

**Investing in Climate: A Defining Theme
for the Next Generation**

February 2025

For investors, few themes have ever matched the scale and urgency of climate change. Over the past two decades, the rapid rise of the internet transformed global markets, creating trillion-dollar industries and reshaping economies. Today, we stand at the beginning of an arguably larger structural shift – the transition to a net-zero economy.

Decarbonisation is not a distant goal but a process that is already well underway, driven by governments, corporations, and investors alike. Net-zero commitments now cover more than 90% of global GDP, and major economies continue to introduce ambitious policies aimed at accelerating the transition. Meanwhile, some of the world's largest companies – including Microsoft, Amazon, and Apple – are making multibillion-dollar investments to reduce emissions, secure clean energy, and future-proof their operations. Many investors, too, are playing a role, using their influence to push companies toward sustainability.

Despite this momentum, the challenge remains immense. Global emissions have only recently stabilised, and the world remains decades away from reaching net zero. Addressing this will require unprecedented capital deployment across industries, from energy and transport to construction, industrials, and beyond. While much of the focus has been on renewables and electric vehicles, the opportunity set is far broader. Technologies like nuclear power, energy efficiency, and circular economy solutions are just as critical – and often overlooked by traditional investors.

At Munro Partners, we view climate change as a multi-decade investment opportunity. Identifying the companies driving this transition requires an approach that goes beyond simply screening out high emitters. The real winners will be those delivering practical solutions to decarbonisation – whether by producing clean energy, reducing industrial emissions, or improving efficiency across sectors.

This paper explores climate as an **Area of Interest (AoI)** and highlights the key structural trends shaping the investment landscape. We examine the major tailwinds accelerating the transition, the sub-sectors poised for growth, and the pivotal role of corporate decarbonisation. As we will outline, the climate opportunity is not just about meeting sustainability targets – it is about capturing one of the most significant investment themes of the 21st century.

The climate challenge: A systemic problem demanding systemic solutions

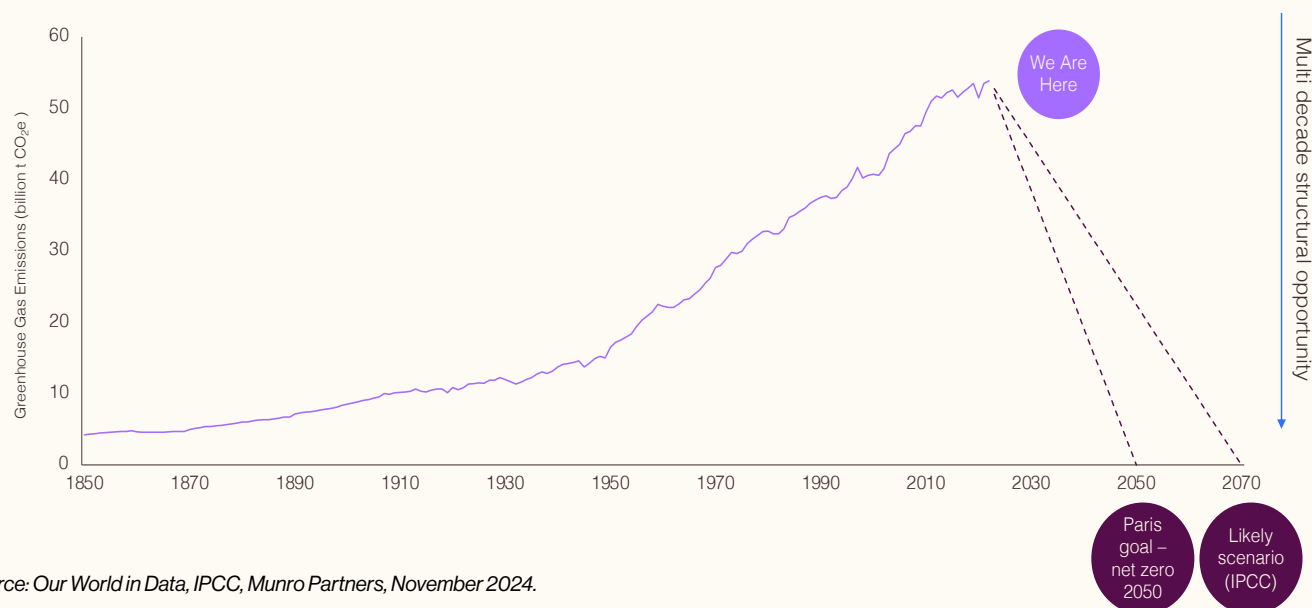
After years of discussion, climate change has moved to an unavoidable economic reality. Governments, corporations, and investors are now actively reshaping industries to align with the net-zero transition. While global emissions have only just begun to stabilise, the shift toward decarbonisation is accelerating – and with it, a significant investment opportunity is emerging.

This is not a temporary trend. Just as the rise of the internet transformed markets over the past two decades, the transition to a low-carbon economy is set to define the coming decades. The investment required to achieve net zero by mid-century is estimated at more than \$50 trillion, spanning clean energy, transport, industrial efficiency, and circular economy solutions. The key question for investors is not whether this transformation will occur, but which companies will lead it.

The forces shaping this shift can be broken into three structural drivers: government policy, corporate leadership, and investor influence. These forces are not only accelerating decarbonisation but also reinforcing each other, creating a multi-decade tailwind for the companies driving the transition.

WE THINK WE ARE MANY DECADES AWAY FROM NET ZERO

Global GHG emissions over time



Source: Our World in Data, IPCC, Munro Partners, November 2024.

Three structural tailwinds accelerating climate solutions

Government policy – the foundation for action

Over the past decade, climate policies have evolved from aspirational targets to enforceable regulations, reshaping entire industries. The **Paris Agreement** set the global benchmark for emissions reduction, while **COP28** reinforced the ambition with commitments to triple renewable energy capacity by 2030 and nuclear energy by 2050. National policies are now following suit. The **Inflation Reduction Act (IRA)** in the United States and the European Union's **Green Deal** are directing trillions of dollars toward clean energy, electrification, and industrial decarbonisation.

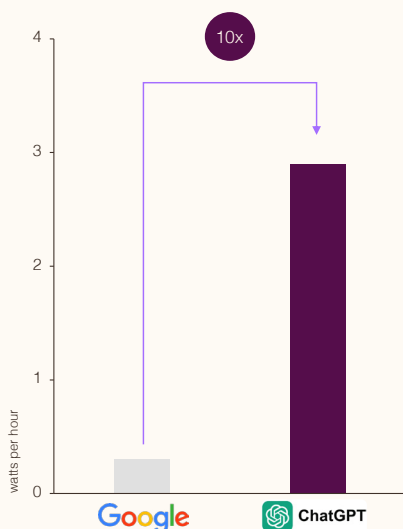
While the political landscape varies by region, the trend is clear – governments are using regulation, financial incentives, and carbon pricing to steer capital toward low-emissions technologies. According to Net Zero Tracker, the proportion of global GDP from countries with net zero targets went from 16% in 2019 to over 90% in 2025. The scale of these policy-driven investment flows is accelerating the adoption of renewables, grid infrastructure, energy storage, and efficiency technologies, reinforcing the case for long-term structural growth.

Corporate leadership – the private sector steps up

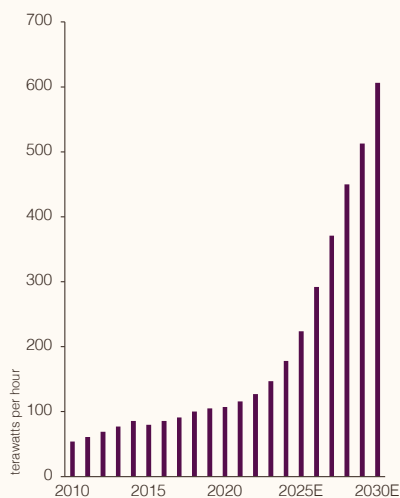
While government action provides the foundation, corporate investment is turning climate ambition into reality. Some of the world's largest companies – including Microsoft, Amazon, and Google – are making direct investments in renewables, such as nuclear power and signing long-term power purchase agreements (PPAs) to ensure a stable supply of carbon-free energy.

US POWER DEMAND IS NOW INCREASINGLY BEING DRIVEN BY DATA CENTRES

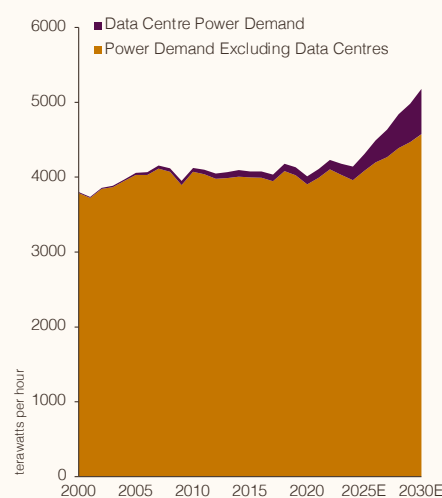
Chat GPT vs. Google search query (Wh)



US data centre power consumption (TWh)



US total power consumption (TWh)



Source: Munro Partners estimates and industry research as at 30 September 2024. The companies mentioned may or may not be held in the Munro funds.

These investments are not just about sustainability – they are about securing reliable energy in a world where AI, data centres, and electrification are driving massive new power demand. At the same time, commercial real estate owners and industrial manufacturers are investing in HVAC (heating, ventilation and air conditioning) systems, insulation, and efficiency upgrades, cutting costs while reducing emissions.

This shift marks a fundamental change in how businesses view climate solutions. Instead of simply offsetting emissions, companies are embedding decarbonisation into their operations, supply chains, and infrastructure. The result is a growing demand for technologies that enable net-zero goals, from energy storage to next-generation grid systems.

Investor influence – capital allocation as a force for change

The financial sector is playing a critical role in accelerating the climate transition. It is estimated that over US\$1.5 trillion flowed into climate-focused investments in 2023¹, demonstrating that there is a compelling investment opportunity.

Unlike early ESG strategies, which focused on passive screening, investors are now deploying active capital into climate solutions. This means prioritising companies that enable decarbonisation – such as those improving energy efficiency, scaling clean power, and developing circular economy solutions – rather than simply investing in companies with low emissions.

At the same time, a large number of shareholders are pressuring businesses to set emissions targets, increase transparency, and improve supply chain sustainability. Climate risk is now a financial issue, and companies failing to adapt are increasingly finding themselves at a competitive disadvantage.

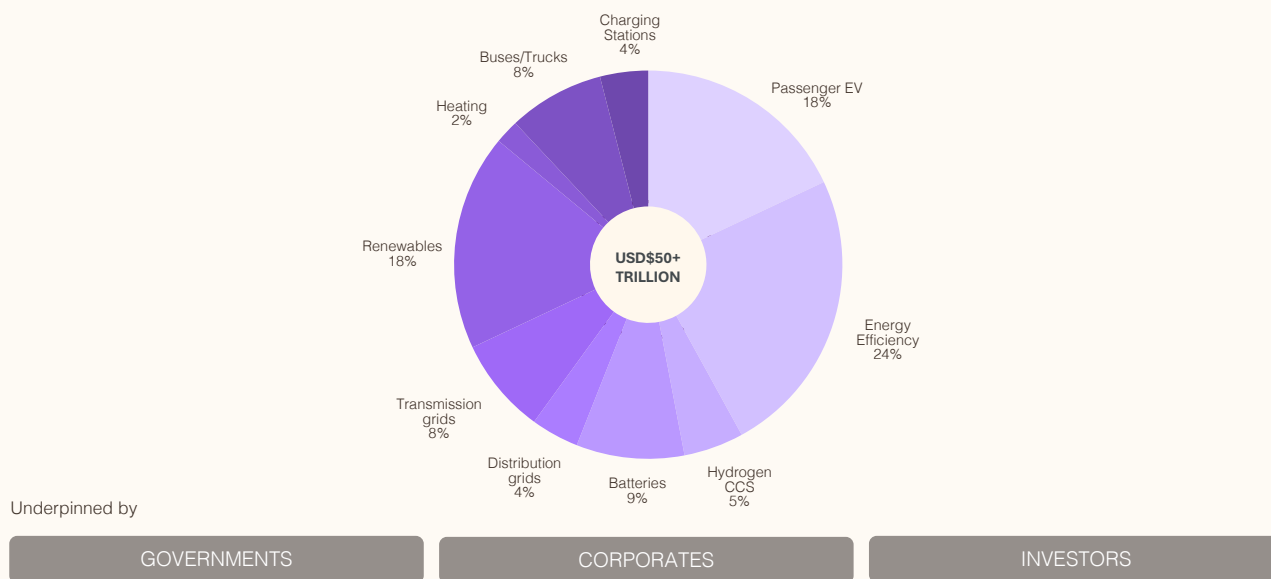
Importantly, climate investing does not always mean avoiding high-emissions companies altogether. Some of the most critical investment opportunities lie in companies with significant carbon footprints that are leading their industries in decarbonisation – whether by transitioning to clean energy, adopting breakthrough efficiency

¹ Source: Climate Policy Initiative, [Global Landscape of Climate Finance 2024](#).

technologies, or setting ambitious emissions reduction targets. These businesses may not be low-carbon today, but their role in transforming industrial processes, power generation, and heavy transport is essential to reaching net zero.

HOW WE THINK DECARBONISATION WILL HAPPEN

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Source: Munro Partners estimates and industry research as at 31 December 2023. Information is based on Munro estimates and sources believed by Munro to be accurate. For further information, contact your Munro representative.

Opportunities within the climate Aol: Four key sub-themes

At Munro Partners, we focus on four sub-themes within the climate investment landscape:

Clean energy – the foundation of decarbonisation

Clean energy is essential to reaching net zero. However, not all clean energy investments are created equal.

Renewables like **solar and wind** are now well established, but they face increasing commoditisation, intense competition, and supply chain risks. Chinese dominance in solar panel manufacturing, for example, has driven prices lower while squeezing profit margins, making these investments less attractive. Meanwhile, the intermittency of renewables – their dependence on weather conditions – means they cannot meet rising energy demand alone. Regardless of this, solar and onshore wind are on the trajectory to be the more cost competitive energy technologies globally².

Nuclear energy, on the other hand, is seeing a resurgence as a reliable, carbon-free baseload power source. Hyperscalers such as Microsoft and Amazon are actively securing long-term nuclear power contracts to meet their sustainability commitments and ensure a stable energy supply for their AI-driven data centres. While small modular reactors (SMRs) hold promise, their commercial deployment is still in the early stages and likely won't scale until the 2030s.

Beyond generation, a compelling investment opportunity lies in energy enablers – companies providing grid upgrades, energy storage, and infrastructure solutions that allow renewables and nuclear to integrate seamlessly into the energy system.

² Source: Wood Mackenzie, [Global competitiveness of renewable LCOE continues to accelerate](#).

Energy efficiency – the unsung hero of decarbonisation

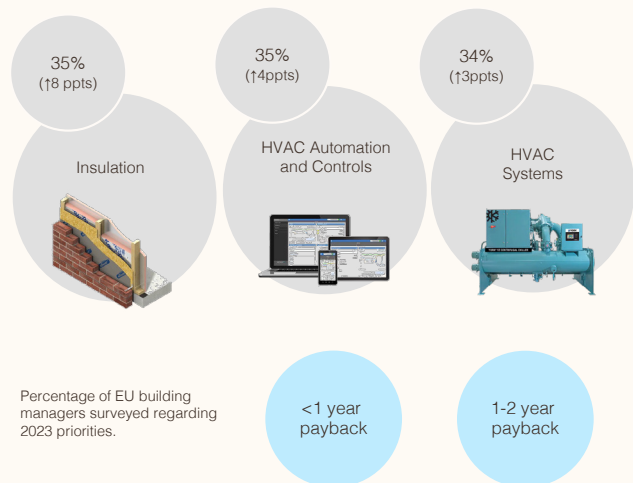
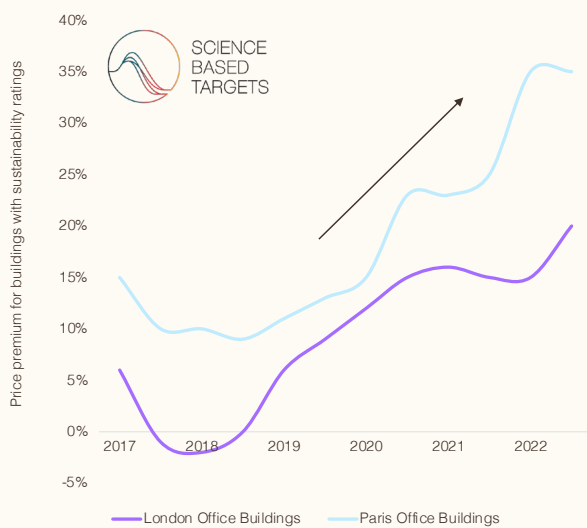
Energy efficiency has done more to reduce emissions in the US over the past decade than renewables, yet it remains one of the most overlooked areas of climate investment. Unlike energy production, efficiency solutions reduce demand altogether, cutting costs and emissions in the process.

Buildings alone account for nearly 40% of global energy use, making HVAC systems, insulation, and energy management software critical areas of investment. With short payback periods – **often under two years** – energy efficiency solutions represent one of the fastest-growing and most financially attractive areas of climate investment.

ENERGY EFFICIENT BUILDINGS

Corporate tenants are paying for sustainability...

... so building managers are investing today



Source: MSCI. Green Premiums are defined by MSCI as follows London sustainability ratings are based on offices that have either BREEAM or LEED ratings (versus those that don't) Paris based on BREEAM, LEED, HQE and BBC certifications.

At the same time, industrial energy efficiency is becoming a major investment theme. Technologies such as industrial process optimisation, heat pumps, and waste heat recovery are improving operational efficiency in manufacturing, logistics, and data centres.

Circular economy – reducing waste, increasing sustainability

The transition to a sustainable economy is also about redefining how we use materials. The circular economy focuses on reducing waste, increasing recycling, and creating more sustainable production systems.

Plastics, industrial waste, and water scarcity present some of the biggest environmental challenges today. Companies involved in waste management, advanced recycling, and water treatment solutions are seeing rising demand, particularly as corporate and government policies push for higher sustainability standards in packaging and industrial processes.

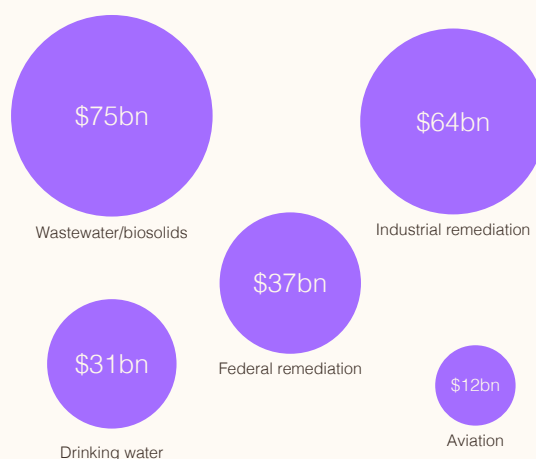
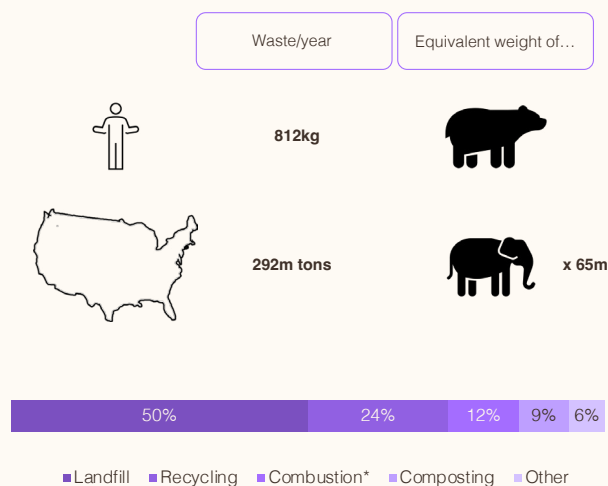
Beyond traditional waste management, innovation in **alternative materials** – such as bio-based plastics, low-carbon cement, and synthetic fuels – is opening up new investment opportunities. These industries are still in the early stages, but they are set to grow as global supply chains adapt to increasing regulatory and consumer pressure.

CIRCULAR ECONOMY – BETTER MANAGEMENT OF WATER AND WASTE

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Waste is a big problem

The clean up of contaminants like PFAS present investment opportunities



Source: US EPA (2018), Munro Partners. *Combustion with Energy Recovery. For illustrative purposes, diagrams are not to scale. PFAS stands for Perfluoroalkyl and Polyfluoroalkyl Substances.

Clean transport – beyond the EV excitement

The rise of electric vehicles (EVs) is one of the most visible shifts in the climate transition, but the investment case for direct EV exposure is becoming more complex. A combination of oversupply, slowing demand, and aggressive competition from China has put pressure on automakers, making investments less compelling in the short term.

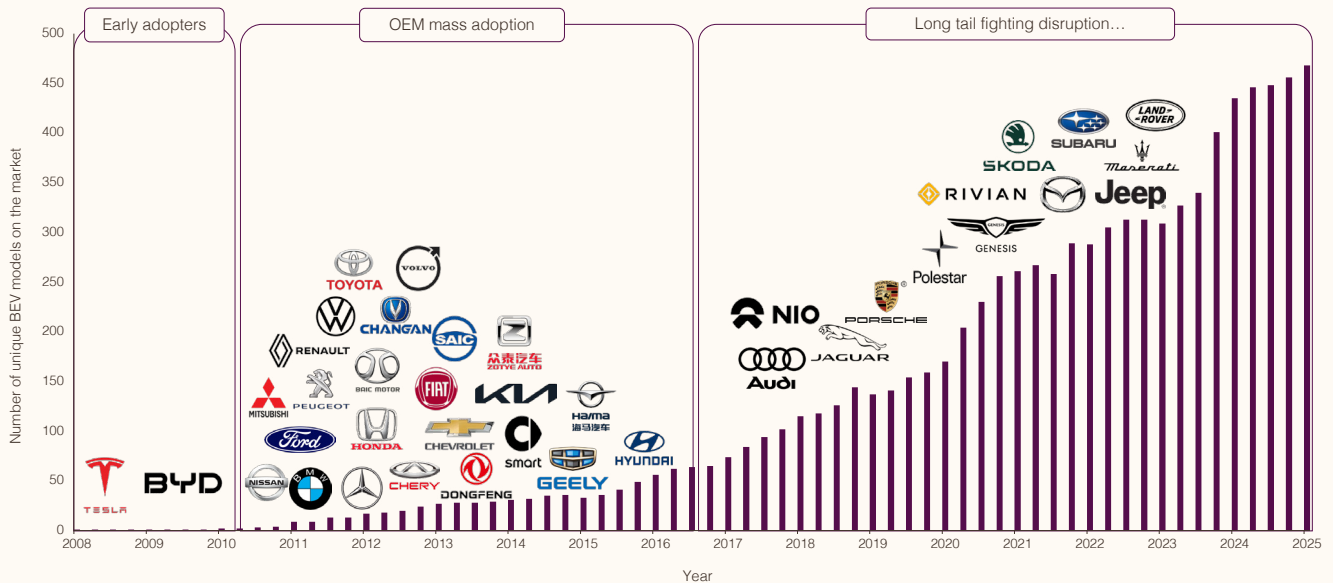
However, the broader clean transport ecosystem remains an attractive investment theme. The supply chain behind EVs – including battery materials, charging infrastructure, and grid integration technologies – continues to grow as electrification expands across passenger vehicles, trucks, and public transport.

At the same time, low-carbon fuels, hydrogen, and sustainable aviation solutions are emerging as potential areas for future investment, particularly in industries where electrification is not yet viable.

WE ARE CAUTIOUS ON CLEAN TRANSPORT BECAUSE OF A SHORT-TERM GLUT

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Battery Electric Vehicles (BEV) year of first model release



Source: Munro Partners and Industry research as at January 2025. OEM stands for Original Equipment Manufacturers

Looking ahead: Emerging drivers and innovations

The transition to a net-zero economy is underway, but the path forward is still evolving. As governments, corporations, and investors accelerate decarbonisation, several emerging trends are beginning to shape the next phase of climate investment. While clean energy, energy efficiency, and circular economy solutions remain foundational, new technologies, market shifts, and changing energy demand dynamics are creating fresh opportunities.

AI-driven energy demand – the unexpected climate accelerant

The rapid adoption of artificial intelligence is reshaping global energy consumption. AI workloads are significantly more power-intensive than traditional computing, and as businesses deploy AI at scale, data centre electricity demand is set to surge. According to the International Energy Agency (IEA), electricity consumption from data centres, AI and cryptocurrency could double between 2022 and 2026, reaching more than 1,000 terawatt-hours (TWh) – roughly equivalent to Japan's annual electricity consumption³.

Data centres already contribute over **2.5% of global emissions**, a figure set to rise as AI infrastructure expands. Rather than slowing decarbonisation efforts, AI could increase the urgency of the energy transition, forcing companies to scale clean energy investment and grid infrastructure faster than previously expected.

Additionally, AI is playing a role in energy efficiency and grid optimisation. Machine learning models are being used to improve electricity demand forecasting, enhance battery storage performance, and increase the efficiency of industrial and building energy systems. While AI is accelerating the need for clean power, it is also emerging as a key enabler of smarter energy use.

³ Source: IEA, [Electricity 2024](#).

At the same time, heavy industry is undergoing a structural shift. New industrial technologies are emerging – from green steel and cement to low-carbon chemical production – driven by both regulation and corporate commitments to reduce supply chain emissions. While these areas are still in the early stages, they may represent the next major investment wave in the climate transition.

The climate multi-decade shift and beyond

The path to net zero will not be linear. Political cycles, technological advancements, and evolving consumer behaviour will all influence the pace of change. However, the direction is clear: government and companies are spending on decarbonisation, whether through energy infrastructure, efficiency technologies, or resource management solutions.

For long-term investors, climate is not just an environmental necessity – it is one of the **defining investment themes of the 21st century**. Those who position early will be well placed for the next phase of growth as the world accelerates toward a low-carbon future.

Learn more

To learn more about climate as an Area of Interest or about the Munro Climate Change Leaders Fund, head to our website at munropartners.com.

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