

Content Includes:

Preqin Special Report: North American Oil & Gas

November 2016

Fundraising

Vehicles focused on North America represent 70% of total oil & gas capital raised over the past decade.

Funds in Market

There are currently 51 oil & gas funds in market focused on North America, seeking \$28.6bn.

Investors

Investors targeting oil & gas will primarily seek domestic opportunities in the year ahead.

Performance

Most recent vintages post huge losses amid volatility in energy markets.





Foreword

The pressures on the oil industry over recent years have unsurprisingly had a large effect on the performance of recent North America-focused unlisted oil & gas funds, with vintage 2012-2013 vehicles posting median returns of -24.1%. As a result of such a large swing in performance from comparatively recent years (vintage 2010-2011 funds returned approximately 10%), institutional investor appetite for the natural resources asset class in general has dampened; nearly two-thirds (65%) of investors interviewed by Preqin in June 2016 stated that performance over the past year had fallen short of their expectations, and 56% of those surveyed named performance as a challenge to operating a successful natural resources portfolio currently.

Despite these challenges, North America-focused oil & gas fundraising in recent years is far above levels seen between 2006 and 2012. Although there has been a reduction in the number of funds reaching a final close for two consecutive years, the amount of capital raised has continued to be robust and North America remains the primary investment destination for these types of opportunities: North America-focused oil & gas funds in market are seeking nearly 3.5x the capital targeted by funds focused on all other regions combined.

As seen in interviews with investors earlier in the year, energy remains the primary target for investors seeking to access the natural resources asset class in the year ahead, and these commitments are likely to focus on the North American oil & gas market.

Preqin's **Natural Resources Online** database is an essential source of data and intelligence on the unlisted natural resources fund industry, covering agriculture/farmland, energy, metals & mining, timberland and water. To find out more about this and Preqin's other services, please visit www.preqin.com or contact us at info@preqin.com.

Data Source:

Preqin's **Natural Resources Online** offers a comprehensive overview of the natural resources fund industry, covering funds, fund managers and institutional investors. Information is constantly updated by our dedicated teams of analysts, ensuring that we provide the most extensive, up-to-date information available on all aspects of the industry.

With global coverage across all strategies, including agriculture/farmland, energy (including oil & gas), metals & mining, timberland and water, **Natural Resources Online** is a vital source of intelligence for all natural resources professionals.

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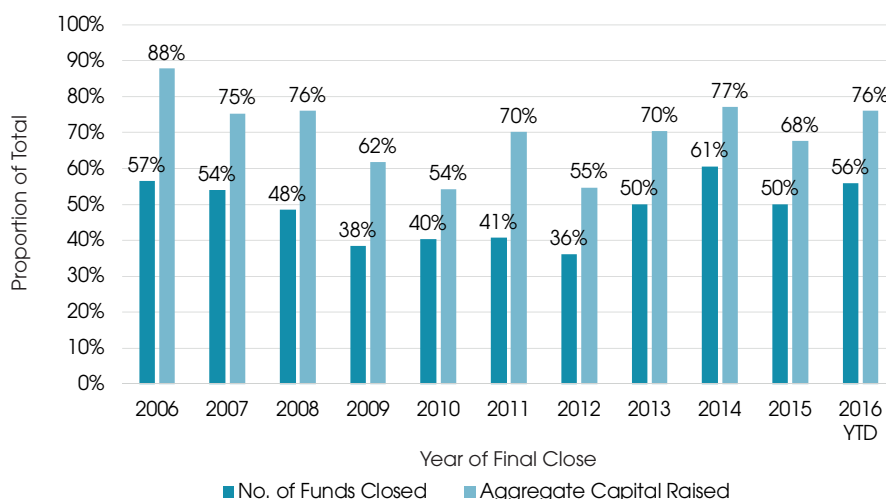
Fundraising

Preqin's **Natural Resources Online** contains detailed information on the 302 North America-focused energy funds that have reached a final close since 2006 that apportion a significant part of their mandate towards investment in oil & gas assets.

While not always representing the majority of unlisted oil & gas funds closed annually, the aggregate capital raised by North America-focused vehicles has consistently accounted for more than 54% of all energy capital raised – the nadir witnessed in 2010 (Fig. 1). In the years examined, North America-focused oil & gas vehicles represented, on average, 70% of the total oil & gas capital raised, while accounting for just 48% of funds closed.

On an annual basis, post-2013 North America-focused oil & gas fundraising has consistently surpassed the levels seen between 2006 and 2012 (Fig. 2). In the period 2006-2012, an average of 24 vehicles closed annually securing an aggregate \$21bn in capital from institutional investors, while in the post-2013 environment, an average of 39 funds have closed annually, securing \$38bn. Furthermore, 2016 is set to be a record year for oil & gas fundraising, with \$33.9bn secured from just 19 funds

Fig. 1: North America-Focused Unlisted Oil & Gas Fundraising as a Proportion of All Unlisted Oil & Gas Fundraising, 2006 - 2016 YTD (As at October 2016)



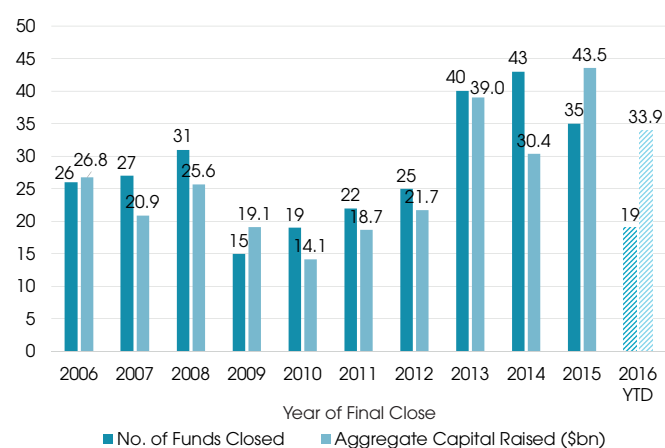
Source: Preqin Natural Resources Online

closed, although this is in part due to Brookfield Infrastructure Fund III reaching a final close in May 2016 on \$14bn – the fund has a significant proportion of capital focused on the energy sector, including oil & gas.

Natural Resources Online allows users to drill deeper into the specific investment preferences of vehicles. Unsurprisingly, North America-focused oil & gas vehicles closed since 2006 primarily target either

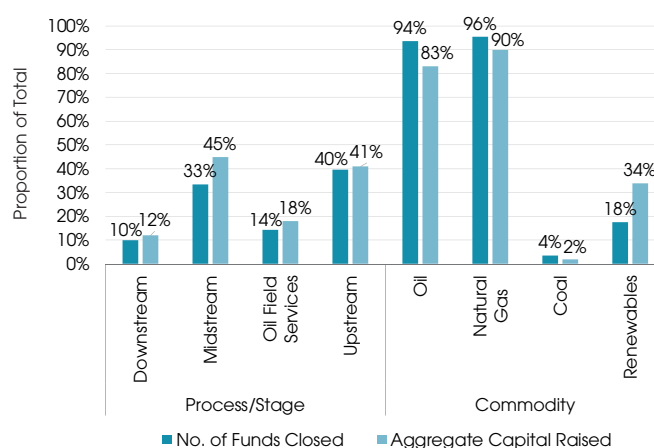
commodity, although there is greater variation in the process or stage targeted by these funds. Since 2006, 40% of oil & gas funds have targeted upstream investments, and a third have targeted midstream (Fig. 3). Furthermore, 18% of vehicles include renewable energy investments alongside their oil & gas acquisitions.

Fig. 2: Annual North America-Focused Oil & Gas Fundraising, 2006 - 2016 YTD (As at October 2016)



Source: Preqin Natural Resources Online

Fig. 3: Unlisted North America-Focused Oil & Gas Fundraising by Energy Investment Preference, 2006 - 2016 YTD (As at October 2016)



Source: Preqin Natural Resources Online

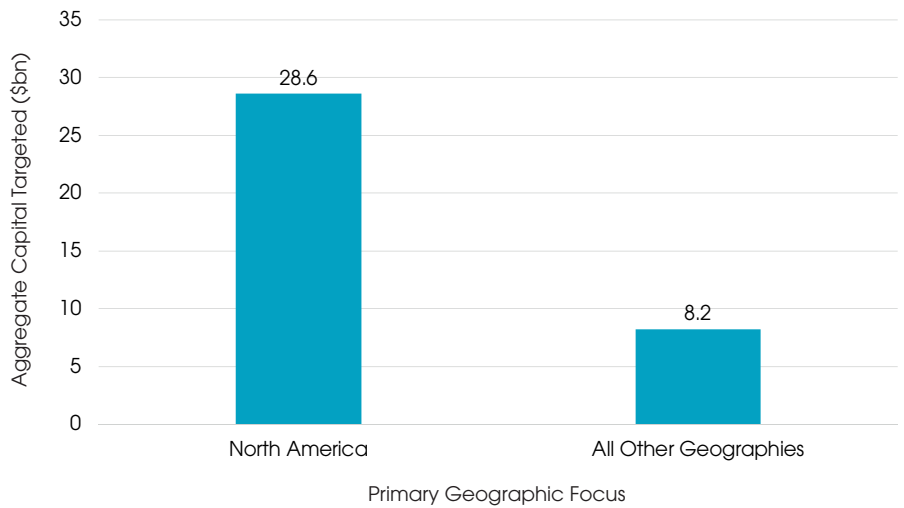


Funds in Market

There are currently 68 unlisted energy funds in market that target investments in the oil & gas industry profiled on Preqin's **Natural Resources Online**, with the vast majority primarily seeking investment in North American assets. Fifty-one North America-focused oil & gas funds are in market, collectively targeting \$28.6bn in institutional capital commitments, nearly 3.5x the combined total of funds seeking investments in other regions around the world (17 funds targeting \$8.2bn, Fig. 4).

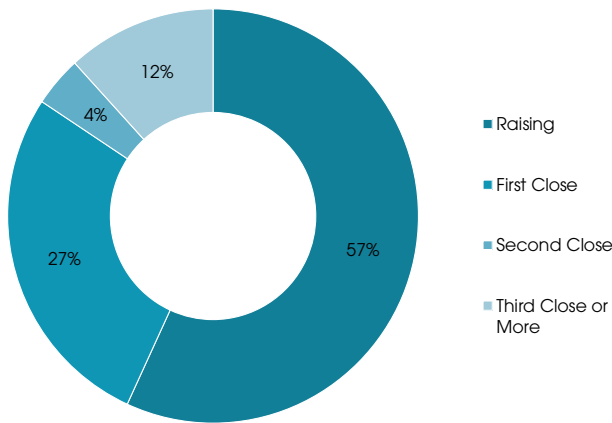
Of these North America-focused funds in market, 43% have already held at least one interim close (Fig. 5), securing \$8.1bn towards their combined fundraising target. As seen with funds closed, oil & gas funds will primarily target assets further upstream in the process: 62% and 45% of vehicles target upstream and midstream assets respectively, while only 17% seek downstream assets (Fig. 6).

Fig. 4: Aggregate Capital Targeted by Unlisted Oil & Gas Funds in Market by Primary Geographic Focus



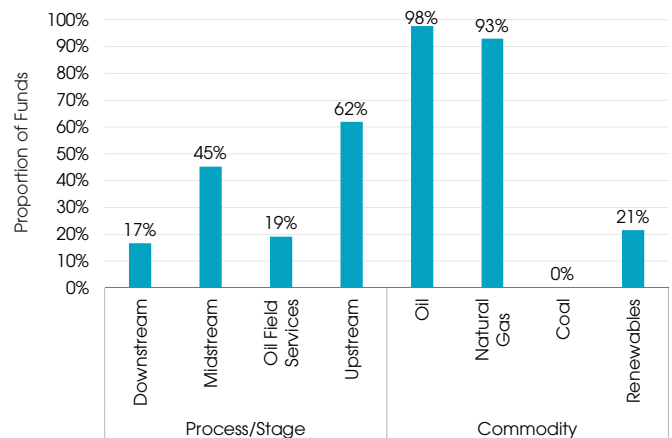
Source: Preqin Natural Resources Online

Fig. 5: North America-Focused Oil & Gas Funds in Market by Fund Status



Source: Preqin Natural Resources Online

Fig. 6: Unlisted North America-Focused Oil & Gas Funds in Market by Energy Investment Preference



Source: Preqin Natural Resources Online

Fig. 7: 10 Largest North America-Focused Oil & Gas Funds in Market (As at October 2016)

Fund	Firm	Headquarters	Target Size (\$mn)
Alinda Infrastructure Fund III	Alinda Capital Partners	US	5,000
Apollo Natural Resources Fund II	Apollo Global Management	US	3,000
Carlyle Energy Mezzanine Opportunities Fund II	Carlyle Group	US	2,500
Bastion Infrastructure Fund I	Bastion Infrastructure Group	Canada	2,000
Yorktown Energy Partners XI	Yorktown Partners	US	1,700
Denham Oil and Gas Fund	Denham Capital Management	US	1,500
AMP Capital Infrastructure Debt Fund	AMP Capital Investors	Australia	1,250
North Haven Energy Capital Fund	Morgan Stanley Infrastructure	US	1,000
Triloma EIG Global Energy Term Fund I	Triloma Energy Advisors	US	1,000
Orion Energy Credit Opportunities Fund II	Orion Energy Partners	US	750

Source: Preqin Natural Resources Online



Investors

The Energy Investor Universe

Preqin's **Natural Resources Online** contains detailed information on more than 1,000 institutional investors in North America that have stated a preference for, or previously committed to, unlisted energy funds. Foundations and endowment plans are the most numerous investor type in the region, representing 24% and 21% of the energy investor pool respectively, with private and public pension funds also making up notable proportions of the investor universe

(Fig. 8). With many traditionally smaller investor types, 44% of North America-based energy investors have less than \$1bn in assets under management (AUM), while approximately a fifth hold at least \$10bn in assets (Fig. 9).

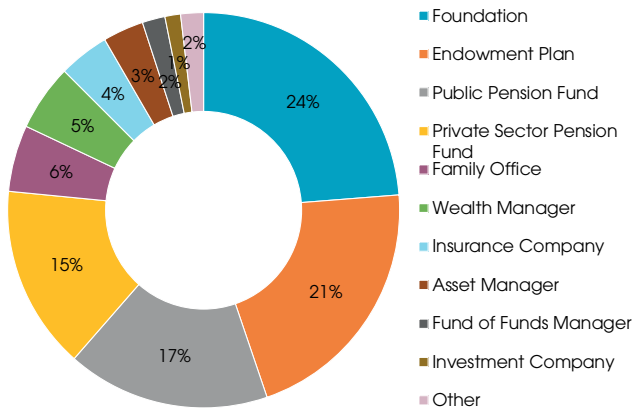
Given the relatively recent emergence of natural resources as a distinct asset class, it is unsurprising that the largest proportions of investors in North America incorporate their energy portfolio into their real assets (32%) or private equity allocations (23%). Contrastingly, only 5%

have a separate energy allocation, and 13% consider energy as part of a specific natural resources bucket.

Investment Plans

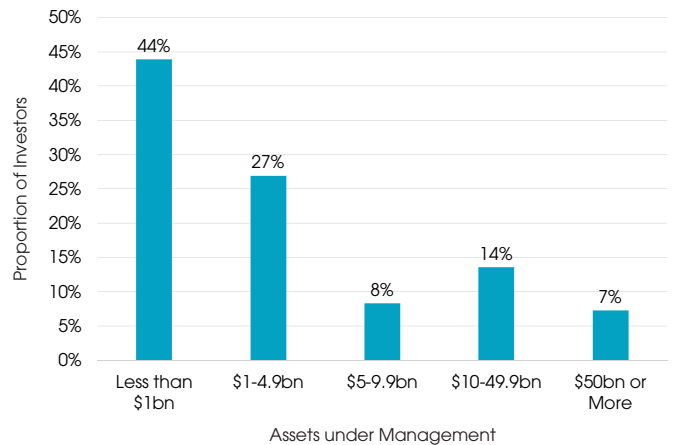
Ninety-one percent of North America-based energy investors each have a preference for oil and natural gas investments, while 50% prefer renewables (Fig. 11). In terms of investment stage, two-thirds of the energy investor pool in North America have a preference for midstream assets, with

Fig. 8: North America-Based Energy Investors by Type



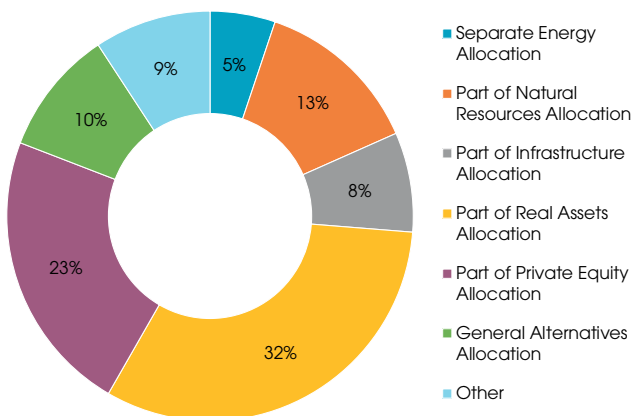
Source: Preqin Natural Resources Online

Fig. 9: North America-Based Energy Investors by Assets under Management



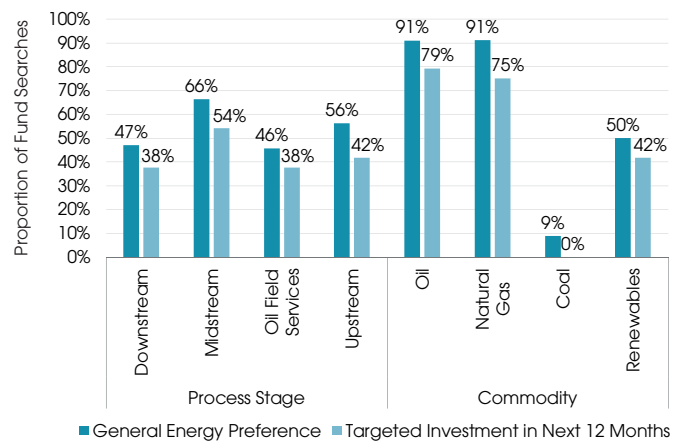
Source: Preqin Natural Resources Online

Fig. 10: North America-Based Investors by Source of Energy Allocation



Source: Preqin Natural Resources Online

Fig. 11: Energy Preferences and Investment Plans of North America-Based Natural Resources Investors



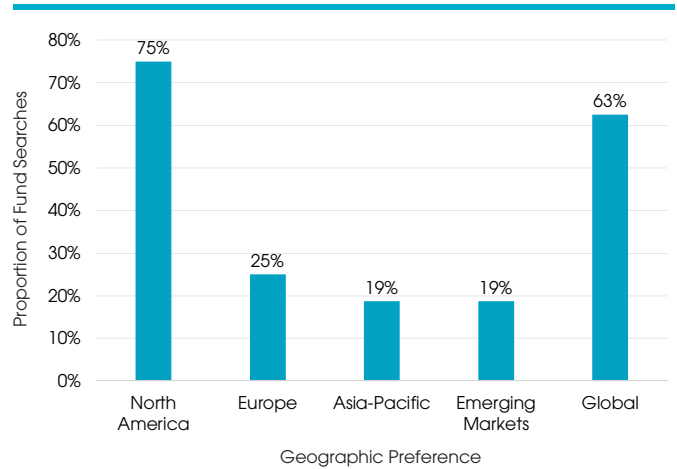
Source: Preqin Natural Resources Online



relatively equal proportions seeking downstream, oil field services and upstream investments. This trend persists when looking at those North America-based institutions that are actively seeking energy investments in the year ahead: in terms of commodity, 79% and 75% of energy fund searches and mandates issued will seek oil and natural gas investments respectively, while funds that target midstream, upstream and downstream assets are sought by 54%, 42% and 38% of active institutions respectively.

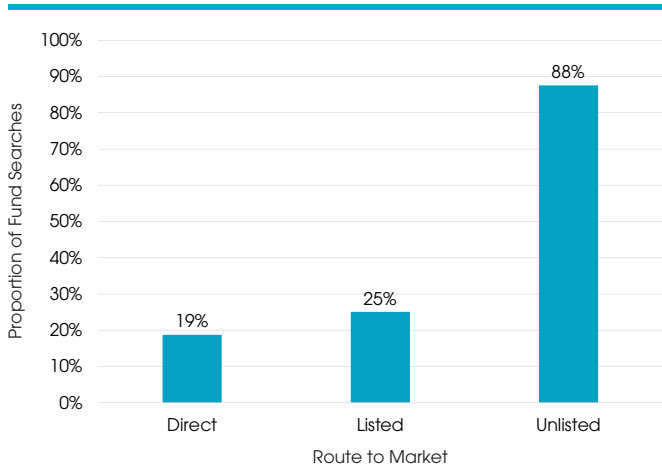
Geographically, North America-based investors seeking oil & gas investments in the next 12 months will primarily target their domestic market (75%) or seek global-focused funds (63%, Fig. 12). Most of these investments will be made through unlisted vehicles, which represent 88% of fund searches by active oil & gas investors in the region (Fig. 13).

Fig. 12: Geographic Preferences of North America-Based Natural Resources Investors Targeting Oil & Gas Funds in the Next 12 Months



Source: Preqin Natural Resources Online

Fig. 13: Preferred Route to Market of North America-Based Natural Resources Investors Targeting Oil & Gas Funds in the Next 12 Months



Source: Preqin Natural Resources Online

Fig. 14: Sample North America-Based Natural Resources Investors Targeting Unlisted Oil & Gas Investment in the Next 12 Months

Investor	Type	Investment Plans for the Next 12 Months
Société de transport de Montréal	Private Sector Pension Fund	Seeking to invest CAD 20-60mn in one to three unlisted natural resources funds in the year ahead that provide exposure to all types of energy.
Teacher Retirement System of Texas	Public Pension Fund	Looking to invest \$1.3bn in emerging natural resources managers in the coming year alongside its investments in emerging equities, private equity and real estate managers. The public pension fund has previously invested its entire natural resources allocation in the energy sector.

Source: Preqin Natural Resources Online

Fig. 15: Sample North America-Based Institutional Investors in Unlisted Oil & Gas Funds

Investor	Type	Location	Sample Oil & Gas Funds in Portfolio
Washington State Investment Board	Public Pension Fund	Olympia, US	Warwick Partners III
New Mexico State Investment Council	Sovereign Wealth Fund	Santa Fe, US	Carlyle Power Partners II; First Reserve Energy Infrastructure Fund II
Oregon State Treasury	Public Pension Fund	Salem, US	Brookfield Infrastructure Fund III
University of Texas Investment Management Company	Endowment Plan	Austin, US	ArcLight Energy Partners Fund IV
Alaska Permanent Fund Corporation	Sovereign Wealth Fund	Juneau, US	LS Power Equity Partners III

Source: Preqin Natural Resources Online

Data Source:

Natural Resources Online contains detailed information on more than 1,000 investors targeting investment in energy, oil & gas in North America.

For more information, please visit: www.preqin.com/nro



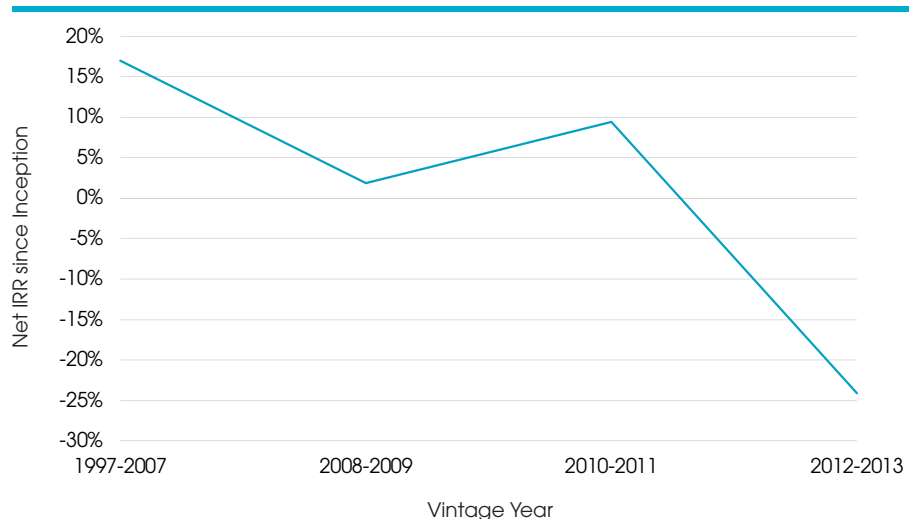
Performance

Preqin's **Natural Resources Online** contains performance data on 44 North America-focused energy vehicles that target oil & gas investments.

As can be seen in Fig. 16, unlisted vehicles of earlier vintages (pre-2007) have shown the strongest performance, posting a median net IRR since inception of 17.0%. While the financial crisis led to reduced returns for vintages 2008 and 2009 (+1.9%), performance rebounded to approximately 10% for vintage 2010-2011 funds. Strikingly, however, returns for the most recent vehicles (vintage years 2012 and 2013) have borne the brunt of the sharp fall in oil prices and volatility in energy markets, posting -24.1%.

All of the top five performing North America-focused unlisted oil & gas funds are of the earlier vintages (Fig. 17). Quantum Energy Partners II is the best performing vehicle, delivering a net IRR of 138.0%. However, even within the top five, there is significant variation in returns, with a spread of 113 percentage points between the best performing vehicle and the fifth best performer.

Fig. 16: Median Net IRR of North America-Focused Energy Funds with a Preference for Oil & Gas by Vintage Year



Source: Preqin Natural Resources Online

Understandably, a challenging few years for natural resources investment has put performance at the forefront of natural resources investors' minds. When Preqin interviewed institutional natural resources investors in June 2016 for the **Preqin Investor Outlook: Alternative Assets, H2 2016**, nearly two-thirds (65%) of investors stated that

performance over the past 12 months had fallen short of their expectations. However, these investors are committed to the asset class in the long term and the majority (74%) continue to see the strongest opportunities in energy.

Fig. 17: Top Five Performing North America-Focused Energy Funds with a Preference for Oil & Gas (All Vintages)

Fund	Firm	Vintage	Fund Size (\$mn)	Net IRR (%)	Date Reported
Quantum Energy Partners II	Quantum Energy Partners	2000	225	138.0	Jun-16
Quantum Energy Partners	Quantum Energy Partners	1998	101	41.2	Jun-16
SCF Fund V	SCF Partners	2003	150	33.9	Mar-16
SCF Fund VI	SCF Partners	2005	400	26.9	Mar-16
ArcLight Energy Partners Fund I	ArcLight Capital Partners	2002	950	25.0	Jun-16

Source: Preqin Natural Resources Online

Data Source:

Identify which fund managers have the best track records with performance benchmarks for natural resources funds and detailed performance data for over 440 individual named funds on **Natural Resources Online**.

For more information, or to arrange a demonstration, please visit:

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Preqin: Global Data and Intelligence

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With global coverage and detailed information on all aspects of the natural resources asset class, Preqin's industry-leading **Natural Resources Online** service keeps you up-to-date on all the latest developments in the natural resources universe.

Source new investors for funds

Find the most relevant investors, with access to detailed profiles for over 2,200 institutional investors in natural resources, including information on their current fund searches and mandates, direct contact information and sample investments.

Find out which investors are specifically targeting investments in agriculture/farmland, energy (including oil & gas), metals & mining, timberland or water.

Identify potential investment opportunities

View in-depth profiles for over 1,400 natural resources funds, across all natural resources strategies. Profiles include information on investment strategy, geographic focus, fundraising progress, service providers used and sample investors.

Find active fund managers in natural resources

Search for firms actively targeting natural resources investments. View information on firm background, key contacts, fundraising, and applied strategies of the firm.

Analyze the latest natural resources fundraising activity

See which firms are currently on the road raising a natural resources fund and which will be coming to market soon. Analyze fundraising over time by fund type, manager location and regional focus, and conduct competitor analysis.

Benchmark performance

Identify which fund managers have the best track records with performance benchmarks for natural resources funds and performance details for over 440 individual named funds.

Conduct competitor and market analysis

Keep track of all activity in the natural resources industry, with access to in-depth market intelligence and a wide range of analytical tools. Stay up-to-date on the activity of competitors and drill down to areas of interest to analyze trends in specific sectors, regions and markets.

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