

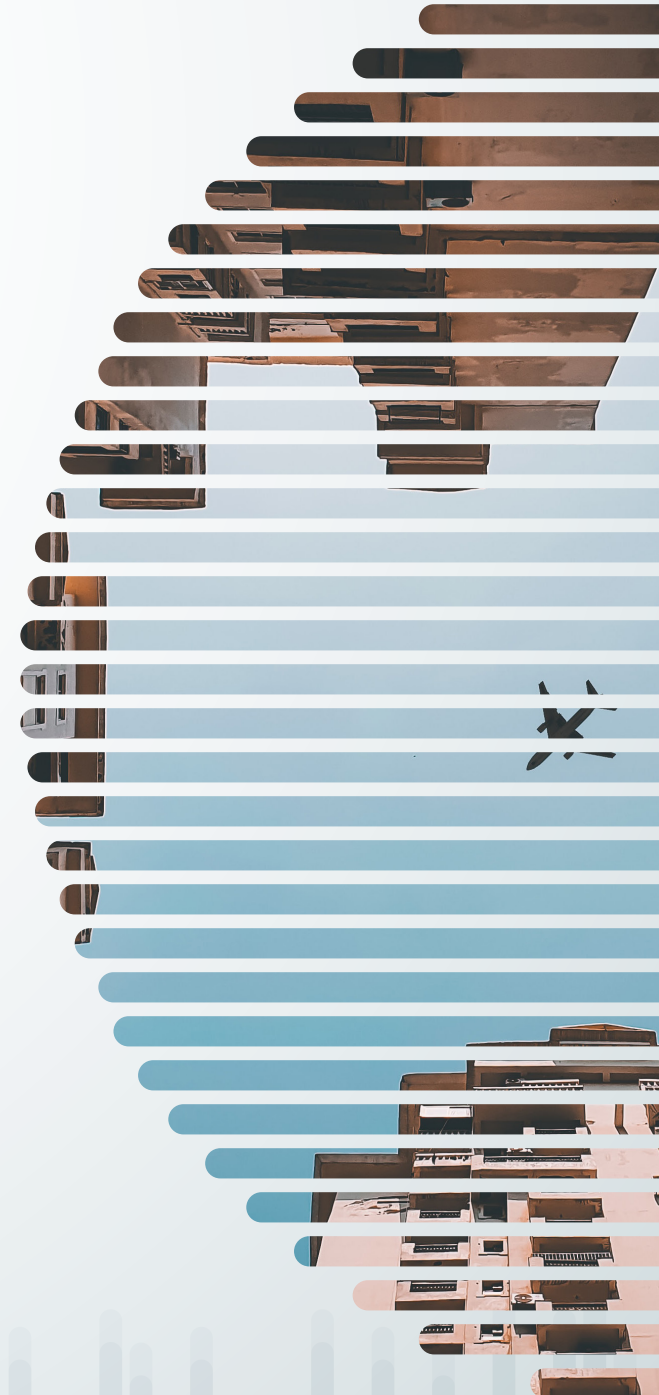
Private capital availability



PRIVATE CAPITAL AVAILABILITY

Key findings

- Although 2022 was a positive year for the infrastructure sector with capital raised by funds reaching a record high, there was a notable downward shift in 2023, reflecting the dynamic nature of the private capital landscape and its sensitivity to economic conditions and global events.
- In 2022, for only the second time in a decade, infrastructure capital investment materially outpaced the infrastructure capital raised.
- Most of the private infrastructure capital raised and invested by funds has been concentrated in North America and Europe.
- Renewable energy was the most popular sector, accounting for 16% of the private infrastructure capital raised in 2022.
- Capital within the renewable sector mainly targets low-risk investment opportunities, which are often classified as secondary or brownfield investments rather than greenfield investments.
- 70% of the private capital raised by funds for infrastructure investment targets lower-risk strategies.
- 2023 saw a substantial decline in capital raised for infrastructure investments.
- Dry powder decreased in 2023, mainly due to the record low level of funds raised and the recent surge in funds invested.
- In 2023, North America led the decrease in dry powder.
- In other regions, dry powder increased in the first half of 2023, reflecting persistently low levels of private capital mobilisation and investment.

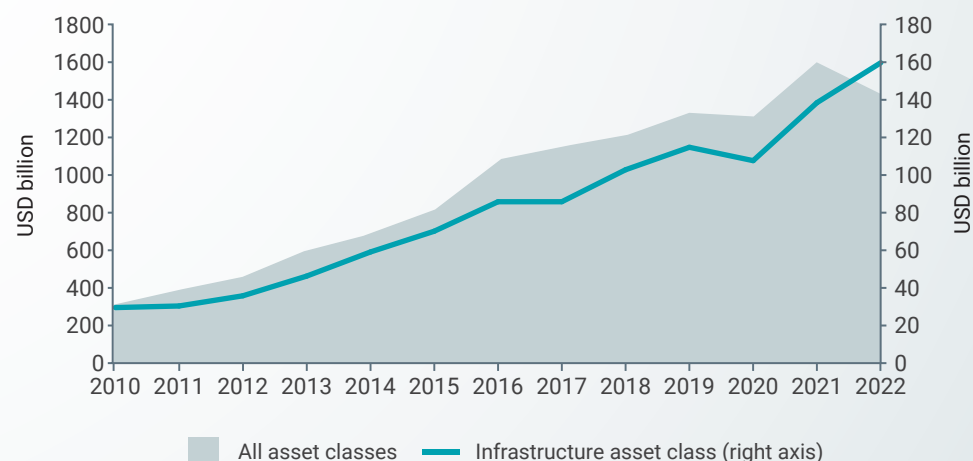


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Although 2022 was a positive year for the infrastructure sector with capital raised by funds reaching a record high, there was a notable downward shift in 2023, reflecting the dynamic nature of the private capital landscape and its sensitivity to economic conditions and global events.

- Prior to the COVID-19 pandemic, private capital raised by funds for all asset classes showed consistent growth, before falling in 2020 and recovering in 2021. The inflation crisis in 2022 led to another fall across all asset classes.
- In line with this, private capital raised by funds for infrastructure experienced consistent growth before the COVID-19 pandemic. There was a temporary decline in 2020 with a strong recovery in 2021 – not only fully recovering from the previous drop but reaching a record level (USD144 billion).
- However, in 2022, in contrast to the amount of private capital raised by funds for all other asset classes, funds raised for infrastructure increased sharply to a record level (USD166 billion). During this period of elevated inflation, infrastructure investments may have been attractive as a means of protection.
- Infrastructure accounted for around 8% of the total funds raised in the decade preceding 2021. This share grew to 11% in 2022, during a period where multiple economic shocks – rising inflation, geopolitical tensions, and a global energy crisis – increased investors' risk aversion and preference for infrastructure as a low-risk asset class. The boost in private capital allocation to infrastructure may also be due to investor efforts and government plans to invest in sustainable infrastructure, especially in developed economies.
- Whilst sharp interest rate hikes have increased returns on private debt in 2023, private debt is the only main asset class from which most private investors expect to earn higher returns in 2024 and to which they intend to increase long-term allocations. Core infrastructure is the other popular target among private investors due to the inflation-indexation and stability of its cash flows. For all other asset classes, rising interest rates, asset valuations, and commodity price volatility are the main challenges impeding positive return expectations for next year. (Preqin, 2023d).

Annual private infrastructure capital raised by funds
(USD billion, 2010-2022)



Source: Preqin data as of 13 October 2023.

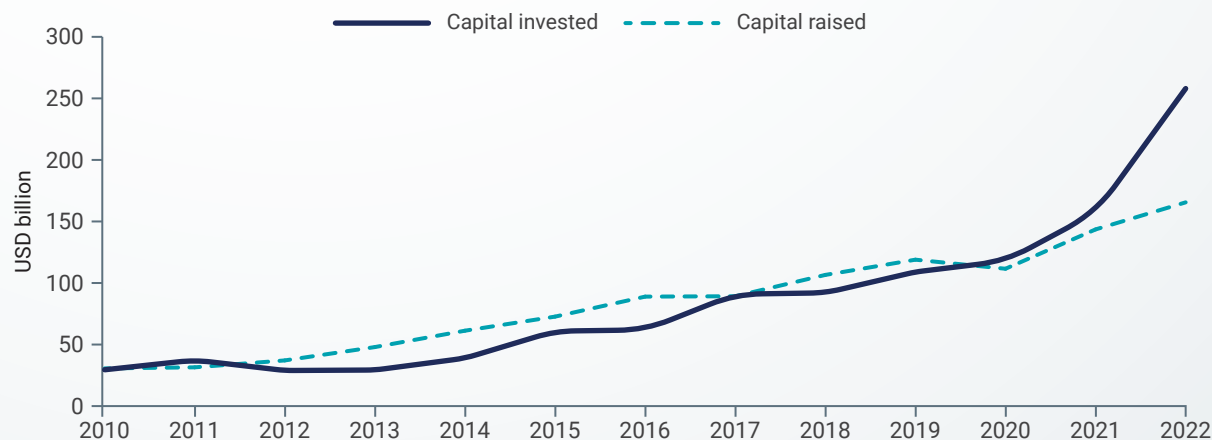
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In 2022, for only the second time in a decade, infrastructure capital investment materially outpaced the infrastructure capital raised.

- Over the last 10 years, the annual private capital raised for infrastructure generally outpaced the private capital that was invested in infrastructure (except in 2017).
- In 2022, for the first time, the private infrastructure capital that was invested by funds grew significantly and outpaced the growth in private infrastructure capital that was raised by funds. Funds raised grew significantly in 2022 (15%), but the funds invested grew by 64%.
- The positive trend in investment shows that although infrastructure is one of the top choices for hedging inflation risks, there was also an unprecedented shift within infrastructure markets – suggesting that there were many new investment opportunities available that year.

Annual private infrastructure capital raised and invested by funds

(USD billion, 2010–2022)



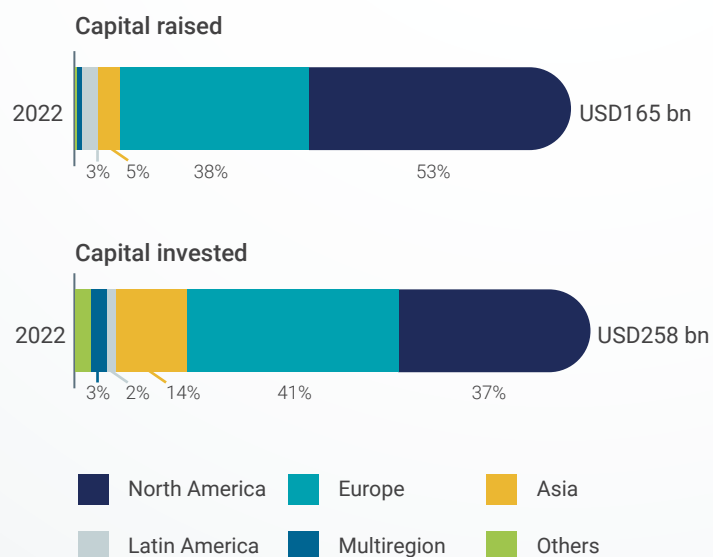
Source: Preqin data as of 13 October 2023.

Note: Capital invested is measured by the annual capital called by the fund manager for investment in the infrastructure asset class.

PRIVATE CAPITAL AVAILABILITY

Most of the private infrastructure capital raised and invested by funds has been concentrated in North America and Europe.

Private infrastructure capital raised and invested by funds by region in 2022
(% of total)



Source: Preqin data as of 13 October 2023.

- Historically, North America and Europe account for most of the private infrastructure capital raised and invested by funds.
- The capital raised has increased over time, and in 2022, was mostly from North America (53%), followed by Europe (38%).
- The amount of private infrastructure capital invested more than doubled after the COVID-19 pandemic, and in 2022, was mostly from Europe (41%) and North America (37%).
- North America and Europe are concentrating more opportunities and less risk compared to emerging markets and developing economies (EMDEs), where the challenges from recovering from the COVID-19 pandemic persist and economic shocks are hitting harder. The levels of capital raised and invested in EMDEs have not shown a significant change compared to pre-pandemic levels.
- In 2022, Europe took the lead and raised USD106 billion, almost tripling its pre-pandemic level of USD39 billion. This may be associated with the opportunities raised by post-pandemic recovery plans and strong commitments to the climate transition, which also generated a robust pipeline of infrastructure investment opportunities, particularly in renewable energy assets.
- In 2022, North America caught up, increasing funds raised to USD96 billion, more than double its pre-pandemic level of USD46 billion. This boost may have been intensified by recent US government announcements, such as the *Infrastructure Investment and Jobs Act (2021)* and the *Inflation Reduction Act (2022)*, both of which opened up investment opportunities for the substantial pool of North American capital.
- In a recent study, 80% of private investors listed the United States as a preferred market for infrastructure investment, whilst 50% listed Western Europe as a preferred market (Preqin 2023c).

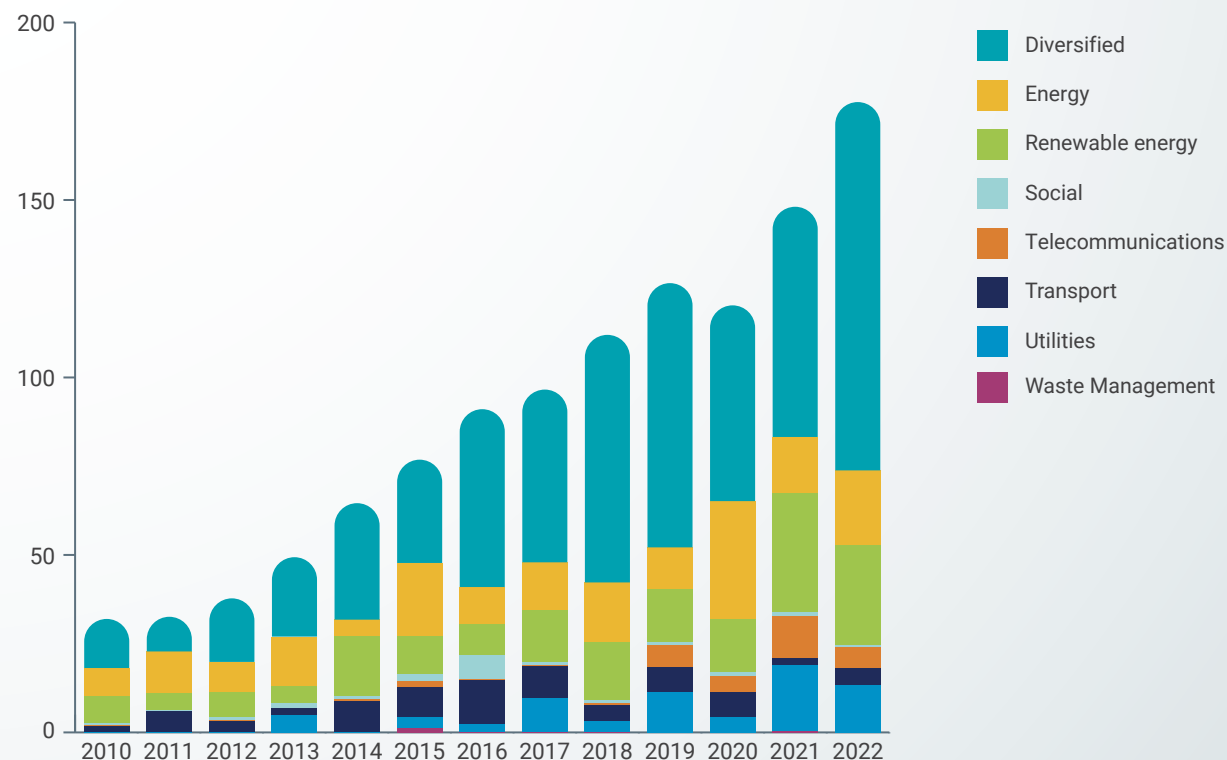
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Renewable energy was the most popular sector, accounting for 16% of the private infrastructure capital raised in 2022.

- Historically, most of the private capital invested by funds in the infrastructure asset class is diversified across a mix of infrastructure sectors.
- Diversification is a key reason cited by investors for allocating funds toward infrastructure.
- Other than the need to diversify, the availability of a pipeline of operational infrastructure assets with no or low construction risk, and the potential return, dictate which infrastructure sectors fund managers decide to invest in.
- In 2022, renewable energy was the most popular sector, with 16% of the capital targeting this sector. The popularity of renewable energy has increased over time, with private capital raised by funds for this sector nearly doubling from USD15 billion in 2019 to USD28 billion in 2022. Optimistic expectations of the future of the renewable energy sector and the stable revenues of utilities have encouraged investors to prioritise these sectors during inflationary conditions.
- As the energy transition matures, the renewable energy sector is expected to continue its evolution from a niche sector to a mature sector targeted by mega funds.

Private infrastructure capital raised by funds, by sector

(USD billion, 2010–2022)



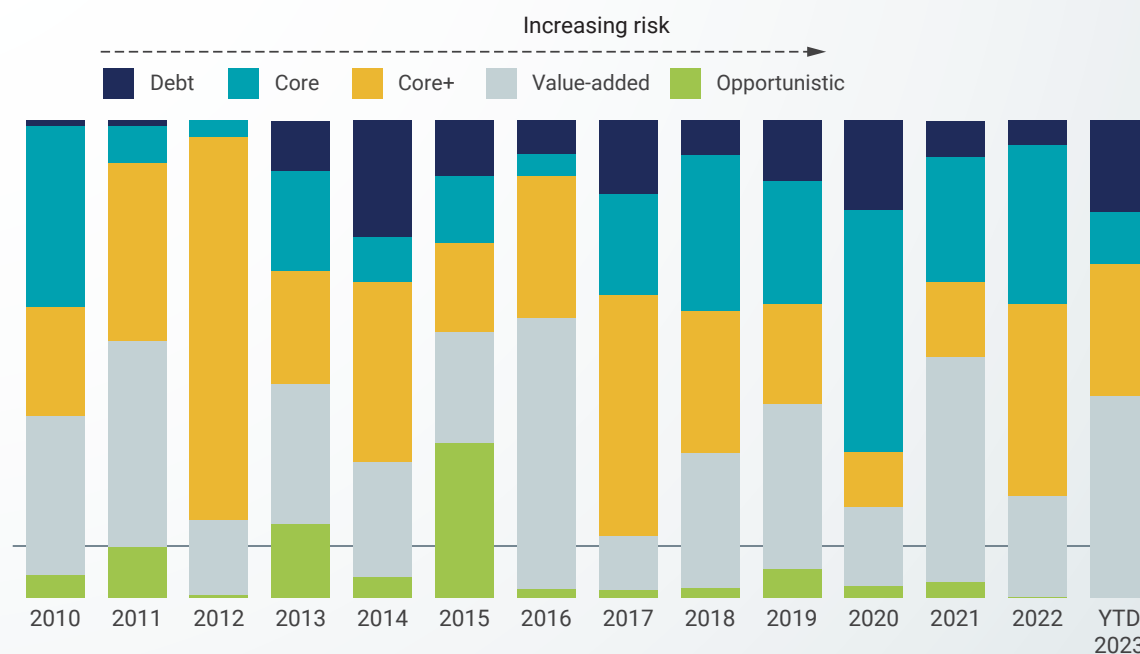
Source: Preqin data as of 9 October 2023.

PRIVATE CAPITAL AVAILABILITY

The capital raised within the renewable sector mainly targets low-risk investment opportunities, which are backed by business models with low demand and/or price risk.

- The renewable energy sector has shown remarkable and constant growth in fundraising during recent years.
- On average, from 2010 to 2023 (YTD), 82% of the annual private infrastructure capital raised by funds for renewables targeted debt, core, and core+ as investment strategies, which typically aim to invest in business models with low demand and/or price risk.
- From 2019 to 2023 (YTD), the average share of total investment driven by the value-added investment strategy remained low. This strategy typically seeks opportunities featuring enhancements to existing assets and business models with low demand and price risk. In 2023 however, the value-added strategy featured more prominently for renewable energy (increasing to 42% YTD).

Renewable energy: private infrastructure capital raised by funds, shares by investment strategy
(%, 2010–2023)



Source: Preqin data as of 9 October 2023.

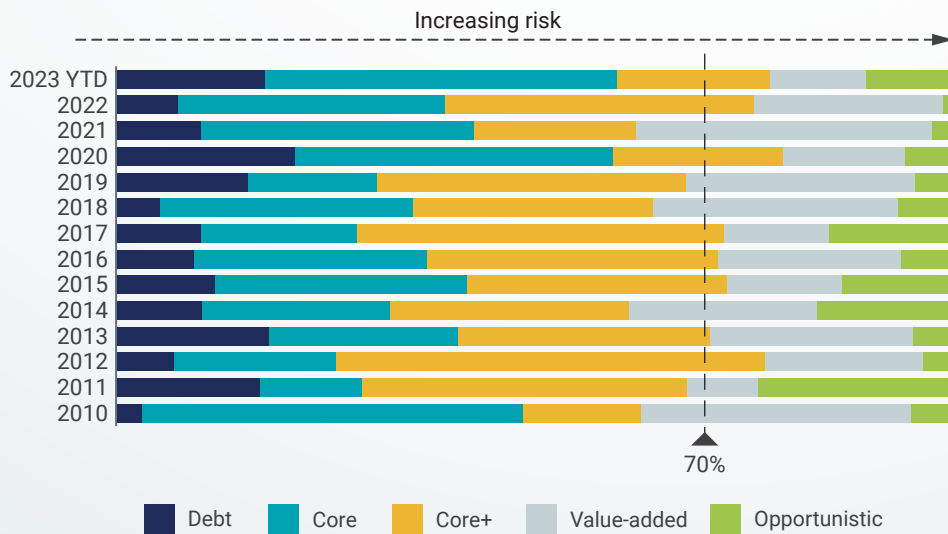
Note: Funds can be mapped to five infrastructure investment strategies according to their risk appetite. See the Glossary for a detailed definition of each strategy.

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70% of the private capital raised by funds for infrastructure investment targets lower-risk strategies.

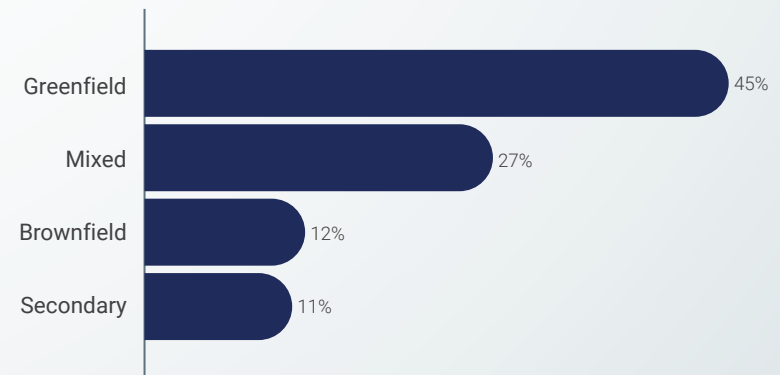
- From 2010 to 2022, on average, 70% of the private infrastructure capital raised by funds was invested according to core (26%) and core+ (32%) investment strategies, reflecting a preference for low-risk assets.
- On average, funds targeting secondary projects had the lowest share of dry powder (11%), while greenfield projects had the highest share (45%).
- The value-added investment strategy focuses on infrastructure assets that actively pursue enhancements to boost usage or demand. This is the third most popular investment strategy and is followed by 21% of funds. Funds that apply this strategy typically target brownfield projects which, on average, have the second lowest share of dry powder (12%).
- Although private investors remain mostly equity providers to funds, providing lending facilities is a strategy that features in 11% of private capital raised.
- The least popular strategy among funds is the opportunistic infrastructure investment strategy, which focuses on the potential future growth in asset value and not on recurrent cash flows. This strategy is only followed by 9% of funds.

Private infrastructure capital raised by investment strategy
(% of capital raised, 2010–2022)



Source: Preqin data as of 13 October 2023.

Dry powder by type of investment
(% of cumulative private infrastructure capital)



Source: Preqin data as of 5 July 2023.

Note: Mixed covers funds investing in more than one project stage.

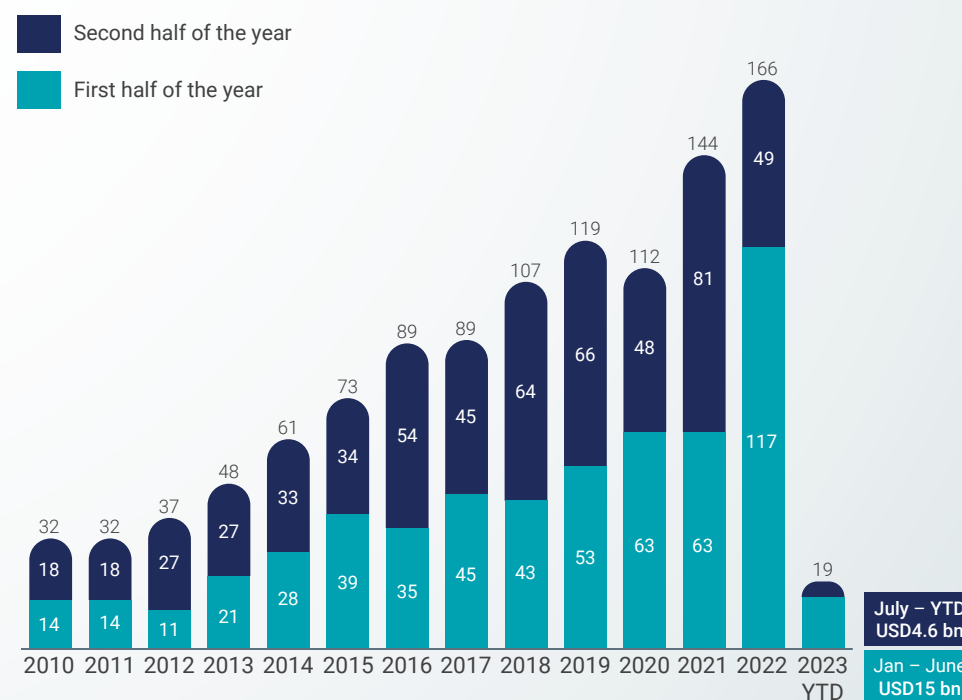
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2023 saw a substantial decline in capital raised for infrastructure investments.

- In 2023, the fundraising environment for private infrastructure capital has been more challenging than at any other point over the past decade. Funds raised in the first half of 2023 reached only USD15 billion, considerably less (-87%) than the level raised in the first half of 2022. Not only was the strong growth from previous years reversed in 2023, but the level of capital raised was the lowest in a decade.
- This sharp decline is a reversal of the record growth that was seen in 2021 and 2022, and potentially due to the deteriorating financial and macroeconomic environment. Much of 2022's infrastructure fundraising success can be attributed to decisions that were made before the current market turmoil. Hopes are fading that increases in inflation and interest rates are transitory, and this is putting downward pressure on asset valuations. The proportion of investors that cite interest rates as a key challenge for return generation increased from 12% in 2020 to 56% in 2022 (Preqin 2023a), and this is reflected in the 2023 data.
- In addition to economic conditions and their impact on asset valuations, there are other key challenges. Limited Partners (LPs) are approaching, have reached, or have exceeded their infrastructure allocation targets, and face competition for assets, an unfavourable geopolitical landscape, and regulatory restrictions (Preqin 2023c). Political risks, such as government pressure to lower the prices charged for infrastructure services are also higher during inflationary periods, e.g. some countries introduced energy price caps in 2023 due to an affordability crisis.
- In more positive news, 58% of investors expect to increase their capital allocations to the infrastructure asset class in the longer term (Preqin 2023c). However, this will depend on the macroeconomic trajectory. So long as inflation remains high and monetary policy continues to tighten, investors are likely to remain cautious or hesitant to invest.

Private infrastructure capital raised by funds

(USD billion, 2010–2023)



Source: Preqin data as of 13 October 2023.

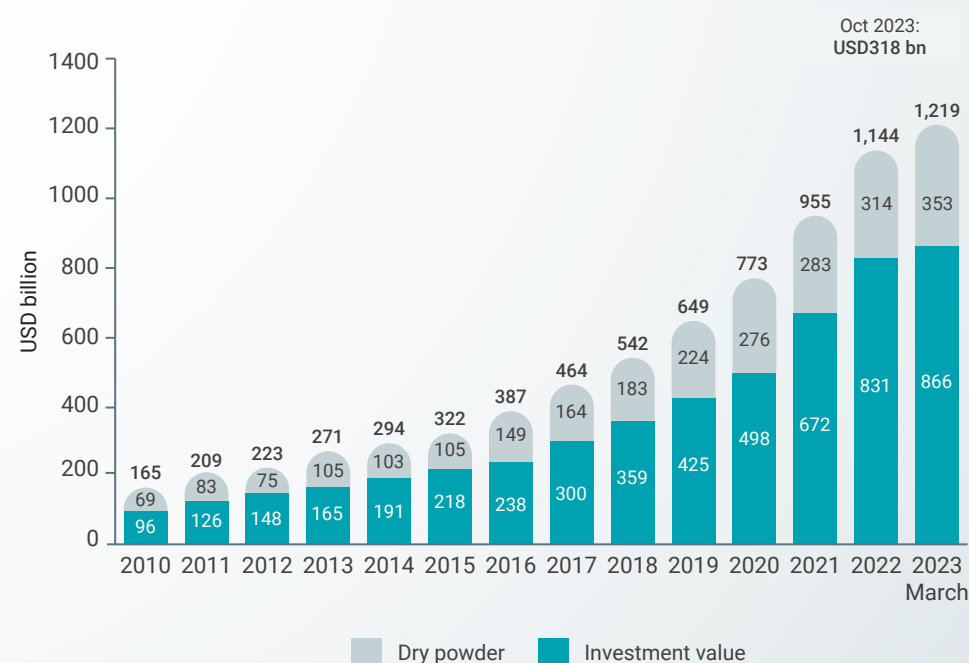
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Dry powder decreased in 2023, mainly due to the record low level of funds raised and the recent surge in funds invested.

- From 2010 to 2022, the cumulative total value of private infrastructure capital increased sevenfold from USD165 billion to USD1,144 billion.
- Since 2010, the investment value component has grown ninefold, and since 2019, it has nearly doubled.
- The dry powder component also increased consistently from 2010 to 2022, due to the faster rate of capital raised compared to the rate of capital invested during the previous decade.
- As capital invested outpaced capital raised in 2021 and 2022, the investment value component increased from 65% in 2019 to 73% in 2022, while the dry powder component decreased from 35% in 2019 to 27% in 2022. This suggests a new array of available investment opportunities – also seen in transaction trends.
- Dry powder decreased in 2023 from USD353 billion at the start of the year to USD318 billion as of October 2023. This can be attributed to the reduced availability of funds, mainly due to the record low levels of funds raised in 2023, and the recent surge in funds invested. This has resulted in increased overall deployment while simultaneously diminishing dry powder.

Cumulative private infrastructure capital by component

(USD billion, 2010–2023)



Source: Preqin data as of 13 October 2023.

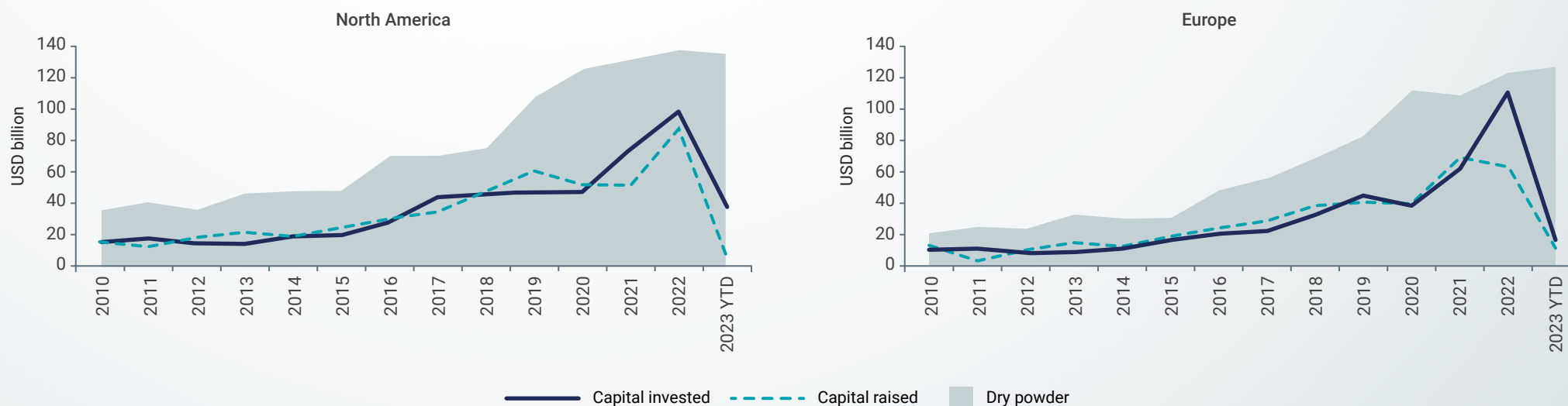
Note: Capital committed is the sum of unallocated capital and portfolio returns, minus any disbursements to investors.

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In 2023, North America led the decrease in dry powder.

- The global decline in dry powder in 2023 was mainly led by the decline in dry powder of funds targeting North America.
- In North America, the decline in annual capital raised by funds from USD87.5 billion in 2022 to USD5.5 billion as of October 2023 was much sharper than the decline in annual capital invested (USD98.1 billion in 2022 to USD36.9 billion as of March 2023). This was driven by the extraordinary overall market growth in 2022 and by an investment momentum that was stronger than the fundraising momentum.
- While large investment opportunities (such as airports) and recent US infrastructure stimulus have strengthened the investment momentum, the fundraising momentum is being negatively affected by the deteriorating macroeconomic environment, especially sharp interest rate hikes.
- In Europe, the annual private infrastructure capital investments by funds doubled every year during the COVID-19 pandemic from USD38.4 billion in 2019 to USD111 billion in 2022, driven by a heavy emphasis on accelerating the clean energy transition. In 2023, due to deteriorating macroeconomic and geopolitical conditions, Europe suffered a sharp fall in capital raised and in capital invested.

Annual private infrastructure capital raised and invested by funds, and cumulative dry powder, by region, 2010–2023



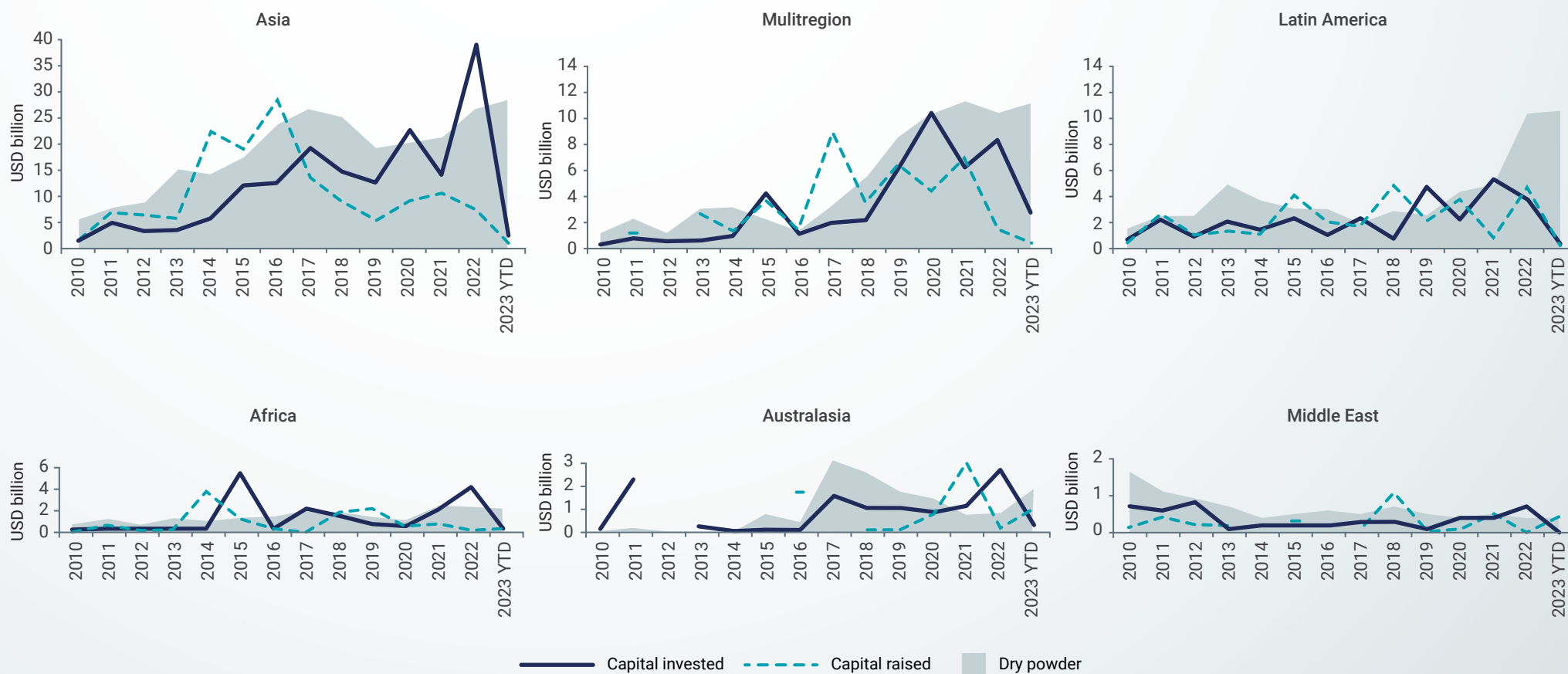
Source: Preqin data as of 13 October 2023 for annual capital raised and dry powder, as of March 2023 for annual capital invested.

Note: The gaps in the charts represent regions and years for which data is currently unavailable.

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In other regions, dry powder increased in the first half of 2023, reflecting persistently low levels of private capital mobilisation and investment.

Annual private infrastructure capital raised and invested by funds, and cumulative dry powder, by region, 2010–2023



Source: Preqin data as of 13 October 2023 for annual capital raised and dry powder, as of March 2023 for annual capital invested.

Note: The gaps in the charts represent regions and years for which data is currently unavailable.