Engaging Science, Technology, and Society

Promises that Don't Work? COP26 and the Problems of Climate Change

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Abstract

The 26th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP26), hosted in Glasgow in 2021, reaffirmed the guidelines assumed in 2015 around the "Paris Agreement" (COP21). Many of these guidelines, which are aimed at building pathways to net zero carbon emissions, translate publicly into techno-scientific promises, such as the global development of bioenergy with carbon capture and storage (BECCS). However, these promises are also questioned in the mass media by several actors. Both promises and criticisms are based on scientific reports produced or evaluated by the Intergovernmental Panel on Climate Change (IPCC, dependent on the United Nations). In this sense, the set of criteria mobilized by the IPCC constitutes a framework for the debate. However, this framework generates a projection of the future based primarily on technical criteria that omit social plausibility and ignore the particular conditions of peripheral countries to achieve the proposed objectives. As a result, they ignore the relationship between peripheral (dependent) and core nation-states. This relationship implies, among other consequences, a lack of technological autonomy for peripheral countries that makes very difficult to modify their economic structures (increasingly primarized) in order to be able to operate changes in the fight against global warming. In this paper we analyze such reception and translation of climate change promises in Argentina.

Keywords

COP26; techno-scientific promises; IPCC; public problems; climate change; peripheral countries

The COP26 Agreements as Techno-Scientific Promises

The 26th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP26) hosted in Glasgow in 2021, reaffirmed the guidelines assumed in 2015 around the "Paris Agreement" (COP21). Thus, it proposed limiting the increase in global average temperature by a maximum of 1.5°C compared to the period 1850–1900, as well as achieving a neutral level of emissions by 2050. In addition, to

To cite this article: Layna, Juan, and Leandro Altamirano. 2022. "Promises that Don't Work? COP26 and the Problems of Climate Change." *Engaging Science, Technology, and Society* 8(3): 118–129. https://doi.org/10.17351/ests2022.1377.

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accomplish these goals, it is proposed to reach and exceed annual transfers of $100 billion (USD) from "developed countries" to "developing countries" (UNFCCC 2021).

The growing media coverage of "climate change," combined with the development and increase of civil society organizations focused on socio-environmental problems, has led to giving an increasingly important place to the agreements resulting from each COP. In particular, the COP26 agreements were translated into techno-scientific promises based on the global development of new technologies, such as bioenergy with carbon capture and storage (BECCS).[1] In Argentina, the reception of these promises translates into different ways of addressing the energy transition, all of which entail the promotion of green hydrogen production and lithium extraction. The exploitation of these "new" natural resources is supposed to strengthen socioeconomic improvements through the renewable transition.

Promises operate on socially constructed problems, which are not the result of objective conditions (Kitsuse and Spector 1973), but are defined to become objects of intervention (Gusfield 1981), and therefore involve specific problematic approaches. On these problematic approaches, the COP26 establishes specific orientations towards the future. These imply the exclusion of alternative discourses and social horizons. At the same time, they boast wide coverage and thematization in the mass media. Both issues, the orientation to the future and mass media coverage are at stake in the enunciation of public promises, which are structured as techno-scientific promises (Joly 2010).

This paper attempts to answer the following questions.

- How do the COP26 promises to operate with respect to the center-periphery relationship?
- In particular, how are these promises received in Argentina and what promises and interventions do they enable by the national governments of this country?

So far, we have discussed the agreements of the COP26 and defined techno-scientific promises as an analytical concept. In the second section we review existing criticism to COP26 agreements raised by different kind of actors and analyzed the criteria mobilized in the IPCC reports, which promotes BECCS as a feasible pathway to reaching the maximum 1.5ºC increase. In the third section, we analyze the reception and

1 COP26's promises have a specific character, which allows them to be distinguished from other types of promises that are a usual resource of government: (i) the elements that underpin the problematic approach of these promises emerge within specialized scientific organizations, especially the Intergovernmental Panel on Climate Change (IPCC, dependent on the United Nations). Thereby, the scientific and technological component is at the core of the projections, intervention pathways and expectations regarding the future. (ii) Beyond the new solution-oriented perspective of the IPCC, this institution still presents scientific reports and recommendations as neutral (Beck and Mahony 2018, 7). These are displayed as "external" to the promises of COP26, and are a source of legitimacy for the interventions of all actors. (iii) Therefore, all the translations that the different organizations, groups and social sectors operate on scientific information, are presented as fully adjusted to these scientific reports.

translation of these international agreements and promises made by the Argentine Federal Government, and show the series of environmental, social and economic problems that are usually omitted in these discourses at the local level. Finally, we argue that the mutual and complementary relation of central and peripheral countries is crucial in the process of defining environmental issues and their respective techno-scientific promises.

This paper relies on the documentary analysis of scientific and journalistic articles; audiovisual materials related to COP26; international agreements; official documents on energy transition issued by the Argentine Federal Government; and papers on economic, environmental, and technical issues on lithium extraction and "green hydrogen" production.

The IPCC, Framework for Making Promises and Questioning them by the Public

The IPCC reports[2] constitute the basis of argumentation both for political leaders leading COP26, as well as for several groups of environmental activists and organizations that question the agreements. The latter, with increasing access to the media, point out the pronounced dissociation between the content of the scientific reports, on the one hand, and the agreements and method of controlling COP26 achievements, on the other hand (Harrabin 2021; Friedman 2021; Plumer and Popovich 2021; Golledge 2021; Dewan et al. 2021; United Nations 2021).

Most of this criticism comes from youth environmental activists, such as Greta Thunberg (Sommerlad 2021), Elizabeth Kité, or Sohanur Rahman (Rannard 2021); from government officials in core countries, such as Boris Johnson; from COP26 organizers, such as Alok Sharma (Excelsior 2021; Infobae 2021); and international organizations, such as UN Director General, Antonio Guterres (United Nations 2021). If we identify the common denominator of the different statements, we can see they all criticize the COP26 agreements as unfeasible promises.

After the Paris agreement, in 2015, the IPCC took a new perspective, consisting of a solution-oriented assessment (Beck and Mahony 2018). This implied, on the one hand, the choice of technologies to intervene in climate change and their assumption as a basis for the projections, recommendations and objectives of the reports approved by the IPCC. One type of technology that is intensely promoted is BECCS (ibid., 7).

[2] The IPCC's latest report 2021 confirms the correlation between human activity and the 1.1°C increase in global average temperature. It suggests that the effects of warming are spreading to all regions of the globe, and that to avoid more catastrophic consequences it is necessary not to exceed an increase of 1.5° compared to the pre-industrial era, which implies the implementation of carbon capture and storage technologies.

In addition, the urge presented by scenarios of skepticism and questioning by different actors[3] and in a highly politicized public context,[4] led IPCC to develop an approach focused on assessment as a way to maintain a differentiation between science and politics (and thus legitimacy and independence), and represent itself as a benchmark of neutral science in the post-Paris polycentric governance framework (ibid., 12). As a result of this process, technical feasibility and experimental reproducibility replaced social plausibility as a key criterion for formally sanctioning certain constructions of the future (ibid., 7). All these transformations enabled the latest IPCC report and assessments to continue—even in the present—disregarding the social, economic and political conditions of each region. This is visible, among many other issues, in the fact that, although BECCS is a technology whose global adoption is a necessary condition to achieve the goal of not exceeding a 1.5ºC increase in global temperature,[5] its socio-political and economic implications were not discussed. Since marginal lands are the most appropriate for BECCS implementation (Turner et al. 2018), this technology can lead to displacement of vulnerable populations, which undermines—among other issues—their livelihoods, food security and identity constitution (Cotula et al. 2008; Kartha and Dooley 2016). These vulnerable populations are mostly situated in peripheral countries. Nevertheless, the point is still under discussion. Other authors argue that further systematic research on the topic is still required. We understand this to be a possible effect of BECCS and it can´t be firmly denied that this technology could generate massive displacements of land and people in peripheral areas, in addition to having potential global effects on food supply, land rights, and environmental justice (Creutzig et al. 2014; Beck and Mahony 2018, 7).

Everything stated so far can be more clearly understood if we look in detail at how promises related to climate change are received and formulated in peripheral areas. In particular, we will examine the case of Argentina, in Latin America.

Climate Change Promises in Argentina and the Concealment of the Interdependence

The Argentine case shows that the promises of COP26 and the IPCC criteria are taken up by the Federal Government. It justifies foreign investments aimed at the exploitation of natural resources linked to the development of "clean" technologies (with zero or low carbon emissions) in central countries. However, the

[3] Since its creation, the IPCC has been a target of lobbying activities and criticism by energy companies, trade organizations and free market think tanks. Such criticisms have significantly impacted the public legitimacy of climate science (Oreskes and Conway 2010). Although the Paris Agreement acknowledges a change in the position of many large energy corporations (Farid et al. 2016), the impact of emerging right-wing populism and attacks on climate science is a relevant issue, since it could interact with the functioning and public performance of the IPCC (Beck and Mahony 2018, 11)

[4] Several authors identify highly politicized publics in core countries such as the United States and the United Kingdom (Jasanoff 2017; Jasanoff and Simmet 2017; Lynch 2017; Sismondo 2017a, 2017b). These highly politicized publics could also affect the IPCC credibility (Beck and Mahony 2018, 11).

[5] Assumed by the Integrated Assessment Model (IAM) commissioned by IPCC.

extraction and exploitation of such resources is not innocuous for this country since it can contribute to environmental degradation and even aggravate the effects of global warming in the region.

In Argentina, the climate change issue does not occupy a privileged place in the public or political agenda, where the announcements on oil and natural gas exploitation in the Vaca Muerta mega project are crucial for the economic program (Centenera 2020). However, the discourse on global warming is not absent. In addition to committing to lower carbon emissions at COP26 (Smink 2021), the Argentine government takes up the issue of energy transition (a key strategy against climate change) by promoting foreign investments in green hydrogen production and lithium extraction. Both productive activities are displayed as techno-scientific promises, aimed at achieving socioeconomic improvements and reducing carbon emissions (Ministerio de Ciencia, Tecnología e Innovación 2021a, 2021b, 2021c, 2021d, 2021e, 2021f).

These techno-scientific promises constitute their effectiveness, among other things, in the concealment of social relations and potential problematic aspects. Firstly, on the economic level, they project development and prosperity for the nation and the local population, avoiding to define which entities are the appropriators of the exploited resources.[6] Secondly, a balanced and sustainable use of "natural resources" is stipulated, avoiding to reveal the potential socio-environmental problems of the implementation of these technologies.[7] These conditions, translated into potential impacts on ecosystems, may imply greater vulnerability for local populations when facing the effects of climate change.

There is a remarkable tension between the formulation of the aforementioned promises and the resolution of local problems.[8] Both of those local problems that the technologies pretend to solve, and of the local problems that potentially emerge in the implementation of those same technologies. On the one hand, the framework of these Argentine promises is constituted around internationally established agreements (where the COP has a superlative influence). On the other hand, the very content of the promises attempts to solve capital investment problems in a context of pronounced reprimarization of the economy (Teubal

[6] The main companies exploiting lithium are Food Machinery & Chemical Corporation (FMC Corp, USA), Toyota Tsusho (Japan), Orocobre (Australia), Gangfeng (China) and Lithium Americas Corp (LAC, Canada) (Nacif 2019). While, in the case of hydrogen, the first major investment belongs to the Australian miner Fortescue (Scarímbolo 2021). Regarding the former, production is oriented to lithium carbonate and lithium chloride, which serve as primary inputs for the manufacture of batteries outside the country. As for hydrogen, which is produced as fuel. It is destined exclusively for export.

[7] Direct lithium extraction technologies pose risks of irreversible contamination of salt flat ecosystems, due to the connection between freshwater aquifers and subway brines, as well as problematic deposition of wastes such as calcium, magnesium, and boron (Álvarez and Carmen 2018; Flexer et al. 2018). On the other hand, some studies have questioned the participatory dimension of the incorporation of green hydrogen (Proaño 2021). Other analyses indicate the environmental impacts of water use (high conductivity effluents, demand for large volumes, purification processes), and point out that it is only feasible in the short term to produce gray or blue hydrogen, from natural gas consumption, instead of the so-called green hydrogen, obtained from renewable energy sources (Kazimierski 2021).

[8] We could say that this problem is not unrelated to the dissociation between the production and use of science and technology in peripheral countries (Kreimer and Thomas 2006).

and Palmisano 2015) of which the aforementioned international relations are an important stimulus and consolidation factor. At the present stage, the reprimarization process implies a growing dependence on foreign investments and therefore makes it difficult for peripheral economies to freely adopt technological forms appropriate to local problems and problems related to climate change.

This is relevant, moreover, because it could shed light on other Latin American cases, whose economies are characterized by a high level of primarization, dependence on the world market and, as a result, lack of technological autonomy. In this regard, the largest economies in the region show considerably worse carbon emission projections than the world average.[9] At the same time, Latin America has greater risks and vulnerability to climate change.[10] In this context, the COP26 objective of transferring $100 billion (USD) to developing countries has as a weak point when omitting the dependent condition of these nations.

Denaturalizing Promises: Apparent Neutrality and Omitted Dependence

It is impossible to conceive of the IPCC as an organization limited to the production and assessment of knowledge, but it is clear that it has a considerable influence on global political action. In this context, some leaders of peripheral countries claim to have a greater intervention and representation within the IPCC so as to achieve more equitable proportions in shaping criteria, assessments, analysis and projections (Beck and Mahony 2018, 5 and 9), and thus be able to contemplate contextual particularities. Also, several researchers suggested new modes of evaluation that include a fuller range for judging technological solutions (Beck and Mahony 2017; Buck 2016; Hajer and Pelzer 2018; Parson 2017), e.g., reflection on tacit social and political judgments (Jasanoff 2004, 34; Hughes and Paterson 2017).

Addressing the Argentine case allows us to add that it is not simply a matter of incorporating actors from peripheral countries and variables of analysis, but also of conceiving the complementary and mutually constitutive relationships between central and peripheral countries. The problems and promises formulated within the IPCC and at COP26 (where the most developed countries have a superlative influence) are a concealment of this relationship rather than a guide to effectively address climate change.

Acknowledgements

The authors wish to thank the referees for the extremely valuable comments on earlier drafts of the manuscript.

[9] According to an analysis made by experts of the "Climate Action Tracker" (https://climateactiontracker.org/), if the picture of the four largest economies in the region (Brazil, Mexico, Argentina, and Colombia) were to be generalized to the rest of the world, the global average temperature in 2100 could reach an increase of 3ºC or 4ºC; much higher than the 2.7ºC expected under current conditions. We believe that this scenario is due to the increasingly primarized mode of global insertion common to the entire region (Svampa 2013).

[10] Jaqueline Álvarez, Regional Director of the United Nations Environment Programme for Latin America and the Caribbean, points out that, among the twenty countries most vulnerable to climate change in the world, nine of them are in the region (Smink 2021).

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