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Think Globally, Act Locally!

Wednesday, 28 October 2026

Dear HOPE members and supporters,

Re: AI Progress Needs Responsibility

1. Purpose and proposed position

Artificial intelligence is increasingly used across society, from environmental monitoring to healthcare, education and public services. Its potential benefits deserve attention, but so do its effects on privacy, security, people and the environment. AI development should be supported by practical safeguards, clear accountability and action to prevent avoidable harm.

2. Opportunities and risks

AI has useful environmental applications. United Nations Environment Program (UNEP) describes its use in detecting methane emissions, while the International Energy Agency identifies opportunities to improve electricity-grid monitoring and equipment maintenance. [1][2]

However, these benefits need to be considered alongside cybersecurity, privacy and resource-use concerns.

Area	What the sources indicate	Implication for this discussion
Environmental applications	AI can assist environmental monitoring and energy-system management. [1][2]	Assess specific benefits rather than assuming every application is equally valuable.
Cybersecurity	The National Cyber Security Centre (NCSC) assesses that AI will make elements of cyber intrusion more effective and efficient through 2027. [3]	Organisations need to maintain security controls and respond promptly to vulnerabilities.
Privacy	The Office of the Australian Information Commissioner (OAIC) recommends careful product assessment, human oversight and protection of personal information. [4]	Convenience should not replace responsible information handling.
Environmental footprint	The UNEP identifies electricity, water, materials and electronic waste as relevant impacts. [1]	Consider the full life cycle rather than only the visible digital service.

The NCSC findings are assessments of likely developments, not guarantees. Similarly, evidence of a useful AI application does not establish that its benefits outweigh its costs in every setting.

3. Energy demand: useful context

The IEA's updated 2026 projections show substantial growth in electricity consumption across the data-centre sector.[2]

Measure	IEA estimate or projection
Global data-centre electricity consumption in 2025	Approximately **485 TWh**
Projected consumption in 2030	Approximately **950 TWh**
Projected share of global electricity demand in 2030	Approximately **3%**

3.1 Interpretation: These figures cover all data centres, including non-AI workloads. They should not be described as electricity consumed exclusively by AI. The 2030 figures are projections, not observed outcomes.

The International Energy Agency (IEA) also reports improvements in efficiency per AI task alongside growth in more energy-intensive applications. Lower consumption per task therefore does not necessarily mean lower total consumption. [2]

For HOPE, this raises a practical question: how can AI's benefits be assessed alongside its demands on energy, water and materials?

Different sectors raise different questions. The following examples are illustrative possibilities, not claims about particular incidents.

Healthcare: An AI tool may help organise clinical information, but inaccurate output or exposure of patient information could cause harm. A qualified professional should check important decisions and protect sensitive records.

Education: An AI tool may assist learning, but students and teachers need to check its output for errors and consider how personal information is handled.

Community organisations: A charity might use AI to organise information, but it should assess a tool before entering personal details about members or volunteers. [4]

Environmental management: AI can support monitoring and electricity-grid management, while the computing infrastructure it uses also consumes resources. Decisions should consider both the intended benefit and the wider footprint. [1][2]

3.2 Proposed checks and balances

The Organisation for Economic Co-operation and Development (OECD) AI Principles emphasise transparency, safety, accountability and ongoing risk management.[5] Drawing on these principles and the other sources reviewed, the following measures could form the basis of an argument for prevention.

These are proposals for discussion, rather than a claim that every measure is already legally required.

Proposed safeguard	Purpose
Risk assessment before deployment	Identify potential harms before widespread use.
Independent testing for high-risk applications	Examine safety claims beyond the developer's own assessment.
Clearly assigned responsibilities	Establish who must act when problems arise.
Meaningful human oversight	Give people the understanding and authority needed to intervene.
Incident reporting and regular reviews	Identify problems that emerge during operation.
Environmental disclosure	Help compare demonstrated benefits with resource costs.

My view is that oversight must be practical: a person needs enough time, knowledge and authority to question an AI-supported decision. Responsibility should also be assigned across developers, suppliers and deploying organisations according to their roles and ability to prevent harm.

Voluntary action by technology companies alone may not provide enough assurance. Governments should consider working together to develop and enforce proportionate rules for AI development and use, with independent oversight, public input and clear responsibilities. The requirements should reflect the level of risk and provide ways for affected people to challenge harmful decisions. This is a proposed policy direction, not a statement of existing law.

4. International cooperation and prevention

The International AI Safety Report 2026 demonstrates the value of sharing scientific evidence across countries. It also makes clear that international participation does not mean endorsement of a particular regulatory approach. [6]

Cooperation on testing methods and incident information could strengthen safeguards for technology used across borders. Meanwhile, organisations can take practical precautions without waiting for complete international agreement.

This approach reflects the emphasis on cause and effect, checks and balances, and preventing harm before it becomes difficult to reverse.

References

[1] United Nations Environment Programme. *AI has an environmental problem. Here's what the world can do about that.* Originally published 21 September 2024; subsequently republished.
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[2] International Energy Agency. (2026). *Key Questions on Energy and AI: Executive summary.*
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[3] National Cyber Security Centre. (2025, 7 May). *Impact of AI on cyber threat from now to 2027.*
https://www.ncsc.gov.uk/report/impact-ai-cyber-threat-now-2027
[4] Office of the Australian Information Commissioner. (2024, 21 October). *Guidance on privacy and the use of commercially available AI products.*
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[5] Organisation for Economic Co-operation and Development. *AI Principles.*
https://www.oecd.org/en/topics/ai-principles.html
[6] Bengio, Y., and co-authors. (2026, 3 February). *International AI Safety Report 2026.*
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"AI assisted with research and drafting. The author reviewed and edited the final report."

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