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ARTIFICIAL INTELLIGENCE AND CLIMATE IMPACTS

A guide for charity and
university asset owners

About this brief

This brief was written for the Charities Responsible Investment Network (CRIN) and Responsible Investment Network – Universities (RINU). It provides an introduction to AI and its climate impacts for charity and university asset owners. For further information about this brief, or for more information about the networks, please contact the CRIN and RINU secretariat on rin@shareaction.org.

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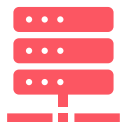
Why do AI climate impacts matter to investors?

Artificial intelligence (AI) is already having a transformative effect on society, the economy and the environment. This paper focuses specifically on climate risks and impacts linked to AI. However, investors may also wish to consider AI-related risks associated with labour markets and wealth inequalities, data privacy and human rights, bias and discrimination, impacts on nature (including water use and pollution), governance issues at AI companies, as well as risks associated with integrating AI into weapons systems. Further resources on these for asset owners can be found in the [Appendix](#).

AI contributes to climate change, with wide ranging and cascading impacts including flooding to coastal regions, food insecurity, loss of biodiversity and damage to infrastructure. Investors such as charities and universities should consider how AI companies align with their investment policies and climate commitments.

What are AI companies?

There are roughly three categories of companies operating in the AI space. Some companies may fit into two or even all three of these categories:



AI supply chain/infrastructure providers – data centres and associated infrastructure. These are often funded through institutional lending, infrastructure funds, private equity, and partnerships with institutional investors.ⁱ



AI frontier developers – the companies developing AI software. These are a mix of large, publicly traded companies (e.g. Microsoft) and non-listed companies (e.g. Anthropic)



AI deployers – anybody using AI. This is the largest of the categories, and includes anything from governments and large, listed companies to SMEs and NGOs.

How do these companies impact the climate?



Increased energy use by AI frontier developers

Data centres used to power AI are huge consumers of energy:

- **Electricity consumption for AI increased 4x faster than global electricity growth** between 2017 and 2023.ⁱⁱ The four leading AI-focused companiesⁱ increased their operational emissions (Scope 1&2) by 150% on average since 2020.ⁱⁱⁱ
- This increased electricity demand from data centres is **a significant driver of growth for natural gas-fired and coal-fired generation**, through higher utilisation of existing assets and new power plants. For example, in June 2026 Microsoft entered into an agreement with Chevron to construct a new gas-fired generation facility for a data centre in Texas.^{iv} **Natural gas and coal together are expected to meet over 40% of the additional electricity demand from data centres until 2030.**^v
- Although some companies have pledged² to increase their sourcing of renewable energy,^{vi} this still places a strain on existing electricity infrastructure^{vii} and requires trade-offs with existing energy users including businesses and homes.^{viii} Whilst some tech companies are investing in renewable energy alongside fossil fuel power generation,^{ix} this has been frustrated by low installation costs, costs associated with battery storage and issues connecting to the grid.^x



Enabled emissions in high-emitting sectors

AI technologies can allow **high-emitting and environmentally harmful industries to transform how they operate.**^{xi} For example, with AI, fossil fuel companies can:

- Optimise reservoir modelling
- Extend the life of oil and gas fields
- Identify new drilling locations
- Improve seismic imaging for exploration

AI-driven productivity gains in coal, oil and gas enable more emissions than applications in renewables avoid; net emissions reductions require renewables gains 4–5x greater than fossil fuel

¹ Amazon, Microsoft, Alphabet and Meta

² Google and Microsoft are both members of the RE100, a global initiative where companies pledge to use 100% renewable electricity by 2050.

gains. Any potential climate benefits by AI in the energy sector are therefore outweighed significantly by fossil fuel gains.^{xii}

Why should investors care?

Many companies developing, supporting, and deploying AI **feature heavily** in investors' portfolios, including in sustainable funds.^{xiii} Investors therefore **need to understand what these companies do, how they are governed, and how to handle these risks**. Climate change, and AI's contribution to it, are **systemic risks** and **cannot be avoided by simply selecting the 'right' stocks or diversification strategies**.^{xiv} Furthermore, issues such as improving the grid to support more renewable energy generation requires state intervention – a systemic change.

What can investors do?

Investors who wish to take action on this can take the following steps:

1. **Review your own investment policy** to make sure that it takes into account the impact of AI on the climate.
2. **Integrate criteria relating to AI and climate in your tendering processes and mandates** for consultants and asset managers (see suggested questions below for guidance).
3. **Monitor your asset managers'** progress on these criteria (see suggested questions below for guidance).
4. **Use client power to escalate action with asset managers where necessary** through ongoing engagement, including moving mandates if progress is not sufficient.
5. **Engage in sectoral and policy initiatives** to advocate for minimum standards and policy attention to AI.

Suggested questions for asset managers

Below is a list of potential questions that asset owners can ask their managers about AI and climate. These can be adapted for due diligence questionnaires during the appointment process, ongoing monitoring of asset manager responsible investment performance, and for discussion during asset manager reviews.

Questions are included with reference to the Thompson Reuters Foundation AI Company Data Initiative (AICDI),^{xv} the World Benchmarking Alliance (WBA) Digital Inclusion Benchmark,^{xvi} InfluenceMap^{xvii} and the Railpen 2026 Global Voting Policy.^{xviii}

3 key questions to ask your asset manager

1. Does the asset manager restrict direct financing (through bonds and/or private equity) for fossil fuel expanders? If so, does this include companies that are directly or indirectly financing fossil fuel expansion for data centres and/or developing technology to enable further exploration? If the asset manager does not collect data on the above, what steps is it taking to gather this information from investee companies?

2. Does the asset manager engage with investee companies involved in AI on their own lobbying practices to ensure they are not advocating (directly or via industry bodies) for increased fossil fuel use in light of data centre energy needs?

3. How has the asset manager voted on shareholder and management resolutions related to climate and AI?

AI and climate governance

Question	Why this matters	Follow-up questions
Does the asset manager have a responsible investment policy that addresses AI impacts on the climate?	Responsible investment policies guide investment decisions – a policy that explicitly references AI's impact on the climate will allow for more informed investment decisions. This is not a single reference to 'AI' with little guidance on how this affects investments.	- How often is this reviewed? - What percentage of assets does it cover? - Does this cover bonds as well as equities? - When was the last time that this responsible investment policy impacted an investment decision?
Does the asset manager assign somebody at either board or executive level with responsibility for AI impacts on the climate?	Assigning individuals at senior level shows that an organisation is taking this seriously.	How often are AI impacts on the climate reviewed at board or executive level?

Net zero targets and emissions

Question	Why this matters	Follow-up questions
Does the asset manager's interim and/or 2050 net zero target take into account investments in high-emitting companies involved in AI?	Emissions from AI are threatening climate targets – any net zero target must take this into account. This is not a vague reference to the potential positive environmental impacts of AI, with no reference to the current negative impacts.	- How is the asset manager planning on managing the forecast increased operational emissions (scope 1&2) from companies involved in AI? - Is it planning on engaging with these companies, divesting from them or buying carbon credits? - How is the asset manager accounting for enabled emissions at companies involved in AI?
Does the asset manager restrict direct financing (through bonds and/or private equity) for fossil fuel expanders? If so, does this include companies that are directly or indirectly financing fossil fuel expansion for data centres	Significant fossil fuel infrastructure is being expanded as a result of increased energy use from AI, and AI is enabling increased fossil fuel emissions. Whilst public equity divestment can send a powerful public signal, restrictions on primary	- How is the asset manager monitoring companies financing fossil fuel expansion for data centres? - How is the asset manager monitoring the enabled emissions for investee companies involved in AI?

and/or developing technology to enable further exploration? If the asset manager does not collect data on the above, what steps is it taking to gather this information from investee companies?	financing increase the cost of capital for harmful projects and make them less feasible.	● If no data is provided on the above, how is the asset manager planning on filling this data gap?
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Environmental risks and impacts

Question	Why this matters	Follow-up questions
Does the asset manager conduct environmental impact assessments that include its investments in companies involved in AI?	Asset managers should assess environmental impacts across its investments, including those of AI companies.	Does this include water use and pollution impacts?

Stewardship and voting

Question	Why this matters	Follow-up questions
Does the asset manager have a voting policy that includes specific guidance for shareholder resolutions on climate and AI?	Shareholder resolutions are key tools for holding publicly-listed companies accountable – having specific guidance signals that companies should be paying attention to this issue.	
Does the asset manager have a voting policy that includes specific guidance for voting against management resolutions for reasons related to climate and AI?	Voting against management resolutions (re-election of directors, auditor appointments, pay approvals) is a strong signal that an investor is unhappy with a company's direction on a particular issue.	

How has the asset manager voted on shareholder and management resolutions related to climate and AI?	This shows whether an asset manager is following their own voting guidance.	
Does the asset manager have an engagement policy that includes AI impacts on climate?	Engaging with companies pressures them to change their behaviour.	
What is the asset manager's escalation plan for companies involved in AI that have harmful climate impacts and have not demonstrated a willingness to address these?	Engagement without escalation is ineffective – asset managers should be clear what happens when companies don't meet expectations. This is not simply a list of actions that may or may not be taken - there should be a clear pathway.	Please give examples of where and how you've escalated on climate and AI.
What engagement activities has the asset manager engaged in on AI impacts on climate?	This demonstrates the extent to which an asset manager is following their own engagement policy. This is not a list of cherry-picked case studies.	Please provide a breakdown of where these engagements have been successful/unsuccessful

Policy and collective engagement

Question	Why this matters	Follow-up questions
Does the asset manager disclose its policy position and/or lobbying activities related to AI impacts on the climate?	AI is a systemic issue, one which regulators have struggled to address so far. Therefore, in addition to investor engagement, policy engagement is vital.	- Does the asset manager disclose its position and/or lobbying activities on specific pieces of legislation related to AI impacts on the climate? - Does the asset manager disclose its membership of trade associations, a framework for assessing alignment with these associations, and actions addressing any misalignment?
Does the asset manager engage with investee companies involved in AI on their own lobbying practices to ensure they are not advocating	The large energy requirements on data centres both puts a strain on existing renewable resources	Does the asset manager engage with investee companies involved in AI to ask whether they

(directly or via industry bodies) for increased fossil fuel use in light of data centre energy needs?	and has resulted in increased utilisation and development of fossil fuel infrastructure.	actively lobby for infrastructure improvements that would enable more renewable energy?
Is the asset manager a member of coalitions engaging on AI and climate, including: ● The Thompson Reuters Foundation AI Company Data Initiative (AICDI) ● World Benchmarking Alliance (WBA) ● Collective Impact Coalition for Ethical AI ● Greening AI Data Centres Coalition	Participation in collaborative engagement allows asset managers to share resources and collectively pressure investee companies to make change.	● What contributions has the asset manager made as members of these coalitions? ● Has the asset manager led any engagements as a member of these coalitions?

Appendix: Key other resources

If you want...	Read
The full picture on digital companies' climate commitments and progress	This report from the World Benchmarking Association and International Telecommunication Union – Greening Digital Companies 2025 .
To understand how transparent AI companies are being	This report from the AI Company Data Initiative – Responsible AI in Practice 2025 .
The breakdown of enabled emissions from AI companies: how these are larger than both current climate benefits in the energy system as well as data centre emissions.	This report on enabled emissions in the energy system — AI-driven productivity gains enable more CO₂ emissions than they avoid in a global energy–economy model — and the related work by the Enabled Emissions campaign
To learn more about upcoming AI company IPOs and debates on dual-class share structures	This article from Sanjay Joshi - The coming AI IPO wave has a governance problem — and institutional investors should act now
A framework for investors to assess how companies are managing AI risks	This report by Railpen - Achieving Effective AI Governance
To understand what actions asset owners are taking on AI	This report from Majority Action - AI Stewardship in Motion: How First-Mover Asset Owners and Asset Managers are Responding to AI Risks
To learn more about how the fossil fuel industry is lobbying for AI data centres to be gas-powered	This article by DeSmog - Inside the Plot to Cover Europe with Gas Powered AI Data Centres
To understand how community action is leading to data centre projects being cancelled	This article by Heatmap - Amid Rising Local Pushback, U.S. Data Center Cancellations Surged in 2025

Endnotes

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