

REAL ASSETS

OTLIGHT

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THE RISE OF INFRASTRUCTURE IN ASIA



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As at September 2017, Asia-focused unlisted infrastructure assets under management stand at a record \$57bn, with unrealized value having increased each year since 2008. As the demand for infrastructure projects in the region shows no sign of slowing, we take a look at how the market in Asia has developed to where it is today.

Find out more on page 2

NATURAL RESOURCES: BACK ON TRACK?



Despite the steady growth of the natural resources market over the past decade, most vintages are, on average, underperforming all other private capital asset classes. Here we take a closer look at the factors influencing natural resources performance, and those managers that are successfully navigating the volatile environment, to see what the future might hold.

Find out more on page 7



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THE RISE OF INFRASTRUCTURE IN ASIA

Against a backdrop of rapid growth and rising demand, we profile the infrastructure market in Asia, providing details on fundraising, funds in market, deals, investors and the burgeoning market for renewable energy assets.

he Asian infrastructure market has seen a surge in assets under management (AUM) in the past 10 years, with the size of the industry increasing by a factor of eight between the end of 2008 (\$7.1bn) and September 2017 (\$57bn, Fig. 1). The continued economic development of the continent and the growth of the population is driving the need for infrastructure investment, and has resulted in the formation of the multilateral development bank - Asian Infrastructure Investment Bank (AIIB) - in 2015 to ensure these needs are met. With 57 founding member countries and its continued expansion - Kenya recently became the latest country to be awarded membership

status – the AIIB has loaned out in excess of \$4bn since launching (as at May 2018).

DRY POWDER AND AUM

In September 2017, Asia-focused unlisted infrastructure AUM stood at a record \$57bn, with unrealized value having increased each year since 2008. This accounts for 13% of global infrastructure AUM, up from 0.1% at the end of 2008, and highlights the significant expansion of the Asian infrastructure industry. Dry powder experienced steady growth between 2008 and 2012, rising from \$4.4bn to \$8.5bn within this four-year period. However, between December 2012 and December 2013 this figure almost doubled to \$15bn.

FUNDRAISING

Despite the growth in Asia-focused AUM, 2017 recorded a substantial decrease in Asia-focused unlisted infrastructure fundraising compared to 2016. Only eight Asia-focused funds reached a final close in 2017, securing an aggregate \$1.6bn, significantly lower than the 13 funds that closed in 2016 for a record \$11bn (Fig. 2). Since the number of fund managers operating in the region is already comparatively low, this slowdown can be attributed to fund managers focusing on investing their capital from the previous year.

Fig. 1: Asia-Focused Unlisted Infrastructure Assets under Management, 2008 - 2017



Fig. 2: Annual Asia-Focused Unlisted Infrastructure Fundraising, 2008 - 2018 YTD (As at May 2018)

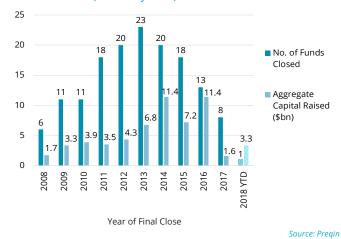


Fig. 3: Largest Unlisted Asia-Focused Infrastructure Funds Closed in the Last 10 Years (As at May 2018)

Fund	Firm	Headquarters	Fund Size (mn)	Primary Strategy	Final Close Date
Macquarie Asia Infrastructure Fund II	Macquarie Infrastructure and Real Assets (MIRA)	London, UK	3,300 USD	Core	Apr-18
Guangzhou City Development Industry Fund	Sfund	Guangzhou, China	20,000 CNY	Value Added	Dec-14
China Aviation Investment Fund	Civil Aviation Investment Management Company	Beijing, China	20,000 CNY	Opportunistic	Aug-14
Macquarie Asia Infrastructure Fund	Macquarie Infrastructure and Real Assets (MIRA)	London, UK	3,100 USD	Core	Feb-16
CCCC First Phase Equity Investment Fund	CCCC Fund Management	Beijing, China	15,000 CNY	Value Added	Nov-15

The fundraising horizon does appear to be improving in 2018, with \$3.3bn in aggregate capital already secured by one fund: UK-based Macquarie Infrastructure and Real Assets' (MIRA) Macquarie Asia Infrastructure Fund II is the largest Asia-focused unlisted infrastructure fund to close in the past 10 years (Fig. 3). The fund closed in April 2018 on 102% of its target size and is looking to target core Asian economic infrastructure assets and related companies, in sectors including transportation, telecoms, utilities and waste management.

FUNDS IN MARKET

There are currently 15 Asia-focused unlisted infrastructure funds in market, targeting an aggregate \$8.3bn in investor capital, only two of which are targeting \$1bn or more (Fig. 4). The largest of these is NIIF Master Fund managed by India-based National Investment and Infrastructure Fund. The fund is targeting \$2.1bn to invest in large

sectoral platforms in the infrastructure space, allocating to both greenfield and brownfield projects within India, and reached a first close on \$650mn in October 2017. The second largest, Tamil Nadu Infrastructure Development Fund, is also based in India and is managed by Tamil Nadu Infrastructure Fund Management Corporation. The debt/mezzanine vehicle is seeking INR 120,000mn (\$1.8bn) and aims to provide debt financing for India's infrastructure sectors.

Of the 15 funds currently in market, eight are primarily focused on Indian infrastructure opportunities. Over the past few years, the Indian infrastructure sector has experienced a significant transition towards sustainability due to the accelerated rate of urbanization through foreign direct investment and a rise in job creation. The Indian Government's Smart City initiative, which requires comprehensive development of infrastructure, has become a substantial

catalyst for economic growth and could partially explain the large attraction of India for unlisted infrastructure funds in market.

As the Asian continent has developed, its energy demand has increased as has the need for sustainable sources.

DEAL FLOW

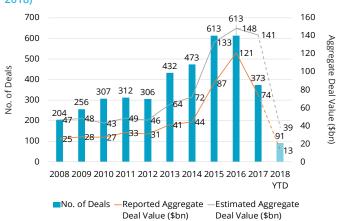
One of the most prevalent challenges facing unlisted infrastructure fund managers globally is deal flow – a third of fund managers surveyed by Preqin in November 2017 felt it was a key issue facing the industry. As Fig. 5 illustrates, 2017 recorded the fewest deals in Asia since 2012, with 373 deals completed for a reported \$74bn, low figures when

Fig. 4: Largest Asia-Focused Unlisted Infrastructure Funds in Market (As at May 2018)

Fund	Firm	Headquarters	Target Size (mn)	Primary Strategy
NIIF Master Fund	National Investment and Infrastructure Fund	Mumhai India		Core
Tamil Nadu Infrastructure Development Fund	Tamil Nadu Infrastructure Fund Management Corporation	Tamil Nadu, India	120,000 INR	Debt
India Infrastructure Fund Morgan Stanley Infrastructure Partners		New York, US	750 USD	Opportunistic
Green Growth Equity Fund	Everstone Capital	Singapore	500 GBP	Value Added
EFS Energy Japan Investment	GE Energy Financial Services	Stamford, US	75,000 JPY	Core-Plus

Source: Pregin

Fig. 5: Infrastructure Deals in Asia, 2008 - 2018 YTD (As at May 2018)



Source: Preqin

Fig. 6: Average Size of Infrastructure Deals, 2008 - 2018 YTD (As at May 2018)



compared with the 613 deals completed for a reported \$121bn in 2016.

Despite the decline in deal activity between 2016 and 2017, the average size of Asian deals has substantially increased during the same period. In the past decade, average deal size globally has consistently been higher than the average Asian deal size, but in 2017 this trend reversed, as the average size of Asian deals increased from \$230mn in 2016 to \$346mn, \$1mn higher than the global average (Fig. 6). This steep incline points to the prevalence of high valuations, which are the most widespread concern among unlisted infrastructure fund managers globally: 59% of those surveyed reported it as a key challenge.

Over the past 10 years, 48% of the 3,980 unlisted infrastructure deals in Asia have been for greenfield assets, while secondary-stage assets account for 31% and brownfield assets make up the remainder. Considering that Asia consists largely of developing countries, the large volume of greenfield deals does not come

KEY CHALLENGES FACING UNLISTED INFRASTRUCTURE FUND MANAGERS IN 2018

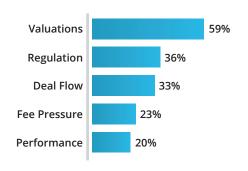
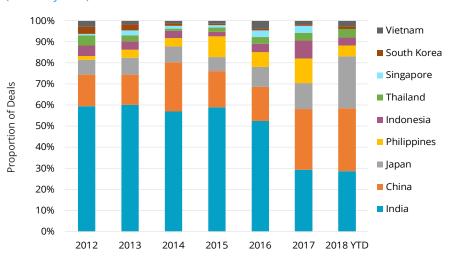


Fig. 7: Infrastructure Deals in Asia by Country, 2012 - 2018 YTD (As at May 2018)



Source: Pregin

as much of a surprise given the many areas of unused rural land and the push towards a more sustainable and clean environment. The five largest infrastructure deals completed in Asia in 2017 involved a mixture of project stages; notable deals included Rosneft, Trafigura and United Capital Partners' \$12.9bn acquisition of Essar Oil, a secondary-stage Indian oil company, and Copenhagen Infrastructure Partners' TWD 180bn acquisition of Taiwan Strait Wind Assets, a greenfield wind power site located in Taiwan.

Of the 373 deals completed in Asia in 2017, India (88) and China (87) saw the most activity. While India has dominated the deals landscape for a considerable period, China has gained some traction, making up 30% of all deals in Asia in 2018 so far, compared with 29% in India (Fig. 7).

In 2017, 3,110 infrastructure deals were completed globally, with Asia representing only 12% of the total (Fig. 8). Prior to 2017, Asia's share of global deals had increased each year since 2012.

RENEWABLE ENERGY DEALS

As the Asian continent has developed, its energy demand has increased as has the need for sustainable sources. Prior to 2008, renewable energy was not considered a valuable investment opportunity in Asia, but over the past 10 years, the number of renewable energy deals in Asia each year has greatly increased (Fig. 9). Since 2008, there have been 1,338 renewable energy infrastructure deals in Asia, amassing a total reported value of \$106bn. 2016 saw a record 228 deals completed for a reported value of \$21bn. Although the number of such deals fell to 168 in 2017,

Fig. 8: Infrastructure Deals by Region, 2007 - 2018 YTD (As at May 2018)

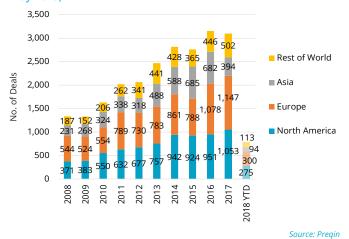
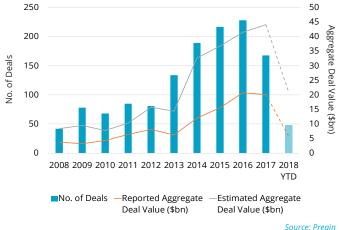


Fig. 9: Renewable Energy Infrastructure Deals in Asia, 2008 - 2018 YTD (As at May 2018)



the renewable energy sector still made up 45% of all infrastructure deals completed that year.

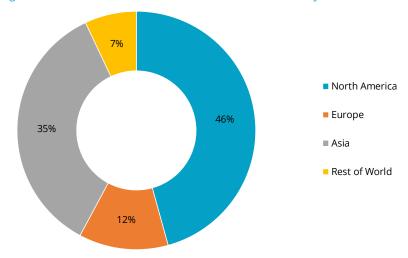
During the period 2008-2017, there have been some notable multibillion-dollar renewable energy deals, the largest five of which have occurred during the past two years (Fig. 11). One such deal was Hydro Solutions' \$4.5bn acquisition of Nepalbased Aankhu Khola Hydro Power Plant in January 2018, a 42.9 MW hydroelectric facility. Also noteworthy is Impregilo's \$3.9bn purchase of the Diga di Rogun Dam Project in Tajikistan in July 2016. The Italybased firm acquired a 100% stake in the dam project which, when at full capacity, will produce energy through six turbines of 600 MW each, the equivalent of three nuclear plants.

INVESTORS IN ASIA

Of all institutional investors with a preference for Asian infrastructure, the largest proportion (46%) are located in North America (Fig. 10). Such a large volume of North America-based investors could indicate the desire for LPs to diversify their portfolios and gain access to better returns due to the higher risk inherent in Asian markets. The comparatively larger sums of capital under management of North American firms also means there is a greater need to diversify their portfolios.

From a global perspective, investors that are not actively investing in Asia tend to have lower AUM than their counterparts investing in Asia. Forty-three percent of investors with a preference for Asia operate \$10bn or more in AUM, compared with 34% of non-Asia-focused investors. This is indicative of the wider global

Fig. 10: Investors with a Preference for Asian Infrastructure by Location



Source: Pregin

perspective that investors with greater AUM tend to have compared with smaller institutional investors.

The majority (73%) of Asia-based investors gain exposure to infrastructure through unlisted investments. The expertise of fund managers can provide smaller Asia-based investors with a more suitable way to diversify their portfolios and bridge the gap between larger investors around the globe. Asia-based investors that are looking to invest through unlisted funds include Seoul-based DB Insurance. The insurance company intends to commit KRW 600-750bn to 15 unlisted debt/mezzanine infrastructure funds over the next 12 months, with a preference for developed markets.

OUTLOOK

Infrastructure has experienced significant growth in Asia in recent years due to various governmental initiatives to

promote sustainability as well as large institutional investors having the scope to diversify their portfolios, with the expectation that they will receive strong risk-adjusted returns. Although fundraising has been somewhat volatile, Asia-focused funds are increasingly overachieving with regards to target size.

Fund managers' concerns about high valuations, however, have not been wide of the mark, with average deal size in the Asian infrastructure market significantly rising since the last dip in 2013. Despite this, the market could continue the growth trend observed, provided more opportunities present themselves to fund managers focusing their investments on the region and investor appetite remains strong.

Fig. 11: Largest Renewable Energy Infrastructure Deals in Asia in the Last 10 Years

Asset	Location	Industry	Investor	Deal Size (mn)	Stake (%)	Deal Date
Taiwan Strait Wind Assets	Taiwan	Wind Power	Copenhagen Infrastructure Partners	180,000 TWD	100	May-17
Aankhu Khola Hydro Power Plant	Nepal	Hydropower	Hydro Solutions	4,500 USD	-	Jan-18
Diga di Rogun Dam Project	Tajikistan	Hydropower	Impregilo	3,900 USD	100	Jul-16
Dasu Hydro Power Plant	Pakistan	Hydropower	-	286,320 PKR	-	Mar-17
Grid-Tied Solar PV SATS Airfreight Terminals 5 & 6 Project	Singapore	Solar Power	Sembcorp Utilities Pte Ltd	2,600 USD	49	Dec-16

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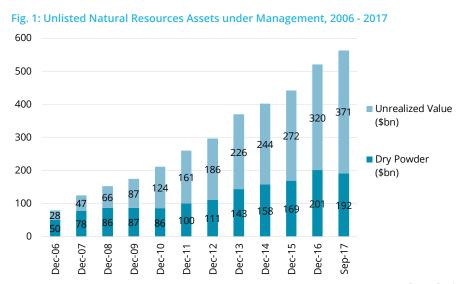
NATURAL RESOURCES: BACK ON TRACK?

Here we take a close look at the factors influencing natural resources performance, along with the top performers and largest managers, to gauge what the future might hold for the industry.

he natural resources industry has experienced significant growth in recent years, with assets under management (AUM) standing at a record \$563bn as at September 2017 (Fig. 1). This growth has been largely driven by increased investment in natural resources as the need for sustainability becomes more apparent, with population growth and pollution proving sizeable concerns.

Dry powder also fell for the first time in several years, from \$201bn in December 2016 to \$192bn as at September 2017, indicating that managers have put significant amounts of capital to work. Furthermore, 79% of investors surveyed by Preqin in December 2017 felt that their natural resources investments met or exceeded their expectations in the past 12 months. Performance is a key component

Among natural resources funds closed in the past 12 months, 31% invest in oil, a commodity that appears to have a significant impact on natural resources fund performance.



Source: Preqin

for investors and fund managers alike, and with strong commodity prices in recent years, the horizon has looked positive for the natural resources asset class.

BACK ON TRACK?

Natural resources funds of every vintage examined from 2005 to 2014 have consistently underperformed other private capital funds of the same vintage (Fig. 2). The effects of the drop in commodity prices during 2009, as a result of the Global Financial Crisis, are apparent: natural resources funds of vintage 2010 have

the lowest median net IRR of any private capital strategy examined.

Following the fall in commodity pricing in 2009, returns have been increasingly volatile. However, 2015 vintage funds are the only vehicles to outperform other strategies, with a median net IRR of 14.1%, suggesting a positive outlook for the asset class. It is, however, important to note that these funds remain relatively early in their respective fund cycles, meaning IRRs are likely to fluctuate further.

Fig. 2: Median Net IRRs by Vintage Year: Natural Resources vs. Other Private Capital Strategies

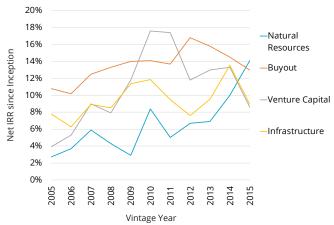
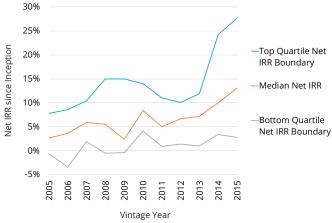


Fig. 3: Unlisted Natural Resources – Median Net IRRs and Quartile Boundaries by Vintage Year



Source: Preqin

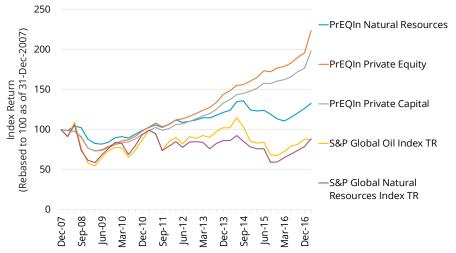
Although median net IRRs of 2005-2014 vintage natural resources funds have underperformed other private capital strategies, top-quartile funds have consistently displayed strong performance, with 2014 and 2015 vintage funds producing returns of 24.2% and 27.7%, respectively (Fig. 3).

V-OIL-ATILITY

Among natural resources funds closed in the past 12 months, 31% invest in oil, a commodity that appears to have a significant impact on natural resources fund performance. When oil prices fell to significantly low levels towards the end of 2015, the PrEQIn Natural Resources Index reflected this with a gradual dip across the same period (Fig. 4). Since 2016, natural resources performance has recovered and improved, during which time oil prices have also strengthened.

There is currently, however, much uncertainty as to how oil prices could evolve in 2018, with experts raising concerns about supply disruptions in a fragile geopolitical environment. If oil prices do indeed fluctuate, natural resources performance may once again suffer. Although lagging behind the PrEQIn Private Capital Index and PrEQIn Private Equity Index by some distance, the PrEQIn Natural Resources Index has consistently outperformed both public S&P indices (Global Oil and Global Natural Resources), which have been more significantly affected by commodity price fluctuation.

Fig. 4: PrEQIn Index: Natural Resources vs. Private Equity, Private Capital and Public Markets (Rebased to 100 as of 31 December 2007)



Source: Preain

There is also more volatility in public markets compared to unlisted markets, as the latter are better able to account for price fluctuations.

While unlisted natural resources performance is directly correlated to oil prices, it is less sensitive to adjustments than public investments. As a result, unlisted funds could be viewed as a safer route for natural resources investors due to the degree of protection from volatility.

BEST PERFORMERS

As at September 2017, nine of the top 10 largest fund managers by estimated dry powder are located in North America (Fig. 5). The largest of these is New York-based Global Infrastructure Partners (GIP), with

an estimated \$12.9bn in dry powder allocated to natural resources. The firm invests in global infrastructure assets in select emerging markets, focusing on energy, transport and water. Global Infrastructure Partners III, managed by GIP, is the largest natural resources fund ever closed, reaching \$16bn in investor commitments at final close in January 2017. Guernsey-based EQT is the only fund manager in the top 10 to be headquartered outside North America, and currently invests in the energy sector, holding approximately \$4.8bn in dry powder.

It is unsurprising to see energy-focused funds accounting for all of the top 10 performing unlisted natural resources funds, having historically dominated the

Fig. 5: Largest Natural Resources Fund Managers by Estimated Dry Powder (As at September 2017)

Firm	Headquarters	Estimated Dry Powder (\$bn)
Global Infrastructure Partners	New York, US	12.9
Brookfield Asset Management	Ontario, Canada	10.1
EnCap Investments	Houston, US	9.9
Quantum Energy Partners	Houston, US	6.1
Riverstone Holdings	New York, US	5.1
EQT	Guernsey, UK	4.8
BlackRock	New Jersey, US	3.7
EIG Global Energy Partners	Washington, US	3.7
l Squared Capital	New York, US	3.0
Blackstone Group	New York, US	3.0

landscape within the asset class (Fig. 6). Eight of the top 10 performing funds are based in North America, while the best performing fund, Aravis Energy I, is managed by Switzerland-based Aravis. The 2009 vintage fund reached a final close on €47mn, €3mn below its €50mn target, and has now reached a net IRR of 448.0%.

OUTLOOK

The continuing fluctuation of commodity prices, namely the price of oil, has directly

affected the performance of unlisted natural resources funds, causing it to lag behind other asset classes in recent times. As market fluctuations have steadied, natural resources performance has reflected this and so the outlook for the industry has improved.

However, with oil prices widely expected to fluctuate once again in the coming months due to an uncertain geopolitical horizon, it remains to be seen how the

natural resources industry will adapt. Yet, the continued growth in AUM for the asset class indicates investors' willingness to commit to natural resources and highlights the industry's suitability for portfolio diversification.

Fig. 6: Top Performing Unlisted Natural Resources Funds (All Vintages)

Fund	Firm	Headquarters	Vintage	Fund Size (mn)	Primary Geographic Focus	Primary Strategy	Net IRR (%)
Aravis Energy I	Aravis	Zurich, Switzerland	2009	47 EUR	Europe	Energy	448.0
Carnelian Energy Capital I	Carnelian Energy Capital	Houston, US	2015	400 USD	US	Energy	331.0
Quantum Energy Partners II	Quantum Energy Partners	Houston, US	2000	225 USD	US	Energy	138.0
WLR Recovery Fund II	WL Ross & Co	New York, US	2002	400 USD	US	Energy	78.8
Arris Petroleum Corporation	Kimmeridge Energy	New York, US	2014	210 USD	US	Energy	76.0
Natural Gas Partners VI	NGP Energy Capital Management	Irving, US	2000	370 USD	US	Energy	73.0
HitecVision Private Equity III	HitecVision	Stavanger, Norway	2002	690 NOK	Europe	Energy	72.0
Enervest Energy Institutional Fund IX	EnerVest	Houston, US	2001	239 USD	US	Energy	69.0
EnCap Energy Capital Fund IV	EnCap Investments	Houston, US	2002	525 USD	US	Energy	67.1
Japan Solar Fund	Equis	Singapore	2014	720 USD	Asia	Energy	64.6

Source: Preain

IDENTIFY TOP PERFORMING NATURAL RESOURCES FUND MANAGERS

Preqin's online natural resources platform can be used to identify fund managers with consistently high performance, using Preqin's quartile ranking system. Preqin currently tracks over 1,000 natural resources fund managers with over 600 performance track records. Top performing managers can be filtered according to vintage, geographic fund focus and strategy.

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FUNDS

FUNDS OPEN TO INVESTMENT

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FUNDS WITH PERFORMANCE

DEALS & EXITS

33,145

60,782

22,510

16,649

28,469

343,345

PRIVATE EQUITY*

7,284 Active **Private Equity** **HEDGE FUNDS REAL ESTATE**

6.549

Active Real Estate LPs

3.462

INFRASTRUCTURE

Active Infrastructure LPs

PRIVATE DEBT 3,351

Private Debt Investors

RESOURCES 3.411

NATURAL

Active Natural Resources Investors

FUND COVERAGE

INVESTOR

COVERAGE

20,841 Private Equity **Funds**

LPs

26,539 Hedge

Funds

5,497

Active

Hedge Fund

Investors

7,343 PE Real Estate **Funds**

1,343

Infrastructure **Funds**

2,648

Private Debt **Funds**

2,068 Natural Resources

Funds

FIRM COVERAGE

15,149 Private Equity Firms 9,651 Hedge Fund Firms

5,044

PE Real Estate Firms

563

Infrastructure Firms

1,666

Private Debt Firms

1,072

Natural Resources **Firms**

PERFORMANCE COVERAGE

6,170 Private Equity Funds

18,678 Hedge **Funds**

1,873 PE Real

Infrastructure Estate Funds **Funds**

890 Private Debt

582 **Natural Resources**

Funds

FUNDRAISING COVERAGE

DEALS & EXITS

COVERAGE

2,901 Private Equity **Funds**

17,516 Hedge **Funds**

PE Real Estate Funds

Infrastructure **Funds**

368 Private Debt

Funds

Funds

268 Natural Resources **Funds**

BUYOUT

89,018 Buyout Deals and Exits **VENTURE CAPITAL**

161,642 Venture Capital Deals and Exits

REAL ESTATE

55,947 Real Estate Deals

INFRASTRUCTURE

28,224 Infrastructure Deals

PRIVATE DEBT

8,514Private Debt Deals

Alternatives Investment Consultants Coverage:

> 581 Consultants Tracked

Funds Terms Coverage: Analysis Based on Data for Around

> 18,161 **Funds**

Best Contacts: Carefully Selected from our Database of over

> 463,226 Contacts



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- + Dry Powder
- + Fund Administrators
- + Compensation + Plus much more...
- + Law Firms Debt Providers
- THE PREQIN DIFFERENCE
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 - San Francisco, Hong Kong, Manila and Guangzhou
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^{*}Private equity includes buyout, growth, venture capital, turnaround, private equity fund of funds, private equity secondaries, direct secondaries, balanced, hybrid, hybrid fund of funds, PIPE, co-investment and co-investment multi-

INDUSTRY NEWS

In this month's Industry News, we take a look at Europe-focused infrastructure funds closed so far in 2018, Europe-focused infrastructure funds in market and recent European infrastructure deals.

EUROPE-FOCUSED INFRASTRUCTURE FUNDS CLOSED IN 2018

So far in 2018, nine Europe-focused unlisted infrastructure funds have reached a final close securing \$21bn in aggregate capital.

Infracapital Partners III held a final close in May, securing £1.9bn in investor commitments. Managed by UK-based Infracapital, the fund will invest in a diverse portfolio of core infrastructure assets in the UK and Europe across the utilities, transportation, renewables and communications sectors.

Netherlands-based DIF held a final close for DIF Infrastructure V in May on €1.9bn, having exceeded its initial target of €1.5bn. The fund will target renewable energy and PPP projects within the EU member states.

3i European Operational Projects Fund, managed by UK-based 3i Infrastructure, held a final close on €456mn in April. The fund invests in operational social infrastructure and transportation PPP projects across Europe.

EUROPE-FOCUSED INFRASTRUCTURE FUNDS IN MARKET

There are currently 84 Europe-focused unlisted infrastructure funds in market, seeking an aggregate \$43bn in investor capital.

Fondi Italiani Per Le Infrastrutture

III, managed by Milan-based F2i SGR, is seeking €3bn for infrastructure opportunities in Italy across all project stages. However, a maximum of 20% of the fund can be invested elsewhere in continental Europe on a deal-by-deal basis.

France-based Mirova is seeking €1bn in investor commitments for Mirova

Core Infrastructure Fund II. Like its predecessor, it will predominantly target brownfield infrastructure projects across Europe, but will not exclude greenfield

from consideration. It will focus on transportation, broadband networks and a range of social infrastructure.

Cube Infrastructure Fund II is targeting €1.2bn in investor commitments. Managed by Luxembourg-based Cube Infrastructure Managers, the fund is predominantly focused on Europe where investments will likely contribute to the shift towards a low-carbon economy and provide social benefits to local communities.

RECENT EUROPEAN DEALS

2018 has so far seen 289 infrastructure deals completed in Europe, with aggregate deal value totalling \$36bn.

In May 2018, Antin Infrastructure Partners, through its vehicle Antin Infrastructure Partners III, acquired Madrid-based fibre optic telecoms service provider Ufinet Spain from Cinven for €2bn.

Italy-based holding company Atlantia acquired a 15.5% stake in Getlink (previously Groupe Eurotunnel), the holding company for the Channel Tunnel, from Goldman Sachs in March 2018. The deal was worth €1.1bn.

INVESTORS TARGETING EUROPEAN OPPORTUNITIES

There are currently 1,262 investors targeting infrastructure investment opportunities within Europe.

W&W Asset Management will commit €15-200mn to 4-6 unlisted Europe-focused debt/mezzanine infrastructure funds over the next 12 months. The German asset manager has no strict industry preferences and will consider investing with a mix of both new and existing managers in its portfolio.

Access Capital Partners seeks to invest at least €150mn in unlisted infrastructure funds. The French private equity fund of funds manager will target a broad range of industry sectors focused on Europe.

KEY FACTS



\$43bn

Aggregate capital targeted by the 84 Europe-focused unlisted infrastructure funds currently in market.



39%

of Europe-focused unlisted infrastructure funds in market are primarily focused on renewable energy.



\$6.7bn

Size of the largest European infrastructure deal completed in 2018 so far, the purchase of TDC Group.

SHARE YOUR NEWS

Do you have any news you would like to share with the readers of Spotlight? Perhaps you're about to launch a new fund, have implemented a new investment strategy, or are considering investments beyond your usual geographic focus?

Send your updates to spotlight@preqin.com and we will endeavour to publish them in the nex issue.

INFRASTRUCTURE MEGA FUNDS

With increasing capital concentration within the alternative assets industry, the average size of funds reaching a final close has grown every year and large and mega funds* continue to dominate the infrastructure landscape.

Fig. 1: Large- and Mega-Sized* Infrastructure Fundraising as a Proportion of All Unlisted Infrastructure Fundraising, 2008 - 2018 YTD (As at May 2018)*

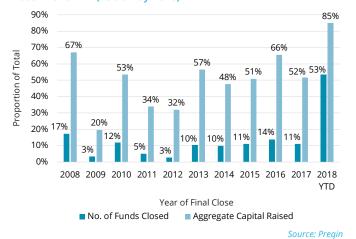
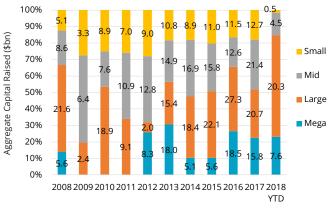


Fig. 2: Aggregate Capital Raised by Unlisted Infrastructure Funds by Fund Size*, 2008 - 2018 YTD (As at May 2018)



Year of Final Close

Source: Preqin

Fig. 3: Largest Unlisted Infrastructure Funds Closed, 2017 - 2018 YTD (As at May 2018)

Fund	Firm	Headquarters	Fund Size (mn)	Primary Geographic Focus	Final Close Date
Global Infrastructure Partners III	Global Infrastructure Partners	US	15,800 USD	US	Jan-17
BlackRock Infrastructure Debt - Aggregated Separate Accounts	BlackRock	US	7,571 USD	Europe	Mar-18
Copenhagen Infrastructure III	Copenhagen Infrastructure Partners	Denmark	4,318 EUR	Europe	Mar-18
EQT Infrastructure III	EQT	UK	4,232 EUR	Europe	Feb-17
Macquarie Asia Infrastructure Fund II	Macquarie Infrastructure and Real Assets (MIRA)	UK	3,300 USD	Asia	Apr-18

Source: Preqin

Fig. 4: Largest Unlisted Infrastructure Funds in Market (As at May 2018)

Fund	Firm	Headquarters	Target Size (mn)	Primary Geographic Focus
KKR Global Infrastructure Investors III	KKR	US	7,000 USD	US
Alinda Infrastructure Fund III	Alinda Capital Partners	US	5,000 USD	US
ISQ Global Infrastructure Fund II	l Squared Capital	US	5,000 USD	US
Macquarie Infrastructure Partners IV Macquarie Infrastructure an Assets (MIRA)		UK	5,000 USD	US
Fondi Italiani Per Le Infrastrutture III	F2i SGR	Italy	3,000 EUR	Europe

^{*}Fund size categories: Vintage 1992 - 1996: Small < \$200mn, Mid \$201-500mn, Large > \$500mn Vintage 1997 - 2004: Small < \$300mn, Mid \$301-750mn, Large \$751mn - \$2bn, Mega > \$2bn Vintage 2005 - 2017: Small < \$500mn, Mid \$501-1,500mn, Large \$1,501mn - \$4.5bn, Mega > \$4.5bn.

NATURAL RESOURCES IN THE SOUTHWEST US

Using Preqin's online platform, we examine the natural resources industry in the Southwest US, looking at historical fundraising, funds in market and investors based in the area.



55%

of Southwest US-based natural resources funds are managed by firms headquartered in Texas.



\$762mn

Average target size of Southwest US-based natural resources funds in market (as at May 2018).



94%

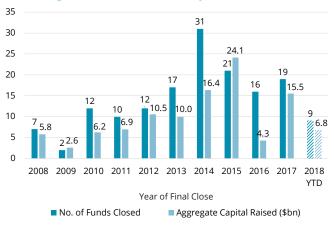
of natural resources funds closed by Southwest US-based managers have an allocation to non-renewable energy.



36

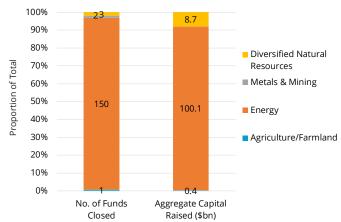
natural resources funds currently on the road are being raised by Southwest US-based managers.

Fig. 1: Annual Southwest US-Based Unlisted Natural Resources Fundraising, 2008 - 2018 YTD (As at May 2018)



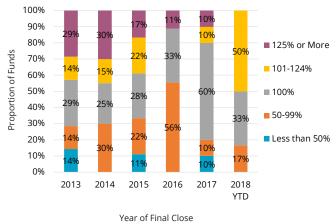
Source: Pregin

Fig. 2: Southwest US-Based Natural Resources Fundraising by Primary Strategy, 2008 - 2018 YTD (As at May 2018)



Source: Pregin

Fig. 3: Southwest US-Based Unlisted Natural Resources Funds Closed by Proportion of Target Size Achieved, 2013 - 2018 YTD (As at May 2018)



Source: Preqin

Fig. 4: Southwest US-Based Unlisted Natural Resources Funds in Market by Target Size (As at May 2018)

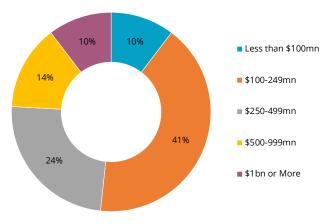


Fig. 5: Largest Southwest US-Based Unlisted Natural Resources Funds Closed, 2017 - 2018 YTD (As at May 2018)

Fund	Firm	Headquarters	Fund Size (bn)	Geographic Focus	Final Close Date
EnCap Energy Capital Fund XI	EnCap Investments	Houston, TX	7.0 USD	US	Nov-17
EnCap Flatrock Midstream Fund IV	EnCap Investments	Houston, TX	3.3 USD	US	Jan-18
Energy & Minerals Group Fund IV	Energy & Minerals Group	Houston, TX	2.4 USD	US	Jun-17
First Infrastructure Capital	First Infrastructure Capital Advisors	Houston, TX	1.0 USD	US	Sep-17
SCF Fund IX	SCF Partners	Houston, TX	0.8 USD	US	Apr-18

Source: Pregin

Fig. 6: Largest Southwest US-Based Unlisted Natural Resources Funds in Market (As at May 2018)

und Firm		Headquarters	Target Size (bn)	Geographic Focus
NGP Natural Resources XII	NGP Energy Capital Management	Irving, TX	5.3 USD	US
Quantum Energy Partners VII	Quantum Energy Partners	Houston, TX	4.5 USD	US
Warwick Partners IV	Warwick Energy Group	Oklahoma City, OK	1.0 USD	US
Tailwater Energy Fund III	Tailwater Capital	Dallas, TX	0.8 USD	US
Tillridge Global Agribusiness Partners II	Tillridge Global Agribusiness Partners	Irving, TX	0.8 USD	US

Source: Preqin

Fig. 7: Southwest US-Based Natural Resources Investors by Type

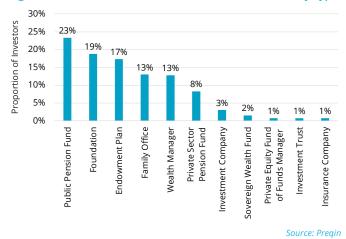
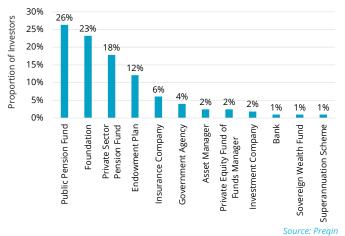


Fig. 8: Natural Resources Investors with a Preference for Southwest US by Type



LOOKING FOR MORE DATA ON SOUTHWEST US NATURAL RESOURCES?

Preqin's online platform has helped thousands of natural resources professionals raise capital and identify investment opportunities.

Constantly updated by a team of dedicated analysts, this comprehensive resource provides the most up-to-date information on the industry, including 227 natural resources funds based in the Southwest US and 331 investors with a preference for investing in the Southwest US.

For more information about how Preqin's data can help you, please visit:

www.preqin.com/naturalresources

CONFERENCES

JULY 2018

Conference	Dates	Location	Organizer	Preqin Speaker	Discount Code
Family Office & Private Wealth Management Forum	16 - 18 July 2018	Newport, RI	Opal Financial Group	-	-

SEPTEMBER 2018 -

Conference	Dates	Location	Organizer	Preqin Speaker	Discount Code
FundForum Asia 2018	3 - 5 September 2018	Hong Kong	KNect365	ТВС	10% Discount - FKN2544PQL
Total Alts	6 - 7 September 2018	San Francisco, CA	IMN	-	15% Discount - PQ15
Preqin Breakfast Seminar – Future of Alternatives - London	12 September 2018	London	Preqin	-	-
Emerging Managers Summit	12 - 13 September 2018	New York, NY	Opal Financial Group	-	-
SuperReturn Asia	17 - 20 September 2018	Hong Kong	KNect365	Patrick Adefuye	10% Discount - FKR2449PRQ
SuperReturn Infrastructure	17 - 19 September 2018	London	KNect365	-	10% Discount - FKR2459PRQ
Finovate Fall	24 - 26 September 2018	New York, NY	KNect365	-	20% Discount - FKV2343PQT
Brazil Breakfast in association with LAVCA's Annual Summit and Investor Roundtable	25 September 2018	New York, NY	ABVCAP	-	-

OCTOBER 2018

Conference	Dates	Location	Organizer	Preqin Speaker	Discount Code
GAI Asia	2 - 3 October 2018	Tokyo	HighQuest Group	TBC	-
Local Government Pension Investment Forum	3 October 2018	London	KNect365	-	-
IVCA - Agri Investment Leadership Summit	11 October 2018	Mumbai	IVCA	-	-
Private Wealth Management Summit - APAC	22 - 24 October 2018	Macao	marcus evans Summits	-	-
Family Office & Private Wealth Forum – West	24 - 26 October 2018	Napa, CA	Opal Financial Group	-	-
Finovate Asia	29 - 30 October 2018	Hong Kong	KNect365	-	-

NOVEMBER 2018 -

Conference	Dates	Location	Organizer	Preqin Speaker	Discount Code
FundForum Middle East & Africa 2018	4 - 5 November 2018	Dubai	KNect365	-	10% Discount - FKN2548PQL
Elite Summit	5 - 7 November 2018	Montreux	marcus evans Summits	-	-
Endowment & Foundation Forum	13 - 14 November 2018	Boston, MA	Opal Financial Group	-	-
thebell Private Markets Investment Forum	20 November 2018	Seoul	thebell	Ee Fai Kam	-