Carbon Tracking Platforms and the Problem of Net-Zero
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In recent years, platform companies including Google, Amazon, and Meta have announced grand net-zero carbon pledges and a range of commitments to "technological sustainability." In 2019, Amazon's then CEO Jeff Bezos announced a USD $10 billion "Earth Fund" to fund climate research and pledged to be net-zero by 2040. Meta committed to becoming net-zero throughout its entire supply chain by 2030, with Google, Microsoft, and Twitter echoing similar promises.

Despite these sweeping assurances, platform companies continue to adversely impact the environment in several ways. Platform companies routinely profit from climate disinformation and denialism, usually spread by known actors with vested political and/or economic interests. Last year's Intergovernmental Panel on Climate Change drew attention to the impacts of climate obstruction for the first time, outlining how the problem directly impedes policy and collective action.

This brief considers how platform companies' recent interventions into climate governance – through changes to their climate change content and advertising policies, data management of "net zero" carbon tracking systems, and the expansion of physical infrastructures that directly impact lived environments – constitute an emerging form of platform governance. It outlines further policy considerations regarding the transparency, accountability, and standardization of platform interventions in carbon management specifically, and "platform sustainability" more broadly in order to bridge the artificial divide between climate policy and platform governance.

Platforms and Climate

Platform infrastructures are themselves built and run on extractive energy and data practices that require vast amounts of natural and rare earth materials. Just last year, Amazon's carbon emissions increased at the highest ever reported rate. These ecological harms are not universal; rather, they disproportionately affect communities of colour, continuing long legacies of environmental racism, especially in the United States. Yet, platform companies fiercely protect their commercial interests over their stated sustainability goals – earlier this year, Amazon worked to quash a climate bill that would have regulated its data centres by its own stated timeline of 2040.

Despite clear environmental harms and lack of any real transparency and accountability, platform companies continue to "greenwash" their products and services as "sustainable" solutions to the climate crisis. In fact, many are increasingly expanding their market power with a range of products and services to extend their reach into new "climate tech" markets, investing in "green" infrastructure including low-energy facilities and data processing. Platform companies are also increasingly developing proprietary carbon accounting systems to track their stated net-zero goals. Google, Amazon, and Microsoft are self-regulating their climate impacts through various carbon reporting and tracking systems, such as Microsoft's Sustainability Dashboard. All told, it seems that climate change has become a digital policy problem.

Net Zero Infrastructures: Climate Platform Governance and the Emergence of Carbon Tracking Platforms

While many experts agree that net-zero is largely inadequate, it remains an ambitious goal fraught with both epistemological and political challenges – how to "know" when goals are or are not met, and how to ensure accountability of actors.

Framed as a predominantly technological problem, a new crop of platforms has emerged to help private companies and other organizations measure, disclose, and ultimately achieve their stated net-zero goals. These companies promise to deliver what environmental social scientist Holly Jean Buck calls "decarbonization-as-a-service." Among them, Canadian company *FigBytes* offers a platform for "decarbonization, data management and climate reporting" in order to help "automate and manage your entire sustainability program, for carbon accounting and beyond."

FigBytes and other carbon tracking platforms like it offer a familiar form of technosolutionism to the climate crisis. But to solve our ecological crisis through exclusively technological means, carbon needs to be made legible to platform power – it needs to be quantified, which always entails a particular set of political choices and social relations. Without meaningful policy in this space, these crucial choices are currently left to private actors with clear vested interests. Like other kinds of technological, media, and human infrastructures, carbon tracking platforms "lie beneath" while companies are "racing ahead of law and policy and performing de facto governance, creating new proprietary infrastructures for knowing and managing our planet."

Challenges with Carbon Tracking Platforms

While carbon tracking platforms are a nascent but growing domain, researchers, policymakers and communities have raised significant challenges around the politics of carbon markets and exclusively market-based solutions to the climate crisis. Many have belied the ability of carbon offsets to bring about real change, showing how offsets and monitoring reproduce existing power structures and disproportionately impact local and low-income communities. Negative emissions more broadly have often been used to maintain the status quo over working to mitigate the climate crisis. Others have questioned the political and ideological role of carbon tracking platforms in governing a set of industry interventions toward climate change given their vested reliance on continued emissions.

All told, net-zero is a contested terrain. The term is used by different actors for specific purposes, and is at times mobilized in ways that actually delay and obstruct climate policy and action. These aims rely on both disinformation and deliberate tactics as well as ambiguity surrounding "net-zero" and the metrics used to evaluate carbon impacts. For instance, an evaluation of corporate net-zero goals by the New Climate Institute finds that many businesses fall short of the Paris accord, despite claiming to reach net-zero. This is partially due to the ambiguity, lack of transparency, standardization and independent oversight of the systems used to certify various net-zero interventions. There are also concerns about the efficiency, accuracy, and potential "algorithmic flaws" of such data-driven systems, but little analysis exists on how the data and algorithms function.

Policy Considerations

The emergence of platforms like *FigBytes* raises significant questions about the role of carbon tracking platforms in the governance of broader ecosystems and environments, concentration of market power, and the democratic implications of proprietary systems for managing ecological and public impacts.

Carbon tracking platforms pose a unique set of policy considerations that will need to be further unpacked using a global platform governance agenda. There is a lack of uniformity and standardization to ensure carbon tracking platforms are reliable, transparent, and accountable for potential inaccuracies or harms. These challenges include the varying levels of data quality from platform companies self-reporting on a currently elusive mix of internal metrics.

Relatedly, there is an urgent need for robust verification protocols and independent audits to ensure carbon tracking platforms can actually verify proprietary emissions data. Significant questions remain around the role of public oversight as well as which communities and actors stand to benefit from access to these environmental data and whether local communities are being brought into the design process.

These unresolved challenges around private carbon tracking platforms are reinvigorating broader debates about public versus private roles in platform governance. As Holly Jean Buck inquires: "Shouldn't the political choices about how to quantify carbon — and, by extension, about what kind of social relations to create in pursuit of net zero — be made democratically, rather than by executives and shareholders?" These questions are familiar to researchers and practitioners working in the field of platform governance, who are well positioned to question the role of platform carbon tracking in the governance of broader ecosystems and environments, and whether the use of net-zero platform initiatives are furthering ambiguity and delay or if these corporate mechanisms are working toward climate change mitigation.

These challenges should prompt Canadian policymakers to mandate reporting requirements from platform companies, with clear disclosures of their own carbon emissions as well as their net-zero targets, progress and accounting mechanisms used to measure them.

Beyond energy use and fossil fuel extraction, regulators will need a broader view of the entire tech ecosystem, including the ecological implications of AI systems, as well as the extraction of natural resources and human labour needed to operate them. Transparency requirements are an important, albeit partial step – robust accountability mechanisms should be the goal of an eventual regulatory approach that includes independent oversight over companies' climate metrics, standardization of climate compliance, as well as third-party audits of emissions data and net-zero claims.

Most importantly, the public, Indigenous peoples, youth and affected communities will need to be brought into the design and development of accountability policies related to the climate crisis.