Pre-marketing communication for professional investors - September 2025 - Environmental strategies group

# LISTED ENVIRONMENTAL INFRASTRUCTURE



An analytical assessment of the investment case and structural growth drivers

BNP PARIBAS
ASSET MANAGEMENT

The sustainable investor for a changing world

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## SUMMARY

Global environmental listed infrastructure represents publicly traded companies that own and operate essential infrastructure assets – such as renewable energy networks, water and waste utilities, sustainable transport systems, and key digital infrastructure – designed with a strong environmental focus. These assets provide critical services that underpin modern economies, with business models that can be characterised by regulated revenues, long-duration contracts and inflation linkage.

The sector is supported by powerful structural tailwinds. The global energy transition is driving record investment into renewables, grid modernisation, and electrification. Digitalisation, including the rapid build-out of data centres, further fuels infrastructure demand. Meanwhile, climate adaptation has emerged as business critical, as explored by BNP Paribas Asset Management's Sustainability here. Capital flows are aligning accordingly, with global green investment totalling more than $2 trillion in 2024.

The team's new Environmental Infrastructure Income Fund is designed to capture these opportunities by investing in a diversified global portfolio of listed infrastructure companies that deliver resilience and sustainability. This paper expands on the points outlined here. Should you like to get in touch, please don't hesitate to reach out to the team at: list.am.is_environmentalstrategiesgroup@bnpparibas.com

## CONTEXT

In October 2025, the Environmental Strategies Group is planning to launch the BNP Paribas Environmental Infrastructure Income Fund, focusing on listed environmental equities. The fund will qualify as Article 9 under the Sustainable Finance Disclosure Regulation (SFDR), with the following characteristics:

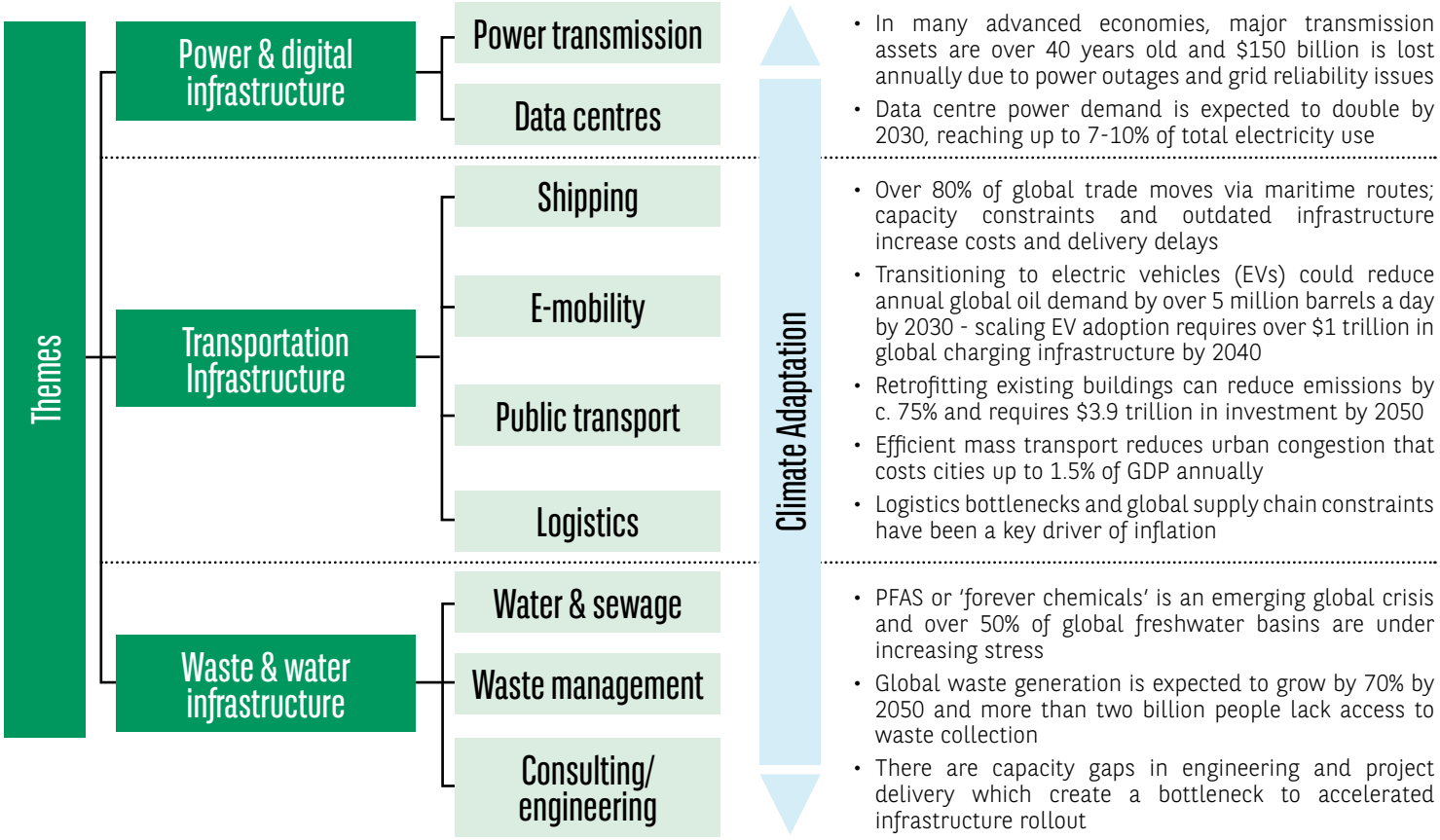
- Investment in acyclical critical infrastructure:
  Provides long-term stability and resilience, especially in volatile markets
- High & stable dividend yield:
  The latest portfolio yield of the fund is 3.5% in EUR, with a focus on high dividend-paying companies
- Strong downside protection:
  The portfolio typically has a lower beta against the MSCI ACWI and provides less downside risk during market selloffs
- Inflation-adjusted returns with strong cash flows and recurring income:
  Invests in companies with stable, recurring revenue streams, many of which offer inflation-linked income
- Large cap, utility focused:
  The fund has a strong large cap and utilities bias
- Low tracking error:
  The target tracking error is 3-5% vs. Dow Jones Brookfield Global Green Infrastructure Index
- Quantamental investment approach:
  Combined fundamental research and quantitative portfolio construction. This hybrid approach allows us to stay true to the theme while delivering a risk profile comparable to the benchmark and aiming to outperform when the theme rallies

The prospectus and key investor information document (KIID) are leading, and no assurance can be given that any forecast, target or opinion will materialise.

# INTRODUCTION TO INFRASTRUCTURE

Infrastructure is critical to the functioning of the global economy and society, underpinning economic activity, public welfare and long-term sustainable development. It is the backbone of modern commerce – facilitating energy production and delivery, transportation and digital connectivity. It also provides for the fundamental needs of society, for example, through water and waste management; and it can be an enabler of global net zero targets. The scale of investment required is unprecedented, as there is increasing demand for new, more resilient, more sustainable infrastructure systems.

In this paper, we focus exclusively on environmental infrastructure in the context of our fund launch, while recognising its dual role in ensuring essential services and advancing climate objectives. Our framework centres on three interconnected themes, as illustrated below:




Graphic Sources

- Europe's Grids Are Not Up To Grade | Breakthrough Energy
- $150 Billion Blackout Crisis: The Urgent Need for Grid Resilience
- IEA: Data center energy consumption set to double by 2030 to 945TWh - DCD
- Shipping data: UNCTAD releases new seaborne trade statistics | UN Trade and Development (UNCTAD)
- How EV Adoption is Reshaping Global Oil Demand: IEA's 2025 Outlook and 2030 Forecast • Carbon Credits
- EV_MarketInsights_SLATE_16June.pdf
- Why Retrofitting Buildings Is Often Greener Than Demolishing Them
- (PDF) The cost of the wider impacts of road traffic on local communities: 1.6% of Great Britain's GDP
- What is driving global supply chain bottlenecks? | Bank of England
- WMO report highlights growing shortfalls and stress in global water resources
- Global Waste to Grow by 70 Percent by 2050 Unless Urgent Action is Taken: World Bank Report

# INVESTMENT CASE FOR LISTED INFRASTRUCTURE

Listed infrastructure has emerged as a unique and increasingly attractive asset class, offering a compelling combination of income stability, inflation protection and long-term growth potential. Its appeal lies in its ability to deliver consistent returns through economic cycles.

## UNIQUENESS AND RESILIENCE

Infrastructure assets provide essential services such as energy, transportation and water – sectors that can operate under long-term contracts with governments or highly rated counterparties. Its essential nature underpins high and stable cash flows, offering a degree of predictability often absent from other asset classes.

Moreover, its inflation linkage is a defining feature. Many infrastructure contracts include escalation clauses or indexation mechanisms, shielding investors from inflationary pressures.

For example, during seven of the past 20 years when US inflation exceeded 3%, listed infrastructure assets appreciated by an average of 12.4% compared to 7.5% for global equities. Even in a falling interest rate environment, infrastructure has remained attractive – outperforming global equities by 2% on average during the past two decades. Its resilience is enhanced by high barriers to entry, capital intensity and inelastic demand.[1]

Overall, these factors contribute to downside protection. Over the past 20 calendar years, the MSCI ACWI index—which comprises large-cap and mid-cap equities across both developed and emerging markets—has dropped several times. In these down-market environments, listed infrastructure has fallen by an average of 11.8%, whereas global equities have declined by an average of 16.3%.

**Infrastructure outperformed in 11 of the last 13 market declines**

| Date Range (Global Equity Market Declines >5%) | Listed Infrastructure | Global Equity | Relative Return |
|---|---|---|---|
| 23 Feb 2007 - 5 Mar 2007 | -4.5% | -6.3% | 1.8% |
| 11 Oct 2007 - 22 Jan 2008 | -8.1% | -16.9% | 8.8% |
| 12 Sep 2008 - 9 Mar 2009 | -38.8% | -45.5% | 6.7% |
| 3 May 2010 - 25 May 2010 | -11.4% | -12.8% | 1.5% |
| 26 Jul 2011 - 8 Aug 2011 | -13.1% | -15.4% | 2.2% |
| 21 May 2013 - 20 Jun 2013 | -9.1% | -7.0% | -2.1% |
| 19 May 2015 - 11 Feb 2016 | -9.7% | -19.0% | 9.3% |
| 26 Jan 2018 - 8 Feb 2018 | -7.3% | -9.0% | 1.7% |
| 27 Sep 2018 - 24 Dec 2018 | -4.9% | -16.4% | 11.6% |
| 19 Feb 2020 - 23 Mar 2020 | -37.4% | -33.6% | -3.8% |
| 1 Jan 2022 - 31 Dec 2022 | -5.0% | -18.4% | 13.3% |
| 29 Mar 2024 - 19 Apr 2024 | -2.9% | -5.1% | 2.1% |
| 31 Jul 2024 - 5 Aug 2024 | -1.4% | -6.4% | 5.0% |

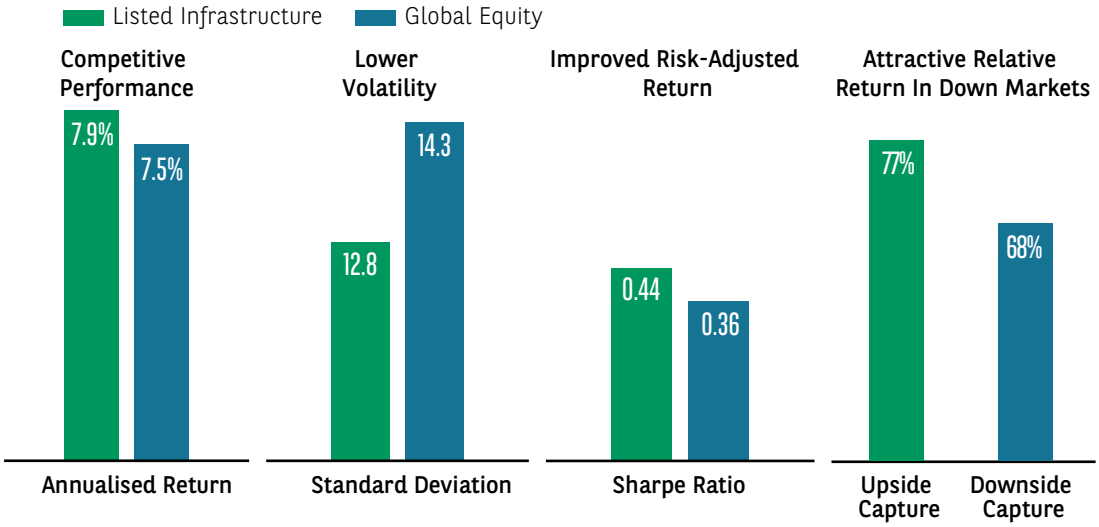
As of December 2024. Source: Bloomberg (Listed Infrastructure refers to FTSE Developed Core Infrastrcuture USD; Global Equity refers to MSCI ACWI USD)
Prospectus and KIID are leading, and no assurance can be given that any forecast, target or opinion will materialise.

1 The allure of alternatives: Listed infrastructure | Newton

## TRACK RECORD AND GROWTH TRAJECTORY

Infrastructure's long-term performance track record is well documented. Morningstar data reveals that listed infrastructure has consistently delivered mid-to-high single digit returns over the past 20 years, outperforming equities on a risk-adjusted basis with lower volatility.[2] This is often attributed to the monopolistic or semi-regulated nature of many infrastructure assets, which supports stable earnings and yield profiles.

### Performance Statistics, 2006-2024



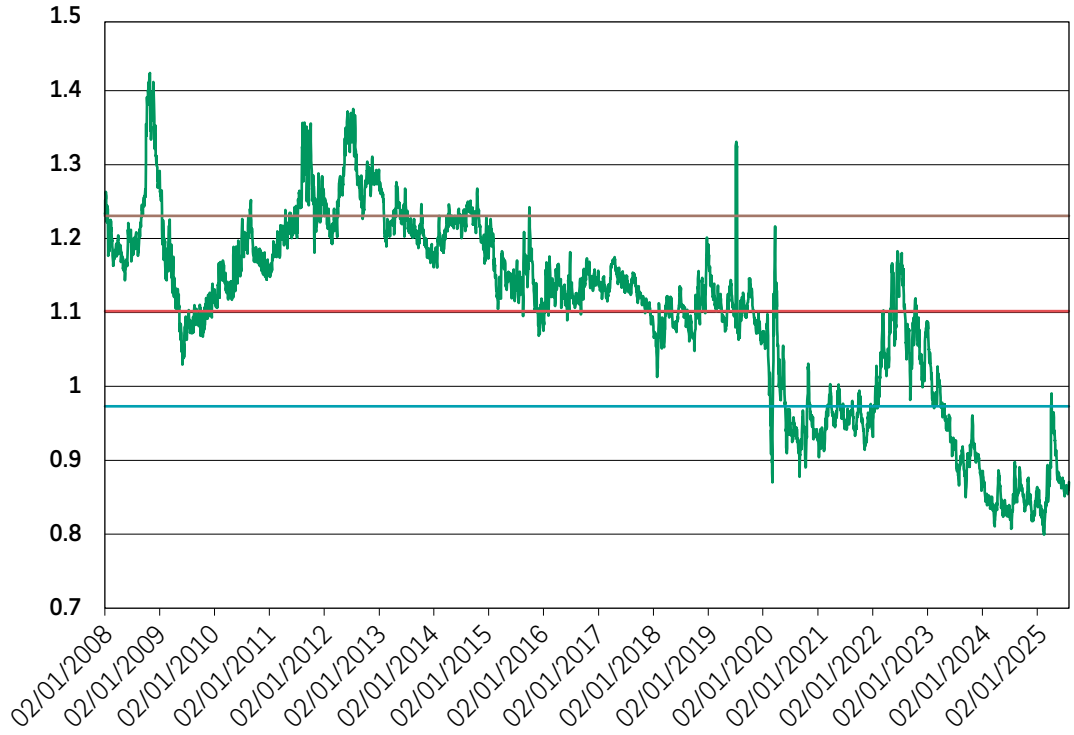

As of December 2024. Source: Bloomberg (Listed Infrastructure refers to FTSE Developed Core Infrastrcuture USD; Global Equity refers to MSCI ACWI USD)

## OTHER BENEFITS

- Evolution of the asset class: Infrastructure is an evolving asset class, adapting to shifts in policy, technology and investor preferences. The market continues to broaden in terms of geographic exposure, sectors, fund structures and investment vehicles, including co-investments, secondaries and direct investments. However, with diversity comes complexity. The sector lacks uniform benchmarks and can encompass a wide range of investment styles and strategies. As such, effective allocation requires informed decision-making and careful navigation to balance opportunity and risk
- Increased portfolio diversification through broad sector exposure and geographic reach
- Good liquidity: Listed infrastructure can be bought or sold daily in public markets, unlike private infrastructure which may take months or years to enter/exit. This real time liquidity enables tactical portfolio adjustments in response to changing macroeconomics
- Cheap valuation: At the end of 2024, global listed infrastructure traded at 10.2x EV/EBIDTA compared to global equities at 12.1x, representing an EV/EBITDA ratio of roughly 0.85x, as per the figure below. This marks an attractive entry as, historically, global infrastructure has traded at a premium to global equities (long-term EV/EBITDA ratio average of 1.1x) and current valuations are roughly at a two standard deviations discount to the long-term average
- Transparent pricing: Public market pricing is updated continuously providing an objective, observable valuation at all times.

2 The allure of alternatives: Listed infrastructure | Newton
Table is adapted from: Essential assets: The case for listed infrastructure - Cohen & Steers

**Valuation of Global Infrastructure vs. Global Equities**
Taken as EV/EBITDA multiple of S&P Global Infrastructure relative to MSCI ACWI




Source: Bloomberg, August 2025 - Past performance or achievement is not indicative of current or future performance



# INVESTMENT CASE FOR ENVIRONMENTAL INFRASTRUCTURE

The team considers green and green-grey[3] infrastructure in scope for the fund. Specifically, this includes traditional infrastructure (with strict, solutions-based screens)[4], nature-based solutions (that are available for listed equity investors), and technological innovations that contribute to environmental sustainability.

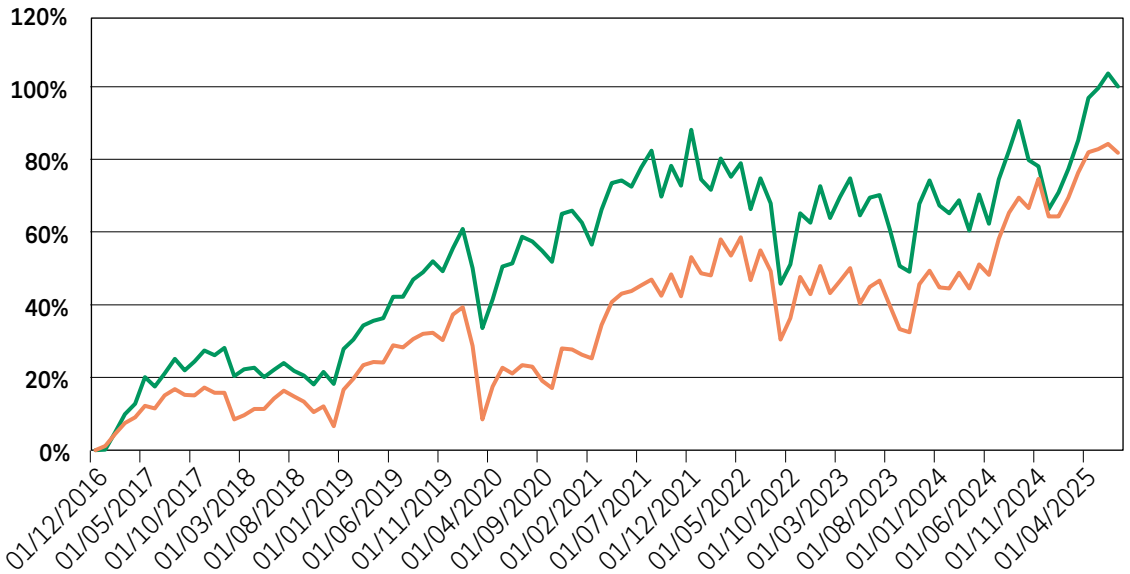
A further distinction can be made within green-grey infrastructure in relation to brownfield and greenfield projects, namely between renovated physical infrastructure (e.g., retrofitting buildings) and building new infrastructure (e.g., new public transport infrastructure systems), respectively. Both are in scope for the fund.

While private infrastructure portfolios offer benefits such as more direct influence and an illiquidity premium, these funds often include fossil fuel-exposed assets subject to commodity price volatility and stranded asset risk. They also may incorporate social infrastructure components (e.g., healthcare or education), the financial performance of which can hinge on shifting public policies.

To enhance investment resilience and future-proof exposure, we have refined our definition to concentrate exclusively on critical environmental infrastructure – assets that support global environmental goals that are poised to benefit from policy and macroeconomic tailwinds. This category has delivered stronger historical performance, exhibited lower earnings volatility, and capitalised on robust capital expenditure trends.

## PERFORMANCE

The graph below compares the 10-year track record of the Dow Jones Brookfield Global Green Infrastructure index versus the Dow Jones Brookfield Global Infrastructure Total Return index. It shows a consistent outperformance of green infrastructure over traditional grey infrastructure.




Source: Bloomberg, 2025

3 Green-Grey infrastructure is an innovative approach that combines natural ecosystems with traditional engineering solutions to address environmental and infrastructure challenges.

4 Please refer to our Sustainable Investment methodology here, through which all companies must qualify: 14787511-CB33-49FC-B9B5-7E934948BE63

Past performance or achievement is not indicative of current or future performance

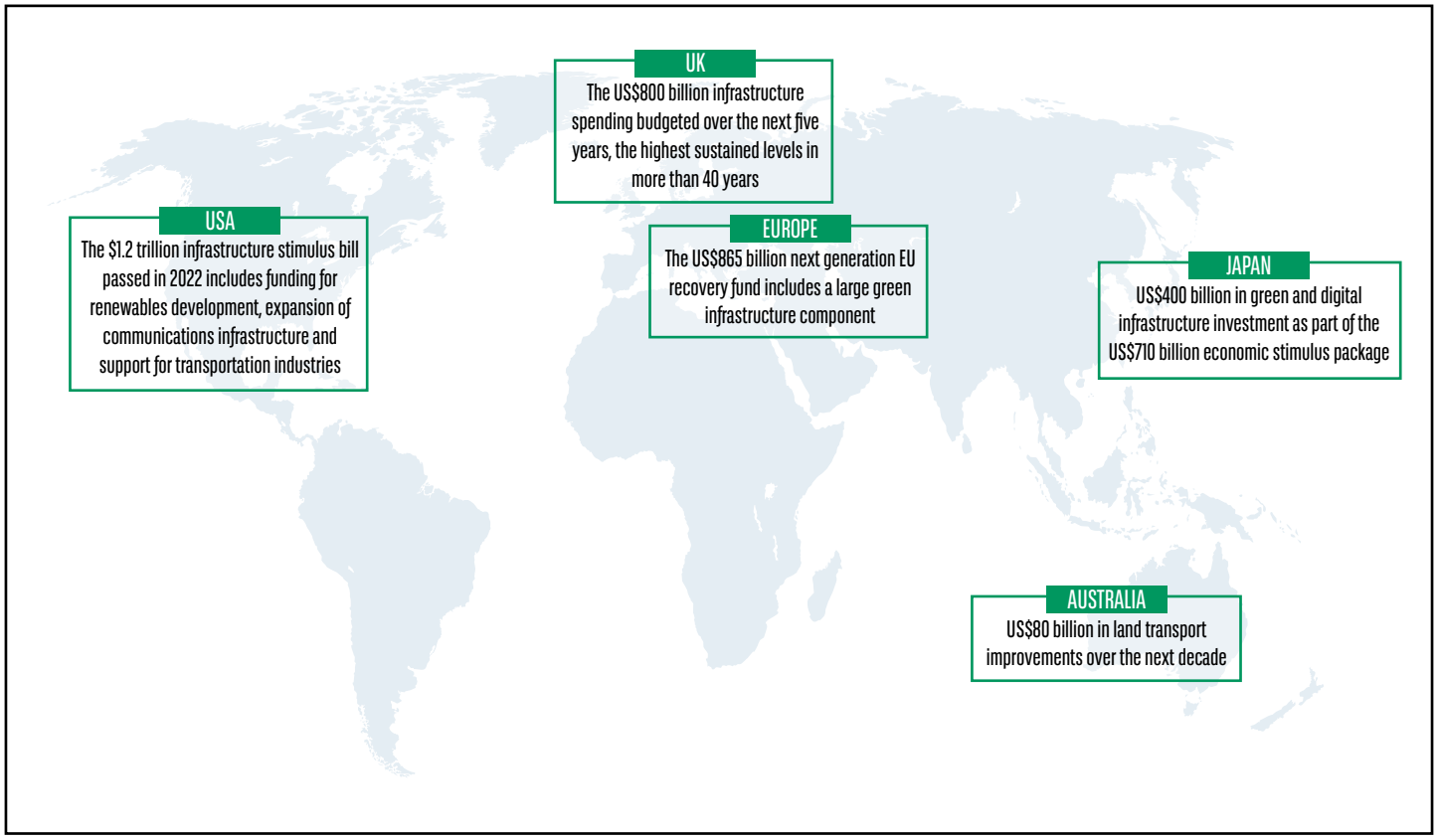
# TAILWINDS FOR ENVIRONMENTAL INFRASTRUCTURE

This section of the paper explores the megatrends that serve as tailwinds for environmental infrastructure. From a demographic perspective, factors such as population growth, urbanisation and an ageing population are all driving infrastructure expansion. In addition, grid disruption – stemming from ageing assets, incompatibility with renewable energy, and surging electricity demand from electrification and AI/data centres – is accelerating investment.

Geopolitical considerations and the need for supply chain resilience have further heightened infrastructure priorities. Climate change is another key driver, through both mitigation and adaption efforts, as well as alignment with global goals like the UN Sustainable Development Goals (SDGs).

At a high level, in response to these forces, countries/regions have made significant financial commitments, as illustrated below. Even so, these are not sufficient to meet current investment shortfalls.[5]

**Essential assets: The case for listed infrastructure[6]**




5 Adaptation Gap Report 2024 | UNEP - UN Environment Programme

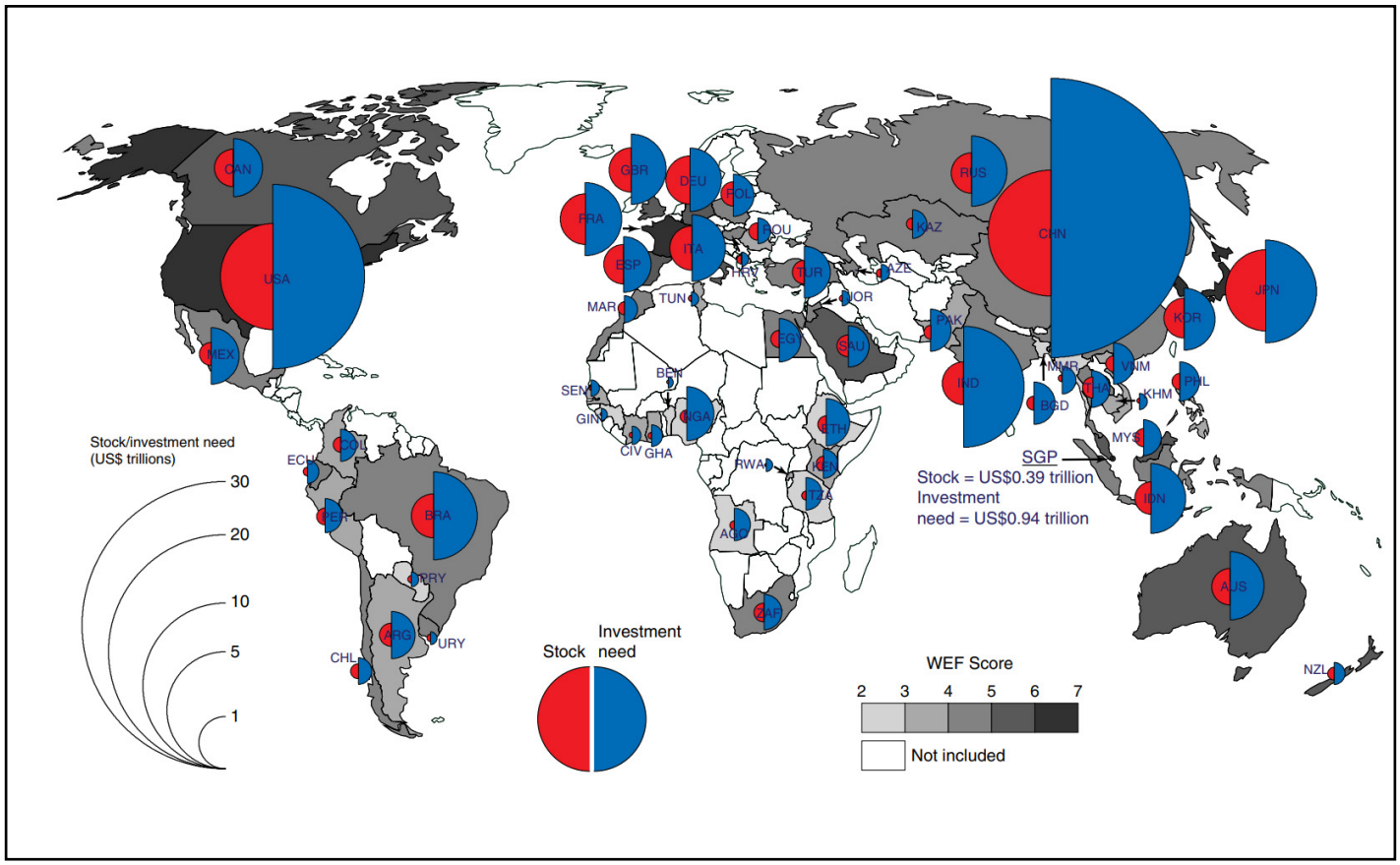
6 Image source: Essential assets: The case for listed infrastructure - Cohen & Steers

## DEMOGRAPHICS

Listed infrastructure is heavily underpinned by global megatrends, particularly those related to the demographic shifts that are reshaping the scale and nature of infrastructure demand worldwide. The global population is projected to grow from 7.7 billion in 2019 to 9.7 billion by 2050, placing unprecedented pressure on existing infrastructure systems to support basic needs such as housing, transportation, energy and water. Urbanisation is accelerating in tandem, with an estimated 2.5 billion additional people expected to live in urban areas in 2050.[7]

There is significant regional variability in the nature, urgency and scale of these needs. In rapidly urbanising regions such as sub-Saharan Africa and South Asia, infrastructure investment is urgently required to expand access to and the reliability of basic services. In contrast, high income regions like Europe and North America face the dual challenge of upgrading ageing infrastructure and building new infrastructure aligned with social and climate goals. Figure one highlights this regional variability in current versus projected infrastructure needs.

### Current infrastructure stock and forecast future needs in 2040[8]




7 More than half of world's population now living in urban areas, UN survey finds | UN News

8 Thacker, S., Adshead, D., Fay, M. et al. Infrastructure for sustainable development. Nat Sustain 2, 324–331 (2019). https://doi.org/10.1038/s41893-019-0256-8

## AGEING INFRASTRUCTURE AND GRID REINFORCEMENT

The US electrical grid is facing an increasingly urgent need to modernise its ageing infrastructure. The average age of the existing transmission infrastructure is around 40 years, with more than 25% of lines having been in service for greater than 50 years. This presents a serious challenge not only to grid reliability and performance but also to public safety and local ecosystems.[9] Ageing grids are also a problem in Europe. They pose power supply risks and, in some cases, fire risks.



### Case study: Grid blackouts

The widespread power outages in Spain in 2025 underscored the urgent need to modernise transmission and distribution networks across Europe. Currently, around 40% of Europe's power distribution grid is more than 40 years old. With rising electrification, Europe must expand transmission capacity by 60-70% between 2030 and 2040, requiring investments of €450-600 billion by 2030 and €1 trillion - €1.5 trillion by 2050.

Since the 1970s, electricity transmission losses have remained stubbornly high at around 8%, representing minimal efficiency gains over the past five decades. In Europe alone, this translates into approximately 288 terawatt-hours (TWh) lost each year, equivalent to 1.5 times Spain's annual electricity consumption.



### Case study: California wildfires

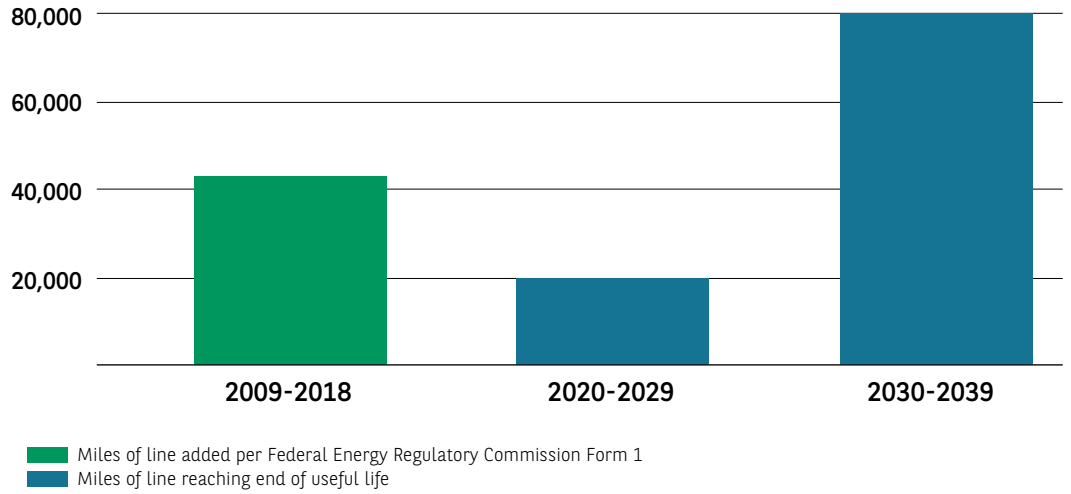
In 2018, near Paradise in California, a live wire broke free of a tower that was 25 years past what the Pacific Gas & Electric Co (PG&E) considers its 'useful life'. The fire it triggered destroyed nearly 14,000 homes and killed 85 people. It was one of the most destructive wildfires in California history.

Source: California Wildfires: How PG&E Ignored Risks in Favor of Profits - The New York Times

9 Modernizing Aging Transmission
Case study source: Jessica Burley, Planet A Ventures

Projections from the US Department of Energy indicate that by 2040, more than 100,000 miles of high-voltage transmission lines may require full replacement. This estimate reflects the scale of national infrastructure overhaul that will be necessary. This case study is not an exception: ageing grid infrastructure can be found in other developing countries.[10]

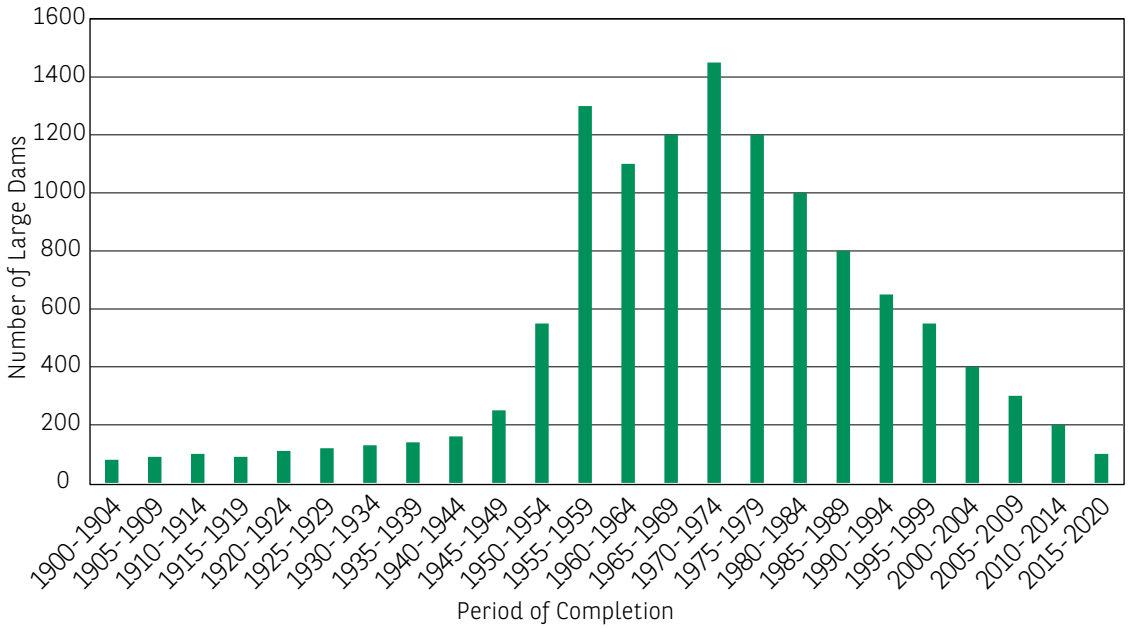
### By 2040, over 100,000 miles of transmission lines may need to be replaced




Notably, ageing infrastructure is not just limited to the grid but also includes key water and waste infrastructure. Furthermore, the annual construction of large dams globally since 1900[11] - the lifespan of which is c.50 years[12] - shows that many are well past their intended lifespan.

### Estimated Dams Completed between 1900 and 2020

*Please note, this is aggregated and estimated data, that should be used for guidance only*




10 Image and text source: Modernizing Aging Transmission

11 (PDF) Ageing Water Storage Infrastructure: An Emerging Global Risk 11

12 How traits of a dam and its watershed affect its longevity

# POWER DEMAND

## Incompatibility with renewables

The current electricity grid was originally designed to enable a unilateral flow of power from large fossil fuel power plants – often located in rural areas – to consumers in urban centres. Transitioning to renewable energy requires a bilateral flow of electricity, along with the flexibility to connect generation sources in diverse locations.

Unlike fossil fuels, which can be transported to power plants, renewable generation facilities must be situated where the resource is naturally available. The grid also has to be able to handle the intermittency of renewable power. Some days might not have enough wind or sun, and other days too much, requiring curtailment.

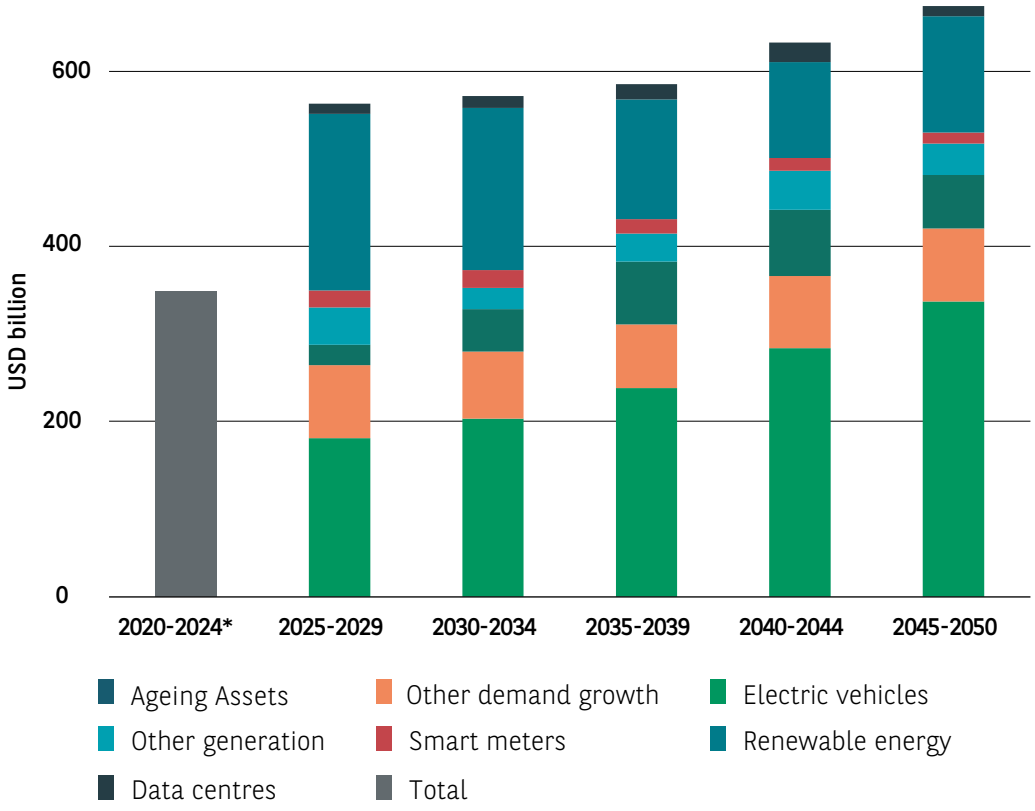
For example, in the first half of this year, Germany curtailed a record amount of solar and wind power as grid constraints and insufficient battery storage prevented it from taking advantage of new capacity. Bloomberg reports that c.8% of solar power and 5.3% of wind power was deliberately cut, both significantly higher than the previous year. Over time, it is planned to address this issue through more battery energy storage and green hydrogen production.

## Increasing power demand

### Case study 1: Increasing electrification of transportation

The electrification of transport is a key driver of rising power demand. The widespread adoption of electric vehicles (EVs) is alone projected to increase the national power demand load by at least 45% in the US. This substantial growth will require a grid that is more robust.

**Electric vehicles stand out among demand-side drivers for grid investment**



## Case study 2: Data centres & artificial intelligence (AI)

Data centres currently account for approximately 4% of global electricity demand. This figure is expected to grow to 16% by 2040 due to the expanding demand for digital services, AI and cloud computing.

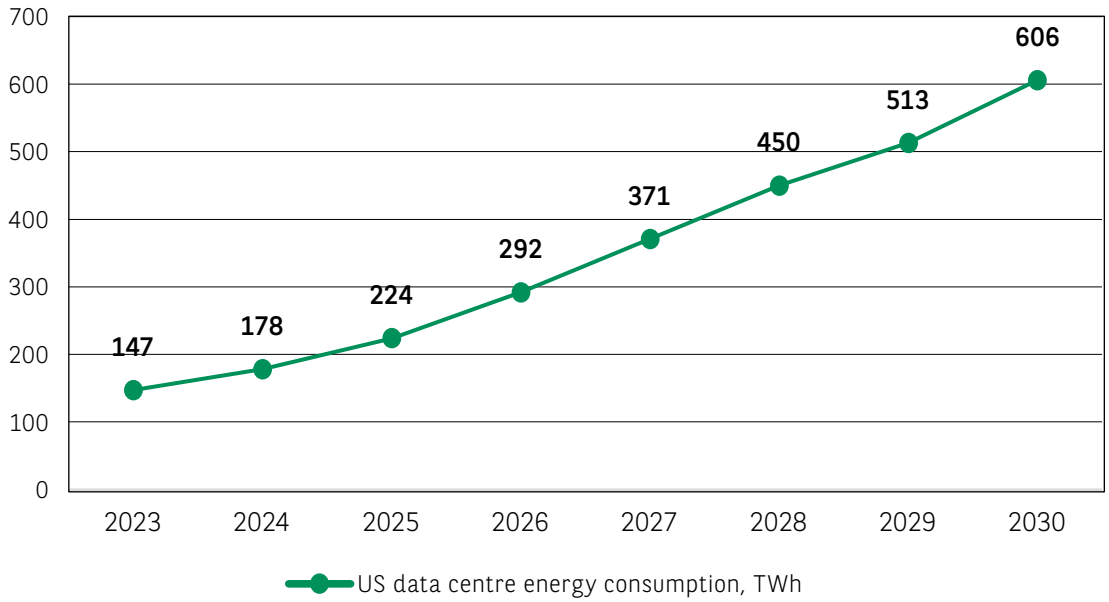
***"A new report from the International Energy Agency has found that global data centres are expected to consume more energy than Japan by 2030."***[13]

Since 2022, global investment in data centres has nearly doubled, with spending in 2024 estimated to be around half a trillion dollars.[14] 806 megawatts (MW) of new data centre capacity are expected to come online in 2025, a significant increase from the 655MW delivered in 2024.[15] McKinsey estimates that global data centre capital expenditure could exceed $1.7 trillion by 2030.[16]

This makes the sector not only a major technological growth story, but also a pivotal player in global energy markets. Key priorities for stakeholders in data centre growth include grid modernisation, clean power procurement, and resilience – especially as these data centres are required to run 24 hours a day, 365 days a year.

For example, renewable energy sources and AI are growing symbiotically as major tech firms are signing long term Power Purchase Agreements (PPAs) for renewables to power their hyperscalers – large-scale cloud computing providers that own and operate massive data centres to offer flexible, scalable cloud services, including computing power, storage and networking. To illustrate, Amazon and Spanish electrical utility firm, Iberdrola, have signed three PPAs, which will see Amazon offtake 476 MW of renewable power.[17] Nuclear power is also having a renaissance due to increased power demand, and is being reflected in national perception shifts.[18]

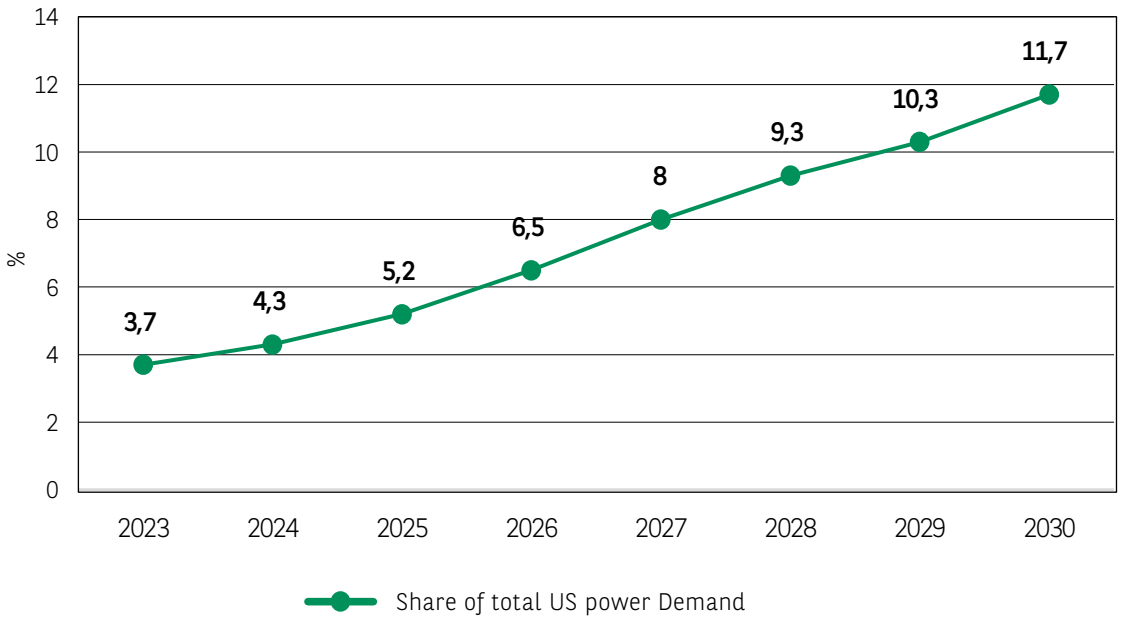
### US data centre energy consumption, TWh




Source: https://www.mckinsey.com/industries/private-capital/our-insights/how-data-centers-and-the-energy-sector-can-sate-ais-hunger-for-power

13 Data centres to consume more electricity than Japan by 2030 | World Economic Forum
14 Energy and AI
15 Global Data Centre Investment Hits Record $144B in 2024 - The Financial Analyst
16 Building data centers bigger, faster | McKinsey
17 Amazon signs 476MW of PPAs with Iberdrola across Spain and Portugal - DCD
18 Nuclear power is on the up in these countries | World Economic Forum

Share of total US power demand




Source: https://www.mckinsey.com/industries/private-capital/our-insights/how-data-centers-and-the-energy-sector-can-sate-ais-hunger-for-power

## GEOPOLITICAL REALIGNMENT AND SUPPLY CHAIN RESILIENCE

In an increasingly uncertain geopolitical environment, governments are placing greater emphasis on localising the supply of critical infrastructure and resources. This approach is aimed at reducing reliance on fragile global supply chains and enhancing national resilience in the face of global disruptions.

Simultaneously, businesses are adopting complementary strategies by diversifying their core supply sources. This effort is intended to mitigate risks associated with overdependence on specific regions or suppliers.

**Case study**

E.ON is investing heavily in modernising Germany's power grid to cut reliance on imported natural gas and support greater electrification. Strengthening the grid enables more renewable energy from domestic wind and solar power sources to flow into the network, reducing bottlenecks and foreign energy dependency as well as ensuring capacity for electric transport, heating and industry.

## POLICY

To encourage local infrastructure build-out, governments are passing a range of supportive policies, including those noted below:

**European Union ex Germany (examples)**

- EU High-Speed Rail Expansion Strategy e.g. Major airports with over 12 million passengers annually must be connected by long-distance rail, making rail a competitive alternative to domestic feeder flights.
- EU Connecting Europe Facility (CEF) – Transport, Energy & Digital Infrastructure e.g. A €600 million funding call (April 2025) supports key cross-border energy infrastructure projects (grids, hydrogen, $CO_2$, smart electricity networks) as part of Trans-European Transport Network (TEN-T).
- InvestEU — Mobilising Investment in Green, Digital, and Social Priorities e.g. through 2027, InvestEU aims to mobilise at least €372 billion in public-private investment across green, digital, and social sectors.
- EU Artificial Intelligence & Digital Infrastructure e.g the new Gigabit Infrastructure Act aims to lower the unnecessarily high costs of the electronic communication infrastructure deployment, partially caused by the permit granting procedures before deploying or upgrading the networks

**Germany**

- €500 billion Special Infrastructure & Climate Fund
- Infrastructure Investment (2025–2029): Germany plans to invest €166 billion through 2029 in infrastructure
- Digital Rail Upgrades: A separate push is underway to digitalise rail systems: €8 billion allocated for digitalisation by 2029

**USA**

- Bipartisan Infrastructure Law (IIJA): the IIJA delivers $550 billion in new federal infrastructure spending over five years
- American High-Speed Rail Act: A current proposal (H.R. 7600) aims to invest $205 billion over five years in high-speed and higher-speed rail

**India**

- National Infrastructure Pipeline (NIP): This is the Government of India's roadmap to make India a $5 trillion economy by 2024-25 by spending 100 lakh crore in infrastructure projects.
- $1 trillion Maritime Investment Roadmap
- National Master Plan for Multi-modal Connectivity: A $1.2 trillion megaproject to boost India's multi-modal logistics and manufacturing competitiveness.

**Other examples**

- South Africa: The World Bank approved a $1.5 billion loan for rail, ports, and energy infrastructure in 2025–26.
- Japan: Japan is expected to announce a $68 billion private investment plan for India during Prime Minister Modi's visit—focused on infrastructure, manufacturing, and technology—spanning a decade.

Sources


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- Call launched for energy infrastructure projects worth €600 million - European Commission
- InvestEU Programme - European Union
- https://www.consilium.europa.eu/en/press/press-releases/2024/02/06/gigabit-infrastructure-act-council-and-parliament-strike-a-deal-for-faster-deployment-of-high-speed-networks-in-the-eu/pdf
- Q&A: Germany's new €500 bln fund - What's in it for climate and energy? | Clean Energy Wire
- Germany plans to invest $192.5B in infrastructure through 2029
- TEN-T NEWSLETTERS - Germany - The federal government is investing billions in the digitalisation of the railways by 2029
- Bipartisan Infrastructure Investment and Jobs Act Guide
- $205B American High-Speed Rail Act Introduced | High Speed Rail Alliance
- National Infrastructure Pipeline (NIP) - Can this mega-push revive the Indian economy? - ClearIAS
- India Unveils $1 Trillion Maritime Investment Road Map for Port and Shipping Development, ETInfra
- Warehousing Demand Skyrockets as India Accelerates $1.2 Trillion Infrastructure Revolution
- World Bank Supports Improved Energy and Freight Transport Services in South Africa

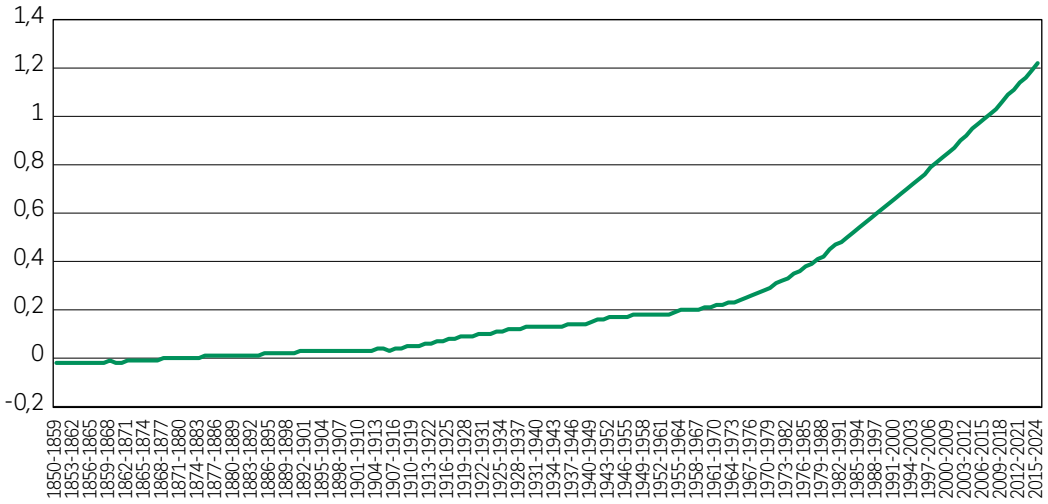
## CLIMATE

We are currently not on track to limit global warming to 1.5 degrees above pre-industrial levels[19] – a threshold widely considered essential to avoid the most severe effects of climate change.[20] In fact, the UK Met Office predicts that global temperatures that are 4°C above pre-industrial levels may be reached as soon as the 2060s.[21] This alarming trajectory underscores the urgency of accelerating climate action.

**"We are playing Russian roulette with our planet,"** said Mr. Guterres (the UN Secretary-General). **"We need an exit ramp off the highway to climate hell, and the truth is we have control of the wheel."**[22]

**Historic Human-Induced Global Warming, °C**

*Data by ClimateChangeTracker.org from 17 Jun 2024.*




## Climate mitigation and infrastructure[23]

Addressing climate change will require a complete transformation of global infrastructure systems, particularly those linked to energy, transportation, buildings and water. To illustrate the scale of the challenge, global investment in sustainable infrastructure is estimated to remain at around $2 trillion a year, cumulatively reaching $75 trillion between 2020 and 2050. However, a survey conducted by the International Federation of Consulting Engineers shows that this trajectory is insufficient; we need investment to reach $139 trillion by 2050 to achieve net zero - a shortfall of $64 trillion based on current policies.[24]

19 An individual year above 1.5 °C would not constitute a breach of the Paris Agreement goal

20 Global Warming: 66% Chance We'll Break Key 1.5C Limit for the First Time in the Next 5 Years

21 What would 4°C of global warming feel like? | News and events | Loughborough University

22 There is an exit off 'the highway to climate hell', Guterres insists | UN News

23 It is important to recognise that the infrastructure sector is a key enabler of global decarbonisation, but it is also one of the largest greenhouse gas (GHG)-emitting sectors. The BNPP Environmental Infrastructure Income Fund invests solely in infrastructure companies which are enabling climate mitigation/adaptation, instead of high-emitting companies or transitioning companies (brown to green).

24 Achieving Net Zero by 2050: $139 Trillion Sustainable Infrastructure Investment Needed | Informed Infrastructure

## Case study - Carrier

**Problem statement:**

**Building energy consumption and efficiency:** Energy consumption in buildings contributes to 26% of global GHG emissions, so it is essential to reduce such emissions from the buildings sector to meet the 1.5°C Paris Agreement goal. In fact, nearly 16% of electricity consumption in buildings is used for space cooling. It has more than tripled since 1990 and is projected to continue rising. The use of more energy-efficient air conditioners helps reduce electricity consumption in buildings, and consequently the associated GHG and air pollutant emissions. It represents one of several mitigation approaches for reducing GHG emissions caused by air conditioning.

**Solution statement:**

**High-efficiency building climate controls:** Carrier Global Corporation provides intelligent climate and energy solutions in the United States, Europe, the Asia Pacific, and internationally. It operates in two segments, Heating, Ventilating and Air Conditioning (HVAC), and Refrigeration. The HVAC segment provides products, controls, services and solutions to meet the heating, cooling and ventilation needs of residential and commercial customers. Its products include air conditioners, heating systems, heat pumps, building automation systems, aftermarket components, and repair and maintenance services and rentals, as well as modernisation and upgrades. The Refrigeration segment offers transport refrigeration and monitoring products, services, and digital solutions for trucks, trailers, shipping containers and intermodal and rail applications.

Carrier reports that high-efficiency products, refrigerant products with a lower global warming potential, and avoided food waste has helped customers avoid about 367 million metric tonnes of GHG emissions since 2020.

Carrier also offers energy-related products for commercial clients – such as building automation systems that increase building energy-efficiency – and services from its subsidiary EcoEnergy Insights, which reportedly saved clients 0.5 billion kWh in 2021, and another subsidiary, NORESCO, which reportedly enabled clients to avoid 1.1 million metric tonnes of $CO_2$ emissions.

Source: Net Purpose

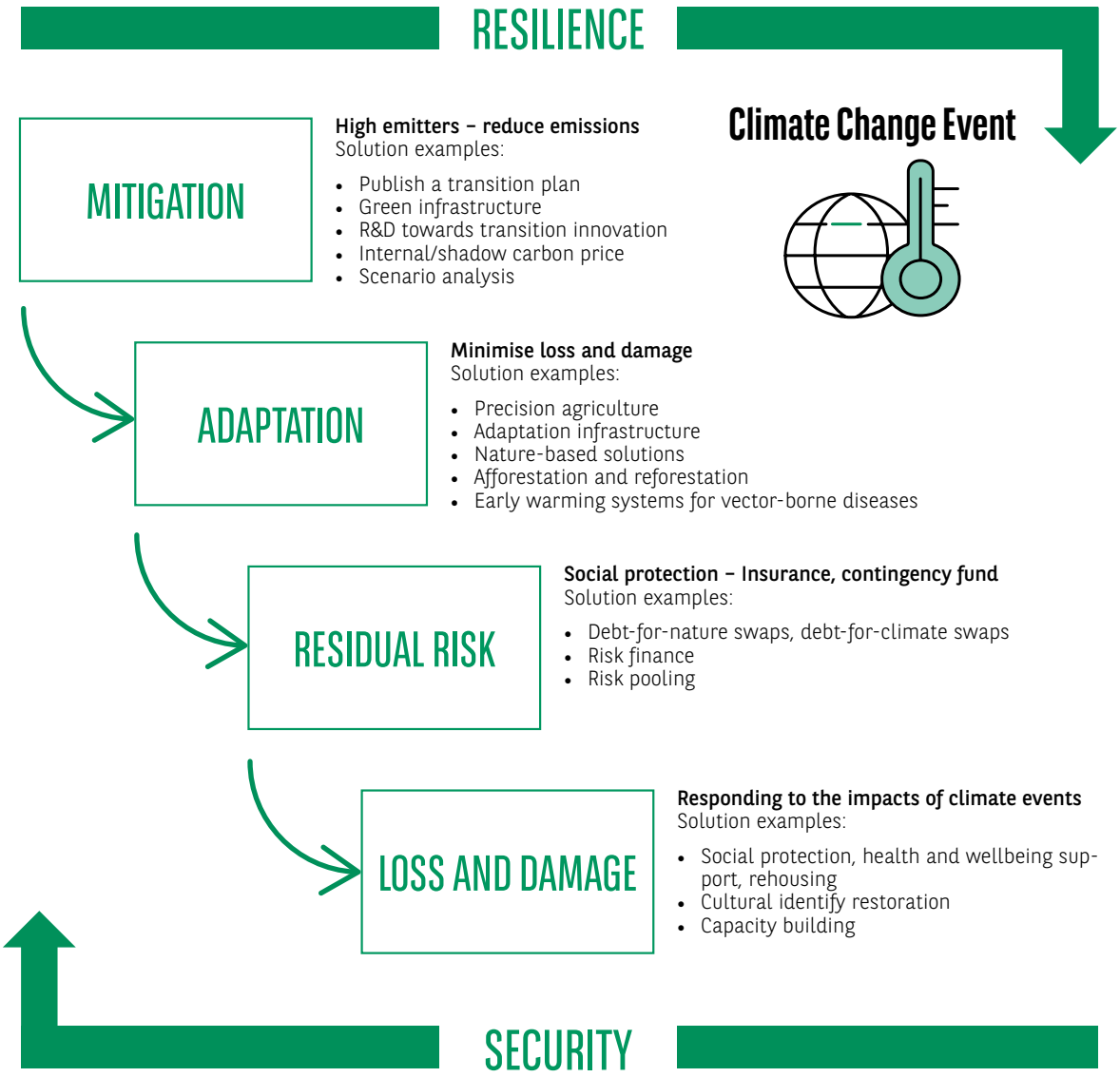


## Climate adaptation and infrastructure

Climate change is correlated to increased instability, the extent of which is a function of both the vulnerability and resilience of human and natural systems. Vulnerability refers to exposure to physical climate events, while resilience encompasses efforts to adapt, plan for residual risks, and prepare for potential losses and damages.

Despite strong regulatory and policy efforts aimed at climate mitigation, climate change is changing the world we live in, and as such, adaptation remains a needed pillar in the broader pursuit of sustainability.[25] The role of the BNPP Environmental Infrastructure Fund is illustrated in the graph below.

### Adaptation Resilience [26]

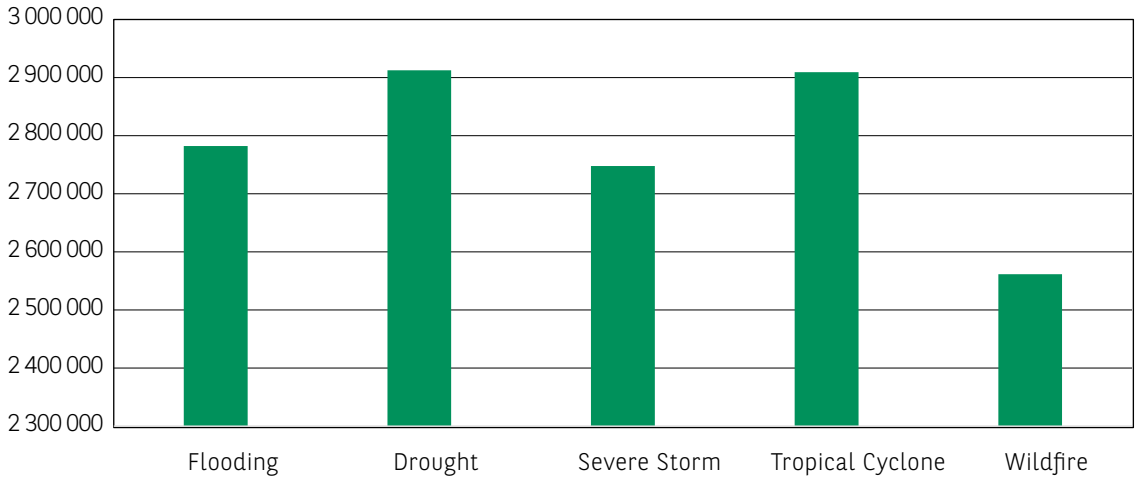



Source: Citi Research, 2024

25 Viewpoint | Global ESG & SRI | 23-Jul-2024
26 Image source: Citi Research

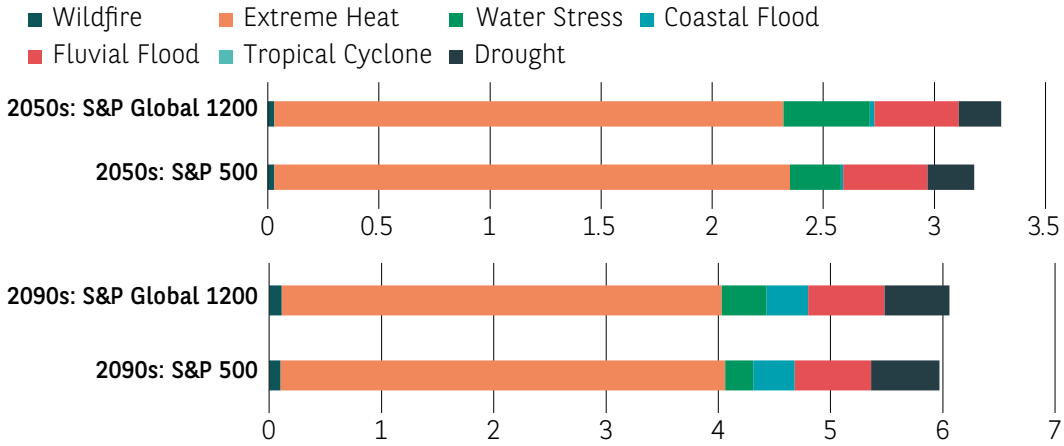
The need for climate adaptation investment, defined as that which reduces or manages physical climate risks, is increasing as extreme weather events are becoming more frequent and severe[27]. In 2024, 58 disasters each wreaked over a billion dollars in damages.[28] The clear increase in billion-dollar events can be seen in the NOAA analysis below.

**Weather and Climate Billion-Dollar Disasters to affect the U.S. from 1980-2024[29]**
*CPI adjusted cost, $ million*




These events create material losses for companies globally, which will only increase if current trajectories are realised, as illustrated by S&P

**Financial impact on major companies will nearly double from 2050s to 2090s**
Weighted average financial impact on assets owned by constituents of the S&P 500 and S&P Global 1200 in the 2050s and 2090s




Data as of February 2023.
Financial impact is first calculated at the asset level and represents the sum of financial costs arising from exposure to climate hazards for an asset, expressed as a percentage of the typical replacement value for a given asset type. Financial impact at the company level is then calculated as the weighted average of the asset-level financial impact for all known assets owned by a company and its subsidiaries. Financial impact at the index level is calculated as the market capitalization-weighted average of financial impact of all companies in the index.
The climate change scenario used in this analysis, known as SSP3-7.0, is characterized by limited mitigation where total greenhouse gas emissions double by 2100 and global average temperatures rise by 2.1 degrees C to 4.6 degrees C by 2100.
Source: S&P Global Sustainable1.
© 2023 S&P Global.

27 Other factors are also driving the need for climate adaptation investment, including but not limited to ageing infrastructure, increasing urbanisation and coastal development.
28 The planet had 58 billion-dollar weather disasters in 2024, the second-highest on record » Yale Climate Connections
29 Billion-Dollar Weather and Climate Disasters | National Centers for Environmental Information (NCEI)



## Case study

According to UN-Water, water scarcity affects every continent. Water use has been growing globally at more than twice the rate of population growth in the last century, and an increasing number of regions are reaching the limit of sustainably sourced water. It is estimated that nearly half of the global population live in areas of water stress, facing scarcity at least one month per year. This is set to increase to 4.8-5.7 billion in 2050.[30] Technological and physical solutions that increase water-use efficiency, water treatment, purification and filtration, contribute to saving water resources while helping to meet sanitation and hygiene needs.

In 2024, Veolia, a French transnational company with activities in three main areas traditionally managed by public authorities, water management, waste management, and energy services, began its GreenUp strategic programme. The programme sets goals for the company to achieve by 2027 in decarbonisation, water saving, and waste treatment. The company thus began measuring and reporting the water saved from freshwater reuse, desalination and leakage reduction.

In areas of the world with intense water stress and affordable energy, desalination has served a vital role relieving water stress. However, desalination is a significantly more expensive way to treat water than recycling used water or sourcing water from fresh surface or ground water. Desalination can also have adverse environmental and species impacts associated with large quantities of brackish water intake from aquifers or seawater and the subsequent discharge of highly concentrated brine back into the environment. However, it is difficult to dismiss desalination as not contributing to the SDGs solely for these reasons. Numerous countries rely on desalination for 50% or more of their useable water. It thus serves as a vital technology for achieving SDG 6.1 (access to drinking water). Issues such as the discharge of brine are also receiving industrial attention. New brine management strategies are being developed, such as pre-mixing brine with alternative water sources of lower salinity before discharge into surface water; industrial use of brine for acid and base production and metal recovery; agricultural use of brine for aquaculture, etc.

Source: Net Purpose



## The climate mitigation and climate adaptation nexus

Insurance providers are cautioning that Europe's clean energy developments will become increasingly vulnerable to the physical risks of climate change. Zurich Insurance Group has published a new report which analyses 25,000 renewable power generation sites throughout Europe and found that these are significantly more exposed to the effects of climate change than their fossil fuel counterparts. Therefore, as Europe becomes increasingly reliant on renewables for decarbonisation and energy autonomy, Zurich calls for stronger collaboration between the public and private sectors to reduce risks. This can take the form of:

- Upgrading existing infrastructure to withstand extreme weather
- Incorporating climate stress tests in the planning of new projects
- Embedding resilience into energy infrastructure design
- Improving access to reliable climate risk data
- Creating the right incentives and financial frameworks to support investment

30 Water Scarcity | UN-Water

Past performance or achievement is not indicative of current or future performance

Case study source: Zurich calls for urgent action to protect Europe's clean energy infrastructure | Zurich Insurance

Climate adaptation capital needs are significant. According to the World Resources Institute, "finance to cope with and respond to these impacts falls persistently short: the gap between funding needed to adapt to climate change and what is currently available is as high as $359 billion per year."[31] The United Nations Environmental Programme provides a slightly broader range, estimating the adaptation gap at $194-366 billion per year.[32] Finally, CDP (formally Carbon Disclosure Project) estimates there is a $86 billion funding shortfall for climate-resilient infrastructure.[33]

There is a compelling investment case for adaptation at scale: in 2019, the World Bank Group estimated that each $1 invested in resilient infrastructure yields an average of $4 in economic benefits.[34] Now, updated studies from the WRI show that every $1 invested in climate adaptation can yield more than $10.50 in benefits over the next 10 years.[35,36,37]

In terms of the performance of listed equity investments in climate adaptation, Jefferies has composed three listed equities climate adaptation baskets, based on 5-year, 3-year and year-to-date (YTD) data sets, comprised of 115, 118 and 115 companies, respectively. The three adaptation baskets outperform the iShares Global Clean Energy exchange -traded fund (ETF), and the YTD basket outperforms the MSCI ACWI index by 6.0%.[38]

| Time Period[39] | Performance of our Adaptation Baskets | Δ Performance to MSCI World Index | Δ Performance to iShares Global Clean Energy ETF |
|---|---|---|---|
| **5Y** | 84.4% | -0.1% | 78.5% |
| **3Y** | 22.1% | -8.1% | 63.7% |
| **YTD** | 30.6% | 6.0% | 53.2% |

Despite the economic rationale, deciding on impactful, climate adaptation investments can be hindered as:

1. The economic impact of climate hazards differs by location, influencing the scale and type of investment need. For example, coastal regions like Veneto (Italy), face risks from sea-level rise, while arid regions like Greece and Spain are more prone to wildfires. These regional differences in geography lead to diverse adaptation needs across Europe (but the same precedent stands globally)
2. Different hazards impact economic activities in various ways, with some sectors being more exposed than others. For example, manufacturing is especially vulnerable due to potential damage of machinery, whereas textiles are more likely to be impacted by heatwaves and labour productivity.
3. Finally, potential synergies between investments in public and private investment remain largely underexplored/underutilised.

31 Climate Adaptation Investments Return About 10x Value, Yet Funding Falls Short – Outlook Business
32 Finance gap for adaptation efforts at least 50% bigger - UNEP-CCC
33 Urgent Call from World's Cities for $86 Billion of Investment in Next Generation of Climate Infrastructure Projects - CDP
34 $4.2 Trillion Can Be Saved by Investing in More Resilient Infrastructure, New World Bank Report Finds
35 strengthening-investment-case-climate-adaptation.pdf
36 The Global Commission on Adaptation notes that without social safeguards, climate adaptation often excludes vulnerable groups. Considering Just Transition principles helps address these risks, and, according to a UNDP-Octopus Energy- Pardee Institute study, could increase global GDP by up to 21%. Source: Just transition to renewable energy 'would boost global GDP by 21%' - edie
37 The economic gains from adaption investments often come in the form of non-market benefits which are difficult to measure and monetise. While these benefits may appear compelling in theory, in practice they are harder to quantify and capture. This challenge of turning them into measurable outcomes is a major barrier to scaling up adaptation finance.
38 Jefferies

As such, while the private sector is aware that climate adaptation investment is required, the needs can vary along multiple dimensions—hazard type, sector, geographical region—and this heterogeneity makes investment difficult.[39]

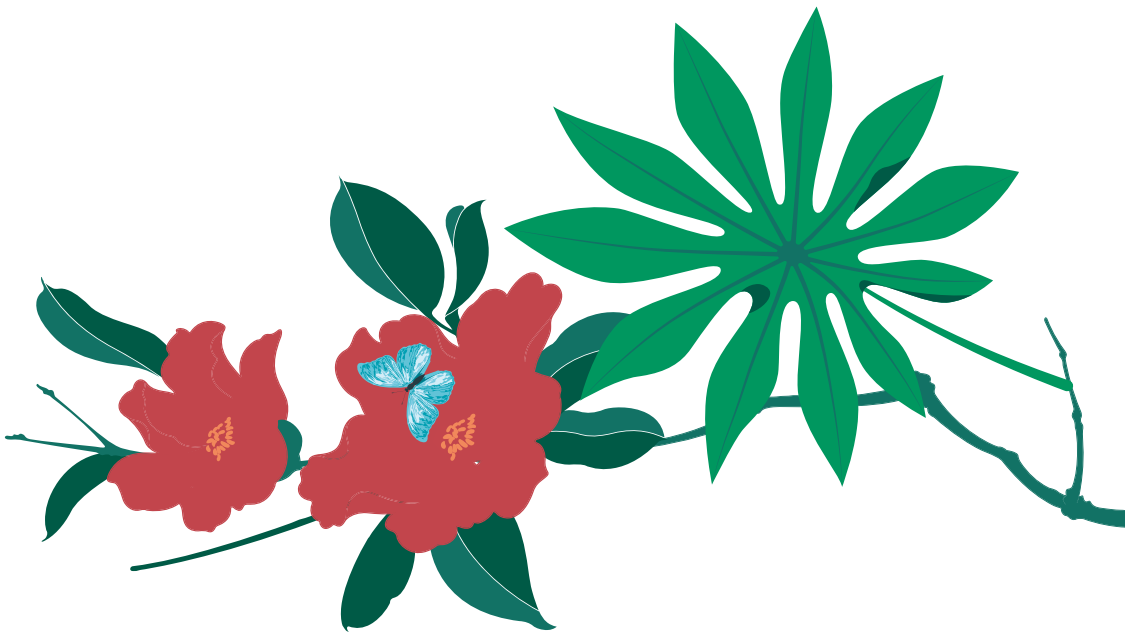
Consequently, pure climate adaptation investments in listed equities require a tailored approach that considers regional and sector-specific differences, making them inherently complex. Institutional investors' asset allocation to direct infrastructure investments in general remains small, less than 1% for OECD pension funds, and the 'green' investment component remains even more limited.

Furthermore, global climate finance surged to a record $1.9 trillion in 2023, but adaptation flows slipped to just $65 billion — down by nearly 16% year-on-year, according to the Climate Policy Initiative (CPI).[40] CPI also notes that, while mitigation funds primarily originate from the private sector, adaptation finance is almost entirely funded by the public sector (98%)[41]. As such, there is ample opportunity to develop innovative financing instruments and structures to participate in climate adaptation finance.

The BNPP Environmental Infrastructure Fund addresses this by identifying holdings with clear links to climate adaptation (please refer to the full climate adaptation methodology in the appendix). Although it is not a dedicated climate adaptation fund and lacks a formal portfolio-level threshold for adaptation exposure, such exposure will be reported on bi-annually. We aim to:

1. Replace infrastructure (maintenance, upgrading and replacing of existing infrastructure)
2. Substitute infrastructure (where it has a negative environmental impact, or is vulnerable to climate transition risk or requires climate adaptation)
3. Build out local infrastructure - reducing the emphasis on globalisation and increasingly fragmented trade.

Aligned with point four in BCG's investment framework below[42], the fund contributes to scaling adaptation solutions by financing established companies that are actively developing and deploying new adaptation product lines – thereby playing a key role in the widespread adoption and integration of these technologies.



39 Private investments in climate change adaptation are increasing in Europe, although sectoral differences remain | Communications Earth & Environment
40 Global Landscape of Climate Finance 2025 - CPI
41 Global Landscape of Climate Finance 2023 - CPI
42 from-risk-to-reward-report.pdf

## Adaptation and Resilience Financing Opportunities Framework

| Opportunity | Business Case | Entry Points |
|---|---|---|
| **Protect** assets, supply chains, and operations | Safeguard value at risk to enhance business resilience | 1. Finance measures companies take to protect against future losses<br>2. Align investment portfolios toward resilient companies |
| **Grow** the market of adaptation and resilience solutions | Capitalize on the growing market fueled by companies and governments that are increasingly recognizing the imperative to act | 3. Finance early- and growth-stage companies developing adaptation and resilience solutions<br>4. Finance mature companies developing new adaptation and resilience product lines |
| **Participate** in public sector implementation | Realize the direct returns and indirect benefits of collaborating with the public sector on critical initiatives | 5. Allocate capital to public adaptation and resilience projects<br>6. Invest in financial vehicles that direct capital to public adaptation and resilience initiatives |



**Mobilise** the private sector Public and social sectors catalyse and de-risk investments

## Global sustainability targets and environmental infrastructure

In reference to the UN Sustainable Development Goals (SDGs), infrastructure is explicitly addressed through SDG 9 "Industry, Innovation and Infrastructure", via the sub-targets below[43].

### SDG 9.1: Develop Sustainable, Resilient And Inclusive Infrastructure

**Develop quality, reliable, sustainable and resilient infrastructure**, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

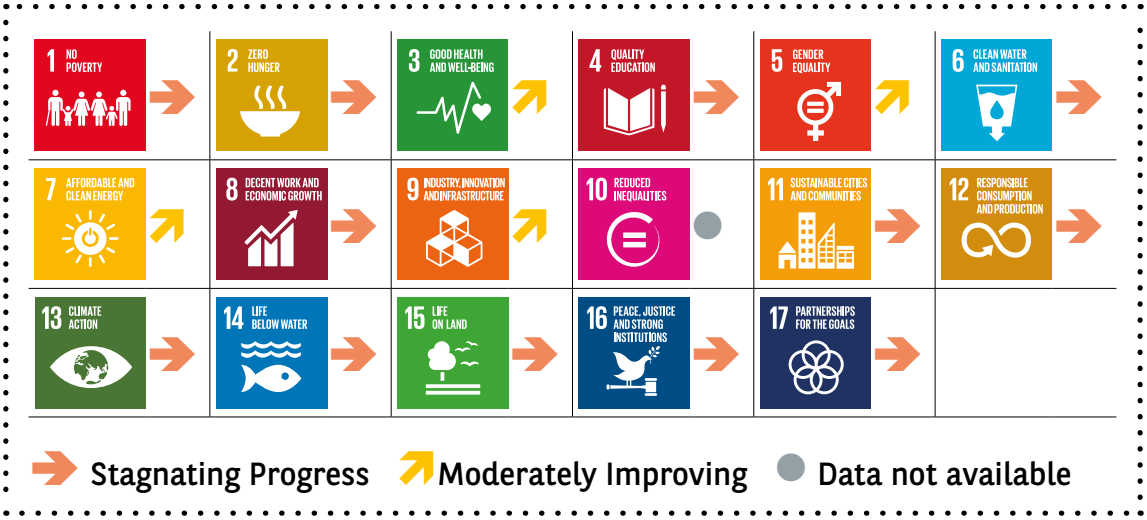
### SDG 9.2: Promote Inclusive And Sustainable Industrialization

**Promote inclusive and sustainable industrialization** and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

### SDG 9.4: Upgrade All Industries And Infrastructure For Sustainability

By 2030, **upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes**, with all countries taking action in accordance with their respective capabilities.

The Sustainable Development Report 2025 re-emphasises that, although we are getting closer to achieving SDG 9, significant challenges remain despite the moderate improvements made since their establishment in 2015. With only five years left until the 2030 deadline, it is more critical than ever to intensify actions in areas where progress is lacking. As can be seen in the graphic below, while progress in SDG 9 is better than most other SDGs, it is still only moderately improving, and challenges remain.[44]




43 It is also addressed through the sub-targets of other SDGs. However, for this paper, we are focusing on climate and natural capital-linked infrastructure, which is investable in the listed equity space.

44 sustainable-development-report-2025.pdf

Infrastructure does not just link to SDG 9; it is linked more broadly as "infrastructure and the SDGs are intimately intertwined."[45] Infrastructure is widely acknowledged as a critical enabler for achieving many of the SDGs, forming the foundational basis for sustainable development.

The figure below highlights this. Infrastructure is shown to influence all 17 SDGs, directly or indirectly, impacting 72% of the sub-targets (121 out of 169). For SDGs 3,6,7,9 and 11, all targets are influenced by infrastructure.

Water and energy infrastructure have the strongest direct impact, particularly on SDGs 6 and 7. Broader infrastructure, including Transport Infrastructure and Digital Infrastructure, enables access, services and participation, exerting widespread indirect influence. Indirect effects occur three times more often than direct ones, yet are often overlooked in policy design, risking missing opportunities to address the SDGs.

## The direct and indirect roles of infrastructure in influencing the targets of the SDGs[46]

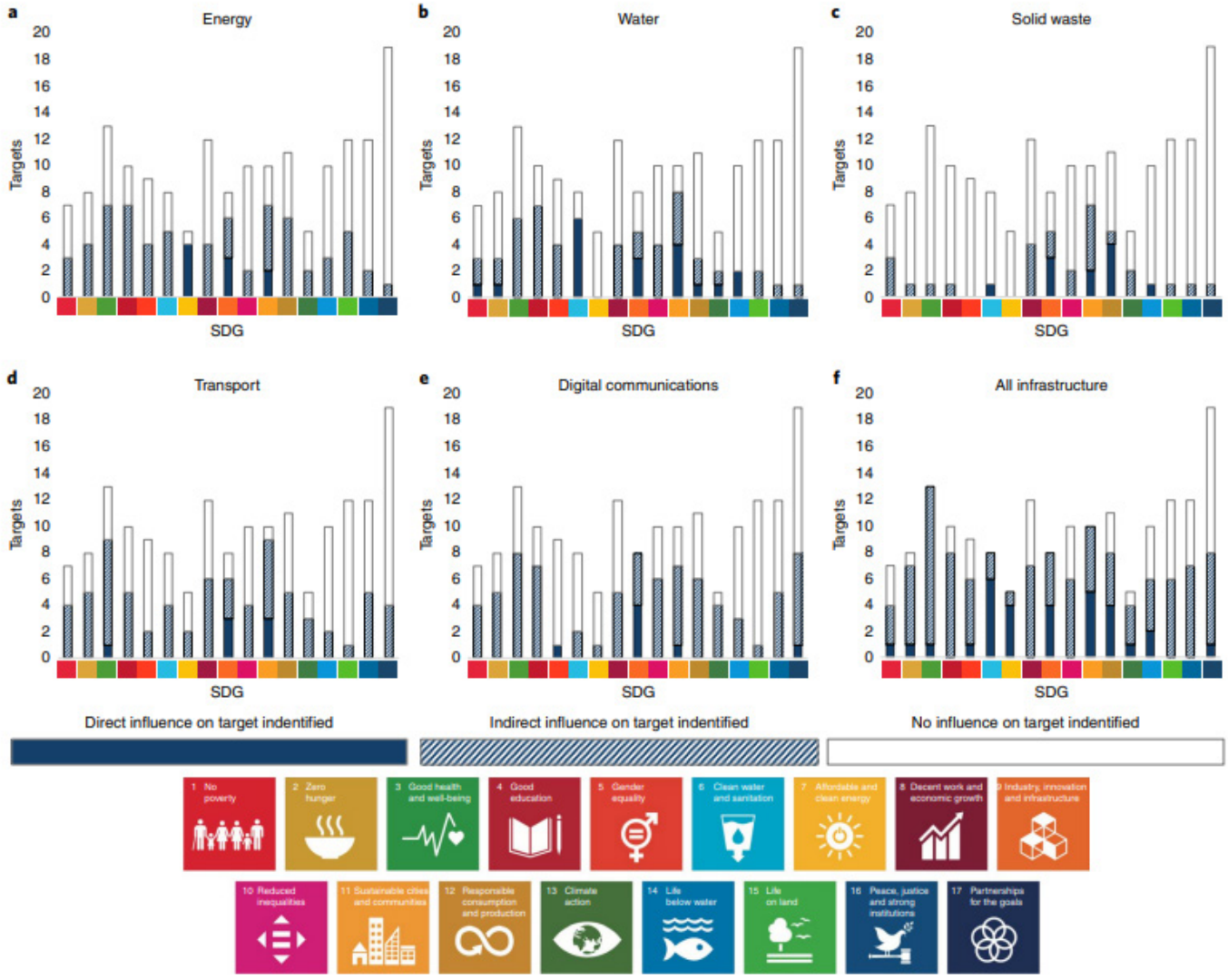



**Fig. 2 | The direct and indirect roles of infrastructure in influencing the targets of the SDGs. a–f**, Each goal is subdivided according to the number of targets, and each target has been assessed to establish direct or indirect influences from provision of the five categories of infrastructure considered in this analysis: energy (**a**), water (**b**), solid waste (**c**), transport (**d**) and digital communications (**e**) (see Methods). **f**, All infrastructure shows the combined influence on SDGs and targets of the five infrastructure sectors: here a target is included if it can be influenced by one or more of the five infrastructure sectors; in cases in which a target is both directly and indirectly influenced by different infrastructure systems, it is classified as direct.

45 Infrastructure for sustainable development | Nature Sustainability
46 Infrastructure for sustainable development | Nature Sustainability

Another way in which infrastructure is recognised for its contributions to sustainable development is through the EU Taxonomy (EUT), a classification tool for assessing if an activity is a solution or addresses infrastructure indirectly. The EUT divides activities into six environmental objectives:

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control and protection
6. Restoration of biodiversity and ecosystems

In every pillar, there are groups of activities, each with a '*substantial contribution*' criterion, '*do no significant harm*' assessment as well as '*minimum safeguards*'. If an activity passes these, it can be deemed '*sustainable*' in the eyes of the EU. Although not explicitly recognised, as it is within the SDGs, infrastructure is seen as the backbone to advancing progress in many of these pillars, and many qualifying pathways are closely linked to infrastructure.

Assessing whether infrastructure investments in products and services 'do no significant harm' is crucial. Although we see improvements, grey infrastructure has been one of the largest historic contributors to greenhouse gas emissions and biodiversity reduction due to its reliance on natural resource extraction and power-intensity.

Furthermore, if incorrectly managed, even green infrastructure can cause environmental harm. Environmental safeguards, lifecycle assessments and environmental impact assessments are crucial to mitigating this.

Finally, all types of infrastructure can increase vulnerability to natural and human-made hazards if incorrectly implemented and managed.

For example, Jakarta[47], Indonesia has built out extensive coastal reclamation and infrastructure development such as sea walls, urban expansion on reclaimed land and drainage canal modifications. While intended to protect the city from flooding and support urban growth, these projects have had unintended consequences including the overextraction of groundwater which has caused severe land subsidence, to the extent that some areas sink up to 25 cm a year. Also, combined with rising sea levels, the lowered land surface makes large parts of Jakarta more prone to tidal and storm surge flooding.



47 Jakarta to Build Giant Sea Wall to Stop City Sinking Into Sea - Saigoneer

# INVESTMENT UNIVERSE AND PROCESS

## THEMES

The BNP Paribas Environmental Infrastructure Income Fund invests in environmental infrastructure globally through solutions companies providing activities and services across power and digital infrastructure, transportation and urban infrastructure, and water and waste infrastructure.

These themes are foundational to economic resilience, affordability, sustainability (including both climate mitigation and climate adaptation) and growth. From the development of new electricity sources to the distribution of fuels, power infrastructure underpins nearly every sector in the global economy.

Demand for electricity is projected to rise significantly, driven by the growth of digital services, electrification and the increasing adoption of AI. This demand is expected to be largely met by renewable energy, placing additional pressure on ageing transmission and distribution systems that are often not designed or prepared to integrate variable energy sources at scale.

In parallel, the expansion of data centres, wireless communication networks and fibre-optic connectivity is intensifying the need for secure, efficient and high-capacity digital infrastructure. As economies become more connected and dependent on technology, investment in robust, modern power and digital systems will be essential.

Maritime shipping and port infrastructure remain critical in the movement of goods – enabling over 80% of international trade volume. Efficient, modern ports are essential for reducing supply chain disruptions, lowering logistics costs and supporting export-led growth, particularly in emerging markets. This goes hand in hand with sustainability as investing in cleaner, smarter port systems also help reduce emissions, lower congestion and future-proof trade infrastructure.

Notably, freight rail is excluded from our focus due to its role in coal distribution, which poses both climate and stranded asset risks.

More broadly, securing the flow of goods and services requires sustainable logistics networks that are resilient, low emission and designed for equitable access. In urban environments, sustainable buildings, integrated e-mobility, public transit and shared infrastructure are focuses.

As pressure on natural systems intensifies, and storms increase in severity and frequency, investment in water and waste infrastructure is becoming urgent. Modern water systems are not only essential to ensure reliable access to clean drinking water but also to manage growing threats. At the same time, effective waste management is key to conserving resources, protecting against public harm and reducing negative environmental impacts. As many of the systems for both waste and water management are outdated or inadequate to handle modern challenges, upgrades are critical to meeting future demand.

Engineering and consulting services facilitate all these three themes, offering expert advice, specialised services and technical expertise throughout project lifecycles. These services can reduce bottlenecks and help improve the efficiency, safety and cost effectiveness of infrastructure developments. While such services have been placed in the waste and waste infrastructure theme, they often provide an array of services which can link to all themes.

# INVESTMENT PROCESS AND SELECTIVITY CRITERIA

## Investment universe

The process begins with defining an initial thematic universe which consists of all eligible companies with any evidence of infrastructure solutions linked to the three core themes below. This includes companies that have the potential to address environmental challenges with a product or a service given the industry in which they operate, but more work is then done to assess their alignment before they are included in the final thematic universe.

Under the AMF Category 1 *Sélectivité* requirements, the initial thematic universe then needs to be reduced by at least 20% based on 'Does No significant Harm' (inc. our Responsible Business Conduct (RBC) policy) and SDG or EU taxonomy alignment. Activities are defined as aligned with at least 20% alignment via either revenue, capital expenditure (CAPEX), or operating expenses (OPEX). Stocks must also not be excluded by the PAB (Paris-Aligned Benchmark) or CTB (Climate Transition Benchmark) exclusions under the European Securities and Markets Authority (ESMA) naming guidelines. The final portfolio is classed as SFDR Article 9, so all companies qualify as a Sustainable Investment under BNPP AM's Sustainable Investment methodology.

The strategy focuses on large-cap, high-quality companies with strong dividend yields. To refine the investment universe, we exclude companies with a market capitalisation below $1 billion, and a dividend yield below 0.5%. This results in a final selection of approximately 350 companies globally.

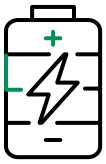
**Investment universe – Critical environmental infrastructure**
Universe of ~350 companies globally with market caps greater than $1bn and dividend yield greater than 0.5%

### Water & Waste Infrastructure



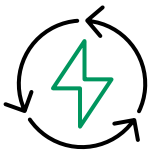
- Waste management
- Waste Recycling
- Water Infrastructure
- Water Treatment
- Water metering & solutions
- Environmental remediation

### Power & Digital Infrastructure



- Grid Management
- Power Transmission
- Power distribution
- Energy storage
- Power efficiency
- Digital infrastructure
- Datacentre infrastructure

### Transportation Infrastructure



- Public transit systems
- Logistics infrastructure
- EV Charging infrastructure
- Distribution and intermodal transportation
- Maritime Infrastructure

Source: BNP Paribas Asset Management. No assurance can be given that investment objectives will be achieved. Prospectus guidelines and the KIID are leading.

Note: 1) All companies are screened to be >1$bn market cap and have a >0.5% dividend yield.

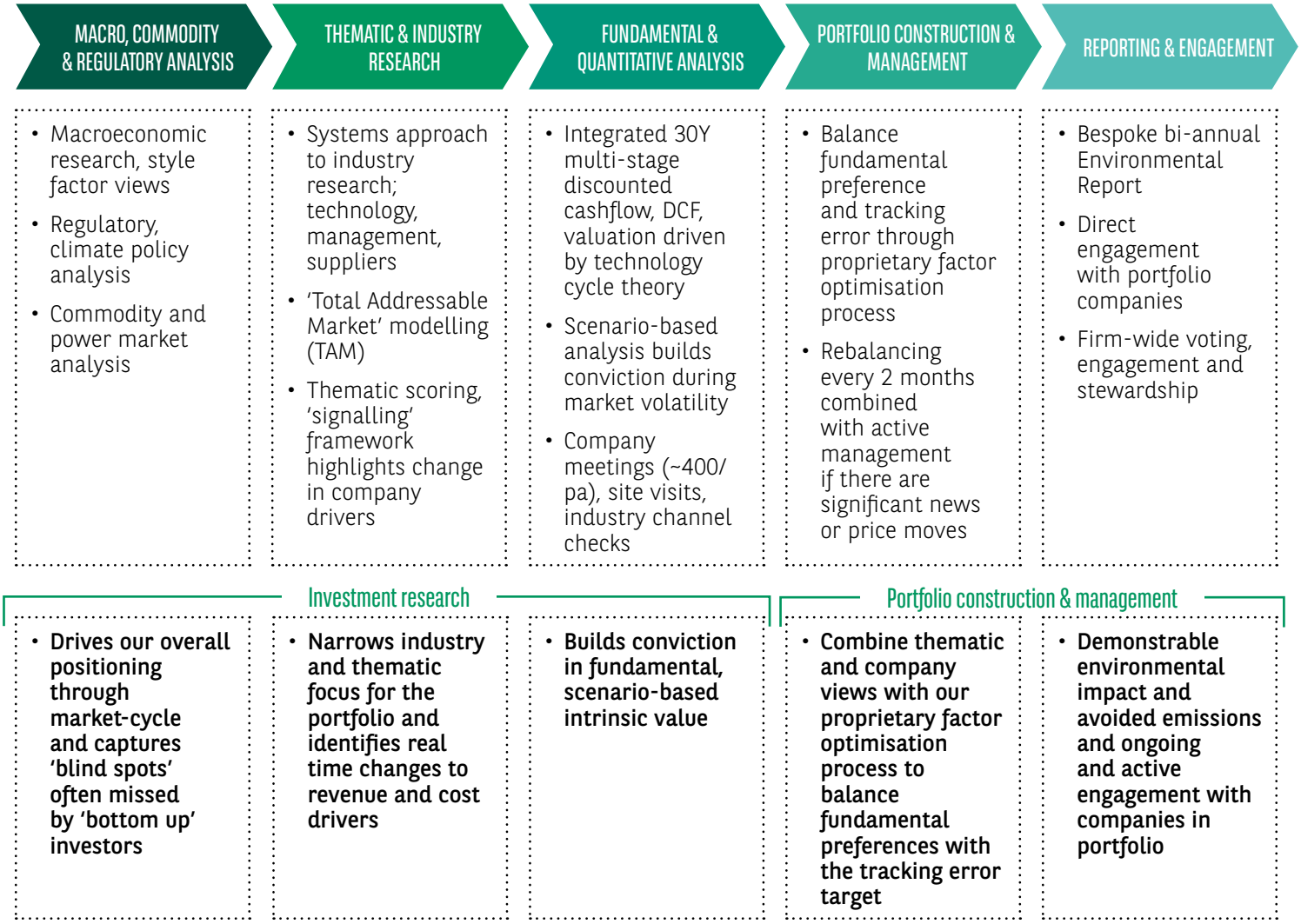
## Investment process

The five-stage investment process begins with top-down analysis to reduce the universe to a selection of attractive opportunities before detailed, bottom-up fundamental and sustainability analysis is used to inform the qualification of companies into the portfolio.

The process – developed by the co-portfolio managers over the course of two decades – is established, repeatable and scalable. Once macroeconomic considerations have been reviewed and a specific sub-theme has been identified, the equity analysts undertake rigorous fundamental bottom-up modelling of target companies. Portfolio candidates are then run through quantitative models for portfolio construction and risk management. These are applied monthly to optimise the portfolio's weightings against the fund's performance and risk objectives. All investment ideas and changes to the portfolio have to be formally approved by both portfolio managers.

Finally, portfolio companies undergo continuous monitoring through calls with management, pre- and post-earning assessments, engagement interactions, and ex-poste environmental analysis.

## Investment process - a systems approach to investment management




Note: prospectus and KIID are leading

## Proprietary quantamental approach

We have a multi-disciplinary investment process combining fundamental selection from the Environmental Strategies Group with a risk optimisation tool which has been co-developed with the 34-person internal Quantitative Research Group, QRG.

Our proprietary model incorporates a multi-dimensional factor overlay to identify the optimal portfolio configuration and is run by our dedicated quantitative research analyst. Key inputs into the optimisation / diversification include:

- Sector and country constraints
- Style factors and other factors (e.g., growth, value, momentum)
- Thematic alignment based on long-term secular trends
- Relative valuation
- Company quality indicators (e.g., earnings visibility, strength of balance sheet, relative valuation)

The output is a mathematically optimised portfolio that aims to maximise exposure to our fundamental convictions while minimising unintended risks and tracking error relative to the benchmark.

Portfolio overlay: After the optimisation process, the portfolio undergoes a final sense-check by the co-portfolio managers, who ensure that the resulting allocations are consistent with our fundamental views. If certain convictions or risk considerations are not adequately reflected, the manager may apply a portfolio overlay to make targeted adjustments while maintaining overall portfolio integrity.

Rebalancing and oversight: The portfolio is rebalanced every two months to reflect changes in fundamentals, market dynamics and risk exposures. Each rebalancing involves applying a scenario and stress-testing process to the portfolio under various macroeconomic and market shock scenarios. There are weekly portfolio reviews to discuss alpha generation and risk monitoring and ad-hoc action can be taken daily in response to significant events.

## OUR CHOICE OF BENCHMARK: DOW JONES BROOKFIELD GLOBAL GREEN INFRASTRUCTURE INDEX

We have selected the Dow Jones Brookfield Global Green Infrastructure index as the benchmark for our fund given its strong alignment with our investment philosophy. Brookfield is widely recognised as a leader in the field of global infrastructure, and the index applies a pure-play approach consistent with our own methodology. Its constituents are high-quality, defensive companies with stable cash flows derived primarily from owning and operating infrastructure assets – an approach that supports our fund's focus on dividend generation.

From a green alignment perspective, the index manages exposure to climate change mitigation and adaptation opportunities through a controlled green revenue share, complementing our fund's own minimum 20% green revenue threshold. Moreover, its clear classification of green and brown exposure mirrors our objective of reducing greenhouse gas emissions while maintaining disciplined, sustainable investment standards.



# ENVIRONMENTAL CAPABILITIES

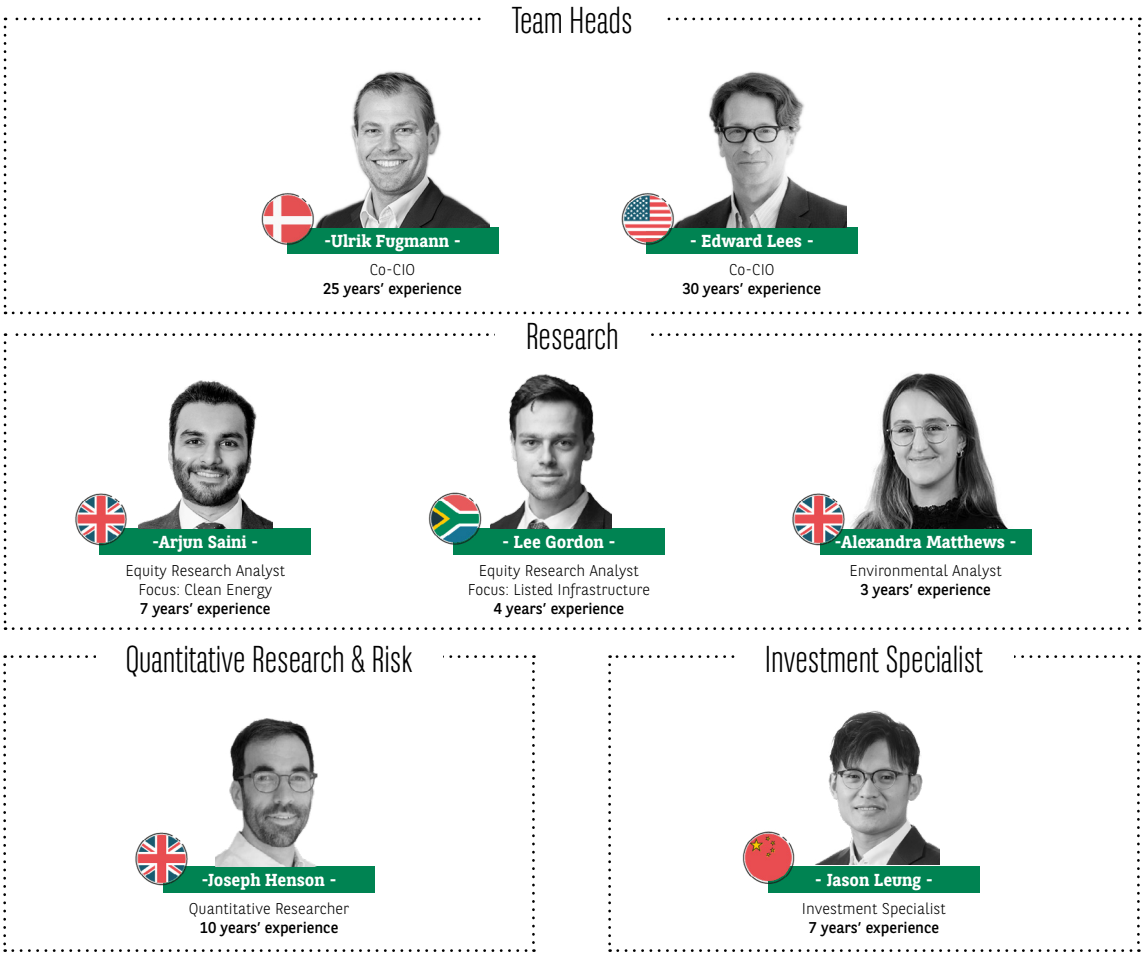
## 1. Team description and expertise

Ulrik Fugmann and Edward Lees co-head the Environmental Strategies Group at BNPP AM. They have operated in partnership for more than 20 years, investing thematically in environmental technologies globally, working together at Goldman Sachs, founding thematic investment asset management company, North Shore Partners, and then joining BNPP AM in 2019.

Today, the team manages environmental thematic strategies across six core environmental themes, spanning unconstrained and constrained long-only portfolios including both developed and emerging markets, as well as long-short strategy. A team of London-based dedicated research, quant and environmental analysts supports the co-heads with close daily collaboration.

### Environmental Strategies Group

A specialised group of investment professionals with a focus on environmental markets and backgrounds across investment banking, private and public equity and quantitative finance.




## 2. Environmental reports

The Environmental Infrastructure Income Fund will offer bespoke, bi-annual environmental reports, which will cover environmental considerations, with a focus on carbon metrics, SDG alignment, ESG scores, case studies, engagement, and relevant regulatory detail. The reports will draw on sources including Bloomberg, S&P Trucost, and Sustainalytics.

## 3. Stewardship and engagement

Stewardship (voting & engagement) is one of the firm's four pillars of sustainable investment, all of which are systematically implemented in all our funds. Together, these approaches strengthen the way we invest, including how we generate investment ideas, construct optimal portfolios, control for risk, and use our influence with companies and markets. We believe that meaningful engagement with issuers can enhance our investment decisions and better enable us to successfully manage long-term risk for our clients by promoting strong ESG practices and disclosure at the companies in which we invest on their behalf. Our engagement priorities and strategies are guided by BNPP AM's Global Sustainability Strategy (GSS), outlining our key firm-wide sustainability priorities.

## 4. Collaborations

The team have collaborated with leading organisations such as the WWF, the BBC, Naturalis, the European Business and Biodiversity Platform, FAIRR and more, for knowledge sharing, to strengthen credibility, draw upon specialist expertise, gain early insight into risks and opportunities, and ensure wider policy and industry alignment.

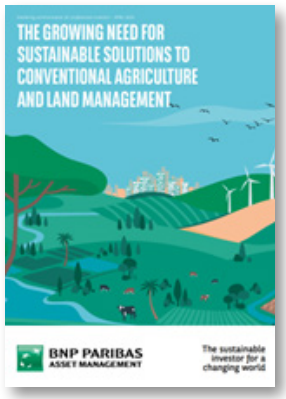
## 5. Thought leadership

The team write several thought leadership pieces a year, some of which are highlighted below. These have also been republished in European media channels.



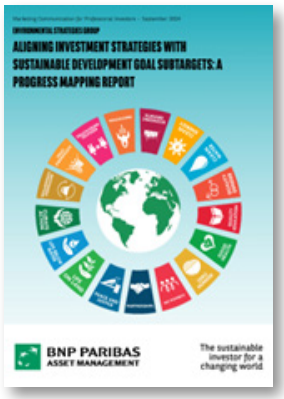















# RISK AND FUND CHARACTERISTICS

## Risk profile

Specific market risks:

- Capital gain tax risk
- Concentration risk
- Derivatives risk
- Emerging markets risk
- Extra-financial criteria investment risk
- Equity risk
- Small cap, specialised or restricted sectors risk
- Warrant risk specific risks related to investments in Mainland China
- Changes in PRC taxation risk
- Risks related to Stock Connect risks related to investments in CNH share categories

## For an overview of generic risks, please refer to the Appendix 3 of Book I of the Prospectus

- Base currency: EUR
- Launch date: 10/10/2025
- Sustainability credentials: Article 9, AMF Cat 1
- Maximum management fees: 1.50%
- Ongoing costs: 1.96% (estimated at launch)
- Benchmark: Dow Jones Brookfield Global Green Infrastructure (EUR) index
- Legal form: Sub-fund of SICAV BNP PARIBAS FUNDS Luxembourg domicile
- Management company: BNP Paribas Asset Management Luxembourg
- Delegated manager: BNP Paribas Asset Management UK
- ISIN code: LU3078530279
- SRI: 4/7

# APPENDIX

## CLIMATE ADAPTATION MAPPING

### Steps:

1. We have identified five climate adaptation themes: floods, storms and cyclones, wildfires, droughts and dry spells, heatwaves and extreme heat and finally, multi-hazard analytics and engineering
   a. Source: Jefferies and RBC, and the latter theme was introduced by the team as a catch-all for indirect or multi-thematic solution providers
2. We took the Bloomberg BICS mapping and noted all the BICS levels that we thought could be applicable for a) climate adaptation and b) green infrastructure and downloaded all the holdings (specifying a minimum revenue exposure threshold of 20%)
3. We then cross referenced this list with adaptation universes from Jefferies, Citi and RBC and added in any companies that were missing
4. We then applied a market cap and dividend yield screen – as this is a fund requirement
5. We then added a sustainability screen which includes:
   a. Is the company a Sustainable Investment (SI) as per BNPP AM's Methodology?
   b. Is it SI via the SDGs or EU Taxonomy pathways, which are activity-based pathways rather than operationally focused?
   c. Is it aligned with the Paris Aligned Benchmarks and Climate Transition Benchmarks due to ESMA regulatory updates?
6. Sense checking

### Framework:

**Climate Adaptation Mapping**
Including Thematic Infrastructure Overlay (e.g. exc. Agriculture)
Mapping Sources: BNPPAM, Bloomberg, Jefferies, RBC

**This is a mapping of the climate adaptation universe for the BNP Paribas Environmental Infrastructure Income fund. As this is an infrastructure fund, only adaptation solutions with links to this theme are included. There are other solutions e.g. crop insurance or gene edited plants, which are adaptation solutions but have been excluded. Furthermore, please note that not every name in these BICS sectors will be included, as they will also have to pass a stringent sustainability assessment.**

| Floods, Storms & Cyclones | Wildfires | Droughts & Dry Spells | Heatwaves & Extreme Heat | Multi-Hazard Analytics & Engineering |
|---|---|---|---|---|
| **Solutions:**<br>Storage Solutions<br>Water<br>Treatment | **Solutions:**<br>Fire Detection<br>Grid Maintenance | **Solutions:**<br>Water Provision | **Solutions:**<br>HVAC Solutions<br>Building Materials<br>Temperature Control | **Solutions:**<br>Early Detection<br>Controls and Operations<br>Engineering<br>Analytics and Research |
| **BICS Names:**<br>• Water Treatment Chemicals<br>• Power Storage<br>• Energy Storage Systems<br>**# of companies: 6** | **BICS Names:**<br>• Fire Detection Devices<br>• Elec Precision Equip Maint<br>• Energy Facilities & Ntwrk Maint<br>• Cable Line Construction<br>• Electric Utility Line Const<br>• Wire & Cable<br>**# of companies: 10** | **BICS Names:**<br>• Water Utility Line Construction<br>• Water Sewage Networks<br>• Water Supply Networks<br>**# of companies: 16** | **BICS Names:**<br>• Auto HVAC Systems<br>• Heating & Cooling Appliances<br>• Plumbing & HVAC Dealers<br>• Roof, Siding & Insulation Distr<br>• Temp Control Logist Own & Dev<br>• Temp Control Logistics REIT<br>• HVAC Building Products<br>• A/C Heating & Fridge Equip<br>• HVAC Equip & Supplies Whslrs<br>• District Heating & Cooling<br>**# of companies: 19** | **BICS Names:**<br>• Industrial Automation Controls<br>• Satellite Operators<br>• Measurement Instruments<br>• Ind Process Automation Mach<br>• Engineering Services<br>• Surveillance & Traffic Mgmt Systems<br>• Analytics & Visualization<br>**# of companies: 34** |

**Non-Climate Adaptation BICS Sectors**
Including Thematic Infrastructure Overlay (e.g. exc. Agriculture)
Mapping Sources: BNPPAM, Bloomberg, Jefferies, RBC

**Sustainable Transport**
- EV batteries
- EV Charging
- Electric Vehicle Supply Equip
- Commercial Veh Mfg – Electric
- Commercial Veh Rental - Electric
- Electric Locomotives
- Agriculture Rail – Electric
- Auto Rail – Electric
- Consumer Prods Rail – Electric
- Industrial Prods Rail – Electric
- LTL Freight – Electric
- Truckload Freight – Electric
- Intercity Rail - Electric
- Intercity Rail - Fossil Fuels
- Commuter Rail - Electric
- Commuter Rail - Fossil Fuels
- Interurban & Rural Bus - Electric
- Local Bus Services – Electric
- Taxi Services - Electric
- Ferry Services - Electric

**Renewable Energy Equipment**
- Solar Energy Equipment
- Polysilicon
- PV Cells
- PV Modules
- PV Wafers
- Solar Inverters
- Solar Thermal Elec Gen Equip
- Thin Film Modules
- Wind Energy Equipment
- Wind Turbines
- Wind Turbine Components
- Geothermal Energy Equipment
- Hydro Energy Equipment
- Marine Energy Equipment
- Other Renewable Energy Equip
- Fuel Cells
- Smart Grid Equipment
- Nuclear Power Gen Equip & Sys

**Renewable Energy Project Dev**
- Development & Construction
- Biomass Plant Construction
- Solar Plant Construction
- Wind Farm Construction
- Operations & Maintenance
- Nuclear Power Construction

**Grids**
- Power Trans & Distr Equip

**Sustainable Buildings & Logistics**
- Flex Industrial Own & Develop

**REITs**
- Timber REIT
- Data Center REIT
- Infrastructure REIT

**Industrial Equipment**
- Flow Control Equipment

**Waste Management**
- Hazardous Waste Collect & Treat
- Hazardous Waste Collection
- Hazardous Waste Treat & Disp
- Bio-Waste Collection & Treatment
- Landfill Gas Capture
- Solid Waste Collection & Treat
- Recycling Facilities
- Remediation Services
- Solid Waste Collection
- Solid Waste Incinerators
- Solid Waste Landfill
- Solid Waste Transfer

**Utilities**
- Integrated Electric Utilities
- Hydrogen Transmission & Storage
- $CO_2$ Transmission & Storage



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VIEWPOINT

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The sustainable investor for a changing world