



UBS Asset Management

Infrastructure inflow resurgence as grid-scale batteries help diversify revenue stacks

In an uncertain economic climate, infrastructure is holding its own. **Alex Murray**, Infrastructure Research & Strategy Lead for the Unified Global Alternatives business at UBS in London, discusses what recent fundraising numbers mean and some new opportunities for investors, as well as the difference between risk and uncertainty.

Recent reports are suggesting that infrastructure fundraising is picking up. Are you also seeing that?

We did see improvements in first-quarter final closings. You must be careful about drawing conclusions based on one quarter though. Funds take many quarters, maybe a year or two, to reach final close. When you attribute all of that capital raised to one quarter, it skews the numbers in terms of when LPs' commitments were made. We conventionally look at the numbers based on final close, but you have to always bear in mind that they have had first, second and third closes over the past year or so. With all this in mind, the pickup in the pace of fundraising has revealed a tilting toward Europe-focused funds. Even before the end of the first half of 2025, capital raised is tracking at about 77 percent of the 2024 total.

Is infrastructure fundraising out of the woods then?

We're certainly seeing improvement, though we're not back to normal yet. One of the metrics I started using to illustrate the impact of slower infrastructure fundraising in 2023 was to divide the capital targeted by funds in the market raising capital, by the flow of capital raised over the previous 12 months. This gives us an idea of how long it will take for the market to clear, if that pace of fundraising were to continue. Historically, that ratio has hovered at one and a half to two years. That jumped to about nine years by the end of 3Q23. This was because not only had fundraising been so slow over those preceding 12 months, but also the stock of funds "on the road" had risen so dramatically – a figurative traffic jam, if you will. Thankfully, that metric has come back down, but it is still a lot higher than its long-term average. It is closer to four years now. This still means that some funds will remain in the market longer than they anticipate, and they might not reach their targets as consistently as they had in the past.

When funds aren't raising capital, then deals aren't getting done. How do you value an asset with limited deal flow?

In a way, it can be easier to value an infrastructure asset than a real estate asset because of the contracts that underpin the revenues. A real estate lease might run three to five years and rarely more than 10. In contrast, infrastructure often involves corporate power purchase agreements that last 15 to 25 years. That means that the cash flows that support the infrastructure valuation are much more stable, much more long-term, and you can model them more precisely. For this reason, as well as the higher barriers to entry in many businesses, infrastructure deals rely less on comparable transactions to get done. This is unlike in real estate, where information about recently traded comparable assets is more important for price discovery. Because many infrastructure assets are contracted, they're less risky. Because they're less risky, and

because you can credibly rely on those numbers 10 to 15 years into the future, you can effectively sculpt the structure of the business within a very complex financial model.

Does the increase in fundraising foretell an increase in deals?

Possibly, but it is not a straight line. Last year in 2024, we started with about \$400 billion of dry powder in the asset class. So there has been plenty of capital on the sidelines to do the deals regardless of slower fundraising. If you compare the private infrastructure deals market with what has been evident in real estate, infrastructure deals have been very resilient. We saw a fallback in 2023 – not at all surprising given the pace of interest rate hikes. That's important because, coming back to my previous point about the stability of the cash flows, being able to contract a lot of the costs and revenues allows infrastructure businesses to take on higher levels of gearing than you find in real estate or private equity. Considering this, I would have expected higher interest rates to have more of an impact on infrastructure deals than they actually have had. Fortunately, the broader macroeconomic demand for the services provided by infrastructure assets has remained strong, and the value of deals through 2024 rebounded. Dry powder fell unusually through 2024, down around \$20 billion through to 3Q because fundraising was weaker while the deals market held up.

With the growth of diversity within the infrastructure sector, are we beginning to lose a bit of what infrastructure really means?

There has been some broadening of the definition of infrastructure over the years, but the usual academic definition remains – you invest in a long-term asset that delivers essential services. There is a difference between a good and a service. A good is something tangible that you can take away, store and reuse potentially, whereas a service is consumed in the moment. If you buy a CD or mp3 of your favorite artist, that is a good. Whereas, if you go to a concert, that is a service. Infrastructure traditionally is about the provision of services that are consumed in the moment – think transport, healthcare, even energy (though that last one is complex). I think the definition has broadened through the use of contracts ensuring the supply of goods. The concern is that the barriers to entry for some of these business models are lower – this brings higher risk to volume and pricing aspects of the business and is more akin to private equity. Just because you have an offtake contract, does not make it infrastructure!

Renewables are on everyone's mind. Where do you see opportunities?

The prospect for scaling investment in renewable energy generation is palpable. However, their intermittency is a constraint on their continued rollout. The market is overcoming this with a still relatively nascent sector – battery energy storage systems (BESS). I think it is a really exciting part of the renewables industry because it allows renewables to further penetrate the energy generation mix. Regulatory developments have helped broaden the sources

of revenue for developers. It is no longer just about using BESS to store and sell energy at the highest price at a point in time. Developers can generate revenue for being on standby to discharge the batteries into the grid as needed. One statistic I saw recently indicated that there are around 22.5 gigawatts of battery energy storage in the U.S., with another 38 gigawatts expected by 2027. To put that into perspective, U.S. electricity demand tends to peak at around 700 gigawatts. That's a big number in terms of new BESS capacity coming onstream, and it could ramp up quicker still.

It is going to go very quickly because the economics stack up now. Renewables stand on their own two feet and make sense commercially even without an offtake contract in merchant models. For many decades, infrastructure investment in renewables was built upon contracts with governments and corporates that de-risk the revenue to help underpin the infrastructure investment. Now the industry is increasingly using merchant business models, in which the developer takes at least some of the demand risk. What batteries allow you to do is make what you might call your revenue stack – the ways you sell your output – more sophisticated, because you can move power through time. You do not have to discharge it into the grid all at once.

Now a developer can, for example, have most of their energy output sold under a power purchase agreement, then some sold in spot markets, and also pursue arbitrage strategies with batteries to sell when power prices are higher. On top of that, developers can provide frequency modulation in contracts by saying, "We agree to have this power on standby to help balance the grid. If the grid operator needs it, they'll call it in." It is much more sophisticated now.

Of course, one of the issues over the past few years – which will remain an issue for many years – is grid connections. Just getting the cable to be able to discharge into the grid faces a bottleneck because the investment has not been there to bring renewable projects on stream to match demand. And so, a lot of developers now say, "If we already have a grid connection for a solar farm, we can put a battery on the site to make more use of the connection."

When I think of batteries, I think of rare-earth minerals. Will limited access to these minerals slow battery development?

Well, it is a complex issue because, of course, that brings us to China. China is the world leader in terms of the economical manufacturing of lithium-ion batteries, the main type of technology

used for grid-scale batteries today. We have seen some increased politicization of reliance on Chinese technology, but no one has invested more in research and development than they have, so it is not surprising they are ahead. They have sought to electrify their economy more than elsewhere. You can see that in their take-up of electric vehicles (EVs), which has driven investment into battery technology there, in contrast to a slowing rate of EV uptake in Europe and North America more recently. BYD, the leading global EV manufacturer, has announced an innovative technology that can charge an EV battery in five minutes. As they expand access to this technology globally, it may help revive EV adoption in Europe and elsewhere as anxiety range becomes less relevant. This also has implications for the EV charging network as an emerging sector within the infrastructure asset class. There has been recent progress from U.S.-China negotiations with specific focus on rare earths. I do not think we will see rare earth supply constraints bite – both sides have a lot to lose.

How can infrastructure investors handle current economic risks and uncertainty?

I have a bit of a bugbear about the use of the word "uncertainty." As an ex-academic, I'm a bit fussy on definitions, and we seem to attribute so much to "geopolitical uncertainty" of late. There is a difference between risk and uncertainty. If something is uncertain, by definition, it is not measurable. If something is uncertain, you know it is possible, but you don't know how likely it is or how costly or beneficial it will be if it happens. Whereas a risk is something that you have good information on. It has happened in the past. You can estimate how likely it will happen again. How you manage risks and uncertainties differs. If you're an investor, you can manage, mitigate, transfer or insure risks. The key is not to convince yourself that something that is uncertain is really a risk and pretend you can manage it.

In terms of how to respond to heightened risks or emergent uncertainties – well – you cannot reposition your whole portfolio over tariffs! You must be strategic in what you dial up and what you dial down on the fringes of your allocations. You can consider reducing exposures to high-risk and uncertain assets, for example, venture capital or emerging market equities, and move toward safer assets like bonds and infrastructure. Infrastructure has shown it can offer the best of both worlds – downside protection amid falling GDP growth, because of the autonomous consumption patterns of infrastructure services, but also upsides from having an equity structure and a variety of business models.

CORPORATE OVERVIEW

Managing \$295 billion* in invested assets, UBS Asset Management's Unified Global Alternatives (UGA) business is a leading alternative investment platform with a strong global presence and a diverse range of capabilities across alternative asset classes. Through our open-architecture alternatives platform, we design customized solutions to meet the specific needs of our clients, including those spanning multiple asset classes.

* Includes invested assets across Asset Management and Global Wealth Management, as of March 2025. Invested assets include net new money/net new fee-generating assets and custody/execution assets.



CONTRIBUTOR

Alex Murray

Infrastructure Research & Strategy
Lead for Unified Global Alternatives

CORPORATE CONTACT

Marc Burkhardt

Real Assets Investor Relations Lead
+41-44-234 04 80 | marc-za.burkhardt@ubs.com

This article presents the author's opinions reflecting current market conditions. It has been written for informational and educational purposes only and should not be considered as investment advice or as a recommendation of any particular security, strategy or investment product.

Copyright © 2025 by Institutional Real Estate, Inc. Material may not be reproduced in whole or in part without the express written permission of the publisher.