

# TWIGF Themed Track Artificial Intelligence and the Environment — The Path to a Sustainable Earth

As artificial intelligence (AI) gradually integrates into our world, recent discussions have highlighted the growing demand for electricity and water resources due to AI technologies. For instance, AI's power consumption is comparable to that of a small country, and there are concerns that AI could lead to a resurgence of fossil fuels.

David Rolnick, a computer scientist at McGill University, likened AI to a hammer, emphasizing that its impact depends on its use rather than the tool itself. AI can both harm and help the environment. The growing demand for electricity by AI is similar to that of electric vehicles or other emerging technologies and industries. The pressing issue is how humanity can meet these demands and leverage AI as a tool to combat climate change.

There are increasing examples of AI effectively addressing environmental issues and reducing industrial carbon emissions. From a policy perspective, both AI and environmental policies have opportunities to make an impact. This panel invites stakeholders from government, industry, technical groups, and academia to discuss methods and challenges in combining AI with sustainable environmental development, while meeting policy, commercial, and environmental goals.



## Event Information

• Date and Time: Thursday, August 22, 2024, 16:15-17:45 (UTC+8)

 Venue: NTUH International Convention Center, Room 401 (No. 2, Xuzhou Road, Zhongzheng District, Taipei City)

# Agenda

16:15 ~ 16:20 Opening

16:20 ~ 17:35 Panel Discussion

Moderator:

Yi-fan Gao, Deputy Research Director (CommonWealth Magazine Group)

### Panelists:

- Yen-haw Chen, Director (Taiwan Institute of Economic Research)
- Mavis Hsu, Partner (Deloitte)
- I-chun Hsiao, Senior Lead, APAC, Energy & Infrastructure (Google)

17:35 ~ 17:45 Q&A



# Discussion Topics

- 1. Al's Impact on Energy Demand
  - How is AI changing global energy consumption patterns?
  - Are there innovative practices currently in place to reduce environmental burdens while meeting AI's energy demands? Any practical examples?
- 2. Al Applications in Environmental Sustainability
  - What are the practical examples and outcomes of AI applications in energy management, waste reduction, and carbon footprint tracking domestically and internationally?
- 3. Al Technology and Policy
  - Are there international AI policies that support environmental sustainability?
  - Does domestic AI policy consider environmental friendliness? What additional policies could be adopted to promote green AI development?
- 4. Multi-stakeholder Collaboration
  - What roles do the government, industry, technical groups, and academia play in promoting AI and environmental sustainability? How can different stakeholders integrate and collaborate?
  - What challenges might arise in combining AI technology with environmental policies?



### About TWIGF

The Taiwan Internet Governance Forum (TWIGF) is a platform aimed at fostering communication among various internet stakeholder groups, including government, academia, technical community, civil society, and private enterprises. The forum is dedicated to discussing internet public policies and providing opportunities for dialogue.

The theme of the 2024 annual conference is "Rethinking Internet Governance: AI, Resilience, Sustainability, and Security," focusing on the opportunities and challenges brought by the rapid development of AI technology to internet governance. As AI technology is widely applied across production, transportation, preventive medicine, and military defense, internet governance faces unprecedented challenges, including the vulnerability of critical internet infrastructure, the security of online commerce, and the ethical and legal issues arising from AI technology.

This year's TWIGF annual meeting will feature international experts delivering keynote speeches and conducting ten informative workshops to address the challenges of ensuring the resilience, sustainability, and security of the network. TWIGF aims to provide innovative ideas and solutions for Taiwan's Internet governance through in-depth discussions and exchanges.