Microsoft

Senate Select Committee on Adopting AI Questions on Notice

Microsoft is pleased to provide the following responses to the questions from the Senate Select Committee on AI Adoption taken on notice on 16 August 2024.

Engagement with governments on energy strategy:

To support energy grid planning, Microsoft's Energy and Sustainability team engages with major utilities and state government bodies throughout Australia. This helps all parties to understand the utility planning process and its impact on data centre location, including challenges and opportunities for future power availability.

Microsoft has met with representatives of the Australian Energy Market Operator (AEMO) to discuss how future electricity demand is considered in AEMO's long-term planning documents such as the Integrated System Plan. Microsoft looks forward to participating in AEMO's industry consultations on these topics.

Microsoft's Energy and Sustainability team also participates in Commonwealth Government engagement with industry. For example, we made submissions to the Department of Climate Change, Energy, the Environment and Water's consultation on Renewable Electricity Guarantees of Origin. We have also shared case studies of Microsoft's pilot projects around the world that focus on time matching of renewable electricity generation and consumption.

South Korean elections and deep fake laws:

In the context of elections, Microsoft supports regulation of deep fakes that limits the ability to fraudulently represent a candidate's words or actions. We recognise that healthy democracies support freedom of expression and therefore regulation should maintain room for reporting, satire and parody. We have recently issued a white paper which shares our views on how to protect the public from abusive AI-generated content: Protecting the Public from Abusive AI-Generated Content (microsoft.com).

To support electoral integrity in the Korean elections in April 2024, Microsoft engaged on nonpartisan policy issues such as cybersecurity, AI and digital transformation. Microsoft was heavily involved in the 2024 Summit for Democracy (S4D3) hosted by Korea in March 2024, showcasing efforts and commitment to protecting elections, supporting and defending democracy, and driving a multistakeholder approach to managing risks of AI in the context of elections, especially through the Tech Accord to Combat Deceptive Use of AI in Elections.

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US elections engagement:

Microsoft's Democracy Forward team works closely with campaigns, electoral commissions and other entities to support the integrity of the elections in the United States and elsewhere globally.

As law makers at the federal and state level consider possible legislation to address the risks posed by deceptive AI targeting elections, we have been proactive in our support for candidates, campaigns and election authorities.

For instance, in advance of the EU, UK and French elections we provided tools, briefings and trainings to mitigate risks, empower campaigns and election authorities and ensure a trusted user experience. Now that the US election is in full swing we are bringing that same approach to the US election. In total we have conducted more than 135 trainings, in over 20 countries with over 4,000 participants. These trainings have focused on understanding the risks posed by deceptive AI in elections, possible mitigations and the free tools Microsoft is providing to help implement some of those mitigations. These include our content integrity tools which empower campaigns and election authorities to place content provenance credentials on official images, videos and releases providing to media and voters indicators of trust that the content originated from the campaigns and election offices.

The Microsoft Threat Analysis Centre (MTAC) is also tracking nation state activity that is attempting to influence the election and makes this reporting publicly available, such as this report on Iran and this report on Russia. We believe bringing transparency to how AI is being used to target elections is critical to mitigating the risks as well as informing possible legislative responses to these risks.

These efforts serve not to just to mitigate risks for this current election but also to educate current and future policy makers on the risks and benefits of AI in elections as well as possible areas for legislation including labelling, watermarking and provenance and public education. Microsoft has also endorsed legislation in the US related to deceptive AI in elections. For instance, we have endorsed a bipartisan proposal in the US Congress the "Protect Elections from Deceptive AI Act".

EU AI Act and watermarking:

At Microsoft, we are committed to compliance with the EU AI Act as we are committed to compliance with the law in all jurisdictions in which we operate Our multi-year effort to define, evolve, refine and implement our Responsible AI Standard and internal governance has strengthened our readiness. At Microsoft, we recognise the importance of regulatory compliance as a cornerstone of trust and reliability in AI technologies, and we further recognise the importance of clear and implementable guidelines and regulations on those deploying AI to ensure we strike the right balance between risk mitigation and economic development. We continue to support the objectives of a risk-based approach to AI Regulation that is the core of

the EU AI Act, having long supported regulation of AI, especially for the highest risk applications and use scenarios and most highly capable models. Effective and globally interoperable regulation will help manage potential AI risks while encouraging responsible innovation and AI adoption in Europe, Australia and around the world.

As raised during the hearing, with such a technically complex area such as AI, it is important address the specific details of how such regulation can be implemented and ensure we are not creating barriers to entry. There are a number of resources produced outside of Microsoft, which we do not necessarily endorse, but wish to share with the Committee, as undertaken at our hearing, to provide further about regulation relating to watermarking. For example, a report from the European Parliament Research Service, available here: Generative AI and watermarking | Think Tank | European Parliament (europa.eu)

Energy usage:

While AI promises to accelerate innovation and help us tackle big problems, it also poses new challenges as we build the underlying infrastructure that's needed. As we enter this era of AI, we're working to balance AI's potential to accelerate sustainability with the realities of its resource intensity.

Accurately measuring AI energy use will benefit from ongoing collaboration among industry, government and research sectors. We are at the beginning of AI adoption, and there is rapid growth when initial technologies are first being adopted. As we get further along, we will get greater clarity on exactly how much energy AI will use and we will also work to reduce our energy consumption and invest in renewables as we have historically done to achieve our commitment of being carbon negative by 2030. Cloud technologies show there is a precedent for technology being much more efficient than anticipated as technology matures.

Microsoft's research team, in collaboration with independent researchers, has published an article in the journal Nature exploring this topic in further detail: Will AI accelerate or delay the race to net-zero emissions? - Microsoft Research. For further information on Microsoft's approach to advancing the sustainability of AI, our Chief Sustainability Officer has summarised our priorities here: Sustainable by design: Advancing the sustainability of AI - The Official Microsoft Blog