Allianz
Global Investors

The Evolution of Infrastructure Debt

…and its role in an institutional portfolio

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Infrastructure Debt investments are highly illiquid and designed for professional investors pursuing a long-term investment strategy only.
This is a marketing communication.

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How it started…

Regulatory restrictions post Global Financial Crisis for Banks

Reduced budgets for state-funded infrastructure

Equity was one of the few (expensive) source of capital available while public and bank capital decreased

The Project Bond Initiative (PBI) of the European Commission and the European Investment Bank (EIB) providing Project Bond Credit Enhancements to find new sources of capital

Source: Allianz Global Investors as of September 2024

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Some key moments in our Infra Debt history…

2012
Launch of Allianz Global Investors Infra Debt platform

2013
First transactions closed in Europe

2014
Case study: **Core** transaction closed

2015
Introduction of 'Qualifying Infrastructure' investments

2016/17
Extension to Core + assets

2019
Case study 2: **Core +** transaction closed

2021
Expansion further down the risk spectrum

2023
Case study 3

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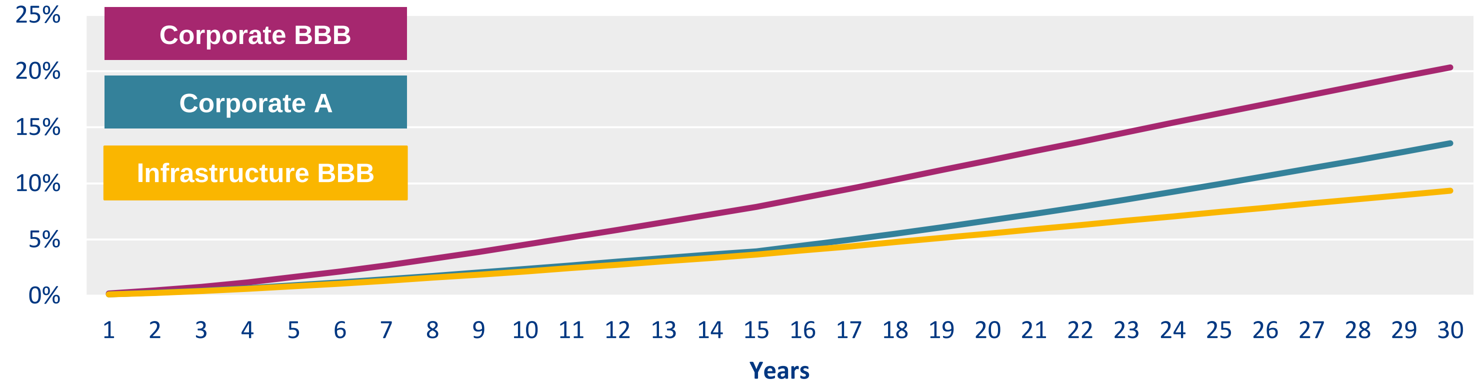
Why were institutional investors investing in Infrastructure Debt?

Cumulative default rates for corporates and infrastructure investments in percent*



Infrastructure Debt investments typically have lower default probabilities and higher recovery rates compared to similarly rated corporate bonds

Previously Inaccessible to Institutional Capital

Yield Pickup & Diversification

Duration & Cash flow matching Matching Universe

Infrastructure Debt can be a natural fit for insurance companies if structured properly

* Source: AllianzGI and Moody's Default & Recovery Rates for Project Finance Bank Loans, 2012. The charts and statistics were created in 2013.This document contains the current opinions of Allianz Global Investors and its employees, and such opinions are subject to change without notice. Statements are based on current market conditions, which will fluctuate. Forecasts are inherently limited and should not be relied upon as an indicator of future results. This document has been distributed for informational purposes only, does not constitute investment advice and is not a recommendation or offer of any particular security, strategy or investment product.

Case study 1:
Example of a Core transaction: Building | Netherlands | 2014

- Sector: Building / Energy Efficiency
- Region: Netherlands
- Year closed: 2014
- Size: €133m
- ESG
- Solvency II: qualifying project

This is for illustration purposes. Investing involves risk. The value of an investment and the income from it may fall as well as rise and investors may not get back the full amount invested. Infrastructure debt investments are highly illiquid and designed for long-term professional investors only. Source: Allianz Global Investors, 2024.

Solvency II and the notion of qualifying infrastructure investments as the inflexion point

Qualifying Infrastructure Investment Criteria for Projects (Article 164a) & for Corporates (Article 164b)

Resilience to **stress tests** such that cash flow generation sufficient to meet debt service under relevant stress tests

EEA / OECD

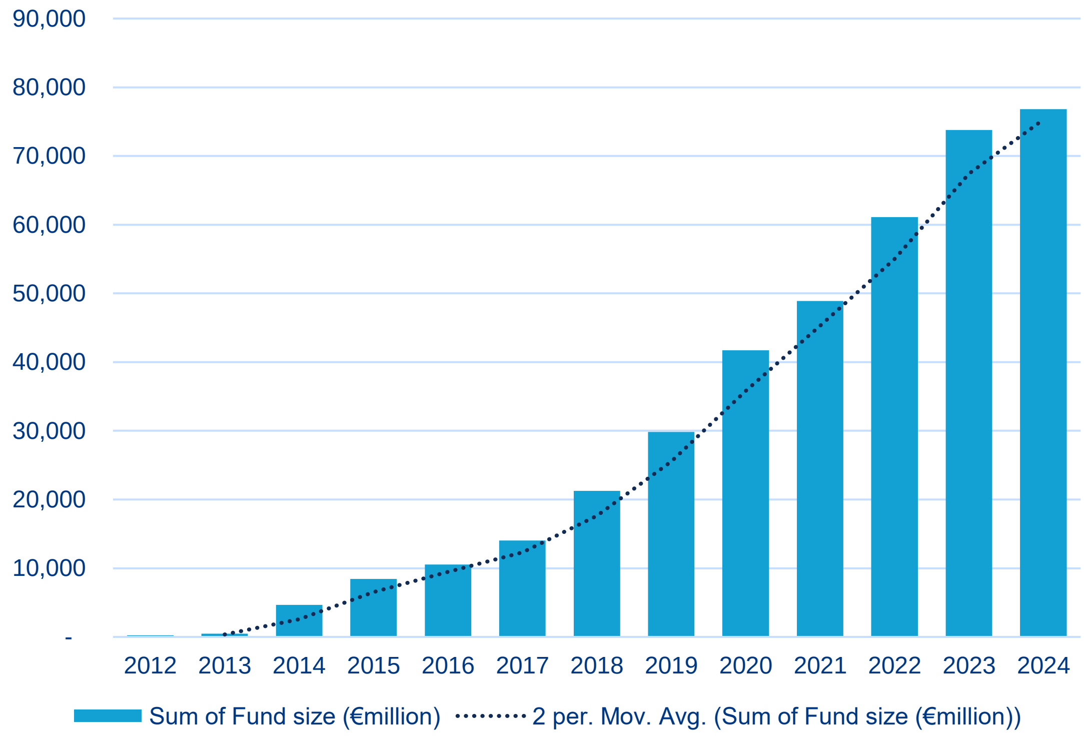
Predictability of **cash flows**

Protective regulatory/contractual **framework**

- At least **investment grade**, from a nominated external credit assessment institution (ECAI)
- Unrated debt treated as BBB if (strict) qualifying criteria met

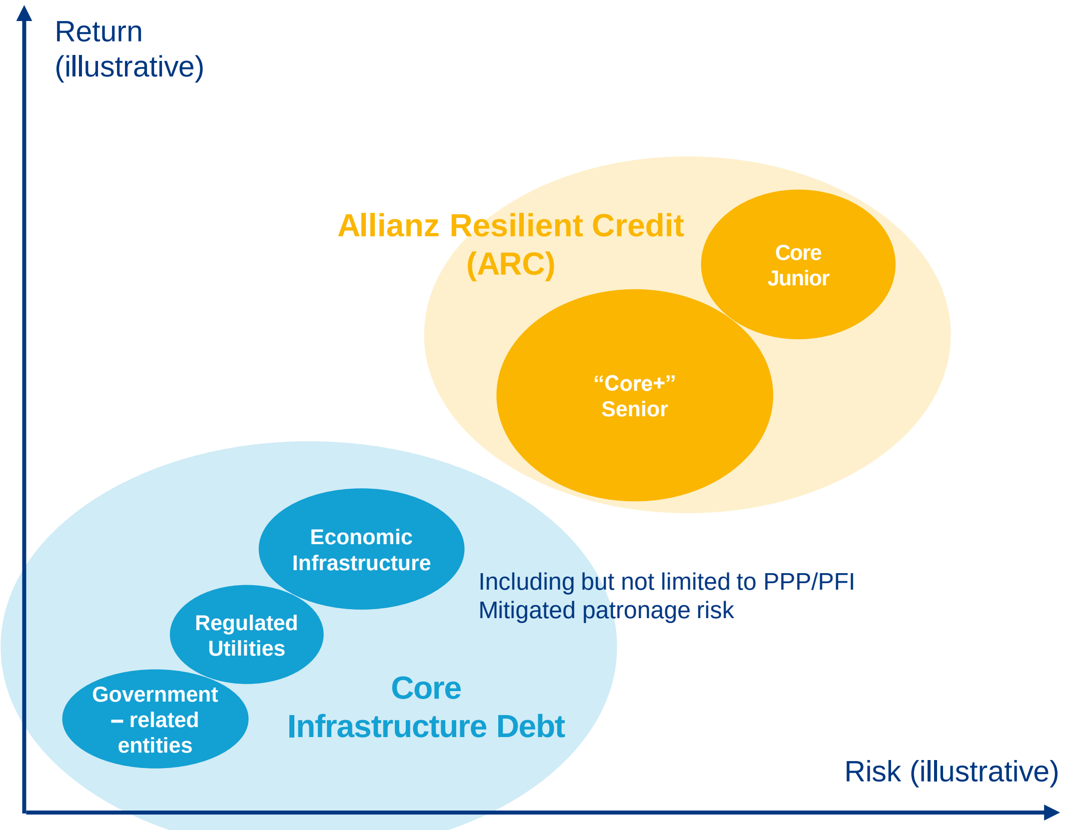
Hold to maturity strategy

Infrastructure Debt capital raised (€mn) (Europe, North America & selected Latin America)



Source: Allianz Global Investors and Picthbook as of August 2024.

Broadening of the investment universe down the risk spectrum



ESG integrated throughout the investment process

		Energy	Transport	Communication	Environmental	Social
2 Core+	High revenue visibility over medium-term period: oligopolistic, high barriers to entry. Less visibility over the long-term	Smart meters Biomass District heating O&G storage	Rolling stock Ferries Car parks Fuel forecourts	Fibre (ramp-up) Towers	Waste plants with volume risk (energy-from-waste, recycling)	Care homes / schools without operator risk
1 Core	High revenue visibility over long-term period: monopolistic, regulatory regime, long-term contracts	Regulated utilities (electricity / gas distribution, transmission) Renewables with PPA	Roads Ports Airports Rail	Fibre (fully deployed with guaranteed volume)	Regulated utilities (water distribution) Waste plants with PPP	Student accommodation / (public) buildings with PPP

Source: Allianz Global Investors, March 2024. For illustrative purposes only. There is no guarantee that all strategy features will be attained. This is not an offer to invest nor a guarantee of future results.

Case study 2:
Example of a Core+ transaction: Energy services | Netherlands | 2020

- Sector: Building / Energy Efficiency
- Region: Netherlands / Europe
- Year closed: 2020
- Size: Undisclosed
- ESG
- Solvency II: qualifying corporates

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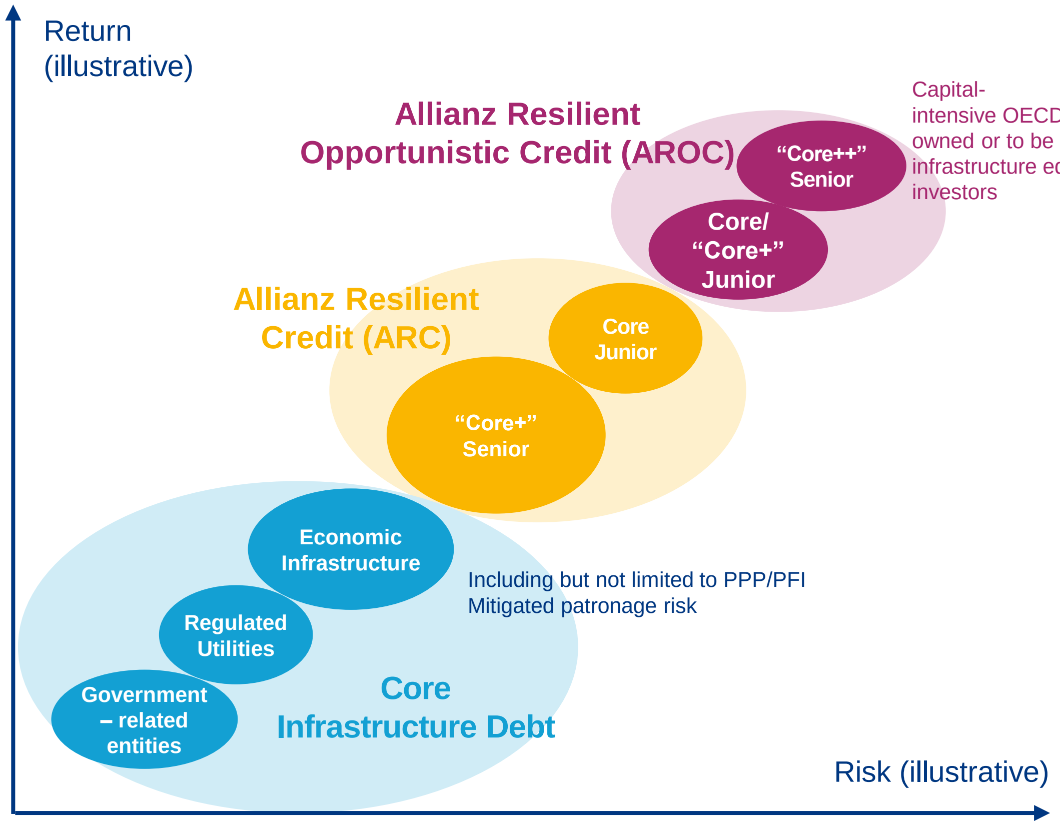
What does Infrastructure debt mean today for AllianzGI?

c. EUR 26bn invested in 145+ assets

Different risk/return profiles available at different tenors, we believe the riskier strategies should be shorter maturity products than core



		Energy	Transport	Communication	Environmental	Social
3 Core++	High growth potential, little contracted revenue, with some degree of volume risk, whilst retaining the criticality of infrastructure.	EV charging Next generation energy & storage (hydrogen, batteries)	Specialised transport assets (trailers, wellboats, offshore support vehicles)	Fibre (greenfield) Data centres	Next generation waste processing	Care homes / schools with operator risk Laboratories
2 Core+	High revenue visibility over medium-term period: oligopolistic, high barriers to entry. Less visibility over the long-term	Smart meters Biomass District heating O&G storage	Rolling stock Ferries Car parks Fuel forecourts	Fibre (ramp-up) Towers	Waste plants with volume risk (energy-from-waste, recycling)	Care homes / schools without operator risk
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ESG integrated throughout the investment process

c. EUR 9bn invested in Energy transition related assets

Source: Allianz Global Investors, March 2024. For illustrative purposes only. There is no guarantee that all strategy features will be attained. This is not an offer to invest nor a guarantee of future results.

Comparison of Infrastructure Debt strategies

AllianzGI Infrastructure Debt platform is able to invest across the full infrastructure credit spectrum

	Core Infrastructure Debt	Allianz Resilient Credit	Allianz Resilient Opportunistic Credit
What are we investing in?	Core infrastructure	Core / Core+ infrastructure	Core / Core+ / Core++ infrastructure
For how long?	18 years average	8 years average	6 years average
How much?	€100m – 750m commitment per deal	€50m – 300m commitment per deal	€30m – 100m commitment per deal
Which geographies?	UK, EEA, USA, LatAm	UK, EEA, certain Emerging Markets	UK, EEA and other OECD
At what rating?	BBB average	BB+ average	B+ average
At what level?	Senior	Mostly senior; some junior	Mostly junior; some senior
At what return?	EUR MS + 2%	EUR MS + 3%	EUR MS + 5-6%
Track Record			
WAL at settlement	17 years	9 years	6.6 years
Deployment	€19.7bn (equiv.)	€3.8bn (equiv.)	€657m (equiv.)
Illiquidity premium[1]	1.20%	1.40%	2.30%

Source: Allianz Global Investors, March 2024. 1 Spread over relevant public indices.
For illustrative purposes only – tenor, rating and price of investments are the expected weighted average of the portfolio. There is no guarantee that all strategy features will be attained. An investment in the strategy entails a high degree of risk and no assurance can be given that investors will receive a return on their capital. A ranking, a rating or an award provides no indicator of future performance and is not constant over time. There is no guarantee that these investment strategies and processes will be effective under all market conditions and investors should evaluate their ability to invest for a long-term based on their individual risk profile especially during periods of downturn in the market. Past performance, or any prediction, projection or forecast, is not indicative of future performance. a WAL = Weighted Average Life

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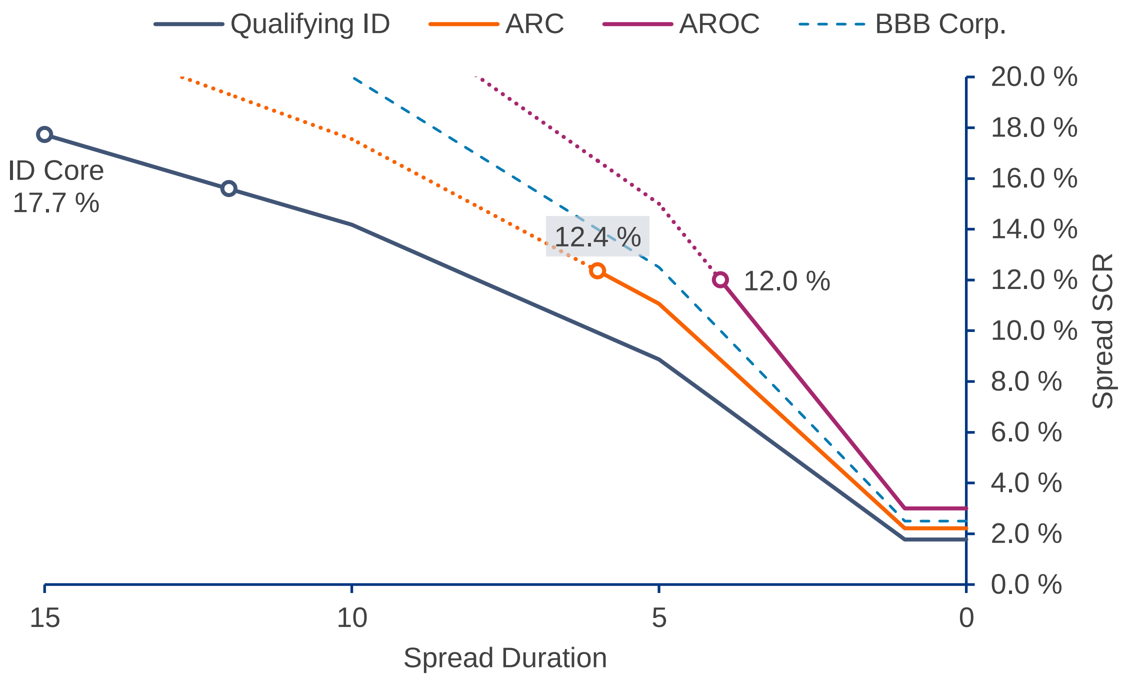
Solvency II treatment of AllianzGI Infra Debt offering

For illustrative purpose only

AllianzGI sources high credit quality infrastructure debt transactions in Core, Core+ and Core++ infrastructure sectors

In average, we estimate that qualifying infrastructure assets have 25 to 33% lower capital charge compared to equivalent public corporate indices.

	Assumptions	CDR-Article	SCR at Issuance	Average SCR over lifetime
ID Core (Initial $dur_i = 15$)	50 % QIP*	180 XI	17,7 %	10,7 %
	50 % QIC**	180 XIV		
ARC (Initial $dur_i = 6$)	70 % QIC**	180 XIV	12,4 %	6,8 %
	30 % Unrated	176 IV		
AROC (Initial $dur_i = 4$)	100 % Unrated	176 IV	12,0 %	6,4 %



No legal or tax advice. For illustrative purposes only. Forecasts are not a reliable indicator of future results. * QIP = Qualifying Infrastructure Projects (Art. 164a CDR); ** QIC = Qualifying Infrastructure Corporates (Art. 164b CDR); Private market investments are highly illiquid and designed for professional investors pursuing a long-term investment strategy only. The statements contained herein may include statements of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. We assume no obligation to update any forward-looking statement.

Source: COMMISSION DELEGATED REGULATION (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament (latest version as of June 30, 2021); own presentation.

Case study 3:
AROC | Solar| France | 2023

- Sector: Energy Efficiency
- Region: France / Europe
- Year closed: 2023
- Size: Undisclosed
- ESG
- Solvency II: not qualifying

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Thank you!

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Appendix

Allianz Global Investors: Evolution of Infrastructure Debt

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2012 - AGI Infra Debt is created

2014 – First investment in the US

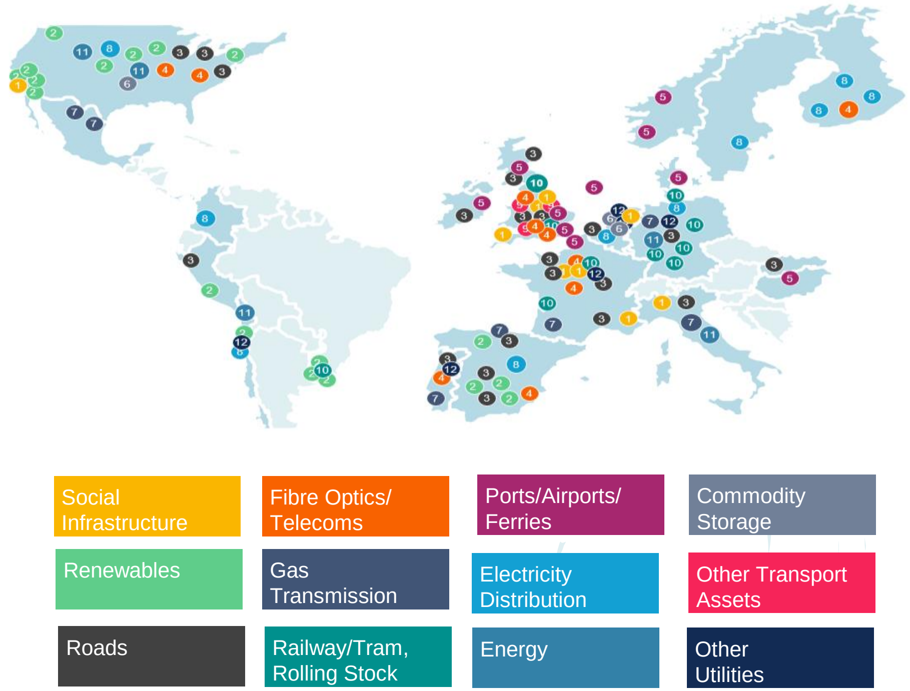
2015 – Infra Debt Americas is created

2017 – ARC fund created

2018 – First investment in LatAm

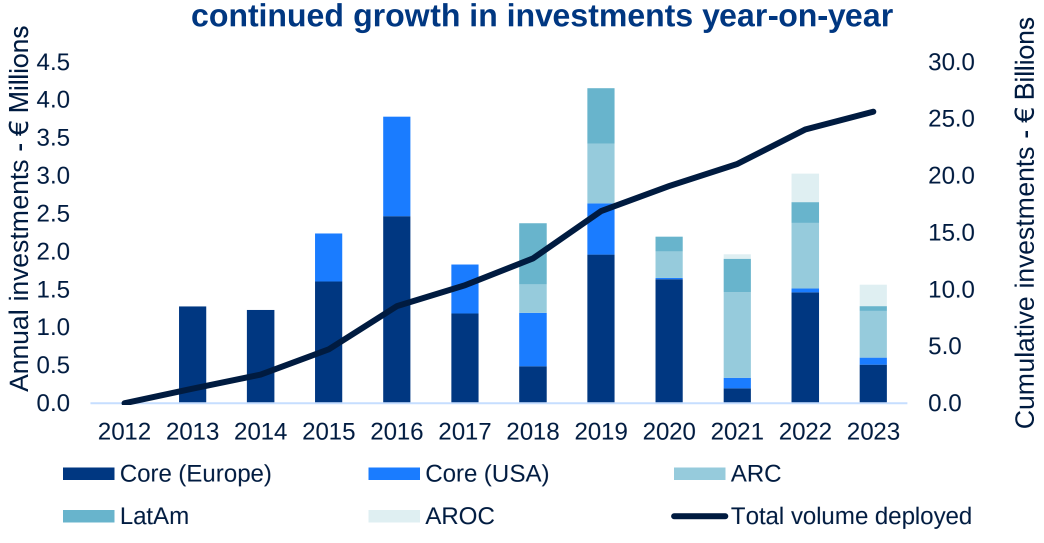
2021 – AROC fund created

Global Infrastructure Debt Platform



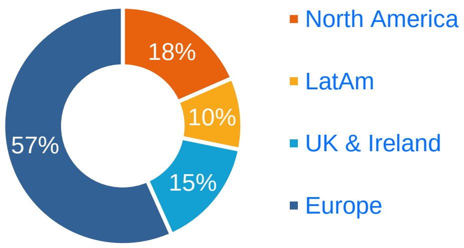
Global Transactions: €26 billion invested in more than 140 transactions in 22 countries across 3 strategies

#1 global infrastructure debt investor* by size with continued growth in investments year-on-year

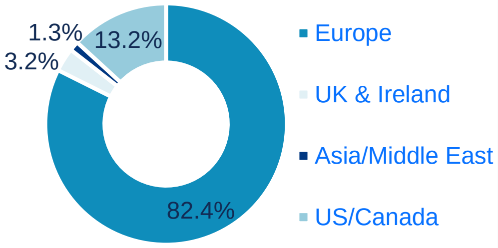


*Infralogic database 2024

Investments by Region (AGI Commitment)



Investors by Region (Initial Commitment)



Data is as of April 2024 and incorporate all repayments to investors. This is for guidance only and not indicative of future allocation.

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