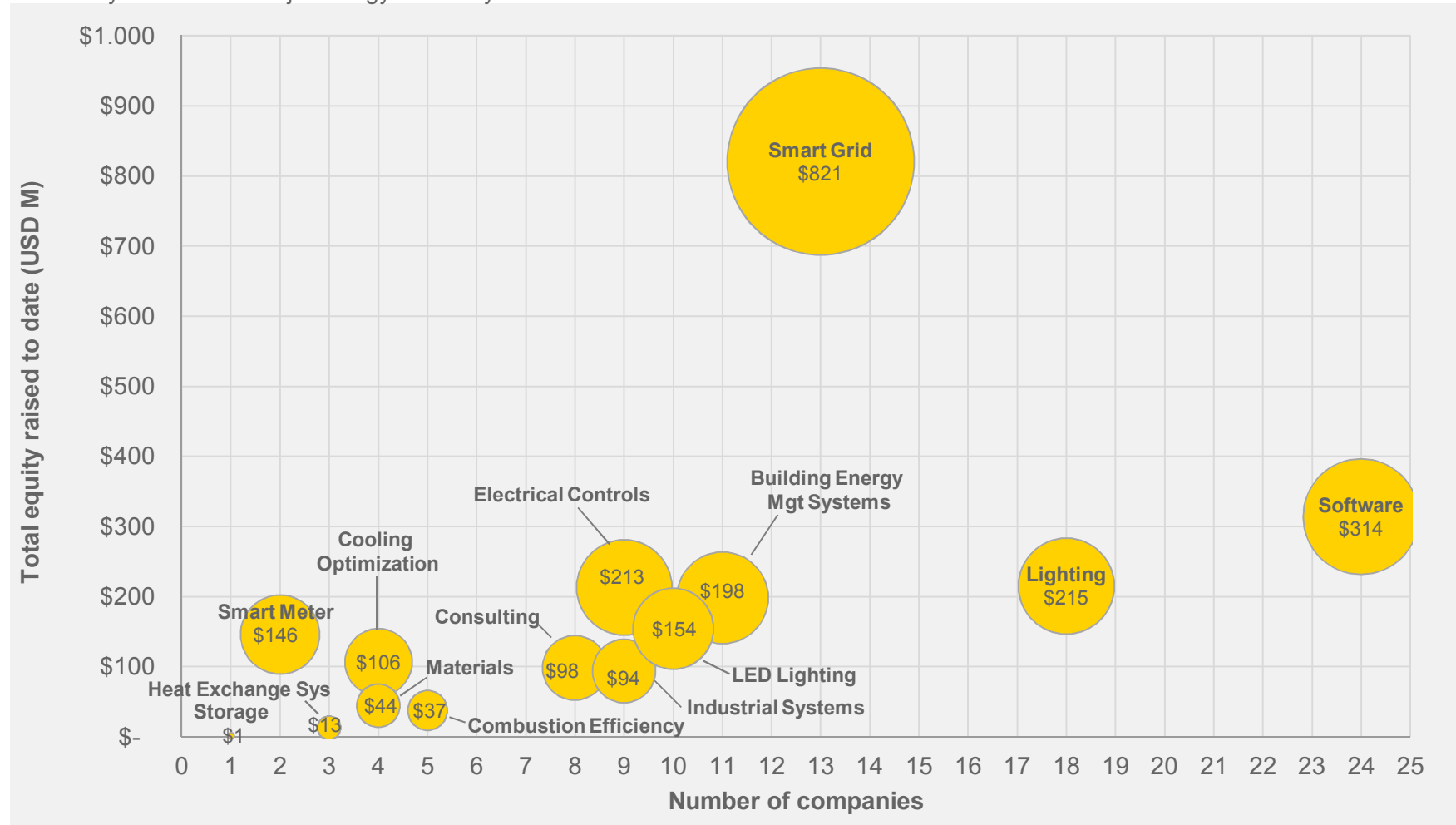


Source: Down Jones VentureSource; Ernst & Young

US energy efficiency technology landscape

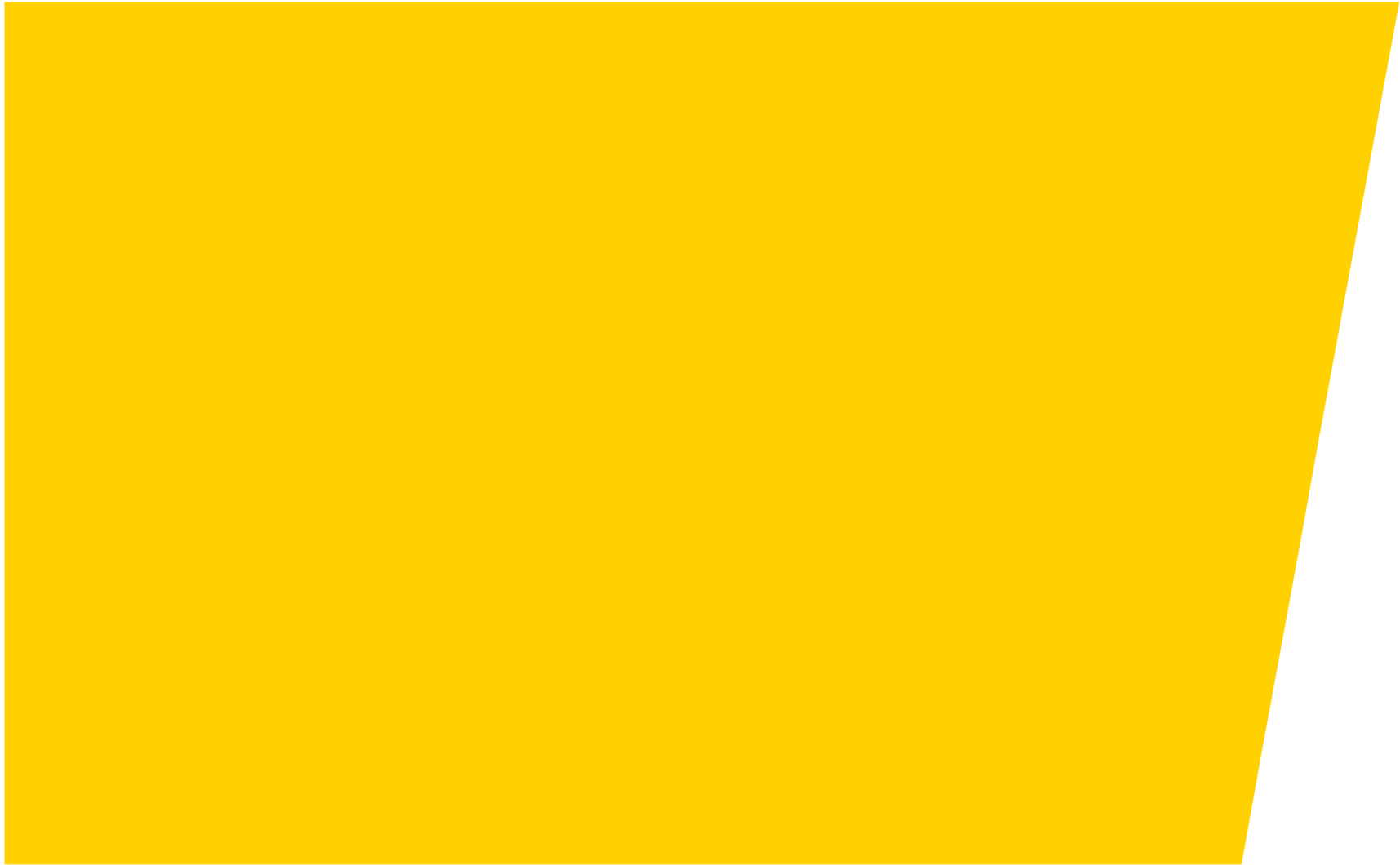
Current number of private VC-backed energy efficiency companies and total equity invested to date

NB: analysis limited to major energy efficiency investment areas



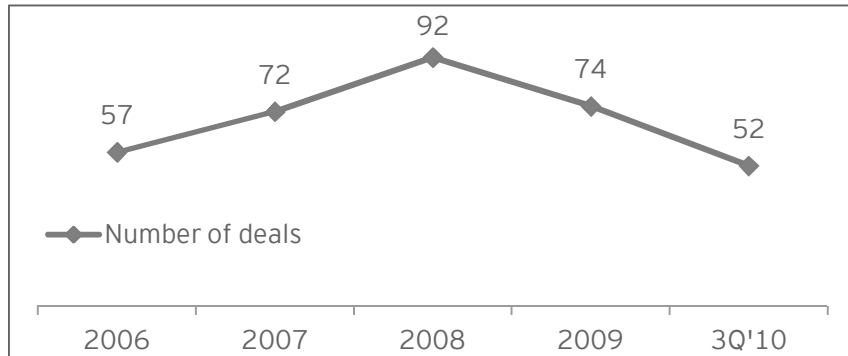
Source: Down Jones VentureSource; Ernst & Young

III. Corporate participation in cleantech venture investments



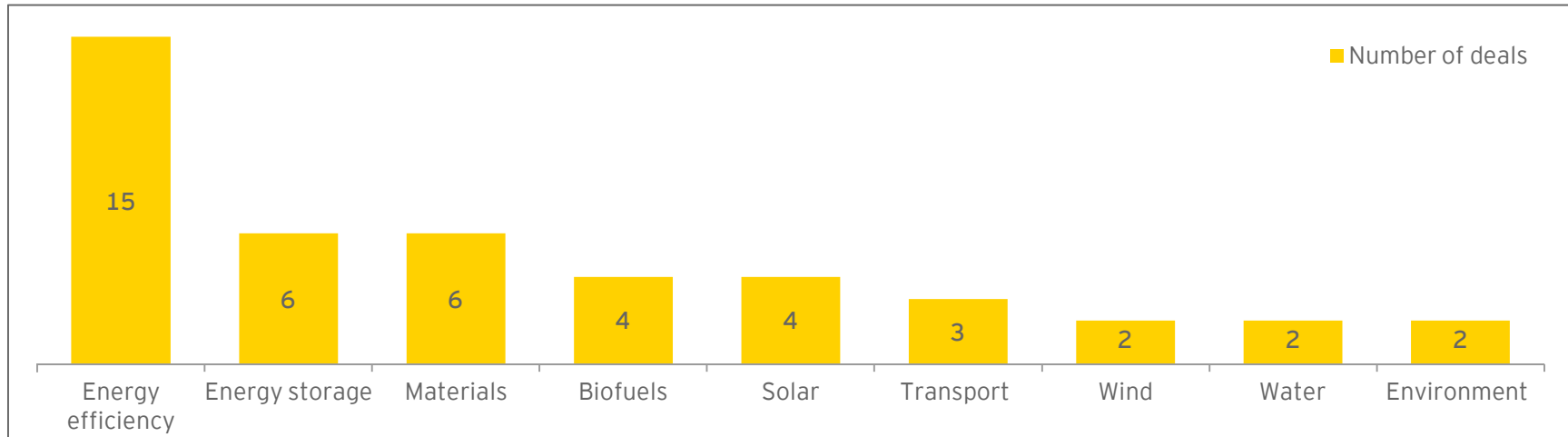
Global corporate participation in cleantech VC rounds

Global cleantech rounds with corporate participation



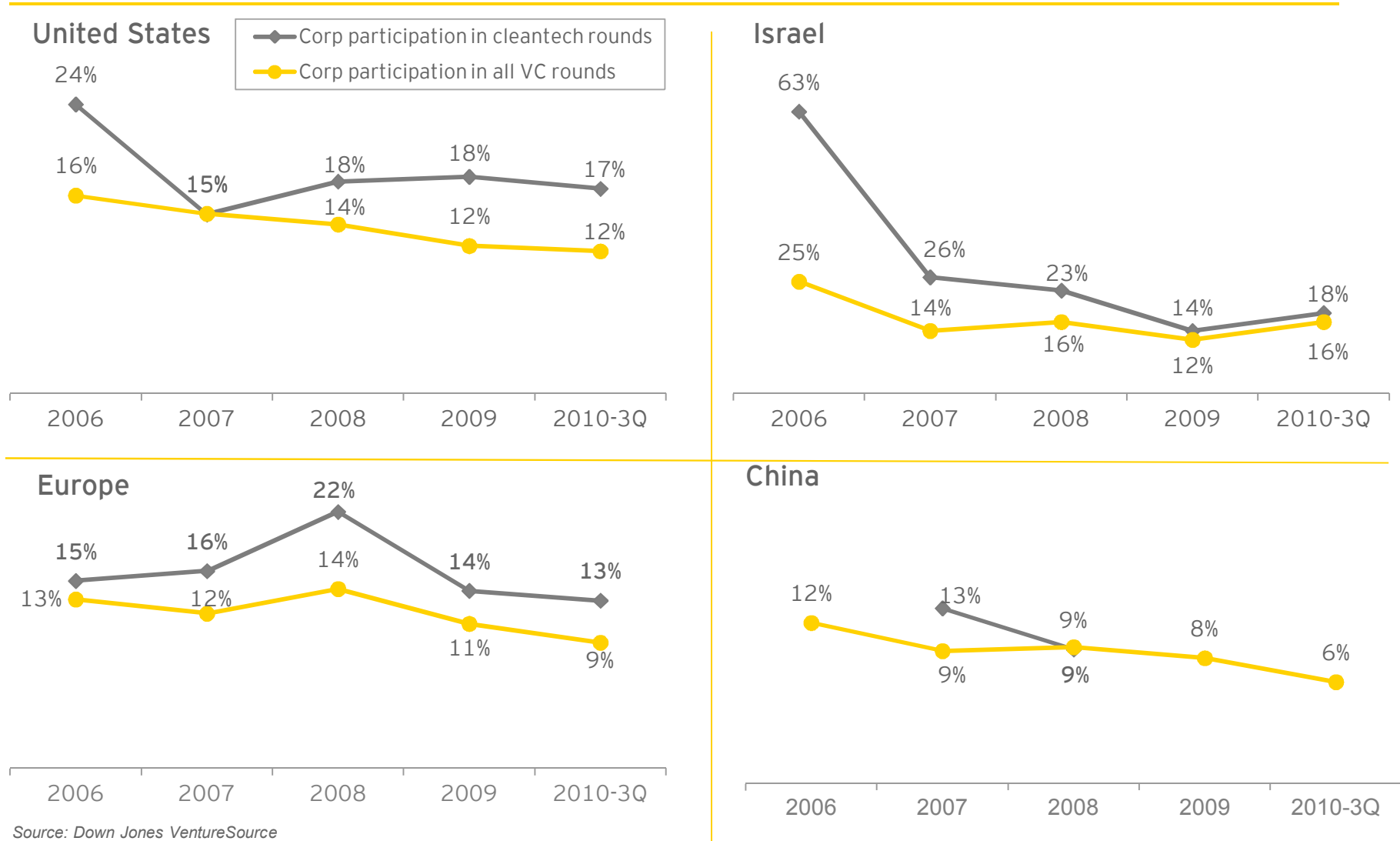
- ▶ 52 cleantech deals with corporate participation in the first three quarters of 2010 globally.
- ▶ 34 of these investments were by US investors.
- ▶ Corporate investors participated in cleantech deals worth over **US\$347 million** in Q1-Q3 2010.
- ▶ Globally, the **energy efficiency** segment, which includes energy efficiency products, management services, and energy efficiency industrial products, had the largest number of corporate investments with 15 deals for the same period.

Corporate participation in select cleantech segments in 2010 (Q1-Q3 2010)

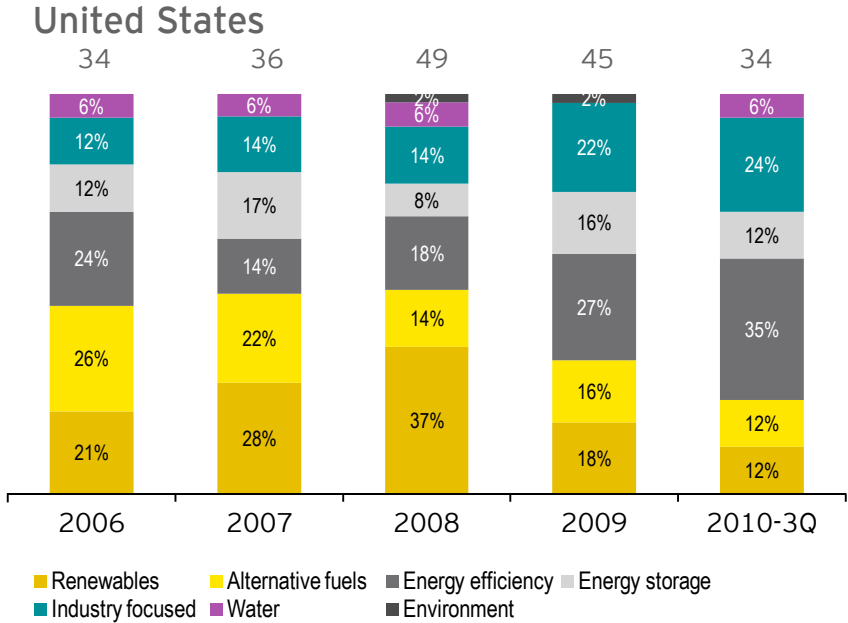


Source: Down Jones VentureSource

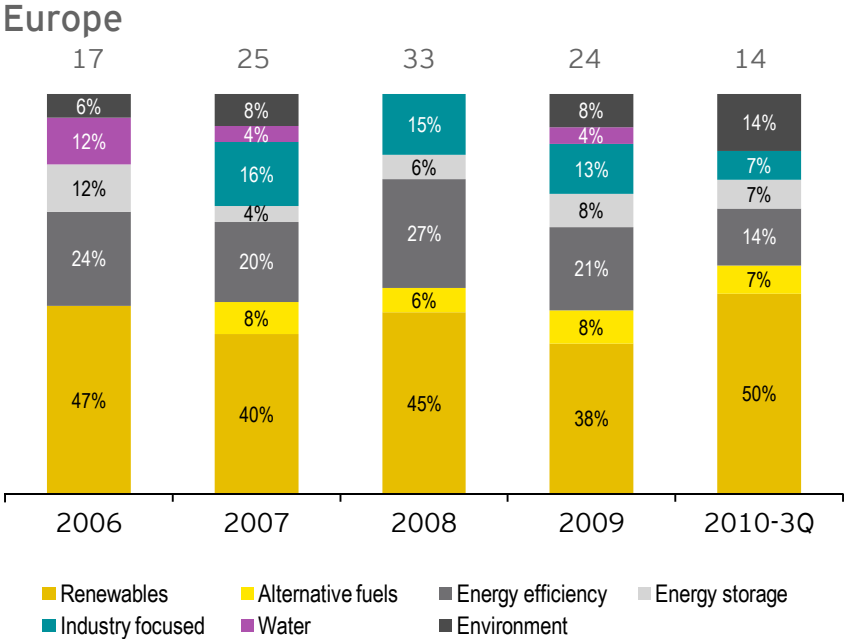
Corporate participation in cleantech financing rounds



Rounds with corporate participation by cleantech segment



- Increasing focus on energy efficiency by corporates in the US



- Renewables remain the main focus of corporate investors in Europe

Source: Dow Jones VentureSource

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