

What Now?: Ecogames After Missed Climate Targets

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EXTENDED ABSTRACT

In October 2025 the secretary general of the UN António Guterres “acknowledged it is now ‘inevitable’ that humanity will overshoot the target in the Paris climate agreement” (Watts and Xipai 2025). The tone of Guterres’ announcement, informed by scientific data and confirmed by many climate researchers (Calvin et al. 2023), was not a warning or a prophecy but a regrettable acceptance of the hardships humanity will face in the very near future. Guterres’ acknowledgment that overshooting the Paris climate target is now inevitable is powerful: it signals that climate change is no longer a future concern but a present reality.

Ecogames, the study of games and climate, must therefore acknowledge this shift in attitude. We must evolve both in theory and practice. Ecogames must move away from its current focus on provocations for climate action that emphasise preservation and damage limitation, growing new points of focus that accept the reality of our quickly changing world. Ecogames lacks a focus on immediate, actionable contributions to citizenship and livability.¹ It must now, through both the study and creation of games, address and assist with the lived realities of the climate crisis. In this presentation I will suggest directions in which this is currently starting to take shape, although I cannot discuss all of the immediate concerns equally. As such, I will dedicate particular attention to climate migration, an area I feel is of the greatest concern.

Ecogames is characterised by outstanding scholarship. However, little of it is fully anchored within the realities of climate catastrophe: Alenda Chang writes of “probable system collapse”; however, she counters her own speculation by suggesting that games could have impacts on environmental attitudes. Chang leaves the door open to possible, undefined, climate preservation (Chang 2019, 198). Benjamin Abraham extensively documents the fatal cost of the materiality of the games industry; but suggests that proper actions can enable “national carbon inventories [that] can play a part [in] keeping the earth within the 1.5 °C ‘safe’ warming limit” (Abraham 2022, 246). Sonia Fizek’s admission that they are “not

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convinced by attempts to solve a problem caused by decades of neoliberal capitalist actions, within the framework of late neoliberal capitalism” is inspiring and necessary; however, it is undercut by their charitable attempt to acknowledge that game industry professionals “deeply care about the environment and want to reshape the culture of making and playing video games into a more sustainable practice” (Fizek 2024). Even in the most recent publications, there remains a hopeful, forward looking emphasis on improving game design practice and reducing environmental damage (Prax 2025). In short, while ecogames literature has lead, even if tangentially, to important initiatives such as Green Game Jams, Playing for the Planet, the Green Games Guide and more, many of which have had small but palpable impacts on the games industry, ecogames writings do not seem fully situated within a world already experiencing civilizational climate crisis.

Incredible work has also been completed on environmental games in practice: tools have been developed for sustainable gaming and game creation. Bart Simon’s work on incorporating solar technology into teaching and his work in the creation of solar powered *Minecraft* (Mojang, 2011) server management project in the ‘For the Trees’ experience, is groundbreaking in its ability to point to a genuinely exciting potential “infrastructural turn” for ecogames studies. This could open the door to gaming that pays attention to voltage and power consumption in real time but goes further by incorporating this into gameplay. Similarly, the EcoKnowGames research project developed in the University of Stirling and King’s College London provides players and researchers with tools to quickly develop games around Lotka-Volterra equations. This demonstrates exciting new possibilities for incorporating scientific research and real-world data into gaming. These projects are laudable - particularly Simon’s work - for their adherence to a respectful engagement with the natural world in line with Fremaux and Barry’s proposed ‘Green Republicanism’ (2019). However, they do not assist in dealing with the most immediate impacts of the climate crisis.

There have been some recent attempts worth mentioning, such as my own recent, admittedly polemical call for a “post-optimistic” approach to climate crisis in ecogames scholarship (McKeown 2025). Similarly, Carolin Becklas’ impressive meditation on the representation of “climate refugees” in popular games such as *Battlefield 2042* (DICE 2021) focusing on the way in which these games “foreground the refugee’s agency and dignity without exaggerating their suffering” (Becklas 2023, 2). While these attempts gesture towards the required direction of travel for Ecogames, they are insufficient as they lack the tangible, practical actions that can make the kind of impact now necessary.ⁱⁱ

One step ecogames scholarship could take to look to a climate future is to champion games as tools for dealing with climate realities. Given the immediacy of these increasingly common phenomena, as suggested in IPCC reports that detail the extent of current climate struggles (Calvin et al. 2023) it’s worth paying attention to those whose engagement with the crisis is most immediate. Climate migration, as highlighted by Becklas, is a strong starting point for this discussion. Games that engage with, educate, and even ease the migration process should be understood as ecogames. For example, a game like *Immigration Nation* (Skinner and Filament Games 2010) is an excellent educational resource for better understanding the immigration process. However, it is not currently commonly viewed within the context of climate issues. This is a missed opportunity, as viewing immigration as increasingly entangled with issues of climate could help players and even policy makers better understand

the immediate human impacts of climate change. Similarly games that simply engage with the anxieties of the coming multicultural boom, promoting multiculturalism should also fall under the umbrella of climate studies: *Chants of Sennaar* (Rundisc, 2023) is an excellent example of a game that integrates the promotion of a linguistic multiculturalism into its game mechanics.

Secondly, drawing on examples from my own pedagogical practice, class-based experiments on game creation using Twine, focusing on climate migration inspired by *Immigration Nation*. To give just one example, I want to briefly discuss a game created by a student based in Singapore. Her work 'Majulah' meditated on tensions that exist within that extremely diverse society. By enabling players to take on different perspectives, issues such as heat, attitudes to food and other small but real prejudices could be discussed. I bring up this small example to draw attention to what I believe the future of ecogames may be: of paying attention to the daily realities of individuals in a changing world that we are going to have to face together.

Ecogames is characterised by truly inspiring scholarship on climate and the natural world. However, there is still room to expand the definition of ecogame: to create a broader spectrum of games seen as emblematic of climate issues. This could help individuals to understand this issue differently: as something that *is* happening rather than something that *could* happen. Further it can help them to understand that daily issues like increasing gas prices, food shortages, and the unfortunate tensions some experience within a multicultural society, are climate issues. Ecogames must engage with pressing issues like climate-migration theoretically and practically: through theory ecogames scholarship can help foster a sense of urgency and empathy, equipping players to take action in the real world. Through targeted game design, that we have demonstrated the ability to create, ecogames have the potential to move beyond abstract targets and become essential tools for understanding and navigating the climate crisis.

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ⁱ This is not to say that there has been no discussion of 'livability' as a focus within gamestudies to date. Indeed, work by scholars like Megan Condis (2020) and Lauren Woolbright (2019) draws on the foundational works of authors who ave foregrounded

livability over more intangible targets such as Rob Nixon (Nixon 2013), Naomi Klein (Klein 2014) and Amitav Ghosh (Ghosh 2016).

ⁱⁱ This should not be misinterpreted as suggesting the work of scholars who have contributed to policies that have actively impacted the games industry are not focusing on tangible outcomes. The work by Chang, Abraham, Prax discussed in this abstract, and that of many more have challenged the games industry to become more sustainable. What is being suggested here is that ecogames can contribute to much more than a sustainable industry. The same attention to detail must be afforded to issues resulting from climate change, such as climate migration.