

# 1. Executive Summary

The global economic downturn had a significant impact on the ability of private equity fund managers of all descriptions to raise new capital, with the cleantech sector no exception as Fig. 1.1 shows. Although cleantech-focused funds did not see a decline in capital raised in 2009 (unlike the majority of other sectors), 2010 was more disappointing, with overall fundraising dropping back to 2006 levels. However, with over 80 purely cleantech-focused funds currently seeking \$23.5bn in capital, there is clear potential for the industry to resume the growth it has been experiencing in recent years as we move into 2011 and beyond.

## Specialists vs. Generalists

While Fig. 1.1 shows the rise in fundraising for specialist cleantech-focused vehicles, it does not account for the rise in appetite for cleantech investments amongst non-specialists – an area that has also experienced significant growth over the past few years. While estimating the actual amount of capital that will flow into the cleantech industry from more diversified vehicles represents a challenge, Fig. 1.2 does provide an indication of just how important these players are, with total

fundraising for all funds actively seeking cleantech investments as part of a wider strategy reaching a peak of \$54.8bn in 2008. There are currently 223 funds which include a cleantech focus in market, seeking an aggregate \$80bn.

Within the 2011 Preqin Private Equity Cleantech Review, we include profiles for dedicated cleantech firms, as well as profiles for the most important generalist players with a significant interest in the clean technology sector.

## How is the Market Split by Type?

Although the cleantech industry is still relatively early in its development, there is already a significant number of firms active within the sector, representing a diverse spread of investment stage focus.

There are currently 603 private equity firms currently being tracked by Preqin which are active in the cleantech sector. Of these, 65% are venture capital firms and 18% are infrastructure firms, with the remaining 17% buyout firms and others such as secondaries and debt-focused players.

Fig. 1.1: Annual Solely Cleantech-Focused Fundraising, 2004 - Feb 2011

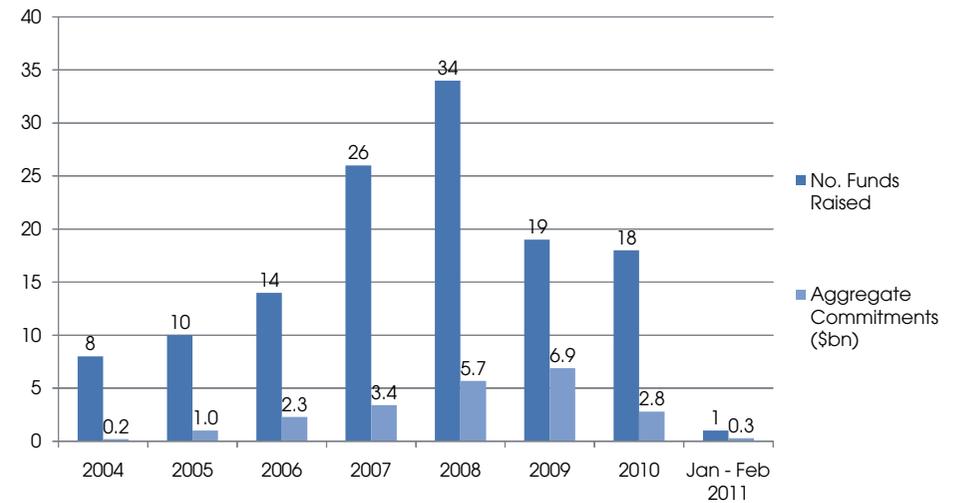
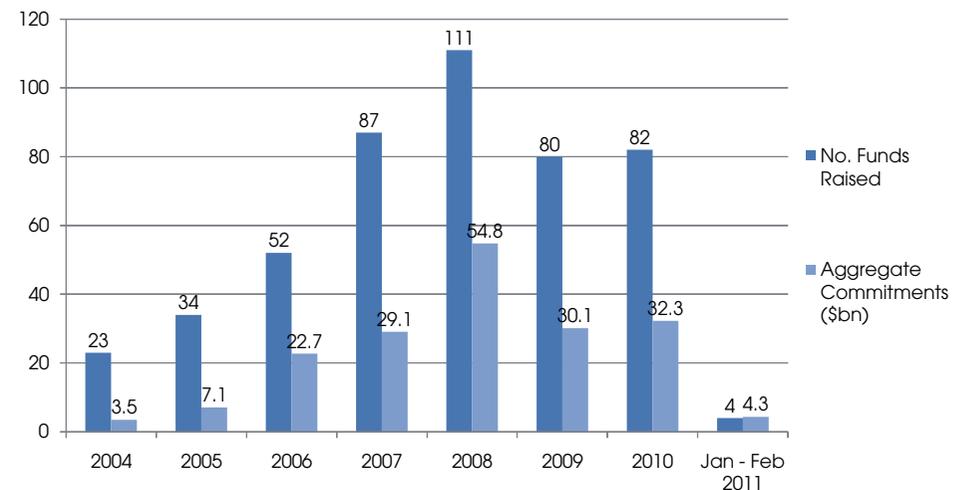


Fig. 1.2: Total Annual Fundraising by Funds That Include Cleantech Investments as Part or All of Their Focus



Within the body of the review, Preqin provides full profiles for the most important 450 of these firms, including fund-level information, investment preferences, key financial metrics and direct contact information.

**Geographic Split**

One of the defining characteristics of the cleantech industry is the geographic diversity of both the private equity players and the investments which they are making. As Fig. 1.3 shows, active firms are now spread evenly throughout the world, with the proportion of cleantech firms located in Asia and Rest of World growing from 19% in 2010 to 28% of the global share in 2011. Alongside traditional hubs of activity such as Silicon Valley, New York and London, a number of new centres of activity have sprung up in recent years, including Mumbai and Singapore, which each play host to 15 cleantech firms.

**First-Time Funds**

Fig. 1.4 shows the split of cleantech-focused funds (here relating just to firms that focus solely on cleantech investments) between first-time fund managers and those managers that have raised more than one vehicle. With more than three-quarters of players having just one fund to their name, this emphasises just how rapidly the industry is growing, with many new firms being formed in the past year.

The challenge facing a significant proportion of these first-time fund managers which have yet to achieve a final close on their debut offering will be to find investors in what remains a congested and competitive fundraising environment. There are 83 pure cleantech funds currently on the road seeking an aggregate \$23.5bn in commitments. Is there enough appetite there from the institutional investor community to satisfy all these ambitions? Will investors be willing to invest in firms without demonstrable performance?

**Investors Scrutinize Returns**

Following the significant impact that the downturn took on existing investments, investors in private equity are now examining new opportunities with far more scrutiny. Uppermost in their minds is past performance, both in terms of the individual managers and the overall sector being considered.

As a result of cleantech being a relatively new sector, there is not a great deal of mature fund performance available, with many funds being far too early in their investment cycles for meaningful conclusions to be drawn. However, the early signs are promising. Looking at returns for individual funds, success stories are already beginning to emerge, with a number of 2007 and 2008 vintage vehicles already posting net IRRs in excess of 10% at this still early stage. Although benchmark returns are limited and subject to change as very little

Fig. 1.3: Breakdown of Cleantech Firms by Primary Regional Location

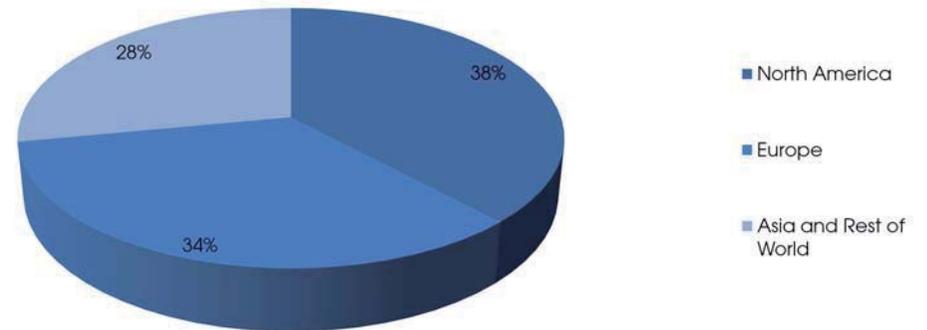
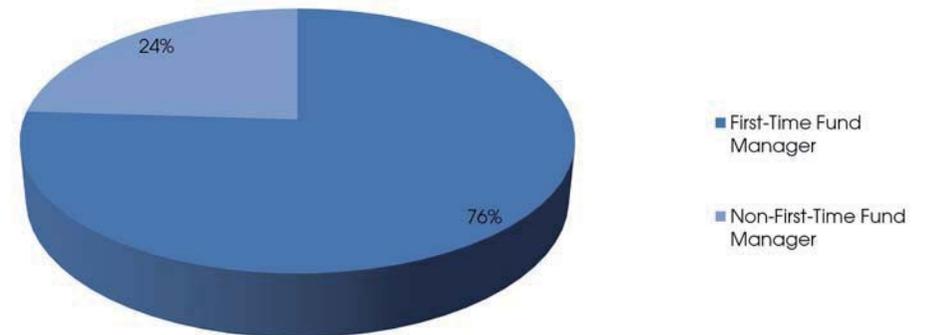


Fig. 1.4: Breakdown of Solely Cleantech-Focused Firms by Fund Management Experience



capital has been distributed to date, both 2006 and 2007 median multiple returns are showing a profit, with the 2006 vintage currently sitting on a 1.2x multiple return.

Within the body of the 2011 Preqin Private Equity Cleantech Review, we show full net-to-LP performance metrics for over 130 vehicles, including IRR, multiple and called capital levels.

**Are Investors Still Keen on Cleantech?**

Despite the lack of long-term performance metrics, there exists considerable support amongst the institutional community for cleantech private equity. For the significant proportion of investors instituting an element of corporate social responsibility into their investment portfolios, cleantech funds represent the preferred method of exposure to initiatives that align with their heightened attention towards climate change and other environmental issues.

Although fundraising for private equity funds has been far more challenging since the onset of the global economic downturn, evidence suggests an improvement in investor confidence in the asset class. Preqin's survey of 100 limited partners conducted in December 2010 indicated that 62% of LPs are planning to make new commitments to private equity funds in 2011, and two-thirds of these LPs are expected to increase or maintain the pace of their commitments in 2011 in comparison to 2010.

The formation of groups such as the Institutional Investors Group on Climate Change (IIGCC) in Europe and United Nations-backed Principles for Responsible Investment (PRI) have served to further promote awareness within the institutional community in recent years, and cleantech funds are likely to benefit from the increasing appetite investors are showing for the private equity asset class. Preqin's Investor Intelligence database currently shows that 23% of active investors in private equity have invested in at least one fund with full or partial exposure to cleantech in the past or have indicated an active interest in the industry.

**Where Will Institutions Be Investing?**

As part of analysis carried out for the 2011 Preqin Private Equity Cleantech Review, Preqin carried out interviews with 100 leading investors in the asset class to ascertain their levels of interest and investment preferences for 2011. The results show that there is appetite for new investments in 2011, with 31% of respondents planning to make their next commitment to a cleantech fund in 2011 and a further 8% looking to invest in the industry in 2012 (Fig. 1.5). A further 39% of respondents intend to invest opportunistically, with only 13% of respondents indicating that they no longer wish to invest in the asset class.

As previously discussed, one of the defining features of the cleantech industry is the

Fig. 1.5: Investors' Expected Timeframe for Next Commitment to a Cleantech Fund

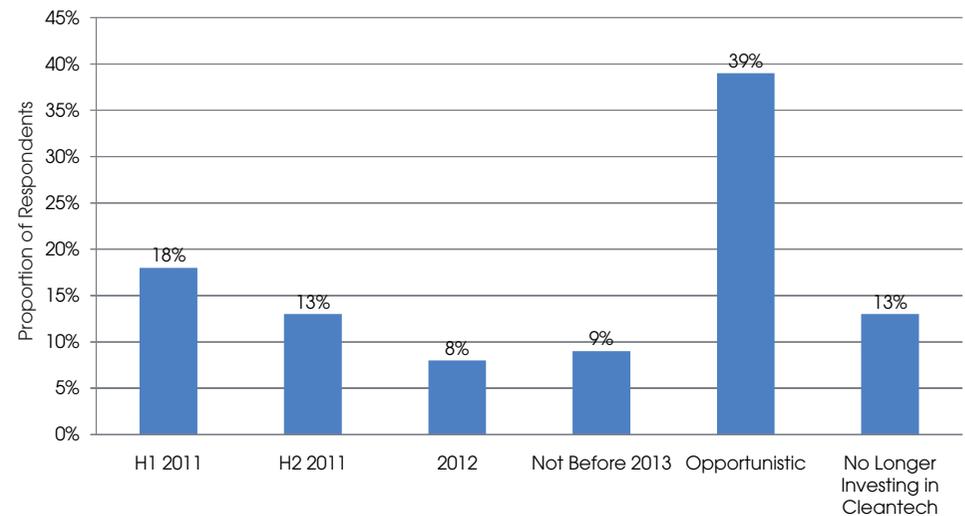
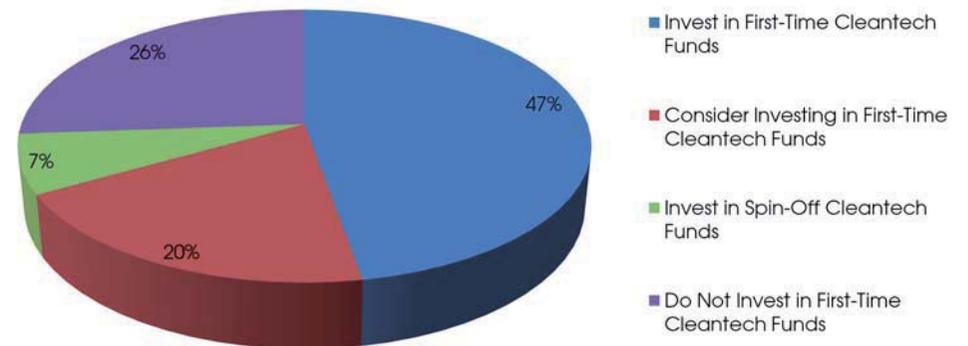


Fig. 1.6: Investor Attitudes to First-Time Cleantech Funds



in the sector. The good news for these managers is that the majority of investors in the asset class are willing to commit. Fig. 6 shows that LPs in cleantech funds are relatively receptive to managers raising vehicles for the first time. 67% of investors either invest with, or consider investing with, such managers, and a further 7% invest in spin-off funds. Just over a quarter of investors (26%), however, will not invest in cleantech funds managed by first-time teams.

Full profiles for 150 key institutional investors in cleantech are listed in the Review, including investment plans, sample investments, contact details and key financial data.

### Outlook

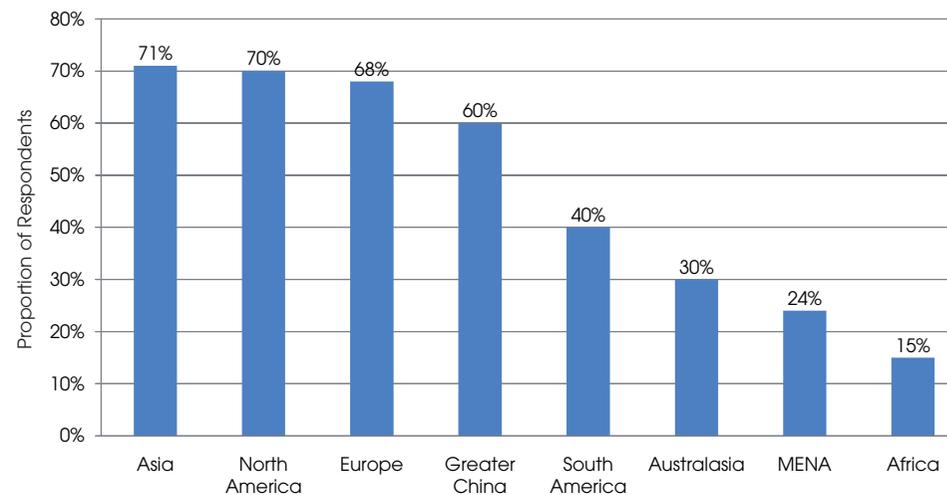
With an excellent stock of new funds on the road, and with investor appetite running at high levels, the future for the cleantech industry appears promising. Amongst both the investor and manager community there is growing interest in emerging markets. Asia emerges as the most promising region for new cleantech investments amongst the fund manager community, with 71% of those interviewed as part of our fund manager study stating Asia as a current area of interest (Fig. 7). Their sentiment is shared by the 58% of investors that will consider investing in emerging markets.

The full results of both our fund manager and investor studies are available in the body of the Review.

The rise in interest in emerging markets is not going to be at the expense of commitments to domestic managers, as investors are also showing appetite for North American and European investments. However, the global nature of the cleantech industry does highlight the need for an international perspective and understanding towards the sector as we are likely to see more cross-border investing on both the investor and fund manager side.

With the number of opportunities for cleantech investment growing, we are already seeing increased interest in the sector from diversified fund managers including cleantech within a wider set of industry foci. Although this trend is set to continue, it will not be at the expense of focused players, which are not only showing excellent potential in terms of returns, but also represent compelling investment solutions for the increasing number of investors with specific remits for including CSR-friendly investments in their portfolio. As investors continue to carve out such allocations in the coming year, cleantech is set to become an increasingly important and established sector within the private equity industry.

Fig. 1.7: Fund Managers' Views on Most Attractive Regions for Cleantech Investment Opportunities in 2011



### The 2011 Preqin Private Equity Cleantech Review

2011 marks the third edition of the Preqin Private Equity Cleantech Review, and this year's edition is the most comprehensive and detailed yet. Within the body of the Review we include detailed profiles for all the key fund managers and institutional investors, with all firms having been contacted directly by our teams of dedicated analysts. The Review also contains listings for funds raised and raising, fund performance and firm preferences. Surveys and analysis conducted for the Review show current sentiment towards the market from both manager and investor perspectives, plus

the current make-up of the market, trends in fundraising, performance and much more.

Previous purchasers of the Cleantech Review have included professionals in various functions within fund managers – both on the deals and the investor relations/fund marketing sides, as well as placement agents, law firms, institutional investors, asset managers, investment consultants, management consultants, investment banks and other industry professionals.

We hope that you find this year's edition of the Review to be a valuable and informative tool, and as ever we welcome any feedback that you may have.



# The 2011 Preqin Private Equity Cleantech Review

A comprehensive guide to the private equity cleantech market

- Sample Pages

# Contents

1. Executive Summary
2. Data Sources / Methodology
3. Overview of the Market
  - Review of the cleantech sub-sectors, growth of the private equity cleantech sector, prospects for 2010
4. Fundraising: Putting Cleantech in Context
  - Private equity cleantech fundraising: 2004 - Feb 2010, proportion between pure cleantech funds and diversified funds over time
5. Review of Fundraising: 2004 - Feb 2011
  - Overview of cleantech funds closed: 2004 – Feb 2011, fundraising by regional focus, fund type, venture investment stage, fund size, time spent on the road and proportion of target size achieved
6. Listings of Funds Closed Historically
7. Current Fundraising Market Analysis
  - Cleantech funds currently on the road; growth of the market by fund type, investment stage focus, regional focus, fund size, time spent on the road, placement agent use
8. Listings of Funds on the Road
9. Fund Performance Analysis
  - Net returns targeted by cleantech funds, target performance by fund type, dry powder, performance of cleantech venture funds
10. Fund Performance Listings
  - Key performance metrics for 136 named cleantech private equity funds
11. Firm Preferences
  - Matrix showing firm preferences by location, strategy and cleantech sub-sector
12. Top Fund Managers by Size
  - League tables of top 10 pure cleantech venture and infrastructure firms
13. Fund Managers Analysis
  - Fund strategies and fund manager location, fund manager experience, average equity investment size, target annual revenue and company value, holding period and shareholding preferences, industry focus, investment stage and position
14. Fund Manager Study: Current and Future Market Prospects
  - Analysis of 57 leading cleantech fund managers views on current and future prospects for the cleantech market
15. Venture Capital Analysis
  - Historical pure and diversified cleantech venture fundraising, largest pure funds raised, fund manager location, investment stage preferences, current fundraising market and investors in cleantech venture
16. Venture Capital Fund Manager Profiles
  - Detailed profiles for 320 cleantech venture firms
17. Infrastructure Analysis
  - Historical pure and diversified cleantech infrastructure fundraising, largest pure funds raised, fund manager location, project stage preferences, current fundraising market, investors in cleantech infrastructure and deal flow
18. Infrastructure Fund Manager Profiles
  - Detailed profiles for 130 cleantech infrastructure and natural resources firms
19. Funds of Funds Analysis
  - Vintages of cleantech fund of funds vehicles, sizes of cleantech fund of funds vehicles, geographical focus of cleantech fund of funds vehicles, strategy preferences of cleantech fund of funds vehicles, other private equity fund of funds vehicles
20. Institutional Investors Analysis
  - Investor interest in cleantech, types of investors investing in cleantech, investor preferences for cleantech investments: degree of exposure, fund type and geographic preferences, attitudes to first-time funds, future investment plans and views on the year ahead
21. Key Investor Profiles
  - Detailed profiles for 150 institutional investors in cleantech private equity funds
22. Index
  - Institutional Investors
  - Figure index
23. Glossary

\$34mn and \$202mn. Cleantech venture firms typically seek to invest in firms with annual revenues between \$10mn and \$66mn.

In a similar manner, Fig. 13.6 displays the average targeted enterprise values of companies invested in. Infrastructure firms typically target companies valued between \$99mn and \$449mn, while cleantech buyout firms target companies with values between \$38mn and \$418mn. Cleantech venture firms typically target smaller companies, valued between \$19mn and \$125mn.

**Holding Period Preferences**

The typical holding period for cleantech private equity firms is shown in Fig. 13.7. The average minimum holding period for most firm types is three years, rising to four years in the case of infrastructure firms. This is up from an average minimum of between one and three years from the previous year. The average maximum holding period of all cleantech firms is between six and eight years.

**Shareholding Preferences**

Fig. 13.8 displays the shareholding preferences of private equity firms that invest in cleantech based on the type of funds they raise. Buyout firms tend to take controlling positions in their acquired companies; 57% of the buyout firms list this as their shareholding preference.

Just under half of infrastructure firms also seek controlling positions. Venture firms, as expected, mainly focus on minority investments; 61% of venture firms have preference for minority stakes, and only 16% seek controlling stakes.

**Industry Focus**

The cleantech industry can be broken down into a number of sub-sectors. Fig. 13.9 shows the sub-sector preferences of private equity firms investing in cleantech, and indicates that power generation, which includes all forms of clean power production and renewable energy, continues to be the most favoured sub-sector for cleantech investments, with 75% of firms having a preference for the industry type. The figure is a slight decrease from 2010, with just under 80% of all firms listing it as an area of interest last year.

Clean fuels are the second most preferred cleantech sub-sector, with just under half of firms stating it as a preference. Recycling and waste management ranks highly (as it did last year), with 47% of firms listing it as a focus for investment. Water and efficiency infrastructure both form a significant area of interest for cleantech firms, while just over 30% of firms have a preference for energy storage. The transportation sub-sector witnessed a substantial decline in interest in 2010, dropping from 55% of firms listing it as a preference in 2010 to only 16% this year.

Fig. 13.8: Shareholding Preferences by Cleantech Firm Type

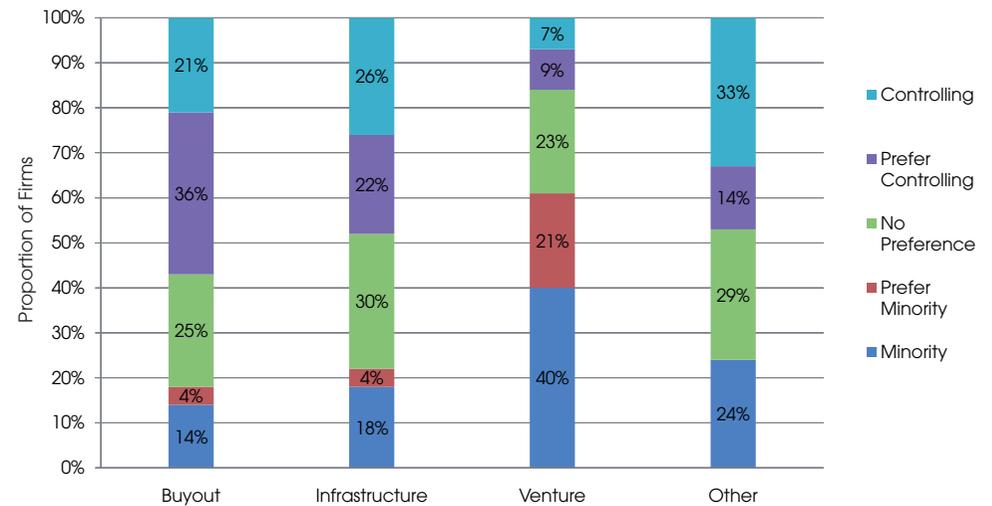
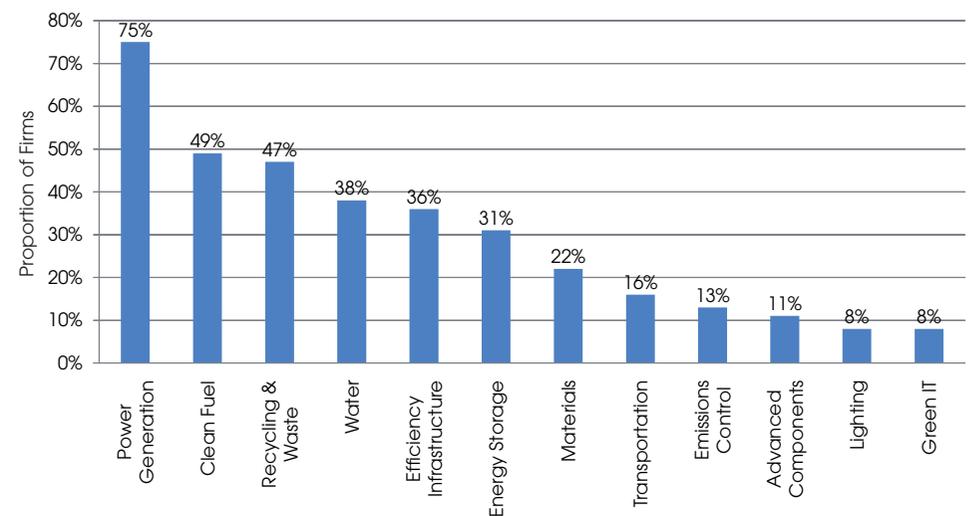


Fig. 13.9: Proportion of Firms Investing in Each Cleantech Sub-Sector



<b>Birchmere Ventures</b>				
424 South 27th Street, Suite 203, Pittsburgh, PA 15203 530 Lytton Avenue, 2nd Floor, Palo Alto, CA 94301 Tel: +1 412 322 3300 Web: www.birchmerevc.com Fax: +1 412 322 3226 Email: info@birchmerevc.com				
Birchmere Ventures focuses on engineering-driven cleantech, medical, and technology companies with strong intellectual property barriers and high barriers to entry. The firm is stage agnostic, generally leading early-stage deals and syndicating into later-stage deals.				
<b>Key Investment Criteria</b>				
Investment Strategy: Early Stage, Late Stage, Venture (General) Cleantech Industry Focus: Advanced Components, Automotive Components, Biofuels, Clean Coal, Energy Storage, Grid Management Systems, Intelligent Sensors, Materials, Solar Power, Solid State Lighting (SSL), Transportation, Water Geographic Preferences: US Initial Investment Size (mn): 1.0 USD to 3.0 USD Investment Size (mn): 5.0 USD to 10.0 USD Annual Revenue (mn): 0.0 USD to 100.0 USD Company Value (mn): 2.0 USD to 200.0 USD Holding Period (Years): 2 - 5 years Board Representation: Required Shareholding: Minority Investment Stage: Initial round, Seed, Follow-on Investment Position: Lead, co-lead, co-investment				
Funds Raised	Fund Size (mn)	Vintage	Status	Fund Type
Birchmere Ventures IV	125 USD*	2010	Raising	Venture (General)
Notable Investments	Investment Size (mn):	Date	Industry Specifics	
CyOptics	\$5m	Feb-11	InP optical semiconductors	
MiaSolé	\$6m	Oct-10	CIGS thin-film solar products	
Solexant	\$2m	May-10	CdTe thin-film solar products	
Plextronics	\$5m	Aug-07	Conductive polymers for OLED & OPV	
Contact Name	Position	Tel	Email	
Sean Sebastian	Partner	+1 412 726 5067	sean@birchmerevc.com	
Ned Renzi	Partner	+1 650 733 6286	ned@birchmerevc.com	

<b>Inspired Evolution Management</b>				
1st Floor, Amdec House, Silverwood Close, Steenberg Office Park, Tokai, Cape Town, 7945, South Africa Tel: +27 21 702 1290 Web: www.inspiredevolution.co.za Fax: +27 21 702 1483 Email: info@inspiredevolution.co.za				
Inspired Evolution is a private equity investment holding company positioned to lead sustainability investing in emerging markets in south and southern-Africa. Inspired Evolution's investment focus is on advancing the development and use of clean technologies and environmental goods and services. It makes early stage, expansion and later stage or mature equity and equity-related investments primarily for control or significant minority positions in market-leading growth businesses. Inspired Evolution is committed to investments that focus on the advancement of proven clean technologies, but also the development of innovative cleantech that is scalable across a broad range of sub-sectors. As a supplement to cleantech, the firm also pursues opportunities in natural health and organics, green buildings and select agribusiness.				
<b>Key Investment Criteria</b>				
Investment Strategy: Cleantech, Early Stage, Expansion/Growth Capital, Late Stage Cleantech Industry Focus: Advanced Materials, Air Quality, Biofuels, Efficiency Infrastructure, Emissions Control, Power Generation, Transportation, Waste Management, Water, Water Management, Water Purification, Geographic Preferences: Southern Africa Investment Size (mn): 10.0 ZAR to 100.0 ZAR Annual Revenue (mn): At least 20.0 ZAR for expansion deals Holding Period (Years): 3 - 7 years Board Representation: Required Shareholding: Prefer Controlling				
Sample Investors: African Development Bank, Castleway (Consensus Business Group), Finnfund, International Finance Corporation (IFC), Norfund, Swiss Investment Fund for Emerging Markets (SIFEM), GEEREF (EIF), Industrial Development Corporation (IDC)				
Funds Raised	Fund Size (mn)	Vintage	Status	Fund Type
Evolution One Fund	700 ZAR	2008	Closed	Venture (General)
Notable Investments	Investment Size (mn):	Date	Industry Specifics	
Abagold	Expansion: ZAR 52.5 mn	Sep-10	Marine aquaculture using next generation growing technology	
EnviroServ	Expansion: ZAR 50mn	Jul-10	Premier waste management	
Swartland Solar Park	Expansion: ZAR 20 mn	Feb-11	Renewable solar PV energy generation project development and finance	
Contact Name	Position	Tel	Email	
Michael Brooks	Chief Executive Officer and Principal	+27 217 021 290	mike@inspiredevolution.co.za	
Christopher Clarke	Executive Director and Principal	+27 217 021 290	chris@inspiredevolution.co.za	
Guy Baxter	Executive Director and Principal	+27 217 021 290	guy@inspiredevolution.co.za	
Wayne Keast	Executive Director and Principal	+44 (0) 207 355 7804	wayne@inspiredevolution.co.za	
Zuko Kubukeli	Executive Director and Principal	+27 11 883 8036	zuko@inspiredevolution.co.za	
Shaun Collyer	Principal	+27 11 883 8036	shaun@inspiredevolution.co.za	

<b>EnerCap Capital Partners</b>				
Burzovní palác, Rybná 14, Prague, 110 00, Czech Republic				
Tel: +420 227 316 222		Web: www.enercap.com		
Fax: +420 227 316 444		Email: ahammond@enercap.com		
EnerCap Capital Partners specializes in private equity investments in renewable energy projects across Central, Eastern and South-Eastern Europe. The firm invests in projects that qualify as non-carbon based or energy efficiency power projects and have predictable and legally binding long-term off-take agreements. The firm may also target strategic and proprietary infrastructure technologies and operations related to renewable energy.				
<b>Key Investment Criteria</b>				
Investment Strategy: Cleantech, Infrastructure				
Cleantech Industry Focus: Biofuels, Biomass, Carbon Credit, Efficiency Infrastructure, Hydro Power, Solar Power, Waste to Energy, Wind Power				
Geographic Preferences: East Europe, Central Europe, Albania, Bosnia & Herzegovina, Bulgaria, Croatia, Macedonia, Poland, Serbia, Slovakia, Ukraine				
Investment Size (mn): 10.0 EUR to 20.0 EUR				
Holding Period (Years): 3 - 5 years				
Board Representation: Required				
Shareholding: Controlling				
Investment Stage: Initial Round, Follow-on				
Investment Position: Co-investing, Lead				
Sample Investors: European Bank for Reconstruction and Development, European Investment Bank, Jaguar Capital, Sumitomo Mitsui Banking Corporation, Investkredit Bank				
Funds Raised	Fund Size (mn)	Vintage	Status	Fund Type
EnerCap Power Fund	98 EUR	2007	Closed	Infrastructure
Notable Investments	Investment Size (mn):	Date	Industry Specifics	
Horní Lodenice Wind Farm	Secondary Stage, 100% Stake	Jul-10	18 MW operational wind farm located in the Czech Republic	
RETA Solar Project - Czech Republic	Greenfield: 100% Stake	Jan-10	Financing, construction and commissioning of three solar parks totalling 7.4 MW	
Scieki Wind Project	Greenfield: USD 10mn, 100% Stake	Dec-09	Development of a 22 MW wind power facility located in Scieki, Poland.	
EKEZ Biomass Power Plant	Greenfield: 90% Stake	Aug-09	15 MW biomass power facility located in Hradec Kralove, Czech Republic.	
Wind Project - Croatia	Greenfield: 100% Stake	Jan-08	Development of a 42 MW wind project	
Contact Name	Position	Tel	Email	
Alastair Hammond	COO & Partner	+420 227 316 222	ahammond@enercap.com	
Michael White	Partner	+420 227 316 222	mwhite@enercap.com	
George Formandl	Partner	+420 227 316 222	gformandl@enercap.com	
Ewan Gibb	Partner	+420 227 316 222	egibb@enercap.com	
Shane Woodroffe	Project Finance Partner	+420 227 316 222	swoodroffe@enercap.com	

additional LPs to commit capital to cleantech funds. However, other investors have raised concerns over regulation, corporate governance and government subsidies. A US fund of funds manager stated: “There is a serious issue over government subsidies and we do not like to invest in projects that are dependent on these.”

#### Types of Investors Committing to Cleantech Funds

The cleantech industry appeals to a variety of institutional investors, as shown in Fig. 20.1. Public pension funds account for more than a quarter (26%) of known LPs active in the cleantech space, followed by fund of funds managers (20%) and government agencies (12%). A number of fund of funds managers, such as US-based North Sky Capital or Switzerland’s SAM Private Equity, raise their own dedicated cleantech vehicles and are expected to make substantial investments in the energy, utilities and clean technology sectors going forwards.

Corporate investors, which make up 6% of investors in cleantech, primarily make strategic investments in the sector. Energy companies, such as Essent and Fortum in Europe, see investments in private equity funds focusing on cleantech as an opportunity to gain experience of, and establish partnerships within, growing sub-sectors of cleantech such as renewable energy and low-carbon technology.

The majority of LPs investing in cleantech can be found in Europe and North America. As demonstrated in Fig. 20.2, almost half (49%) of LPs investing in cleantech funds are located in Europe, followed by 39% in North America, 9% in Asia and 3% in Rest of World.

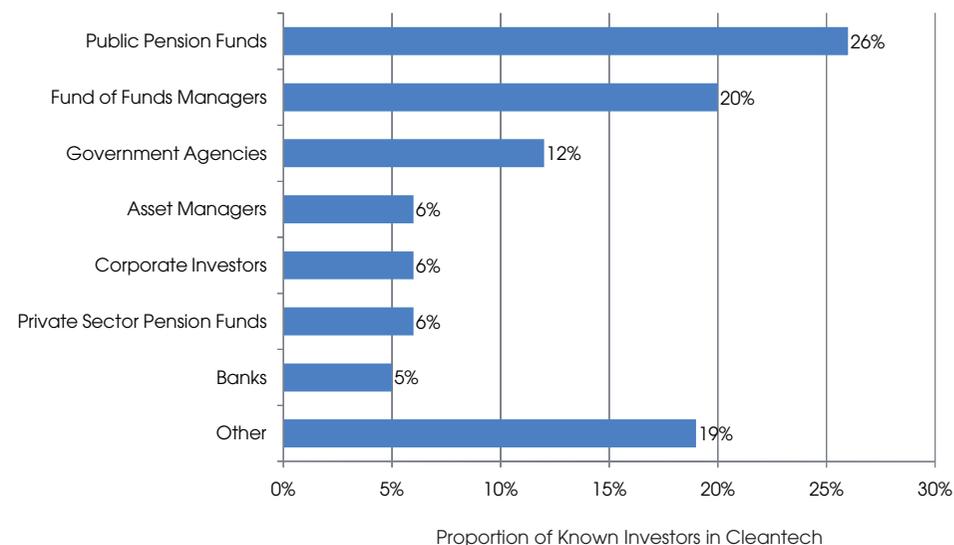
#### Investors’ Preferences and Future Plans for Cleantech Investments: LP Survey Results

In February 2011, Preqin conducted interviews with a sample of 85 LPs that had previously invested in cleantech or shown an interest in the sector in order to assess investors’ general attitudes to cleantech and to analyze their preferences for investment in the sector. Although some of the LPs spoken to for the survey have fixed allocations to the sector, most invest in cleantech funds on an opportunistic basis.

Investors were asked whether they sought to gain exposure to cleantech through funds dedicated to investment in the sector, through broadly diversified funds with an allocation to cleantech, or through a combination of both of these methods. A survey of LPs conducted in 2010 found that 33% invested in dedicated cleantech funds; however in 2011 more LPs expressed an interest in investing in funds with a sole focus on the industry. As demonstrated in Fig. 20.3, 63% of surveyed LPs invest in dedicated cleantech funds.

With the number of private equity funds targeting cleantech opportunities increasing

Fig. 20.1: Breakdown of Investors Known to Have Invested in Cleantech Funds by Type



over the past few years, investors have been able to benefit from exposure to a wider range of development stages and investment strategies. LPs have gained access to, or indicated a preference for, investment in the cleantech industry through venture (including growth funds), infrastructure and fund of funds vehicles.

As shown in Fig. 20.4, 70% of investors expressed an interest in gaining exposure to cleantech through venture funds. 32% gain exposure to the sector through infrastructure funds and 23% through funds of funds.

Fig. 20.5 shows the geographical preferences of investors in cleantech

funds. 72% of LPs that are active in the space invest in funds that primarily target opportunities in Europe, while 68% consider funds primarily investing in North America. Funds that mainly target Asian cleantech opportunities interest 48% of investors and 45% consider investing in funds that invest primarily in Rest of World.

When specifically considering attitudes to cleantech in emerging markets, as Fig. 20.6 illustrates, the majority of respondents (58%) either invest or consider investing in cleantech funds focused on these regions. When asked about specific countries within emerging markets that are presenting good opportunities to invest in the cleantech space, one German asset manager

Christian Super		Superannuation Scheme		
40-44 Belmont Street, Suite 46, Sutherland, Sydney, NSW, 2232, Australia				
Tel: +61 (0)2 9545 1566		Web: www.christiansuper.com.au		
Fax: +61 (0)2 9545 1577		Email: helpdesk@christiansuper.com.au		
Christian Super aims to be an ethical and responsible investor and will only commit to private equity investments that fit its corporate social responsibility criteria. As a result, it has a particular interest in the cleantech sector and its portfolio includes a commitment to the Macquarie Clean Technology Fund. Christian Super's sector preferences include sustainable agriculture, renewable energy projects, geothermal, wind, solar and tidal power technologies.				
Christian Super typically commits AUD 5 million to AUD 20 million per private equity investment. It considers investments with a wide range of geographical foci, including North America, Europe and emerging markets, and also considers first-time funds for investment.				
Going forward, Christian Super will continue investing in cleantech. The superannuation scheme made investments in cleantech funds in 2010 and plans to continue to invest in the sector during 2011. Christian Super prefers to invest opportunistically and does not have a specific allocation to cleantech within its private equity portfolio.				
<b>Total Assets (mn):</b>	580 AUD			
<b>Target Allocation to Private Equity (mn):</b>	145 AUD (25.0% of Total Assets)			
<b>Current Allocation to Private Equity (mn):</b>	16 AUD (2.8% of Total Assets)			
<b>Target Allocation to Infrastructure (mn):</b>	10 AUD (1.7% of Total Assets)			
<b>Current Allocation to Infrastructure (mn):</b>	10 AUD (1.7% of Total Assets)			
<b>General Investment Consultant:</b>	JANA Investment Advisers			
Cleantech Preferences				
N. America	Europe	Asia	Rest of World	First-Time Funds
.	.	.	.	Yes
Venture	Infrastructure	Fund of Funds	Other	
		.		
Contact Name	Position	Telephone	Email	
Nicholas Schaeppi	Head of Private Equity and Infrastructure	+41 (0)21 34 82 191	n.schaeppi@retraitespopulaires.ch	
Jean-Christophe Van Tilborgh	Head of Alternative Investments	+41 (0)21 348 21 11	jean-christophe.vantilborgh@lesrp.ch	
Sample Cleantech Fund Investments				
Macquarie Clean Technology Fund (2006)				
Contact Name	Position	Telephone	Email	
Tim Macready	CIO	+61 (0)2 9545 1566	tmacready@christiansuper.com.au	

Les Retraites Populaires		Asset Manager	
Rue caroline 9, Case postale 288, Lausanne, CH-1001, Switzerland			
Tel: +41 (0)21 348 21 11		Web: www.retraitespopulaires.ch	
Fax: +41 (0)21 348 21 69		Email: info@retraitespopulaires.ch	
Les Retraites Populaires does not currently have any exposure to the cleantech sector but expects to make its maiden cleantech investments in H1 2011. It plans to access the market via commitments to fund of funds vehicles that include an allocation to cleantech within their mandate. It plans to commit EUR 40 million to one or two such vehicles during 2011. It believes that fund of funds investments enable it to increase diversification, access top-tier funds, and ease the administrative burden of managing a direct private equity fund portfolio.			
The asset manager focuses its investments in Europe and North America; however, it has no specific geographic preference for its cleantech investments and will consider investments in emerging markets. Similarly it has no sector preference within the cleantech industry as it believes this selection is the responsibility of the fund of funds manager. It will consider committing to first-time funds and typically commits between EUR 15 million to EUR 20 million per fund of funds.			
<b>Total Assets (mn):</b>	15,000 CHF		
<b>Target Allocation to Private Equity (mn):</b>	750 CHF (5.0% of Total Assets)		

<b>Current Allocation to Private Equity (mn):</b>	450 CHF (3.0% of Total Assets)			
<b>Current Allocation to Infrastructure (mn):</b>	4,000 CHF (26.7% of Total Assets)			
<b>Private Equity Investment Consultant:</b>	In-House			
Cleantech Preferences				
N. America	Europe	Asia	Rest of World	First-Time Funds
.	.	.	.	Yes
Venture	Infrastructure	Fund of Funds	Other	
		.		
Contact Name	Position	Telephone	Email	
Nicholas Schaeppi	Head of Private Equity and Infrastructure	+41 (0)21 34 82 191	n.schaeppi@retraitespopulaires.ch	
Jean-Christophe Van Tilborgh	Head of Alternative Investments	+41 (0)21 348 21 11	jean-christophe.vantilborgh@lesrp.ch	

Overseas Private Investment Corporation		Government Agency	
1100 New York Avenue, N.W., Washington, DC, 20527, US			
Tel: +1 202 336 8700		Web: www.opic.gov	
Fax: +1 202 408 9859		Email: info@opic.gov	
Overseas Private Investment Corporation (OPIC) is a self-sustaining US government agency that supports private investment in more than 150 emerging market economies and countries. It has significant exposure to cleantech through investments in private equity and infrastructure funds, targeting only opportunities in emerging markets. The organization has previously invested in various types of fund to gain exposure to cleantech, including venture, buyout and infrastructure funds, but it typically prefers vehicles investing in proven technologies at the expansion stage of development. While OPIC considers investing with teams managing a cleantech fund for the first time, it generally has a preference for teams that have a record of investing in the space.			
OPIC has committed to a number of 2010-vintage infrastructure and private equity funds dedicated to the cleantech sector, including MEACP Clean Energy Fund, to which it committed USD 50 million, Maybank MEACP Clean Energy Fund, South-Asia Clean Energy Fund and GEF South Asia Clean Energy Fund. As well as investing in pure cleantech funds, it has also previously committed to funds that include smaller allocations to cleantech within their mandates.			
In December 2010, OPIC issued an RFP for private equity firms to manage one or more funds targeting renewable energy, resource efficiency and the preservation of scarce natural resources. The funds will focus on investment in emerging markets, including Africa, South Asia and the Middle East, and OPIC will provide financing of USD 35 million to USD 150 million per fund, although it will not commit more than a third of a fund's total capitalization. It is looking to invest in growth or expansion venture funds and will not consider early-stage venture funds for investment. It is also open to infrastructure investments in agriculture, land and water, including irrigation and transportation. Selection of successful managers is due to be announced on 23 June 2011, and Cambridge Associates has been hired to help assist OPIC in this process. The government agency is likely to make further investments in cleantech-focused vehicles throughout 2011.			

<b>Total Assets (mn):</b>	8,561 USD			
<b>Current Allocation to Private Equity (mn):</b>	2,996 USD (35.0% of Total Assets)			
<b>Current Allocation to Infrastructure (mn):</b>	315 USD (3.7% of Total Assets)			
Cleantech Preferences				
N. America	Europe	Asia	Rest of World	First-Time Funds
.	.	.	.	Spin-Offs
Venture	Infrastructure	Fund of Funds	Other	
.	.	.	.	.

Sample Cleantech Fund Investments			
GEF South Asia Clean Energy Fund (2010), Maybank MEACP Clean Energy Fund (2010), MEACP Clean Energy Fund (2010), MENA Joint Investment Fund (2010), South-Asia Clean Energy Fund (2010), Catalyst Private Equity Fund I (2007), Global Asia Clean Energy Services IV (2007), Aqua International Partners II (2006)			
Contact Name	Position	Telephone	Email
William Pearce	Director, Private Equity	+1 202 336 8699	william.pearce@opic.gov

# 2011 Preqin Private Equity Cleantech Review

The 2011 Preqin Private Equity Cleantech Review provides detailed analysis on all aspects of this important sector, plus listings for all funds, and profiles for the most important fund managers and institutional investors worldwide.

Key features of this publication include:

- Detailed analysis examining the history and development of the industry, fundraising trends, performance analysis, fund manager universe, institutional investors, fund of funds. Profiles for 320 cleantech-focused venture firms and 130 cleantech-focused infrastructure firms, including direct contact details, firm investment strategies, recent deals, fund details and more.
- Profiles for 150 institutional investors in cleantech funds, including investment plans, sample investments and direct contact details.
- Listings for all funds raised historically, funds currently raising, performance metrics for over 130 funds, league tables for biggest firms.
- Covers venture capital, infrastructure, buyout, fund of funds, and other PE firm types focusing on the sector.



For more information visit: [www.preqin.com/cleantech](http://www.preqin.com/cleantech)

I would like to purchase the 2011 Preqin Private Equity Cleantech Review:

Single Copy:

- £795 + £10 Shipping
- \$1,345 + \$40 Shipping
- €945 + €25 Shipping

Additional Copies:

- £110 + £5 Shipping
- \$180 + \$20 Shipping
- €115 + €12 Shipping

Data Pack:

- \$300 / £175 / €185

Data Pack contains all underlying data for charts and graphs contained in the publication. Only available alongside purchase of the publication.

Shipping costs will not exceed a maximum of £15 / \$60 / €37 per order when all shipped to same address. If shipped to multiple addresses then full postage rates apply for additional copies.

## Completed Order Forms:

### Post (to Preqin):

One Grand Central Place,  
60 E 42nd Street, Suite  
2544, New York, 10165

Equitable House,  
47 King William Street,  
London, EC4R 9AF

Asia Square Tower 1  
#07-04  
8 Marina View  
Singapore 018960

### Fax:

+44 (0)87 0330 5892  
+1 440 445 9595  
+65 6407 1001

### Email:

[info@preqin.com](mailto:info@preqin.com)

### Telephone:

+44 (0)20 7645 8888  
+1 212 350 0100  
+65 6407 1011

## Payment Details:

- Cheque enclosed (please make cheque payable to 'Preqin')
- Credit Card       Amex       Mastercard
- Visa       Please invoice me

Card Number: \_\_\_\_\_

Name on Card: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Security Code: \_\_\_\_\_



American Express, four digit code printed on the front of the card.



Visa and Mastercard, last three digits printed on the signature strip.

## Shipping Details:

Name: \_\_\_\_\_

Firm: \_\_\_\_\_

Job Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

City: \_\_\_\_\_

Post/Zip: \_\_\_\_\_

Country: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_