



Endangered Games: Climate Change and the Olympics

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Introduction

The Olympic Games have been as bad for climate change as climate change has been for the Games. These events, which bring athletes and fans from all corners of the world and require the construction of new venues every two to four years, have an undeniably high environmental footprint.¹ Meanwhile, climate change is altering the Games' geography, particularly the winter games, which are projected to have limited options for future host cities.² A study conducted by the University of Waterloo concluded that a continuous increase in greenhouse gas emissions will result in only four reliable host locations by mid-century and only one by the end of the

¹ See Andrew Krososky, *The Olympics Have a Higher Environmental Impact Than You Might Think*, GREEN MATTERS (Aug. 5, 2021), <https://www.greenmatters.com/p/olympics-environmental-impact> [https://perma.cc/E4NT-2ZJG].

² See Shirin Ali, *Only 'One Reliable Host City' Will be Left for Winter Olympics if Global Emissions are not Curbed: Study*, CHANGING AM. (Feb. 14, 2022), <https://thehill.com/changing-america/sustainability/climate-change/594209-only-one-reliable-host-city-will-be-left-for> [https://perma.cc/U2ST-S8ZA].

century.³ Further, in a high-emissions scenario, nearly all previous host cities are predicted to be unreliable locations for Winter Olympics by the 2080 Games.⁴

With global temperatures expected to rise by an additional 2 to 4.4 degrees Celsius, climate change presents both a limitation on potential venues and a threat to athlete safety.⁵ Warmer temperatures create unsafe outdoor conditions such as rain, wet snow, narrow and low snow coverage, and unacceptable temperatures below 14 or above 30 degrees Fahrenheit.⁶ In response, the International Olympic Committee (“IOC”) partnered with the United Nations Framework Convention on Climate Change (“UNFCCC”) to launch the UN Sports for Climate Action Initiative in December 2018, “to address climate change through concrete commitments and partnerships, while applying verified standards to measure, reduce, and report greenhouse gas emissions – in line with the Paris Agreement.”⁷ Further, in 2020, the IOC announced that the summer and winter Olympic Games will be “climate positive” starting in 2030.⁸

Paris Climate Agreement and the UN Sports for Climate Action Initiative

On December 12, 2016, 196 parties adopted the Paris Climate Agreement, a legally binding international treaty that aims to reduce global warming to 2 degrees Celsius compared to pre-industrial levels.⁹ The agreement further encourages developed countries to financially

³ See Andrew Thompson, *Winter Olympic Sites Are Melting Away Because of Climate Crisis*, SCI. AM. (Feb. 16, 2022), <https://www.scientificamerican.com/article/winter-olympic-sites-are-melting-away-because-of-climate-crisis/> [https://perma.cc/9LEW-R5BQ].

⁴ See *Warming Winter Olympics*, CLIMATE CENT. (Feb. 2, 2022), <https://medialibrary.climatecentral.org/resources/warming-winter-olympics> [https://perma.cc/TR99-D5GK].

⁵ See Ali, *supra* note 2.

⁶ See *Warming Winter Olympics*, *supra* note 4.

⁷ *IOC Takes Leadership Role in the UN Sports for Climate Action Initiative*, INT’L OLYMPICS COMM. (Dec. 11, 2018), <https://olympics.com/ioc/news/ioc-takes-leadership-role-in-the-un-sports-for-climate-action-initiative> [https://perma.cc/EU92-VZPM].

⁸ *Warming Winter Olympics*, *supra* note 4.

⁹ See Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 at 3 (Although the Paris Agreement is aiming for 2 degrees, 1.5 degrees is preferable.).

support their less developed counterparts who lack the requisite capabilities to combat climate change.¹⁰

In response, the IOC and 100 other sports organizations partnered with the UN, who developed five principles to get the sports community “on track for the net zero emission economy of 2050 that global leaders agreed in Paris.”¹¹ These principles include undertaking systematic efforts to promote greater environmental responsibility, reducing overall climate impact, educating for climate action, promoting sustainable and responsible consumption, and advocating for climate action through communication.¹² The two main goals under the sports initiative include combating climate change in the sports community and using sports to increase climate awareness and action around the world.¹³ Like the Paris Agreement, the sports initiative also asks organizations to assist one another in implementing its principles.¹⁴

IOC Sustainability efforts

The IOC has made efforts to become a carbon-neutral organization and to reduce the Olympics’ footprint.¹⁵ The organization’s new headquarters in Switzerland is considered “the world’s most sustainable building in its category,” and an on-site hydrogen station supplies its eight hydrogen cars.¹⁶ Meanwhile, the 2022 Winter Games in Beijing included the first “commitment to source entirely renewable electricity for all 25 venues” and the planting of over

¹⁰ See *The Paris Agreement*, UN CLIMATE CHANGE, <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> [<https://perma.cc/JT8Q-EQSJ>] (last visited Mar. 12, 2022).

¹¹ *Sports for Climate Action Framework*, UN Climate Change (last visited Mar. 13, 2022).

¹² See *id.*

¹³ See *id.*

¹⁴ See *id.*

¹⁵ See *The IOC and the Olympic Games – Addressing Climate Change*, INT’L OLYMPIC COMM. (Jan. 17, 2020), <https://olympics.com/ioc/news/the-ioc-and-the-olympic-games-addressing-climate-change> [<https://perma.cc/G3QR-9FQH>].

¹⁶ *Id.*

sixty million trees to offset the more than one million tons of CO₂ produced by construction and air travel.¹⁷ The Games also utilized medals extracted from used electronics and podiums produced from recycled plastic.¹⁸ While environmentalists applaud these efforts, the argument remains that “sustainability increasingly tends to take a back seat to corporate profits and ambitions to put on bigger, more impressive spectacles.”¹⁹ Similarly, a study found that more proactive solutions such as reducing the size of each event, rotating the venue among the same cities, and enforcing independent standards of sustainability would more effectively advance environmental goals.²⁰ Ultimately, to ensure the continued viability of the Games, the IOC must implement more extreme measures that will prioritize athlete safety and environmental protection over generating revenue.

¹⁷ Smiriti Mallapaty, *China's Winter Olympics are Carbon-neutral – How?* NATURE (Feb. 4, 2022), <https://www.nature.com/articles/d41586-022-00321-1> [<https://perma.cc/QSP5-NLN7>].

¹⁸ *See Even With Cardboard Beds and Recycled Medals, Olympics Take Flak Over the Environment*, NPR, <https://www.npr.org/2021/07/06/1013496227/theres-work-to-do-if-the-olympics-actually-wants-to-be-environmentally-friendly> [<https://perma.cc/QK6L-8FSZ>] (last updated July 9, 2021).

¹⁹ *Id.*

²⁰ *See* Martin Müller, et. al, *An Evaluation of the sustainability of the Olympic Games*, NATURE SUSTAINABILITY (Apr. 19, 2021), <https://www.nature.com/articles/s41893-021-00696-5> [<https://perma.cc/89F9-F4FR>].