Latin American Institute of Terraforming submission:

Comments on the Action Plan for a Sustainable Planet in the Digital Age (draft version) by the Coalition for Digital Environmental Sustainability (CODES)

Santiago de Chile, March 09, 2022.

The Latin American Institute of Terraforming[1] welcomes the fact that sustainability is a priority in digitization in the context of SDG compliance. Unfortunately, due to a lack of knowledge that this important process was taking place, our initiative was not present in the previous feedback processes of the document. However, as an organization from the Global South working on the connections between digital technologies and the climate and ecological crisis and their impacts, particularly in Latin America, we hope that our contributions can be helpful to deepen and, above all, diversify the sources of the draft document.

Our comments are divided into two: general, i.e., those structural issues that we believe affect the transversality of the document, and specific, as issues that raise red flags in particular sections of the draft.

I. General comments

- ***Suggestion 1. Structurally address the lack of representation of the Global South in the examples, documentation, or good practices presented in the text.***

There seems to be a considerable disproportion regarding the presentation of examples, documentation, and/or good practices between the North and the Global South; moreover, there seems to be an overrepresentation of the Eurocentric vision, which in itself does not seem to go the way of the SDGs (goal ten speaks specifically of inequality between countries). For example, in 25 times words "Europe" and "European" is used but it seems there is no reference in the main text to Latin America. This situation is aggravated when the graphic design of the draft document presents images of people from the Global South, which reveals

[1] The Latin American Institute of Terraforming (terraforminglatam.net) is a space for feminist reflection to critically consider how digital technologies are connected with the climate and ecological crisis and how this impacts our continent. General coordinator: Paz Peña. Contact: info@terraforminglatam.net

that diversity and equity are addressed only from an aesthetic sphere but not at the heart of the issue.

As has been widely recognized by the scientific community, is the Global South the most affected by climate crisis. Moreover, the socio-environmental problem that digital technologies represent today is nothing more than the continuity of colonial relations of capitalist exploitation. This is most clear when examining mining for digitization, where for the most part, it is the Global South that suffers the consequences of highly toxic unregulated mining that is economically exploited in technology production concentrated in rich countries. In a sense, we believe that this underrepresentation of the Global South reflects the lack of specific recognition of this point in the text, **so we urge the correction of the problem not only from a superficial point of view but also from a structural one**.

- ***Suggestion 2: Incorporate the concept of environmental justice and link it to digitization, especially in participatory processes.***

Related to the previous point, we also see with concern the lack of relevance of the concept of "environmental justice," widely studied and used both in academia, activism and also in international specialist initiatives such as the IPCC itself, as it is also considered elementary for the achievement of the SDGs. Among others, environmental justice demands that public policies be based on mutual respect and justice for all peoples, free from any form of discrimination or bias. It also affirms all peoples' fundamental right to political, economic, cultural, and environmental self-determination. In particular, it demands the right to equal participation at all levels of decision-making, including needs assessment, planning, implementation, compliance, and evaluation.

In this sense, **we believe it is crucial to deepen environmental justice in digitization projects and advance in adopting democratic, transparent, and binding social participation processes, both from projects related to the public and private sectors**. Mainly, the call is to enhance the participation of communities affected by the mining process related to digitization as well as the deployment of the infrastructures for the digital economy in their territories. We believe that this document is an opportunity to advance in a language in line with other national, regional, and international environmental documents, which goes beyond the mere "connection of

communities" or the multistakeholder model to a biding standard of democratic participation.[2]

- ***Suggestion 3: Include the water crisis and its relationship to the deployment of digitalization.***

In the context of Goal 6 of the SGDs and in the UN's recognition of the water crisis we face due to global warming,[3] **we suggest that the document more specifically highlight the relationship between the water crisis and the deployment of technologies**, beyond linking it to the possibilities for digital transformation that are amply covered in the Boxes.

We're referring to extractive mining of basic materials for the digital infrastructure that means intensive water use, such as lithium in South America. The consequences of this have been ecological, political but also cultural.[4] At the same time, the deployments of elemental buildings for the digital economy, like data centers, use vast amounts of freshwater for equipment cooling. Critical social studies on data centers abound on the socio-environmental problems they entail.[5] Water use is one of the most studied aspects, even though large companies building data centers globally, such as Google, qualify their water use as a trade secret.[6]

To give current examples of socio-environmental conflicts produced by the use of water by technologies from Latin America:

---

[2] See, for example, point 35 in the resolution No. 3/21, "Climate Emergency: Scope of Inter-American human rights obligations" by the Inter-American Commission on Human Rights (IACHR) and the Office of the Special Rapporteur on Economic, Social, Cultural and Environmental Rights (REDESCA) https://www.oas.org/en/iachr/jsForm/?File=/en/iachr/media_center/preleases/2022/045.asp

[3] A/HRC/46/28

[4] Peña, P. & Tapia, D. White gold, digital destruction: Research and awareness on the human rights implications of the extraction of lithium perpetrated by the tech industry in Latin American ecosystems. Global Information Society Watch (GISWatch). 2020. https://giswatch.org/node/6247

[5] Data Center Studies / Critical Studies of the Cloud https://docs.google.com/document/d/1bnbDNTXlpddbfuShMgRKWvWLFIKUKBchUkluMMOVRkw/edit#heading=h.oqvatjlpxnzk

[6] Garofalo, P. (2021). Water Is Life, and Also a Trade Secret. Google won't tell you how much water it uses and an Oregon city has its back. Publis Seminar. https://publicseminar.org/essays/water-is-life-and-also-a-trade-secret/

a) *Water consumption of data centers endanger human water consumption*: the construction of Google's new data center in the commune of Cerrillos, in Santiago de Chile, consumes 14,601,600 liters of water per day and has encountered opposition in the territorial communities because it endangers the consumption of fresh water in a commune that has been declared in water emergency due to the historical drought facing in the area.[7]

b) *Water consumption of data centers endangers wetlands*: the new data center that Microsoft seeks to build in the commune of Quilicura, Santiago de Chile, has encountered territorial opposition because the communities denounce that the water consumption it entails (894,000 liters per day) would endanger the Las Cruces estuary, the main feeder of the wetlands in the area.[8] As recognized by the UN Special Rapporteur on Environment and Human Rights, wetlands are vital ecosystems in helping to maintain global hydrological, carbon and nutrient cycles.[9]

- ***Suggestion 4. Clarify the arrangement of the document:***

The ordering of the document concerning the so-called "Boxes" is confusing. Especially from Boxes 1 to 8, there does not seem to be a line of argument that joins them nor an apparent reason why they occupy that central place in the document. It is especially confusing when most of these boxes at the beginning talk about the promises of digitization in the face of sustainability, and there is no precise wording linking them: one concludes, almost necessarily, that the paper gives more weight to these possibilities than to the concrete evidence on the challenges and socio-environmental impacts of digitization.

However, if CODES really wants to give greater importance to the promises of digitization concerning sustainability, rather than to the environmental damage and challenges that lie ahead due to the deployment of the technologies themselves, **we urge that this strategy be rethought for at least two reasons**. On the one hand, and as various academic literature has recognized, the digital promise of the future is an integral part of the

[7] Guerra del agua en Cerrillos: Google enfrenta arremetida legal por megaproyecto de data center - La Tercera https://www.latercera.com/la-tercera-pm/noticia/guerra-del-agua-en-cerrillos-google-enfrenta-arremetida-legal-por-megaproyecto-de-data-center/3EESORSYUBFX3HZFGNWJU7PGP4/
[8] La lucha ciudadana por la regeneración de los humedales de Quilicura. Resumen. 2022. https://resumen.cl/articulos/la-lucha-ciudadana-por-la-regeneracion-de-los-humedales-de-quilicura
[9] A/HRC/46/28

"capitalism as usual" engine that this same document points to as a problematic attitude.[10] And on the other, because the environmental damage of digital technologies is real, as are its challenges, and it seems unrealistic - especially in line with official IPCC documentation - that it is not given at least the same level of importance in the text.

II. Specific Comments

- ***Suggestion for Problem 1: Energy and Emissions (page 28) and Problem 3: Consumption (page 29)***

We welcome that this paper, in line with SDG 12, gives a special section to how digital technology influences over-consumption and hence augmented e-waste and, more importantly, increased consumption patterns of other industries that benefit from digitization, which ends up in a rebound effect on carbon emissions.

As recognized in the draft, the rebound effect on greenhouse gas emissions from digitization is a phenomenon that links energy consumption to the third-order impacts, such as increased consumption patterns of industries that, benefiting from the efficiency of digitization, increase production and economic growth.

In this context, **we first suggest that both sections of the text be presented continuously** (problem 1 and 2) and not separately as in the draft (problem 1 and problem 3), as we believe that this will benefit the understanding of the phenomenon.

In addition, we believe that the rebound effect produced by digitalization - which may be due to intensification of consumption patterns, but not only - should be recognized at greater length in the "Energy and Emissions" section since this effect has been studied in the context of Co2 emissions due to energy use. Furthermore, although reports from the digital industry have minimized it, the digital rebound effect is today a matter of great scientific concern. Therefore, more evidence on the subject is needed, through independent research, to be able to make decisions.

[10] Franco "Bifo" Berardi (2017). Futurability: The Age of Impotence and the Horizon of Possibility. Verso Books.

In this context, and in consideration of the utmost planetary urgency to drastically reduce our greenhouse gas emissions, the Latin American Institute of Terraforming, as it has done with other international digital governance bodies,[11] **we urge the CODES process to encourage industry and governments to adopt the precautionary principle, limited in time, until better evidence and multidisciplinary scientific consensus on the actual impacts of ICTs on GHG emissions is obtained**. This precautionary approach cannot be seen as a passive role for the parties adopting it, but, on the contrary, it should drive bold parallel activities that will help us out of the uncertainty as soon as possible and stimulate the path to ICT innovation that responds to the size of the challenges we face today as humanity.

- ***Suggestion for Problem 4: Misinformation (page 30).***

From the Global South and particularly from Latin America, both misinformation and disinformation have a different face, at least, than in places such as the United States and Europe, where the lobby of fossil fuel companies has found a fertile field in the business model of social media platforms. In this part of the world, there are records of misinformation campaigns regarding the work of environmental activists and land defenders, directly personal attacks on the figure, credibility, and honor of these people, primarily women and indigenous, which end in campaigns in social media with online harassment and gender violence.[12]

These campaigns also occur in mining-related to digitalization and not necessarily concerning the fossil fuel lobby. For example, without going any further, just a few days ago, a national political scandal was uncovered in Guatemala where it was proven, among other things, the use of campaigns to divide indigenous communities denouncing the socio-environmental problems of nickel mining in El Estor, through electronic espionage and the use of campaigns on social media platforms where local fishers were paid to appear in viral videos.[13]

---

[11] Fight Against Extinction: The Critical Role of the ITU in a World Failing to Address Climate Commitments. 2021. https://terraforminglatam.net/fight-against-extinction-the-critical-role-of-the-itu-in-a-world-failing-to

[12] ANÁLISIS GLOBAL DE FRONT LINE DEFENDERS 2020. https://www.frontlinedefenders.org/sites/default/files/global_analysis_2020_spanish_web.pdf

[13] Así se compra un Estado. Cómo una minera rusa corrompió todos los poderes en Guatemala. El País. 2022. https://elpais.com/internacional/2022-03-06/asi-se-compra-un-estado-como-una-minera-rusa-corrompio-a-todos-los-poderes-en-guatemala.html

In this sense, we believe it is essential that the CODES' text **highlights the diverse and complex ways in which these phenomena occur, how some Governments and companies are actively using these techniques and the lack of response to these campaigns in countries of the Global South by large Internet corporations**. We also believe the document must reaffirm that the measures to be taken in the face of this phenomenon, from the platforms and the States, must guarantee respect for human rights.

- ***Suggestion for Problem 6: Rights Violations (page 30).***

In line with resolution No. 3/21, "Climate Emergency: Scope of Inter-American human rights obligations" by the Inter-American Commission on Human Rights (IACHR) and the Office of the Special Rapporteur on Economic, Social, Cultural and Environmental Rights (REDESCA), especially point 3,[14] we believe that this section should highlight the need to ensure that **climate norms, policies, and actions taken in the context of the development of digital technologies guarantee that they do not negatively affect people's human rights**. Nor should the excuse of climate action be used to violate their rights. Therefore, it is vital to ensure transparency and participation of social actors to present observations and build climate solutions based on digital technology with broad support and information.

*****

[14] Resolution No. 3/21
https://www.oas.org/en/iachr/jsForm/?File=/en/iachr/media_center/preleases/2022/045.asp