



EVENT REPORT

# AI regulation and the environment: pathways to a sustainable planet

Brasília, Brazil  
August 2024

**International  
Digital Dialogues**  
Shaping digital  
policy together

# Event report and recommendations

On 10 July 2024, the Secretariat for the Brazilian–German Digital Dialogue hosted the webinar on “**AI regulation and the environment: pathways to a sustainable planet**”, in partnership with the G20 engagement groups for Business (B20) and Think Tanks (T20).

The event brought together specialists from different countries and sectors, including academia, private sector and civil society. The global and multistakeholder approach to the event led to a rich debate on the opportunities and challenges of aligning artificial intelligence (AI) with environmental sustainability.

This document highlights key points that the speakers brought to discussion. With this, the Secretariat hopes to contribute to the development of cooperation activities aimed at fostering a sustainable deployment of AI systems.

## Speakers of the event

### Academia

- Friederike Rohde, Researcher at Institut für ökologischen Wirtschaftsforschung

### Civil society

- Adeboye Adegoke, Senior Manager at Paradigm Initiative
- Anita Gurumurthy, Executive Director at IT for Change
- Bruno Bioni, Director at Data Privacy Brazil and lead co-chair of T20 Inclusive Digital Transformation Task Force
- Kilian Vieth-Ditlmann, Deputy Team Lead for Policy & Advocacy at Algorithmwatch

### Private sector

- Fernando de Rizzo, CEO at Tupy and chair of B20 Digital Transformation Task Force
- Jacqueline Lopes, Director of Institutional Relations for LATAM South at Ericsson
- Luis Mosquera, Vice-President for Legal, Government Affairs & Sustainability at Siemens Brazil

## About the German–Brazilian Digital Dialogue

The German Ministry for Digital and Transport (BMDV) is leading bilateral dialogues on digital policy issues with a range of partner countries. The Digital Dialogues foster collaboration between like-minded states, support the alignment of rules and strategies in international digital policy, and bring together stakeholders from many different sectors.

In 2019, the Brazilian Ministry of Science, Technology and Innovation (MCTI) and BMDV agreed to conduct the Brazilian–German Digital Dialogue. In Brazil, as well as in other countries, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) supports the German–Brazilian Digital Dialogue as a Secretariat.

## Topics most participants agreed on

- As technologies advances faster and artificial intelligence achieves unprecedented adoption rates, there is a common concern regarding **unequal access and fair distribution of benefits** and burdens.
- There is a need to integrate environmentally sustainable practices into AI systems, creating more sustainable supply chains, that adopt more **energy-efficient power sources and consume less water**.
- International cooperation initiatives, both in multilateral and bilateral forums **engaging different stakeholder groups**, are fundamental in developing effective solutions.
- A **harmonised regulatory framework** that allows for interoperability of AI solutions across different policy frameworks is desirable.

## Other topic discussed

- Artificial intelligence can significantly impact the environment, specially concerning natural resources usage. It is necessary to adopt a holistic approach to integrate sustainability into AI systems, encompassing aspects such as **social justice, equal opportunities, human rights and quality of life**.
- It is important to **work collaboratively** and share experiences on methodologies for environmental impact assessment to effectively implement a **green transition in AI**.
- Technological advancements offer substantial benefits, including increased **efficiency in the use of natural resources**, as well as inclusive innovation that can benefit different populations and economic sectors, leading to sustainable development, aligned with the United Nations Sustainable Development Goals (SDGs).
- Artificial intelligence can be a relevant tool to mitigate environmental impacts and climate change, optimize process and reduce the use of resources. Therefore, it is critical to **prioritise investments in clean energy production**, allocate funds for research initiatives and optimise AI infrastructure.
- In order to achieve a just transition, it is necessary to have collaborative efforts to **minimise the gap in digital skills**, leading to a **more resilient and adaptable workforce**.

## Questions for future debates

- How can the **three dimensions of sustainability** (ecological, social and economic) be effectively integrated into the development and deployment of AI systems? Which **indicators** could be monitored in this pursuit of sustainable practices?
- What mechanisms and frameworks are already available to **measure the environmental impacts of AI** throughout the whole supply chain, including energy and water consumption, carbon emissions, mineral extraction and electronic waste?
- How to promote a responsible and sustainable development and adoption of AI, while ensuring that it drives **innovation, growth and social good** through its use cases by governments, societies and across sectors? What mechanisms need to be put into practice and how can **governments support** the achievement of this outcome?
- What is the required level of **policy regulation** to steer AI development in a sustainable manner? How can regulated entities cooperate with regulators and policymakers to ensure a **risk-based and balanced regulation**?
- What is the role of **data governance** in ensuring the sustainability of AI systems? How can the discussion about data governance be integrated into the debate about AI governance, considering the need to strengthen **international collaboration on responsible AI development and deployment**?