Thought Leadership From the Field

From Sport for to Sport as Sustainability: Confronting the climate crisis in sport for development

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ABSTRACT

Recently, there have been calls to understand better the relationship between sport and climate change, and to communicate the severity of the climate crisis to as wide an audience as possible. However, given the current climate crisis, we argue that the challenge facing the Sport for Development and Peace (SDP) sector is not to know more about climate change and the place of sport therein, but to imagine a better future and what to do to get there. In this paper, we discuss some specific ideas and approaches that SDP stakeholders might take in doing so. Specifically, we argue for moving beyond the idea of SDP as a tool for responding to or promoting environmental sustainability, as articulated in some policies and frameworks including the Sustainable Development Goals, and to move instead towards a reconceptualization of SDP as itself an ecological endeavor. In so doing, we draw on contemporary ecological notions like the New Climatic Regime and Buen Vivir, that can help to position sport and SDP not as a solution to the climate crisis, but as a fundamental aspect of ecological life on Earth in the years ahead.

What more do we need to know?

The International Day of Sport for Development and Peace (IDSDP), organized and initiated by the United Nations (UN), takes place annually on April 6th to "recognize the positive role sport and physical activity play in communities and in people's lives across the globe" and to "strengthen social ties and promote sustainable development and peace" (United Nations, 2022a, para. 1-2). In 2022, the theme of the IDSP was "securing a sustainable and peaceful future for all," (United Nations, 2022a, para. 4) with an emphasis on sport's ability to:

display leadership, to take responsibility for its carbon footprint, engage in a climate neutral journey, incentivize action beyond the sporting sector, and play a major role in amplifying awareness among its billions of spectators, facilitators and participants at all levels (United Nations, 2022a, para. 4).

Despite these ambitions, the 2022 IDSDP was also accompanied by a caution that:

with the need for urgent action growing more dire every day, the relationship between sport and climate must be better understood and ways of developing policies and taking concrete action to help reverse the impact of climate change through sport must be communicated to as wide an audience as possible (United Nations, 2022a, para. 6, emphasis added).

To a degree, then, the UN highlighted the need to "know more" about the role of sport in sustainable development and communicate the urgency of the climate crisis in and beyond sport.

This perspective stands in some contrast to recent scholarly assessments of sport and environmental sustainability. For example, in the introduction to their recent edited collection entitled *Sport and the Environment: Politics and Preferred Futures* (2020, p. 2), Brian Wilson and Brad Millington challenged sport stakeholders with a simple, yet direct question: "What more do we need to know?" That is, what more do we actually need to know about the risks and threats of climate change and environmental degradation, and of the complicity and complacency of sport therein, before we acknowledge the necessity to act differently? Wilson and Millington (2020, p. 2) further proposed that, given the

scientific consensus about climate change, "...maybe 'knowing more' is not all that is needed" and instead the challenge facing sport and its stakeholders is to "imagine' what a better future could look like, and the steps we might take to get there."

This is the task now facing the Sport for Development and Peace (SDP) sector. How can we, as advocates and researchers of sport-for-development, take what we know, imagine ways to act differently, and then change our behavior? We know that human-caused climate change is a direct and imminent threat to sustainable human life on Earth, and that the climate crisis requires an urgent rethinking about how to interact with nature and our consumption of its resources. We also know that responding to this threat will require navigating the Anthropocene, the current era "in which humanity, through the massive impacts of the world economy, is creating major disruptions of Earth's physical and biological systems" (Sachs, 2015, p. 37). Relatedly, the impact of sport on the environment is also well-known, and has been for some time. Indeed, sport sociologists have long tracked the environmental footprints of water-sports (e.g., kayaking), winter-sports like skiing and hockey, and golf for their impacts on local ecosystems via the reconstruction of local landscapes, air, water and noise pollution, and the use of chemicals in ice-resurfacing or pest-management, for example (see Chernushenko, 1994; Dingle & Stewart, 2018; Millington & Wilson, 2013, 2016; Andrade, Dominski & Coimbra, 2017; johnson & Ali, 2018). The environmental impact of sport mega-events like the Olympic Games and the FIFA World Cup have similarly received attention in the field (see Cantelon & Letters, 2000; Gaffney, 2013; Hayes & Horne, 2011; Karamichas, 2013; Lenskyj, 1998; and Miller 2016; Kim & Chung, 2018; McLeod et al., 2018), as have efforts to mitigate the environmental impacts of the sport sector (see McCullough, Orr & Kellison, 2020; Sartore-Baldwin & McCullough, 2018; Orr & Inoue, 2019). And a recent study from 'Rapid Transition Alliance' authored by David Goldblatt (2020) provides an up-to-date synthesis of environmental impacts, estimating 10 million tonnes of greenhouse gas (GHG) emissions per year from global sport, with the majority (approximately 7-8 million tonnes) coming from the Olympics and the World Cup (Goldblatt, 2020).

These numbers are jarring and hold profound implications not only for the future of sport, but for the planet as well. Indeed, the world of sport has already begun to feel the impact of climate change: of the 19 most recent Winter Olympic host cities, only ten would be able to reliably host winter sports in 2050 and just six by 2080 because of warming conditions; heat waves have disrupted recent events such as the 2018 US Open in New York; air

pollution from fires saw players struggling to breathe during the 2020 Australian Tennis Open; rains and storms have caused the cancellation of events including the 2019 Rugby World Cup in Japan; and if present trends continue, professional sport clubs in Miami, New York, Toronto, as well as football stadiums throughout England can expect flooding on an annual basis (Goldblatt, 2020).

Further, and more relevant for the global SDP sector, we know that environmental crises (in sport and beyond) have international implications for development, particularly with respect to conserving and sharing the resources of the planet in ways that are both sustainable and equitable. In this regard, the Intergovernmental Panel on Climate Change (IPCC) has made clear the need for farreaching and unprecedented changes to all facets of society in order to limit the rate of global warming to 1.5 degrees Celsius above pre-industrial levels, with failure to do so significantly worsening the frequency and magnitude of droughts, floods, extreme heat, food scarcity and poverty (IPCC, 2018). And while climate change does not discriminate, and poses a significant threat to humanity as a whole, the IPPC also makes clear that the effects of a warming planet will not be, and have not been, born equally, with vulnerable populations, many Indigenous communities, those dependent on agricultural or coastal livelihoods, and small island, developing states, and leastdeveloped countries facing a disproportionately higher risk (IPCC, 2018).

Below, we discuss some specific ideas and approaches that SDP stakeholders might take in response to the climate crisis. Here, we reiterate that the need for "far-reaching" and "unprecedented" changes within the sport sector, and inclusive of SDP, is evident, not only given the scope of the crisis and sport's existing environmental impact, but also recognizing that sport has been positioned as a potential leader of sustainable development, praised for its ability to raise awareness of climate change and sustainability initiatives (United Nations, 2022b). The United Nations' 2030 Agenda and the Sustainable Development Goals (SDGs), offers the clearest articulation of sport's sustainable development promises. Article 37 of the SDG preamble recognized and defined a role for sport directly, calling sport an "important enabler of sustainable development", a statement that has afforded organizations and stakeholders across the SDP sector with the opportunity to conceptualize, frame and structure their work in the service of sustainability (United Nations, 2015, para. 37). In subsequent policy documents, including Sport and the Sustainable Development Goals: An overview outlining the contribution of sport to the SDGs, the UN detailed sport's contribution to each of the 17 Goals, including: '[ensuring] availability and sustainable management of water and

sanitation for all' (Goal 6); '[ensuring] access to affordable, reliable, sustainable and modern energy for all' '[promoting] inclusive sustainable (Goal 7); and (Goal industrialization' 9); '[ensuring] sustainable consumption and production patterns' (Goal 12); and '[combatting] climate change and its impacts' (Goal 13) (United Nations, n.d., pp. 8-14). Following the UN's lead, a range of organizations have begun to incorporate environmental and sustainability components into their SDP programming. For example, the International Olympic Committee (IOC) has made clear its commitment to SDP through its Olympism in Action program, and its support of the IDSDP and the SDGs (International Olympic Committee, 2020), the Kenyan-based SDP organization Green Kenya has initiated a 'kick and conserve' project which promotes environmental literacy through soccer (Green Kenya, n.d.); and the Canadian-based Right to Play has pledged to promote the SDGs within and through their SDP initiatives in the global South (Right To Play, n.d.).

Thus, there would appear to be a clear articulation about the possible contribution of sport to sustainable development and combatting climate change, within international development policy and among some SDP actors. Yet, from our perspective, it is important to think clearly and openly about sport's contribution to sustainable development and the place of the environment in SDP, particularly given the aforementioned dubious environmental record of sport (see Millington, Darnell and Smith, 2020). Ultimately, it is our contention that despite recent changes, the issue of climate change and its implications has still received inadequate attention within SDP, and the critical study thereof. As we discuss below, the reasons for this are myriad, but what is evident is that environmental issues have often been preempted by SDP's more recognized development priorities, like peace building, gender empowerment or health promotion (Giulianotti et al, 2018). Yet, the fact remains that the existing approaches to climate change and environmental issues in sport broadly, and the SDP sector specifically, are now (quite literally) unsustainable, and the global SDP sector, such as it is, has little choice but to respond to the climate crisis head on. Therefore, we argue that the time has come to move beyond thinking of SDP as a tool for responding to or promoting environmental sustainability, as articulated in policies and frameworks like the SDGs, and to move towards a reconceptualization of SDP itself as an ecological endeavor. That is, while much of the sustainability discourse within SDP to date has focused on positioning sport as a tool to promote sustainable development, we suggest that the existential crisis posed by climate change requires a more fundamental shift so as to re-conceptualize the environment as a governing principle (rather than an externality to be managed) and to re-politicize SDP in a manner that

challenges neo-liberal and neo-colonial proclivities that maintain climate injustice. This is wholly necessary in the current context, even though we recognize that SDP stakeholders are not, in most cases, the primary causes of climate change. To make our case, we draw upon Bruno Latour's concept of a New Climactic Regime that prioritizes a Dark Ecology approach to sustainable development.

The remainder of this paper takes three parts. In the next, we discuss the politics of climate change within international development and outline the context for prioritizing eco-justice within the SDP sector, in both policy and in practice. Thereafter, we discuss ways of reconceptualizing the connections between sport, the environment and international development within a New Climatic Regime. Finally, we conclude by offering insights into how SDP stakeholders, advocates and officials might move beyond sport as a *tool* of sustainability and sustainable development, and towards the pursuit of sport as sustainable, and socially and ecologically just, in and of itself.

Social and eco-justice in policy & practice

That major development actors like the UN have touted the sustainable development potential of sport in policy marks an important advancement. How such policies have informed development practices, however, remains difficult to pinpoint. In most cases the challenge of policy coherence posed by frameworks like the SDGs has led some SDP actors to focus on a narrow set of development issues – gender equity, HIV/AIDS education, poverty alleviation which usually exclude, or at least overlook, the natural environment (Lindsey and Darby, 2019). Further, when sustainability is prioritized by sport and/or SDP organizations, it is often done so without critical assessment of the negative environmental impacts of sport itself (see Miller, 2017; Darnell, 2019). One might say, therefore, that while sport and SDP stakeholders know about the climate crisis, environmental sustainability is often viewed as something that cannot be prioritized, and when it is considered, the dominant approach tends to focus on managing that which is known to be unsustainable in the hopes of maintaining it for as long as possible (see Blühdorn and Welsh, 2007). Indeed, these concerns are reflected in the views of SDP practitioners operating in the global South; in one of the few studies on the topic to date, Giulianotti et. al (2018) found that SDP organizations in Jamaica, Kosovo, Rwanda, Sri Lanka and Zambia did not view the environment as a primary concern in comparison to matters of poverty or pandemic illness, and that the development policies proffered by organization like the

UN tended to focus on processes that conflicted with sustainable development. emphasizing by industrialization, urbanization and increasing production and consumption. Further, given neo-liberal tendencies within the SDP sector, whereby the responsibility to address of gender inequity, pandemic illness, underdevelopment have been downloaded onto SDP practitioners at the expense of addressing the systemic issues that maintain such inequalities (see, Hayhurst, Wilson & Frisby, 2011; Hayhurst, Giles & Wright, 2016; Burnett, 2015), it is important to question to what extent responsibility for sustainable approaches to and through SDP are being similarly individualized.

At the same time, and as we discuss in further detail below, when environmental sustainability is incorporated in SDP it often takes the form of one-off events, such as a garbageclean-up following a soccer game, for example. This reflects a broader trend, whereby climate change is also still too often reduced to a problem to be resolved by just out-ofreach technocratic solutions (see Sealey-Huggins, 2017), instead of a matter of social and eco-justice. This is important because, as Giulianotti et. al (2018, p. 44) note, while "developing or marginalized countries are already starting to disproportionately bear the costs of a changing climate, they are also the ones who can least afford to ignore the promises of economic growth." For its part, the IPCC has similarly emphasized the disproportionate effects of climate change on developing polities, arguing that poverty and climate change are "inextricably linked" and that:

poor people and poor countries are least responsible for climate change, and yet, due to their vulnerability, are affected most by the consequences. Rich countries have an obligation to take a lead in climate change mitigation and adaptation, and to bear an equitable burned of the associated costs. (cited in Saunders, 2008, p. 1510)

Further, many scholars and activists have noted the neocolonial and racist underpinnings of climate change inaction. For example, in his book *To Cook a Continent: Destructive Extraction and the Climate Crisis in Africa*, Nnimmo Bassey (2012) argues that ongoing resource extraction and landgrabs have continued to exacerbate the climate crisis in Africa and also the hindered the ability of local communities to withstand its effects. Similarly, Marcia Ishii – Director of Grassroots Science Programme at the Pesticide Action Network – has argued that:

Climate injustice is the manifestation of racism that has, for centuries, been directed at Indigenous communities and peoples of colour; it is the misogyny directed at women that also shows up as brutal disregard for life on Earth; and it is the institutions and structures that perpetuate the notion that

it's okay to dominate, destroy, extract and commodify nature in the pursuit of profit regardless of the expense. (Cited in Mersha, 2018, p. 1422)

A similar line of critique has been mobilized by activists like Naomi Klein, who argues that environmental racism has made it possible to ignore the threat of climate change for decades, in both international theatres (including through policy debates at the United Nations) and domestic contexts like North America, illustrated in the aftermath of Hurricane Katrina in Louisiana (Klein, 2014, para. 13), or the fact that at the time of this writing 34 First Nations, Métis and Inuit communities in Canada lack clean drinking water (Lalonde, 2021).

The irony here, of course, is that the processes of colonial exploitation and industrialization in late capitalism not only expropriated wealth and resources from colonies, but also created the environmental conditions that now threaten marginalized communities and developing states. In his analysis of such imperial histories in the Caribbean, Sealey-Huggins (2017, p. 2445) notes that the "reliance of many Caribbean economies on sectors that are threatened by climate change, notably, tourism, agriculture and fishing, is not merely a feature of geography, but a condition with historical antecedents inseparable from contemporary social relations." Contemporary responses to the impact of climate change similarly reflect such neocolonial practices: "Imperialist underpinning of carbon offsetting practices," Sealey Huggins (2017, p. 2445) writes, "are imperialist in the sense that unequal global power relations allow 'carbon-neutral' consumption in the North to continue, at the expense of high social and ecological costs in the South." Indeed, scholars have made similar connections between neo-colonialism, resource extraction, and environmental racism and the 'under-development' and un-sustainability that have given rise to the 'need' for development programs and policies, including SDP (see Gardam, Giles, & Hayhurst, 2017; Millington et al., 2019, 2022).

Concerns about issues like the unequitable distribution of carbon offsets point to the need to reconsider environmental management strategies in a context where ecological modernization predominates. Ecological modernization refers to the belief in emergent, technocratic solutions to climate change that will allow patterns of production and consumption to continue, or at least not stymie economic growth in the name of environmental protection (see Wilson, 2012). Such market-driven responses tend to overlook the fact that proposed solutions like carbon-offsetting are impossible to implement in a standardized way, are not regulated, and ultimately do not reduce the amount of

carbon emissions entering the atmosphere (see Al Ghussain, 2020). Ecological modernization is still dominant in sport; as Wilson (2012) recounts, in the sporting world much of the (light-) green approaches to sustainability rely upon schemes like carbon offset credits implemented in developing countries but in ways that do not adequately mitigate local environmental harms. For example, organizers of the 2006 FIFA World Cup in Germany purchased 500,000 Euros-worth of carbon offsets in India where "900 farms and their families in Tamil Nadu are getting bio-gas cooking fuel for cow dung instead of using fuel wood or fossil fuels" (see Wilson, 2012, p. 99).

Our point here is that while a strong critical analysis of SDP's neo-colonial and neo-liberal underpinnings has emerged in recent years, this approach now needs to include an appreciation of environmental issues and the policies and politics of climate change within international development. And while SDP programs themselves likely do not carry a large carbon footprint, the broader sport sector still does, and, more importantly, SDP programs operate in a development context in which climate change is of fundamental importance. Overall, then, given the challenges of prioritizing environmental sustainability within SDP, there is an urgent need for a renewed conceptual basis for environmental justice within SDP policy and practice.

Thinking anew in the New Climatic Regime

The good news is that there are a host of ways to imagine a better future with regards to the environment, and development, or, as David Korten (2015) articulates, to think about a 'new story' of the earth, humans and the economy. These new stories might in turn offer a frame in and through which to shift our actions in SDP. As scholars and researchers working in this space, we continue to be inspired by a variety of such thinkers, like Bruno Latour (2017), who argues that in the New Climatic Regime in which we find ourselves, the *natural* and the *cultural* can no longer be seen as separate domains, but rather as a single concept that has always been tightly bound. From this perspective, nature/culture becomes "the topic on which to focus our attention and not at all, any longer, as the resource that would allow us to get out of our difficulties" (Latour, 2017, p. 19). Thinking within a New Climatic Regime requires the reconceptualization of the divide between human and non-human, so as to move away from dominant understandings of nature as exterior to politics, or indeed as exterior to sport and/or SDP. Environmental issues need to be embedded in SDP, or, as we have argued elsewhere:

any sustainable future for sport (and for the SDP sector) can exist only in and through a political framework that includes non-humans and the planet as equal stakeholders.

In such a framework, sport and SDP would not be viewed as external forces or agents that can be mobilized to address or overcome environmental emergencies, but would be understood as themselves deeply implicated in the environmental crisis (Millington, Darnell & Smith, 2020, p. 40)

Indeed, re-imagining sport as a social practice whereby the relationship between human and non-human actants are resynchronized within a New Climatic Regime holds potential to create an approach to sport that is *itself* ecological, and not just a tool of environmental management or stewardship. Further, given the above noted context, such a synchronized approach is of particular importance in the development and SDP contexts.

Such an approach will no doubt require strong policy initiatives that have firm and actionable measures to hold stakeholders accountable. While firmly setting these measures is beyond the scope of this short paper, the key point here is that the guiding principles of this policy agenda should include a move away from stewardship over the environment and towards connection to it and embeddedness within it. The idea of Buen Vivir (or living well) proposes an such a vision, for both international development and SDP, in which growth and consumption are no longer the conceptual bases of development, but in fact deserving of critical assessment for their complicity in the climate crisis. Similar to the New Climatic Regime, Buen Vivir rejects the separation of society and nature, instead proposing "a notion of expanded communities" (Gudynas, 2015, p 202) that includes all living beings and elements of the environment. In place of hegemonic neoextractivist approaches to development, Buen Vivir sees a more holistic model of sustainable growth, one that is grounded in land-based knowledge and proposes a rightscentered approach that includes the rights of nature, ecological sustainability, and the elimination of poverty (see Escobar, 2011). In the same vein, and following the work of philosopher Timothy Morton, a move to genuine environmental sustainability, or Dark Ecology, will need to be predicated on radical self-awareness of the ongoing entanglement between the human and the ecological. At the same time, it is important here to be reminded of the critiques of Deep/Dark Ecology from post-colonial scholars like Guha and Martinez-Alier, who argue that such approaches can ignore or overlook the agency and sovereignty of Indigenous and Subaltern groups in the name of protecting the environment and preserving wild-life (see Guha & Martinez-Alier, 1997).

While theoretical debates continue, overall, we see shifts in thinking — from dominion *over* the environment to recognition of humanity's embeddedness *within* it — as

urgently needed within the SDP sector for two main reasons. On the one hand, we need to continue questioning the role of sport, including the broad, global sport sector in which SDP is uneasily situated, within processes of environmental degradation. Indeed, recent research continues to expose sport's negative environmental impact, from the destruction of natural habitat in order to build facilities (Kim and Chung, 2018), to sport's large carbon footprint (Wicker, 2019). In turn, the seduction of ecological modernization in sport has clearly undermined efforts towards sustainable sport by encouraging the status quo (Millington et al, 2018), as have greenwashing practices that trade on the popularity and power of sport to cover up its complicity in the climate crisis (Miller, 2017), including by organizations like the IOC that now position themselves as leaders in the SDP sphere. We need to continue to acknowledge and reflect on these negative environmental impacts of sport, beyond but also within the SDP sector.

This, then, points to the second reason to embrace new environmental thinking in SDP, which is that sport, including its organization, policies, and cultures, does not (and likely cannot) offer a solution to the climate crisis because it is, in itself, of the climate crisis. Whereas the logic of policy frameworks like the SDGs might ask us to think of sport as a tool for redressing climate change, what is more needed in SDP is to reconceptualize sport itself as an activity of the environment, and one that needs to be guided by sustainability ethics and practice. In other words, since we know that much of global sport as it is currently constructed is unsustainable in the face of climate change, the objective for SDP should be to embrace and where appropriate to (re)politicize debates about sport's role in environmental degradation within a New Climatic Regime. In this way, we take the kind of frameworks put forth by Latour and others to mean that sport does not offer a fix for the environment, and that we need to move ever closer to understanding sport as embedded in the environment itself. It is in this new approach that we as humans might begin to rebuild and re-materialize our belonging to the world by recognizing that the natural and the cultural are literally connected. Further, there remains potential to re-imagine sport's contribution to sustainable development within a New Climatic Regime that re-synchronizes not only the relationship between sport and the environment, but also between development and decolonization. Such approach could reconcile the ostensible need for development (and the concomitant discursive construction of who is 'developed' and who is in need of 'developing') environmental impacts of (neo-liberal) development practices, so as to prioritize local, postcolonial, feminist and Indigenous perspectives.

Conclusion: Taking Steps towards Sport a Sustainability

In this short commentary, we have argued against claims that any of us connected to sport-for-development and the SDP sector 'need to know more' about the climate crisis, and have advocated for reimagining the role of sport and SDP within meaningful commitments to sustainability and environmental justice. This conceptualization can hopefully form the basis of future policy development in the SDP sector, at a relatively macro level.

We also acknowledge that there is still an important, ongoing and more micro-level role for environmental advocacy, action and education within SDP. In Botswana, for example, TUSK's Coaching Conservation program uses football/soccer as a metaphor to teach young people about the importance of conservation and animal welfare (TUSK, 2021). These kinds of actions can, we would hope, help to illuminate and ground the importance of the environment within sport and SDP activities. We also take real inspiration from sport-based activists and organizations that have grounded themselves in ecology. For example, Surfers Against Sewage, a UK-based charity started in the 1990s, continues to advocate for the health and well-being of the planet's oceans and water systems, and does so using a perspective similar to what we are advocating for here (Surfers Against Sewage, 2021). For example, in describing their work, Surfers Against Sewage connect their mandate to a physical presence in water "What has always remained though is our unique identity, shaped by the same forces from which we were borne. Our shared love for and contact with the ocean. We are part of the ocean".

Similarly, Protect our Winters, founded in 2007 by professional snowboarder Jeremy Jones and now boasting an international network of actors and organizations, works to encourage outdoor enthusiasts to protect and preserve natural spaces, supporting them to draw on their literal connection to the outdoors as a force for sustainability (Protect our Winters, 2021). In this way, it is important to recall that sport can be a positive force for good, particularly in moments of crisis, by serving as an 'attractor discourse' (Mol, 2010) for social movements, including sustainable development. Or, as Wilson and Millington (2020, p. 6) argue, sport can be an 'indicator practice' by using its global reach to draw attention to environmental issues, and offering a barometer of "how well or quickly we are adapting to the need for environment-related change; [or] why seemingly 'easy' adaptations (e.g., rethinking sport event hosting) are not as easy as we would think."

If sport is to make a positive contribution to sustainable development initiatives, however, such actions require significant political engagement, so as to re-politicize what has largely been a de-politicized approach to climate change within SDP, as well as global sport more broadly. While the promises of ecological modernization can too easily lead to a 'wait-and-see' approach, given the aforementioned forewarning of the IPPC, what is needed is immediate action on behalf of the sport sector and SDP organizations. In this regard, David Goldblatt (2020) offers a range of recommendations, including the cancellation of sport events that are not carbon zero by 2030; requiring of sport federations, leagues, and sponsors to commit to carbon zero plans; and that all sport organizations sign the United Nations 'Sport for Climate Action Framework' in which signatories commit to adhere to a set of five sustainability principles:

- Undertake systematic efforts to promote greater environmental responsibility.
- Reduce overall climate impact.
- Educate for climate action.
- Promote sustainable and responsible consumption.
- Advocate for climate action through communication.

Such approaches can and should, we argue, be taken up by SDP actors and organizations as well. In turn, SDP might consider even more radical interventions, particularly in the context of international development. Borras & Franco (2018), for example, advocate for a 'five R's' approach to deep social reforms and climate justice: The redistribution of wealth and land monopolized by the few; the recognition of forms of social exclusion and marginalization particularly with respect to agrarian and Indigenous landrights; the restitution of lost land from corporate resource grabs; the regeneration of economic and environmental autonomy in; and support for global resistance struggles that align with social and eco-justice movements. While it will take courage and determination, SDP organizations can, should they choose, begin to adopt these principles into their work, particularly in the global South.

Finally, while all policy-based and programming recommendations for SDP need to be taken up in context, we reiterate here that the re-imagining of SDP within a New Climatic Regime should be informed by several key principles, which are relevant to practitioners, policy-makers, governments, and funding-partners alike:

1. Environmental degradation and the climate crisis should no longer take a back seat to other development goals or issues within SDP policy. Instead, the issue of sustainability should be front and center in all SDP thinking, advocacy, activity, and funding from here on;

- 2. Sport can no longer be seen as an external tool to manage the environmental crisis, but rather of the environment, with positive and/or negative implications, none of which are determined:
- 3. SDP can be a leader in its activism and advocacy around a Dark Ecology, eco-justice approach that challenges the neo-colonial and neo-liberal underpinnings of SDP approaches and policies to privilege social, economic, and environmental justice.

As we write this, we are looking at the climate clock as it counts down. And a report from the World Meteorological Organization released at the time this writing forecasts a 40% change that at least one of the next five years will reach the 1.5 degrees Celsius above pre-industrial levels, the sustainability target set by the 2015 Paris climate accord (Borenstein, 2021). The clock is ticking. We know enough. Now is the time to think differently and to act accordingly.

REFERENCES

Al Ghussain, A. (2020, May 26). The biggest problem with carbon offsetting is that it doesn't really work. Greenpeace UK. https://www.greenpeace.org.uk/news/the-biggest-problem-with-carbon-offsetting-is-that-it-doesnt-really work/#:~:text=Updates-

,The%20biggest%20problem%20with%20carbon%20offset ting%20is%20that%20it%20doesn,atmosphere%20in%20th e%20first%20place

Bassey, N. (2012). To cook a continent: destructive extraction and the climate crisis in Africa. Cape Town: Pambazuka Press.

Blühdorn, I., & Welsh, I. (2007). Eco-politics beyond the paradigm of sustainability: A conceptual framework and research agenda. *Environmental Politics*, *16*(2), 185-205. https://doi.org/10.1080/09644010701211650

Borenstein, S. (2021, May 27). Forecast: 40% chance Earth to be hotter than Paris goal soon. Associated Press. https://apnews.com/article/environment-and-nature-science-

985338e4396ae3e9370bb42cdf9d8c92?utm_campaign =SocialFlow&utm_source=Twitter&utm_medium=AP

Borras, S. M., & Franco, J. C. (2018). The challenge of locating land-based climate change mitigation and adaptation politics within a social justice perspective: Towards an idea of agrarian climate justice. *Third World Quarterly*, *39*(7), 1308–1325. https://doi.org/10.1080/01436597.2018.1460592

Burnett, C. (2015). The "uptake" of a sport-for-development programme in South Africa. *Sport, Education and Society*, 20(7), 819–837. https://doi.org/10.1080/13573322.2013.833505

Cantelon, H., & Letters, M. (2000). The making of the IOC environmental policy as the third dimension of the Olympic Movement. *International Review for the Sociology of Sport*, 35(3), 294–308. https://doi.org/10.1177/101269000035003004

Chernushenko, D. (1994). Greening our games: Running sports events and facilities that won't cost the Earth. Ottawa: Centurion.

Darnell, S.C. (2019). SDP and the environment. In H. Collison, S.C. Darnell, R. Giulianotti, R., & D. Howe (Eds.), *Routledge Handbook of Sport for Development and Peace* (pp. 396-405). New York: Routledge.

Dingle, G. W., & Stewart, B. (2018). Playing the climate game: Climate change impacts, resilience and adaptation in the climate-dependent sport sector. *Managing Sport and Leisure*, 23(4-6), 293-314. https://doi.org/10.1080/23750472.2018.1527715

Escobar, A. (2011). Encountering development: the making and unmaking of the Third World. Princeton: Princeton University Press.

Gaffney, C. (2013). Between discourse and reality: The unsustainability of mega-event planning. *Sustainability*, *5*(9), 3926–3940. https://doi.org/10.3390/su5093926

Gardam, K., Giles, A. R., & Hayhurst, L. M. C. (2017). Understanding the privatisation of funding for sport for development in the Northwest Territories: a Foucauldian analysis. *International Journal of Sport Policy and Politics*, 9(3), 541–555. https://doi.org/10.1080/19406940.2017.1310742

Giulianotti, R., Darnell, S., Collison, H., & Howe, P. D. (2018). Sport for development and peace and the environment: The case for policy, practice, and research. *Sustainability*, *10*(7), 2241. https://doi.org/10.3390/su10072241

Green Kenya (n.d.). *Kick and conserve concept*. Green Kenya. https://www.green-kenya.org/kick-and-conserve-concept/

Goldblatt, D. (2020). Playing Against the Clock: Global Sport, the Climate Emergency and the Case for Rapid Change. Sussex: Rapid Transition Alliance. https://rapidtransition.org/wp-content/uploads/2020/06/Playing_Against_The_Clock_FIN AL.pdf

Gudynas, E. (2015). Buen vivir. In G. D'Alisa, F. Demaria & G. Kallis (Eds.), *Degrowth: A vocabulary for a new era* (pp. 201-204) Routledge: New York.

Guha, R., & Martínez Alier, J. (1997). Radical American environmentalism and wilderness preservation: A Third World critique. In R. Guha & J. Martinez-Alier (Eds.), *Varieties of environmentalism: Essays North and South* (pp. 116–132). Routledge.

Hayes, G., & Horne, J. (2011). Sustainable development, shock and awe? London 2012 and civil society. *Sociology*, 45(5), 749–764. https://doi.org/10.1177/0038038511413424

Hayhurst, L. M. C., Giles, A. R., & Wright, J. (2016). Biopedagogies and Indigenous knowledge: Examining sport for development and peace for urban Indigenous young women in Canada and Australia. *Sport, Education and Society*, 21(4), 549–569. https://doi.org/10.1080/13573322.2015.1110132

Hayhurst, L. M. C., Wilson, B., & Frisby, W. (2011). Navigating neoliberal networks: Transnational Internet platforms in sport for development and peace. *International Review for the Sociology of Sport*, 46(3), 315–329. https://doi.org/10.1177/1012690210380575

International Olympic Committee. (2020, November 30). Olympic Movement accelerates transition to sustainability. International Oylmpic Committee. https://olympics.com/ioc/news/olympic-movement-accelerates-transition-to-sustainability

Intergovernmental Panel on Climate Change (IPCC). (2018). *Global warming of 1.5°C An IPCC Special report*. Report of the Intergovernmental Panel on Climate Change. https://www.ipcc.ch/sr15/

johnson, j., & Ali, A. (2018). Ecological modernization and the 2014 NHL sustainability report. *Sociology of Sport Journal*, *35*(1), 49-57. https://doi.org/10.1123/ssj.2017-0011

Karamichas, J. (2013). *The Olympic Games and the Environment*. New York: Palgrave Macmillan

- Kim, K., & Chung, H. (2018). Eco-modernist environmental politics and counter-activism around the 2018 PyeongChang winter games. *Sociology of Sport Journal*, *35*(1), 17-28. https://doi.org/10.1123/ssj.2017-0094
- Klein, N. (2014, December 12). Why #BlackLivesMatter should transform the climate debate. The Nation. https://www.thenation.com/article/archive/what-does-blacklivesmatter-have-do-climate-change/
- Korten, D. C. (2015). Change the story, change the future: A living economy for a living earth. Berrett-Koehler Publishers.
- Lalonde, M. (2021, May 19). Feds tout progress on clean drinking water. Toronto Star. https://www.thestar.com/news/canada/2021/05/19/feds-tout-progress-on-clean-drinking-water.html
- Latour, B. (2017). Facing Gaia: Eight lectures on the new climatic regime. Cambridge: Polity.
- Lenskyj, H. (1998). Sport and corporate environmentalism: The case of the Sydney 2000 Olympics. *International Review for the Sociology of Sport*, 33(4), 341–354. https://doi.org/10.1177/101269098033004002
- Lindsey, I., & Darby, P. (2019). Sport and the sustainable development goals: Where is the policy coherence? *International Review for the Sociology of Sport*, 54(7), 793-812. https://doi.org/10.1177/1012690217752651
- McLeod, C. M., Pu, H., & Newman, J.I. (2018). Blue skies over Beijing: Olympics, environments, and the People's Republic of China. *Sociology of Sport Journal* 35(1), 29-38. https://doi.org/10.1123/ssj.2016-0149
- McCullough, B. P., Orr, M., & Kellison, T. (2020). Sport ecology: Conceptualizing an emerging subdiscipline within sport management. *Journal of Sport Management*, *34*(6), 509-520. https://doi.org/10.1123/jsm.2019-0294
- Mersha, S. (2018). Black lives and climate justice: courage and power in defending communities and Mother Earth. *Third World Quarterly*, 39(7), 1421-1434. https://doi.org/10.1080/01436597.2017.1368385
- Miller, T. (2016). Greenwashed sports and environmental activism: Formula 1 and FIFA. *Environmental Communication*, 10(6), 719–733. https://doi.org/10.1080/17524032.2015.1127850

- Miller, T. (2017). Greenwashing Sport. Taylor & Francis.
- Millington, B., & Wilson, B. (2013). Super intentions: Golf course management and the evolution of environmental responsibility. *The Sociological Quarterly*, *54*(3), 450–475. https://doi.org/10.1111/tsq.12033
- Millington, B., & Wilson, B. (2016). An unexceptional exception: Golf, pesticides, and environmental regulation in Canada. *International Review for the Sociology of Sport*, 51(4), 446-467. https://doi.org/10.1177/1012690214526878
- Millington, R., Darnell, S.C., & Millington, B. (2018). Ecological modernization and the Olympics: The case of golf and Rio's 'Green' games'. *Sociology of Sport Journal*, 35(1), 8-16. https://doi.org/10.1123/ssj.2016-0131
- Millington, R., Darnell, S.C., & Smith, T. (2020). Sport, international development and sustainable futures: History, policy and potential. In B. Wilson & B. Millington (Eds.), *Sport and the Environment: Politics and Preferred Futures* (pp. 29-46). Bingley: Emerald Publishing Limited.
- Millington, R., Giles, A. R., Hayhurst, L. M. C., van Luijk, N., & McSweeney, M. (2019). "Calling out" corporate redwashing: The extractives industry, corporate social responsibility and sport for development in indigenous communities in Canada. *Sport in Society*, 22(12), 2122–2140. https://doi.org/10.1080/17430437.2019.1567494
- Millington, R., Giles, A. R., van Luijk, N., & Hayhurst, L. M. C. (2022). Sport for sustainability? The extractives industry, sport, and sustainable development. *Journal of Sport and Social Issues*, 46(3), 293–317. https://doi.org/10.1177/0193723521991413
- Mol, A. P. J. (2010). Sustainability as global attractor: The greening of the 2008 Beijing Olympics. *Global Networks (Oxford)*, *10*(4), 510–528. https://doi.org/10.1111/j.1471-0374.2010.00289.x
- Orr, M., & Inoue, Y. (2019). Sport versus climate: Introducing the climate vulnerability of sport organizations framework. *Sport Management Review*, 22(4), 452-463. https://doi.org/10.1016/j.smr.2018.09.007
- Protect our Winters (2021). *Our Work*. Retrieved April 15, 2021 from https://protectourwinters.org/our-work/

Andrade, A., Dominski, F., & Coimbra, D. (2017). Scientific production on indoor air quality of environments used for physical exercise and sports practice: Bibliometric analysis. *Journal of Environmental Management*, 196, 188–200. https://doi.org/10.1016/j.jenvman.2017.03.001

Right To Play. (n.d.). Right To Play Joins Organizations across the Country to #goforthegoals during International Development Week. What's new. https://righttoplay.ca/enca/national-offices/national-office-canada/whats-new/right-to-play-joins-organizations-across-the-country-to-goforthegoals-during-international-development-week/

Sachs, J. D. (2015). *The Age of Sustainable Development*. Columbia University Press.

Sartore-Baldwin, M. L., & McCullough, B. (2018). Equity-based sustainability and ecocentric management: Creating more ecologically just sport organization practices. *Sport Management Review*, 21(4), 391-402. https://doi.org/10.1016/j.smr.2017.08.009

Saunders, C. (2008). The stop climate chaos coalition: Climate change as a development issue. *Third World Quarterly*, 29(8), 1509-1526. https://doi.org/10.1080/01436590802528580

Sealey-Huggins, L. (2017). '1.5°C to stay alive': Climate change, Imperialism and justice for the Caribbean. *Third World Quarterly*, 38(11), 2444-2463. https://doi.org/10.1080/01436597.2017.1368013

Surfers Against Sewage (2021). SAS History. Retrieved April 15, 2021 from https://www.sas.org.uk/about-us/history/

TUSK (2021). *Coaching Conservation*. Retrieved April 15, 2021 from https://www.tusk.org/projects/coaching-for-conservation/

United Nations. (n.d). Sport and the Sustainable Development Goals: An Overview Outlining the Contribution of Sport to the SDGs. New York. https://www.sport-for-

development.com/imglib/downloads/unosdp2014-sport-and-the-sustainable-development-goals.pdf

United Nations. (2015). *Transforming our World: The 2030 Agenda for Sustainable Development*. United Nations. New York. https://sdgs.un.org/2030agenda

United Nations. (2022a). *International Day of Sport for Development and Peace, 6 April, 2022*. United Nations Department of Economic and Social Affairs. https://www.un.org/development/desa/dspd/2022/03/idsdp-2/

United Nations. (2022b). Addressing Climate Change through Sport. United Nations Department of Economic and Social Affairs. https://www.un.org/development/desa/dspd/2022/02/addressing-climate-change-through-sport/

Wicker, P. (2019). The carbon footprint of active sport participants. *Sport Management Review*, 22(4), 513-526. https://doi.org/10.1016/j.smr.2018.07.001

Wilson, B. (2012). Growth and nature: Reflections on sport, carbon neutrality, and ecological modernization. In D. Andrews & M. Silk (Eds.), *Sport and neo-liberalism: Politics, consumption, and culture* (pp. 90-108). Philadelphia: Temple University Press.

Wilson, B., & Millington, B. (2020). Sport and the Environment: Politics and Preferred Futures. Emerald Group Publishing.