



**Select Committee on Adopting Artificial Intelligence Hearing
16 August 2024**

Responses to Questions Taken on Notice

6 September 2024

By Email: aicommittee.sen@aph.gov.au

Written Questions - Senator Pocock

You mention in your submission that you're investing \$1 billion in Australian infrastructure, research, and partnerships. Can you please provide a breakdown of that billion dollars and the different programs and projects it's going towards?

In 2021, Google launched the [Digital Future Initiative \(DFI\)](#) in Australia - a \$1 billion investment in technology, research and partnerships over five years to build a strong digital future for all Australians.

The DFI is focused on three areas in which Google seeks to contribute: building secure and robust local digital infrastructure; launching Google's first Australian research hub leveraging AI and machine learning technologies; and developing technology partnerships, such as in the areas of sustainability and health.¹

Digital infrastructure is a major driver of Australian productivity, and under the DFI, we are continuing to [invest](#) in cloud infrastructure to help build a digital first future. This helps provide Australian businesses with a secure and robust platform for business transformation, faster innovation and growth. Customers are already benefiting from the expansion of our cloud regions, to respond to ever-changing customer needs, quickly and efficiently

A central part of the DFI has also been the launch of *Google Research Australia*, our first ever research hub in Australia.² Partnering with the research community across the country and other Google research hubs, we are building a team of local researchers and engineers to advance AI

¹ [Google. Australia Blog. Digital Future Initiative \(2021\)](#)

² [Google. Australia Blog. Building Google's world-class Australian Research Hub \(2022\)](#)

and machine learning to tackle important challenges for Australians and people around the world. In the first two years of the DFI, we've launched over 10 partnership based projects that aim to address major challenges leveraging Google technologies. We've partnered with more than 20 leading Australian organisations so far. Examples include:

- **Reimagining hearing technology:** In [partnership](#) with Cochlear, Macquarie University Hearing, National Acoustic Laboratories, NextSense and The Shepherd Centre, we're exploring AI and machine learning solutions to pave the way for more personalised hearing healthcare that meets the needs of the individual listener. Together, we are working on new ways for AI models to help separate and prioritise sounds and filter out background noise, to ultimate.
- **AI for Science:** Building on several other successful projects with CSIRO under the DFI ([seagrass mapping](#), [Crown of Thorns Starfish identification](#) with AI etc) we're now working with them to help [scale the positive impact of AI across diverse scientific disciplines](#) and to enable more Australian scientists to solve problems with AI. We've also worked with CSIRO on a project to help [better explain AI](#) to the general public. As part of this effort we've recently launched the first [Google community of practice for research scientists](#) in the world.
- **Biodiversity monitoring:** We're working closely with the Australian Acoustic Observatory at QUT to use AI to [automate species identification](#) for the purposes of biodiversity monitoring.
- **Building Local Infrastructure:** We've [announced](#) a new power purchase agreement (PPA) in Australia — an innovative collaboration between Google, AirTrunk, and OX2 that will advance our sustainability goals and add more renewable energy to Australia's grid. The new PPA continues our work to promote the use of sustainable energy in our operations
- **Inverter Innovation:** A team at Google X has worked with CSIRO's Energy team to explore how [inverters can be transformed](#) into smarter sensors to help better manage the grid and ultimately accelerate the transition to distributed renewable energy.
- **Giant Kelp Protection and Restoration:** We're [working with](#) The Nature Conservancy, University of Tasmania, CSIRO and the Great Southern Reef Foundation to help map the remaining remnant Giant Kelp forests on a national basis and to undertake genetic analysis to understand the genetic drivers of thermal tolerance in those remnant forests.
- **Quantum Algorithm Research:** We've partnered with four Australian Universities to sponsor [Quantum algorithm research](#) in a broad range of disciplines. Our largest local collaboration is with [Dominic Berry](#) at Macquarie University.
- **Accelerating Aussie Startups:** To empower AI-focused startups to grow rapidly and responsibly, we've launched the [Google for Startups Accelerator: AI First](#) program in Australia for the first time. Funded via the DFI this program is designed specifically for Australian startups building AI solutions. It builds on our commitment to foster local AI innovation through initiatives such as the recent [AI Sprint](#) and [Google Certificates](#).

We have a large pipeline of other unannounced projects and look forward to continuing to partner with organisations to invest in infrastructure, research and partnerships in Australia.

In the long term, how does Google anticipate AI changing the landscape of political discourse? What steps are necessary to ensure that these changes do not erode democratic principles? What contingency plans does Google have if AI-driven initiatives inadvertently harm democratic processes, such as through unforeseen biases or vulnerabilities in AI systems?

The impact of AI on political discourse can be difficult to predict. AI is capable of driving advances from the everyday to the extraordinary, from improving tools you use every day — Google Search, Translate, Maps, Gmail, YouTube, and more — to changing the way we do science and tackle big societal challenges.³ Modern AI is not just a technological breakthrough, but a breakthrough in creating breakthroughs — a tool to make progress happen faster. AI also presents challenges that have to be addressed, including deep fakes, misinformation, and cybersecurity risks.

In the context of political discourse and elections, our approach is multilayered. First, we know the importance of access to authoritative and reliable information during an election. We've introduced several tools and policies to help people identify content that may seem realistic but is actually AI-generated, including "double-check" features and digital watermarking.⁴

For example, we were the first tech company to require election advertisers to prominently disclose when their ads include realistic synthetic content that's been digitally altered or generated, including by AI tools.⁵ YouTube now requires creators to disclose when they've created realistic altered or synthetic content and displays labels tied to that disclosure that indicate that the content people are watching is synthetic.⁶ Out of an abundance of caution, we also restrict the types of election-related queries that our own AI tools respond to. On Gemini, for many election-related prompts, users will be encouraged to visit Google Search, which provides high-quality, authoritative election information.

Second, we're protecting our platforms from abuse, to help prevent bad actors from using AI to mislead voters. That includes leveraging AI as a tool to enhance our abuse-fighting efforts, enforce our policies at scale, and adapt quickly to new or emerging threats.

Third, we're partnering with others across the tech industry, governments, and civil society to address existing and emerging AI challenges, share research, intelligence and learnings, and collaboratively counter abuse. Importantly, we have built relationships with the Australian Electoral Commission and their defending democracy unit and State Electoral Commissions to ensure that we are able to support them and are working proactively to share our policies, processes and transparency reporting.

³ [Google Research Brief. *AI in Action: Accelerating Progress Towards the Sustainable Development Goals* \(2024\)](#)

⁴ [Google. *Gemini Apps Help. Double-check responses from Gemini Apps*; *Google Deepmind. SynthID*.](#)

⁵ [Google. *Advertising Policies Help - Political content*](#)

⁶ [YouTube Blog. *How we're helping creators disclose altered or synthetic content* \(2024\)](#)