# Economics of the Environment

## Summary of Article

### Effects of Global Warming on the Future of Winter Olympics

At the rate that climate is changing, it is safe to submit that locations that hosted Winter Olympics in the past might not be considered as future destinations for the Olympic. Weather situations that include natural snowpack, days that are favorable for snow making and temperatures that have been occasioned by global warming have affected the quality of the games severely. While the venue of the Winter Olympic Games this year, Pyeongchang in South Korea, might not seem to be in immediate danger, other venue in the past events such as Vancouver (2010) experienced accelerated snow melting prior to the starting of the games.

The climate central report indicates that only about six of the past nineteen sites that the Winter Olympics were held will be able to hold such event at the turn of the century if nothing is done to check global warming. Moreover, northern hemisphere snow cover extent is decreasing and glaciers are receding. Such condition will affect winter-based economies and the sporting events that also bring a lot of economic benefits to the host nation. Athletes are increasingly being forced travel further to get ready for competitions. In the United States, Winter sports generate over seventy-two billion dollars annually and support almost seven hundred thousand jobs. Climate change also greatly threatens ski-resorts.

Source:

<https://www.aljazeera.com/news/2018/02/global-warming-threatens-future-winter-olympics-180208113809137.html>

## Olympic Winter Games and Winter Sports

### Introduction

Since the first Olympic Winter Games were held in 1924, the worldwide celebration of winter sport has progressively developed to become among the world’s mega-events. The environmental, economic and social impacts of the Olympic Winter Games differ considerably from games to games. However, the worldwide stature of holding the Olympic Winter Games and the optimistic Olympic bequest for host regions and cities that could results from higher levels of government enormous infrastructure investment, increased tourism and economic development might illuminate on the reasons regions and cities aggressively compete for the chance to hold the Olympics (Chappelet, 2008). The success of the Olympic winter games depends significantly on weather condition.

Weather affects directly the games preparation, outdoor closing and opening ceremonies, outdoor competition fairness, spectators comfort, timing and visibility of television broadcast, transportation and the capacity to finish the full competition program. The game's success has occasionally been in part credited to promising weather. Poor weather remains the greatest challenge that organizers encounter. Most historical Olympic Winter Games overcame that risk of poor weather by getting an indoor facility for the competition, the terrain and climate conditions needed by the different outdoor winter sport that are included in the Olympic Winter Games limit the variety of regions and cities that can hold the games. Scott (2015) reckons that, with the effects of global warming, these cities and regions are expected to diminish further as even some of the cities and regions that have hosted the events in the past become unavailable due to weather changes.

### Global Warming Threat to Winter Sports

 Global warming that result in warmer winters presents grave economic outcomes in many nations that depend on winter recreation and sport for revenue. As the number of days with subzero temperature continues to decline, a lot of winter activities that depend on cold conditions, including snowmobiling, outdoor ice hockey, skiing and fishing will be severely threatened (Pestereva et al., 2012). Many countries, view winter recreational activities as a fundamental part of their economy. Snowmobiling, ski, and snowboard industries in the United States employ a lot of people and bring in billions of dollars to the economy and as the winters become warmer, these winter tourism activities will be affected resulting in loss of a livelihood for a lot of people.

 Most winter activities need snow and not just low temperatures. As the surface temperature of the globe continues to rise, more and more winter precipitation is falling as rain as opposed to snow (Hudson, 2004). Snowmaking has been extensively used to make up for the diminishing snow volume and this has aided in downhill ski events. However, snowmobiling and cross-country skiing which are extremely susceptible to these tendencies cannot benefit since artificial snow cannot be applied on open courses.

### The Economics of Global Warming

In the recent years, concern has grown over the matter of global climate change. If one employs economic examination, greenhouse gas release, which is the chief reason for planetary climatic fluctuations, represent the overuse of a common property resource as well as an environmental externality (Rezai, Foley, and Taylor, 2016). Firms and individual can emit pollution to the atmosphere since it is a global commons. Consequently, the global pollution generates a ‘public bad’ that affect everything making it a negative externality with broad influence. A lot of nations have enacted environmental protection laws that restrict the emission of regional and local pollutants.

 Using economic terminology in these circumstances, the negative externalities connected with regional and local contaminants have by and large been internalized (Nordhaus, 2010). However, insufficient controls are available for carbon dioxide, the most significant greenhouse gas. Additionally, carbon dioxide has no short-term harmful impacts at the earth surface level. But when it accumulated in the atmosphere together with other greenhouse gases, the resultant effects have altered global weather and temperature. Scientists do not appear to get a consensus on the timing and possible scale of these effects, but clearly, from the impact that global warming has had on winter sports and economies, the consequences are real. As the severity of the effects of climate change become severe and their impacts on different nation become apparent, it is in everybody’s interest to reduce their emission for the good of everyone.

 It is, therefore, necessary for nations to come up with rules and agreement to supplement the actions of individual cities, nations and firms for the war on climate change to be won. Climate change ought to be looked upon as an issue of public interest that needs concerted effort (Fankhauser, 2013). The international community should come up with a strong international agreement that can compel them to act and stop the severe environmental outcomes occasioned by global warming and the accompanying economic consequences.

### Necessary Policy Reactions to Global Warming

Two kinds of measures exist that can be employed to address the issue of global warming. Preventive procedures normally mitigate or lower the greenhouse effects while adaptive procedures handle the outcomes of the greenhouse effects and attempt to lessen their impacts (Patchen, 2010). Countries need to be encouraged to minimize their greenhouse gas emission, by either moving to technologies that are more energy-efficient that can permit economic activities at a similar level but with lower carbon dioxide emission levels or reducing economic activities that are known to produce emissions. Conservation of forests that act as carbon sinks can greatly minimize emissions.

Forest recycles carbon dioxide into oxygen. Therefore, preserving the existing forests and reforestation can significantly check carbon dioxide emissions. Adaptive measures have little or no effect on preventing glazier recession and snow cover loss they only mitigate the consequences of adverse weather conditions brought about by flooding and storms (Moss et al., 2010). The necessary measure that should be undertaken should pass the cost-effectiveness threshold. For the best results, market-oriented techniques are preferred, since they transfer the incentive to that firm or person to motivate them to change their behavior.

Market-based policy procedures include tradable or transferable permits and pollution taxes which can go a long way in reducing greenhouse gases emission. Other policies that are greatly reducing these emissions could include creating inducements for individuals and firms to switch to energy-efficient technology and renewable energy sources. In the past, politics has stood in the way of adoption of sweeping transferable permit and carbon taxes systems (Gifford, 2011). However, numerous governments have been able to overcome this by shifting subsidies from carbon-based to non-carbon-based fuels. For those countries that subsidize their fossil fuel products, removing the subsidies will level the playing ground for other fuels.

## Conclusion

All key scientific body, including the United States National Academy of Science, agree that global warming is real and has adverse implications. Today the world over, extreme weather is the standard. The winter sports community has experienced firsthand the earliest and most concrete evidence of melting glacier and reduced snowpack. Global warming is a real problem that threatens to alter people’s way of life. But for the Olympic Winter Games and winter sports, the threat is immediate. With the ever-decreasing snow cover and the receding glazier, athletes wishing to take part in these games must travel further to get ready for the competitions. The damage to the environment goes together with the damage to local economies and single businesses.

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