

# **APC submission on environmental democracy and digital technologies**

**October 2023**

APC welcomes the opportunity to present this submission in response to the call for inputs issued by the Special Rapporteur on human rights and the environment on [Promoting Environmental Democracy: Procedural elements of the human right to a clean, healthy and sustainable environment](#).

# Introduction

This submission is made to raise alarms about the impacts of digital technologies for access to information, public participation and access to justice with effective remedies in the deployment of infrastructures and the global production chain that make digitalisation possible.

Digital technologies are increasingly present in our lives, while their impacts often remain hidden. This submission aims to bring attention to specific cases and trends in digitalisation, and their impacts for the right to a clean, healthy and sustainable environment.

In its 2022 report on mitigation, the Intergovernmental Panel on Climate Change (IPCC) asserts that there is limited understanding of the direct and indirect impacts of digitalisation. It is critical to examine the impacts of rapidly evolving systems, including the use of water and energy to power data centres for large language models (LLMs). Moreover, better integration of mitigation models and consequential life cycle analysis is needed to assess how digitalisation, the sharing economy and the circular economy impact the supply and demand of materials and energy.

Due to the very nature of the digital market, there is a particular concentration and dominance of a handful of companies as providers of cutting-edge digital technologies and the infrastructure that makes them possible, such as artificial intelligence, big data, blockchain, the internet of things, 5G, etc. This gives them a relevant position in the world, especially in the global south, where the inequality of power is enormous between these companies and governments and between these companies and the communities affected by the socio-environmental impacts of their deployment. However, it should be added that governments' digital deployments themselves may be public, public-private, or through tenders to private parties, which means that as owners of these initiatives, they must also be responsible for these socio-environmental impacts.

This submission focuses on providing input to questions 1, 3 and 5 in the questionnaire provided, focusing on major barriers to the full enjoyment of the rights to access information, public participation and access to justice on environmental matters impacted by digital technologies.

# Questionnaire

1. *What are States' obligations – and businesses' responsibilities – related to the rights to access information, public participation and access to justice with effective remedies in environmental matters? What are the major barriers to the full enjoyment of these rights? How can these barriers be overcome?*

Major barriers exist for access to information, participation and access to justice on environmental matters relating to digitalisation, among which we would like to highlight:

- Withholding of critical data and information
- Lack of clear standards for transparency and traceability
- Misleading information on socio-environmental impacts
- Disinformation and technology-facilitated violence against environmental defenders.

This submission briefly outlines these major barriers to the full enjoyment of these rights, including references to recent cases.

## **Withholding critical data and information**

Commitments by governments and companies on environmental matters are often vaguely defined, which allows false and misleading information to undermine the procedural elements of the right to a healthy environment. In the technology sector, big technology companies like Microsoft, Facebook, Google and Amazon have committed to being “water positive” in their direct operations by 2030. There is no formal definition for “water positive” and companies routinely withhold data that would allow the public to monitor and assess progress.<sup>1</sup>

For example, concerning a mega data centre that Microsoft is building in the Quilicura district of Santiago, Chile, local environmental advocates charge that while Microsoft boasts of its use of green energy in these infrastructures around the world, the local situation would be different.<sup>2</sup>

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<sup>1</sup> <https://www.theguardian.com/environment/2021/oct/14/water-positive-pledge-corporations>

<sup>2</sup> <https://www.revistadefrente.cl/las-mentiras-de-microsoft-en-chile-una-empresa-no-tan-verde-por-rodrigo-vallejos-de-resistencia-socioambiental-de-quilicura>

One of the most well-known and global cases is the use of industrial and commercial secrecy by Alphabet (Google) to deny access to information on the use of fresh water by its data centres.<sup>3</sup> This means that, for example, governments cannot disclose this information because it is part of a confidentiality agreement. This type of information restriction becomes more controversial when these data centres are installed in drought-stricken territories and have forced communities and even the press to take legal action to resolve access to information.

### **Cases of legal action to access information on water usage**

When the Uruguayan Ministry of the Environment refused to provide information to a local environmental NGO about the use of water by the data centre that Alphabet would build in the department of Canelones, the Court of Appeals ratified that access to information "concerning water and its use" is a "human right", using the Escazú Agreement as a source.

Meanwhile, in the United States, the city of The Dalles (Oregon) filed a lawsuit against the local media outlet, *The Oregonian*, in state court to ensure that the amount of water Google uses for its nearby data centre campus is kept secret. The city had hoped to overturn a Wasco County district attorney's ruling that previously established that the data centre's water consumption is a public record and must be made available. Ultimately, the city dismissed the charges and settled with the media, where city officials finally handed over records showing the tech giant's annual water consumption between 2012 and 2021 and pledged to disclose similar information for future years if it receives public records requests for water usage data.<sup>4</sup>

As a result of the Dalles case, a Google spokesperson told the Associated Press that the technology company would no longer seek to protect water consumption figures at any of its data centres across the US as a trade secret.<sup>5</sup> The question of what standard of transparency will apply in other countries remains in doubt, and there are concerns that these companies have different reporting standards depending on the country they are in.

<sup>3</sup> <https://www.elpais.com.uy/que-pasa/el-secreto-atras-de-millonaria-inversion-de-google-en-data-center-en-uruguay-gobierno-espera-que-se-confirme>

<sup>4</sup> <https://www.rcfp.org/dalles-google-oregonian-settlement>

<sup>5</sup> <https://apnews.com/article/technology-business-oregon-the-dalles-climate-and-environment-f63f313b0ebde0d60aeb3dd58f51991c>

## Lack of clear standards for transparency and traceability

Big technology companies report on their socio-environmental impacts, yet each company reports what it wants to: some consider energy use alone, others add freshwater use, some refer to the supply of mineral materials, and so on. For example, although Google and Microsoft have begun to compete on their sustainability credentials and both have been reporting detailed environmental metrics for several years, neither company attributes their water consumption to data centres, and their figures only represent direct water use, ignoring water used in electricity generation, the most significant contributor to a data centre's water footprint. They also do not disaggregate the water source, which has proved controversial when competing for potable sources under water stress.

There is also insufficient regional and local information. For example, although Microsoft has been working for months on environmental permits to build a mega data centre in Quilicura, Chile, and many of these processes are advancing, the mayor herself is still unclear about the amount of water the project will use from year to year and whether or not there are plans to reduce consumption.<sup>6</sup>

Furthermore, there is no standardisation in the industry as to which categories are to be reported and how they are reported. Lack of clarity on the source of information, its methodology and disaggregated results makes it impossible for external parties, whether governmental, academic or community-based, to verify the information.

This lack of transparency in reporting on socio-environmental aspects is common practice. Take a recent example with ChatGPT. Artificial intelligence (AI) consumes more energy than other forms of computing, and the training of a single model can consume more electricity than 100 US homes in an entire year. However, the sector is growing so fast and is so non-transparent that no one knows exactly how much total electricity and carbon emissions can be attributed to AI. Emissions could also vary widely depending on the type of power plants supplying that electricity; a data centre that gets its electricity from a coal or natural gas plant will be responsible for much higher emissions than one that is powered by solar or wind. The problem is that it is common practice not to make this information transparent.<sup>7</sup>

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<sup>6</sup> <https://olca.cl/articulo/nota.php?id=110006>

<sup>7</sup> <https://www.nature.com/articles/s41545-021-00101-w>

## Misleading information on socio-environmental impacts

There are cases where communities complain that the socio-environmental information provided by big tech companies is misleading. For example, in the Netherlands, there is controversy because a Microsoft data centre consumed 84 million litres of drinking water last year when both the company and local authorities claimed they would only need between 12 and 20 million litres of drinking water. However, according to Microsoft, this increased water use was due to the construction of the infrastructure.<sup>8</sup> This demonstrates a gap in reliable information provided to communities.

Technology companies are also complicit in spreading false and misleading information through their platforms. A study conducted by InfluenceMap found that in the United States, 25,147 Facebook ads with misleading “greenwashing” messages from just 25 oil and gas organisations were seen over 431 million times.<sup>9</sup> Beyond big corporations and their hired public relations firms, background business and government allies that want to push forth deals that impact the environment, along with the general public and activists that want to vouch for their own beliefs, whether intentionally or unwittingly, also spread false information about the environment.

In terms of mining, the big tech companies have been accused of buying gold and cobalt from illegal miners in Brazil<sup>10</sup> and the Democratic Republic of Congo,<sup>11</sup> both of which involve violations of the human rights of children and Indigenous communities, including irreparable damage to biodiversity. The excuse for their defence has been ignorance that the resources they use come from illegal sources, despite their economic power to secure reporting mechanisms.

The same applies to who is responsible for one of the fastest-growing waste streams in the world: e-waste. Many studies show how the dominant countries of the West send e-waste to African countries that do not have adequate infrastructure to handle it, which has been described as another manifestation of environmental racism.<sup>12</sup>

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<sup>8</sup> <https://www.datacenterdynamics.com/en/news/drought-stricken-holland-discovers-microsoft-data-center-slurped-84m-liters-of-drinking-water-last-year/>

<sup>9</sup> <https://influencemap.org/EN/report/Climate-Change-and-Digital-Advertising>

<sup>10</sup> <https://rpp.pe/tecnologia/mas-tecnologia/oro-ilegal-de-la-amazonia-ligado-a-una-refineria-que-provee-a-gigantes-tecnologicos-noticia-1420275>

<sup>11</sup> <https://www.business-humanrights.org/en/latest-news/apple-and-google-named-in-us-lawsuit-over-congolese-child-cobalt-mining-deaths/>

<sup>12</sup> <https://news.yahoo.com/toxic-waste-dumping-gulf-guinea-145315074.html>

## Technology-facilitated violence against defenders

The use of technology to attack environmental defenders – including many Indigenous leaders and women – is part of a continuum of violence that includes targeted disinformation and smear tactics, surveillance and death threats. Identity-based disinformation and smear tactics are disproportionately impacting women defenders, and research suggests that online attacks do not only target climate and environmental defenders, but also their families, friends and colleagues, creating a chilling effect on their communities.

Research has also consistently shown that online disinformation campaigns and coordinated online attacks often occur in parallel with offline physical violence.<sup>13</sup> Citizen Lab reports that smear tactics and the labelling of environmentalists as communists and terrorists in Southeast Asia has been used to justify threats to their own and their family's safety, physical attacks and harassment, and even murder.<sup>14</sup> Latin American environmental activists face hostile conditions with more high-profile killings of environmental activists than anywhere else in the world, while facing increasing government securitisation and ridicule by government officials.<sup>15</sup> Identity-based disinformation has disproportionately affected individuals who belong to marginal communities, such as sexual and gender minority groups, ethnic minority populations, Indigenous peoples, and migrant communities, among others.<sup>16</sup> This places environmental defenders with intersectional identities particularly at risk.

Despite efforts to monitor technology-facilitated violence against environmental defenders, many challenges remain in terms of under-reporting, especially in relation to the attacks faced by women.<sup>17</sup> Many of the places where environmental conflicts are more common are isolated and distant regions. In these areas, documentation of cases is difficult and media and organised civil society are less present.

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<sup>13</sup> <https://www.frontlinedefenders.org/en/resource-publication/global-analysis-2020>

<sup>14</sup> <https://giswatch.org/node/6228>

<sup>15</sup> <https://www.frontlinedefenders.org/en/resource-publication/global-analysis-2020>

<sup>16</sup> <https://www.apc.org/sites/default/files/APCSubmissionDisinformationFebruary2021.pdf>

<sup>17</sup> See, for example: <https://www.theverge.com/2023/6/6/23751071/violence-against-women-environmental-activists-data-research>

*2. To what extent have the two regional treaties on environmental democracy – the Aarhus Convention and the Escazu agreement – been effective in advancing human rights related to access to information, public participation, access to justice with effective remedies, environmental education, freedom of expression and association, and safe spaces for environmental human rights defenders?*

The Aarhus Convention and Escazú Agreement are important treaties to advance the procedural elements of the right to a clean, healthy and sustainable environment.

In Uruguay, there has been a landmark ruling using the Escazú Agreement regarding the right to information on the socio-environmental impacts of digital investment. In July 2022, Daniel Pena, a researcher at the Faculty of Social Sciences of the University of the Republic in Uruguay, submitted a request for access to public information to the Uruguayan Ministry of the Environment, seeking to know what the impact would be on both water and electricity consumption of the mega data centre that Alphabet (Google) planned to build in the department of Canelones.

The Ministry of the Environment denied the request to access information on the amounts of water and electricity that Google's project would use, claiming "commercial secrecy". However, on the basis that water is declared a fundamental human right in the constitution of Uruguay, a judge ruled in favour of Pena, and obliged the Ministry to provide the information within 15 days.

The Ministry of Environment appealed the ruling on the basis that "the right of access to information, beyond being enshrined at the national and international level, does not constitute an absolute right" and that "the mere fact that reference is made to water-related information does not entitle any person to obtain it."<sup>18</sup>

The Court of Appeal ruled in favour of the right to access information on water usage, referring to Article 47 of the constitution in a statement that "any declaration of confidentiality of information" related to the use of water "is not legitimate" because "it does not correspond to obligations that the country assumes in terms of human rights."<sup>19</sup>

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<sup>18</sup> <https://www.elpais.com.uy/que-pasa/el-secreto-atras-de-millonaria-inversion-de-google-en-data-center-en-uruguay-gobierno-espera-que-se-confirme>

<sup>19</sup> <https://ladiaria.com.uy/ambiente/articulo/2023/3/caso-google-tribunal-de-apelaciones-reafirma-sentencia-y-ma-debera-dar-informacion-sobre-volumen-de-agua-que-utilizara-el-data-center>



In its ruling, the Court stated that denying the information is "the opposite" of what is established in the Escazú Agreement, which Uruguay ratified in 2021 and which aims to oblige states to guarantee justice, transparency and participation in environmental matters.

However, despite this ruling, the information provided by the Ministry is still incomplete. For example, Pena stated that after the trial, they were given half a sheet of information regarding the water expenditure that would be used only for the cooling towers. Still, it is unknown whether they will actually use more drinking water. Furthermore, there are no details on what will happen when there are heat waves or periods of drought, such as the one Uruguay had been experiencing for several months at the time of writing.