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Ecotourism in the Arctic Circle: Regional Regulation Is Necessary to Prevent Concerned Environmentalists from Further Contributing to Climate Change

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Ecotourism in the Arctic Circle: Regional Regulation Is Necessary to Prevent Concerned Environmentalists from Further Contributing to Climate Change

Mary E. Edes*

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I. INTRODUCTION

Climate change is a phenomenon that affects the entire world.¹ According to the National Academy of Sciences, the term climate change refers to any significant change in the measure of climate that lasts for an extended period of time.² Climate change may arise from changes in natural factors, natural processes, or human activities that modify the atmosphere's composition or land surface.³

The most significant example of climate change is the rising of the Earth's temperature due to the emission of greenhouse gases.⁴ In modern civilization, the burning of fossil fuels such as coal and oil has become common practice.⁵ When burned, these fuels emit gases which concentrate and trap heat in the Earth's atmosphere.⁶ The trapping of heat caused by these gases is similar to the workings of the glass panels of a greenhouse, hence the term, "greenhouse gases."⁷ As the amount of trapped gases increases, the Earth's respective temperature rises.⁸ This example of the climate change phenomenon is often referred to as "global warming."⁹ Although the term climate change is often used interchangeably with the term global warming, scientists urge that the terms are separate and distinct.¹⁰

1. See Environmental Defense, Global Warming by the Numbers, <http://www.environmentaldefense.org/article.cfm?contentID=5816> (last visited Nov. 11, 2008).

2. U.S. Environmental Protection Agency, Climate Change: Basic Information, <http://www.epa.gov/climatechange/basicinfo.html> (last visited Nov. 11, 2008) (measures of climate include temperature, precipitation, and wind).

3. *Id.* Changes in natural factors can include changes in the sun's intensity or slow changes in the Earth's orbit around the sun. An example of a change in a natural process within the climate system is a change in ocean circulation. Human activities that can modify the atmospheric composition include burning fossil fuels, while human activities that change the land surface include deforestation, reforestation, urbanization, and desertification. *Id.*

4. See *id.* (over the last 100 years, concentrations of greenhouse gases in the Earth's atmosphere have caused Earth's temperature to rise). Globally, the most common greenhouse gases include carbon dioxide, methane, and nitrous oxide. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, FOURTH ASSESSMENT REPORT, CLIMATE CHANGE 2007: SYNTHESIS REPORT, SUMMARY FOR POLICYMAKERS 5 (2007), available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf.

5. See U.S. Environmental Protection Agency, *supra* note 2. Carbon dioxide emissions come from the burning of fossil fuels, deforestation, decay, and peat, and account for the largest portion of greenhouse gas emissions. Methane emissions come from agriculture, waste, and energy production. Nitrous oxide emissions come from agriculture production. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 4.

6. U.S. Environmental Protection Agency, *supra* note 2.

7. *Id.*

8. See *id.* The National Oceanic and Atmospheric Administration and National Aeronautics and Space Administration estimates that the Earth's average surface temperature has increased between 1.2 and 1.4 degrees Fahrenheit over the last one hundred years. Furthermore, eleven of the last twelve years are ranked among the twelve warmest years on record since 1850. The two warmest years on record were 1998 and 2005. *Id.*

9. *Id.*

10. See *id.* (the term climate change conveys the idea that there are other global changes in addition to rising temperatures); see also *infra* Part II.a.

The global tourism industry is both affecting and being affected by climate change.¹¹ Climate is one of the tourism industry's main resources.¹² A change in climate will have a resulting change on the comfort level and available recreational activities at tourist destinations, and thus significantly influence a tourist's decision to visit that locale.¹³ However, the tourism industry is also impacting, and moreover, furthering climate change.¹⁴ The transportation of tourists around the globe considerably adds to the emission of greenhouse gases, causing the Earth's temperature to rise further.¹⁵

On a specific level, tourism in the Arctic Circle is a contributor to the climate change crisis.¹⁶ The Arctic Circle has become the latest tourism hot spot to exhibit the effects of global warming.¹⁷ As atmospheric temperatures heat up, tourists from around the world travel to view retreating ice sheets and melting glaciers.¹⁸ Ironically though, greenhouse gas emissions from the transportation of tourists to the Arctic Circle are inherently contributing toward the climate change crisis.¹⁹

Currently, the Arctic Circle does not have a comprehensive, binding set of regional regulations to protect its fragile environment from the effects of climate change.²⁰ The current scheme of soft law agreements implemented by intergovernmental and non-governmental organizations is not adequate in order to fully protect the environment.²¹ The Arctic Circle needs comprehensive, binding regulation to address Arctic environmental protection generally, as well as to specifically address the impact of climate tourism on the Arctic region.²²

11. See THE INTERNATIONAL ECOTOURISM SOCIETY, FACT SHEET: GLOBAL ECOTOURISM, available at http://www.ecotourism.org/webmodules/webarticlesnet/templates/eco_template.aspx?articleid=15&zoneid=2 (follow "Global Ecotourism" hyperlink) (last visited Nov. 11, 2008); U.N. World Tourism Organization, Climate Change and Tourism: Background, <http://www.unwto.org/climate/bkg/en/bkg.php?op=1> (last visited Nov. 11, 2008) [hereinafter UNWTO, Climate Change and Tourism: Background]; U.N. World Tourism Organization, Climate Change and Tourism: FAQ, <http://www.unwto.org/climate/faq/en/faq.php?op=4> (last visited Nov. 11, 2008) [hereinafter UNWTO, Climate Change and Tourism: FAQ].

12. UNWTO, Climate Change and Tourism: Background, *supra* note 11.

13. See *id.*

14. UNWTO, Climate Change and Tourism: FAQ, *supra* note 11 (noting that tourism must recognize its own contribution to the warming process and respond accordingly); see also Gautam Naik, *Arctic Becomes Tourism Hot Spot, But Is That Cool?*, WALL ST. J., Sept. 24, 2007, at A1.

15. UNWTO, Climate Change and Tourism: Background, *supra* note 11; see *infra* notes 80-83 and accompanying text.

16. Naik, *supra* note 14.

17. *Id.*; see *infra* text accompanying note 40.

18. Naik, *supra* note 14.

19. *Id.* (noting that any trip by train, plane, or cruise ship is emitting carbon dioxide into the atmosphere).

20. LINDA NOWLAN, ARCTIC LEGAL REGIME FOR ENVIRONMENTAL PROTECTION 2 (IUCN & ICEL 2001), available at <http://www.iucn.org/themes/law/pdffdocuments/EPLP44EN.pdf>; see UNWTO, Climate Change and Tourism: Background, *supra* note 11.

21. See NOWLAN, *supra* note 20.

22. *Id.*

This comment analyzes the issue of tourists traveling to the Arctic Circle to view glaciers and ice sheets before they disappear due to climate change while inadvertently contributing to climate change through the greenhouse gases emitted from their travels. Part II of this comment provides background on tourism and its relationship to climate change and introduces climate tourism and its impact in the Arctic. Part III analyzes the Arctic Circle legal regime and explores some of the current binding and non-binding regulations in place. Part IV makes a call for action by arguing that regional regulation is necessary and suggesting how it can be implemented. Overall, the current Arctic regulatory scheme is inadequate as it is comprised of soft law agreements which are not fully comprehensive and do not provide for mandatory sanctions for violators.²³ A comprehensive regional regulatory scheme will ensure that the Arctic nations are held to binding measures which will ensure the sustainability of both the fragile Arctic environment and the tourism industry while minimizing the contribution toward climate change.²⁴

II. CLIMATE CHANGE AND TOURISM

A. *Climate Change and Global Warming*

Although the term climate change is often used interchangeably with the term global warming, scientists urge that the terms are separate and distinct.²⁵ The term global warming is a narrower term, signifying only the average increase in the Earth's atmospheric temperature.²⁶ The term climate change is a broader term, conveying that there are other global changes in addition to rising temperatures.²⁷ Some of these additional changes include rising sea levels, shrinking glaciers, changes in the distribution of plants and animals, growing seasons lengthening, trees blooming earlier, ice on rivers and lakes freezing and breaking up earlier, and permafrost thawing.²⁸

Climate change and global warming have been gaining significant attention in the U.S. and across the world in recent years.²⁹ This phenomenon is attracting attention in part because of the increasing severity of natural disasters such as

23. See *infra* Part IV and V.

24. See *infra* Part IV and V.

25. See U.S. Environmental Protection Agency, *supra* note 2.

26. *Id.*

27. *Id.*

28. *Id.*

29. See *id.* (the EPA has dedicated an entire sector of its website to information surrounding climate change and global warming, <http://www.epa.gov/climatechange>, including a section on "What You Can Do" to help); *Science Topics: Global Warming*, N.Y. TIMES, <http://topics.nytimes.com/top/news/science/topics/globalwarming/index.html> (last visited Nov. 11, 2008) (the United Nations convened a scientific panel to study climate change).

Hurricane Katrina³⁰ and the increased publicity and media attention surrounding the issue.³¹ For example, Al Gore's documentary on global warming, "An Inconvenient Truth," garnered national attention and won him an Academy Award in 2007.³²

The cause of climate change is a subject of a great deal of controversy; however, the most recent study conducted by the Intergovernmental Panel on Climate Change (IPCC) found that human activity is the most likely cause.³³ The study concluded, "[w]arming of the climate system is unequivocal, as is now evident from observ[able] increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level."³⁴ The study further concluded that human activity is "very likely" the primary cause of the rising atmospheric temperatures.³⁵ This represents the last of four studies conducted by the IPCC since 1990 on the causes of climate change.³⁶ However, this study is the first in which the IPCC asserts with over ninety percent confidence that climate change is due to the emission of carbon dioxide and other greenhouse gases from human activity.³⁷

Climate change has shown significant effects around the entire world.³⁸ The IPCC report notes some of the observed climate changes as: rising sea levels;³⁹ decreases in snow and ice;⁴⁰ changes in precipitation levels, with a likely increase in the global area affected by drought;⁴¹ a likely increase in hot days, hot nights, and heat waves, with a corresponding likely decrease in cold days, cold nights, and frosts;⁴² increases in tropical cyclone activity;⁴³ increases in the number and sizes of glacial lakes;⁴⁴ changes in hydrological systems;⁴⁵ and changes in

30. See Environmental Defense, Hurricanes and Climate Change, <http://www.environmentaldefense.org/page.cfm?tagid=486> (last visited Nov. 11, 2008).

31. See *Science Topics: Global Warming*, *supra* note 29 (stating that the subject has experienced "red-carpet" moments when brought into the arenas of the Oscars and the United States Supreme Court).

32. *Id.*

33. Elisabeth Rosenthal & Andrew C. Revkin, *Science Panel Calls Global Warming 'Unequivocal'*, N.Y. TIMES, Feb. 3, 2007, available at <http://www.nytimes.com/2007/02/03/science/earth/03climate.html>.

34. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 4, at 2.

35. Rosenthal & Revkin, *supra* note 33.

36. *Id.*

37. *Id.*

38. See *id.*

39. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 4, at 2 (the global average sea level has risen at a rate of 1.8 millimeters per year since 1961, and at a rate of 3.1 millimeters per year since 1993).

40. *Id.* (the average annual Arctic sea ice extent has shrunk at a rate of 2.7 percent per decade since 1978, with a higher rate during the summer months of 7.4 percent per decade).

41. *Id.* (from 1900 to 2005 precipitation levels have increased in the eastern parts of North and South America, northern Europe, and northern and central Asia; however, precipitation levels have declined in the Sahel, the Mediterranean, southern Africa, and southern Asia).

42. *Id.* (changes recorded over the last fifty years).

43. *Id.* (the greatest evidence of increases in activity are from the North Atlantic region since 1970).

44. *Id.* (such increases are due to changes in snow, ice, and frozen ground, and have led to changes in some Arctic and Antarctic ecosystems).

terrestrial ecosystems.⁴⁶ Specifically, in the Northern Hemisphere, the IPCC report observes an increase in temperatures in the second half of the twentieth century, with those temperatures “very likely” being higher than those of any other fifty year period during the last 500 years, and “likely” being the highest temperatures in the past 1,300 years.⁴⁷ In addition to the observed changes listed in the IPCC report, other potential dangerous effects of climate change include an increasing risk of wildfires and floods.⁴⁸

B. *Global Tourism*

In recent years, the tourism industry has grown to be a chief player in the global economy.⁴⁹ The tourism industry represents the single largest sector of the world economy, generating more than ten percent of the global gross domestic product and employing more than 230 million people.⁵⁰ If the tourism industry itself were represented as a country, it would have the second largest economy in the world, surpassed only by the U.S. economy.⁵¹ Furthermore, tourism is the number one export in sixty countries and is one of the five top exports in more than 150 countries.⁵² The tourism industry’s significant role in the world economy brings with it a considerable impact on developing international policies and treaties.⁵³ Countries that rely heavily on tourism as their main source of income have a considerable stake in the development of global and national policies that affect tourism.⁵⁴ Such countries will likely support policies that will further cultivate the tourism industry and oppose policies that place restrictions on it.⁵⁵

45. *Id.* (glacial lakes have increased in size and frequency due to increased runoff and earlier spring peak discharge from glacier and snow-fed rivers, in addition to affecting the water quality of such warming rivers and lakes).

46. *Id.* (earlier timing of spring events and upward shifts in plant and animal ranges are linked to recent warming, as well as changes in algal, plankton, and fish abundance in marine and freshwater systems being linked to rising water temperatures).

47. *Id.*

48. Environmental Defense, Global Warming and Extreme Weather, <http://www.environmentaldefense.org/page.cfm?tagID=1405> (last visited Nov. 11, 2008).

49. See THE INTERNATIONAL ECOTOURISM SOCIETY, *supra* note 11.

50. *Id.* at 1.

51. *Id.* In 2006, over 75 countries earned over \$1 billion from global tourism. Worldwide, the total estimated receipts from global tourism were \$733 billion in 2006, marking a \$57 billion increase over 2005. Furthermore, in 2006 the global tourism industry earned approximately \$2.4 billion per day. U.N. WORLD TOURISM ORGANIZATION, TOURISM HIGHLIGHTS: 2007 EDITION 3-4 (2007), available at http://unwto.org/facts/eng/pdf/highlights/highlights_07_eng_hr.pdf.

52. THE INTERNATIONAL ECOTOURISM SOCIETY, *supra* note 11, at 1.

53. Jose-Roberto Perez-Salom, *Sustainable Tourism: Emerging Global and Regional Regulation*, 13 GEO. INT’L ENVTL. L. REV. 801, 803 (2001).

54. *Id.*

55. See *id.*

The sheer magnitude of the global tourism industry is partially due to the vast number of people driving the industry through their national and international travels.⁵⁶ The number of tourists traveling internationally has shown significant growth in recent decades.⁵⁷ According to the United Nations World Tourism Organization (UNWTO), 2006 set a new record for the number of tourists traveling internationally at 846 million.⁵⁸ That figure reflected an increase of 43 million people, or 5.4 percent over 2005.⁵⁹ This exponential growth is accredited to growth and performance of emerging destinations and has been supported by sustained economic expansion in the tourism industry.⁶⁰ This momentous growth is expected to continue into the future.⁶¹ The UNWTO estimates that by 2020 the number of internationally-traveling tourists will reach nearly 1.6 billion.⁶² As the number of international tourists continues to increase, the tourism industry must continue to expand in order to meet the increased demand for transportation, accommodations, and recreational activities.⁶³ Any changes in these tourism inputs could potentially have a positive or negative effect on international tourists' decisions to visit a certain destination.⁶⁴ Comprehensively, a tourist's decision not to travel will produce a net loss for the industry, while a tourist's decision to travel will produce a net gain.⁶⁵

C. Climate Change's Relationship to the Tourism Industry

Greenhouse gas emissions that cause climate change come from a variety of global sources.⁶⁶ According to the IPCC, the three main greenhouse gases being emitted globally are carbon dioxide, methane, and nitrous oxide.⁶⁷ Carbon dioxide emissions come primarily from the burning of fossil fuels; however, such emissions can also come from deforestation, decay, and peat.⁶⁸ Methane emissions come from agriculture, waste, and energy production.⁶⁹ Nitrous oxide emissions come from agriculture production.⁷⁰ Of these three types of greenhouse

56. See THE INTERNATIONAL ECOTOURISM SOCIETY, *supra* note 11, at 1.

57. U.N. World Tourism Organization, About UNWTO, <http://www.unwto.org/aboutwto/index.php> (last visited Nov. 11, 2008) (international tourism arrivals grew at an annual rate of 6.5 percent from 1950 to 2005, increasing from 25 million to 806 million travelers).

58. U.N. WORLD TOURISM ORGANIZATION, *supra* note 51, at 1.

59. *Id.*

60. *Id.*

61. *Id.* at 10.

62. *Id.*

63. See Perez-Salom, *supra* note 53.

64. See *id.*; *infra* text accompanying notes 94-100.

65. See Perez-Salom, *supra* note 53.

66. See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 4.

67. *Id.*

68. *Id.*

69. *Id.*

70. *Id.*

gases, carbon dioxide emissions from the burning of fossil fuels accounts for the greatest share of global emissions.⁷¹

The economic sectors contributing to the emission of greenhouse gases are also varied.⁷² Globally, the largest sector contributing toward emissions is energy production, which accounts for approximately twenty-six percent of emissions.⁷³ The next largest sectors contributing toward emissions are industrial production, at approximately nineteen percent,⁷⁴ forestry, at approximately seventeen percent,⁷⁵ and both transportation and agriculture at approximately thirteen percent each.⁷⁶ The remaining economic sectors emitting greenhouse gases are residential and commercial building and waste and wastewater production.⁷⁷

On a global level, the U.S. is the leading contributor to greenhouse gas emissions.⁷⁸ In the U.S., the largest economic sector contributing to emissions is electricity production, which accounts for thirty-three percent of emissions.⁷⁹ Transportation is the second largest economic sector, accounting for twenty-eight percent of emissions.⁸⁰ Industrial production followed, accounting for nineteen percent of emissions.⁸¹ The remaining twenty percent of U.S. greenhouse gas emissions are contributed by the residential, commercial, and agricultural sectors.⁸²

The global tourism industry is not the leading contributor of greenhouse gas emissions; however, it does make a notable contribution.⁸³ It is estimated that five percent of all carbon dioxide emissions come from the tourism industry, while fourteen percent of all greenhouse gas emissions come from the tourism industry.⁸⁴ If tourism's emissions were compared to the emissions of countries

71. *Id.*

72. *See id.*

73. *Id.*

74. *Id.* (industrial production estimated to account for 19.4% of emissions).

75. *Id.* (forestry estimated to account for 17.4% of emissions).

76. *Id.* (agriculture estimated to account for 13.5% of emissions and transportation for 13.1% of emissions).

77. *Id.* (residential and commercial building estimated to account for 7.9% of emissions and waste and wastewater for 2.8% of emissions).

78. *See* Environmental Defense, *supra* note 1 (noting the U.S. as the number one global warming polluter in the world).

79. U.S. ENVIRONMENTAL PROTECTION AGENCY, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2005, EXECUTIVE SUMMARY 14 (2007), available at <http://www.epa.gov/climatechange/emissions/downloads06/07ES.pdf>.

80. *Id.*

81. *Id.* In contrast to electricity production and transportation, greenhouse gas emissions from U.S. industrial production have declined over the last decade. This long term decline has been due to structural changes in the U.S. economy, like the large shift from a manufacturing-based to a service-based economy. *Id.*

82. *Id.*

83. U.N. Environment Programme, Climate Neutral Network: Tourism, http://www.climateneutral.unep.org/cnn_contentdetail.aspx?m=99&amid=239 (last visited Nov. 11, 2008).

84. *Id.*

around the world, tourism would be the fifth greatest polluter worldwide.⁸⁵ It is further estimated that if no action is taken to mitigate emissions, in thirty years the tourism industry's carbon dioxide emissions will be three times as high.⁸⁶

The tourism industry contributes to emissions through the movement of tourists to their destinations and through the accommodation and servicing of tourists while visiting their destinations.⁸⁷ These activities span the largest economic sectors that contribute to global warming.⁸⁸ The transportation sector is an integral part of the tourism industry.⁸⁹ Transportation is the foundation of tourism as it allows for tourists' movement to and from their destinations.⁹⁰ Additionally, tourism activities also impact agriculture and waste production.⁹¹ As the number of tourists visiting a certain destination increases, the demand for agricultural products also increases as well as the waste created.⁹² Overall, greenhouse gases are being emitted in great quantities by other economic sectors; however, with its role in transportation, agriculture, and waste production, the tourism industry significantly contributes to emissions and thus climate change.⁹³

Climate change is also currently affecting the global tourism industry in addition to being affected by it.⁹⁴ Climate is one of the main resources of the tourism industry⁹⁵ and is of particular importance to beach travel, nature travel, or winter sports-focused travel.⁹⁶ Any change in climate or weather pattern can significantly impact a tourist's decision to visit a certain destination.⁹⁷ This decision can rest on a number of factors, including comfort and available recreational activities.⁹⁸ A change in climate will have a resulting change on the comfort level and available recreational activities at tourist destinations, and thus significantly influence a tourist's decision to visit that locale.⁹⁹ For example, an

85. *Id.*

86. *Id.*

87. *Id.*

88. *See id.*; *supra* text accompanying notes 73, 76-77.

89. *See* UNWTO, Climate Change and Tourism: Background, *supra* note 11 (stating that the tourism sector is contributing to greenhouse gas emissions, especially through the transport of tourists).

90. *See id.* Furthermore, there is significant variation in the amount of emissions across the segments of the tourism industry. For example, trips by car and railroad account for thirty-four percent of all trips worldwide, but only account for thirteen percent of all carbon dioxide emissions. Long-haul trips by airplane account for approximately three percent of all trips, but account for seventeen percent of emissions. U.N. Environment Programme, *supra* note 83.

91. *See infra* text accompanying notes 125 and 146.

92. *See infra* text accompanying notes 125 and 146.

93. *See* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 4; U.N. Environment Programme, *supra* note 83.

94. *See* THE INTERNATIONAL ECOTOURISM SOCIETY, *supra* note 11; UNWTO, Climate Change and Tourism: Background, *supra* note 11.

95. UNWTO, Climate Change and Tourism: Background, *supra* note 11.

96. *Id.*

97. *Id.*

98. *See id.*

99. *See id.*

increased frequency in tropical hurricanes will likely deter tourists from choosing certain beach locations, while rising ocean levels may make certain beach destinations simply less accessible to tourists.¹⁰⁰

Furthermore, such a resulting change in tourist flow patterns will have sweeping effects on tourist communities' business sectors.¹⁰¹ Any businesses that rely on tourism will suffer a decline in revenue as the number of tourists decline.¹⁰² For example, handicraft industries in tourist communities will suffer a loss of sales if the stream of tourists declines due to climate change.¹⁰³ A decline in tourist arrivals will similarly decrease the demand for outputs from other related sectors such as agriculture and construction.¹⁰⁴ Moreover, in small island nations and developing countries that rely heavily on the tourism industry, a decrease in tourist arrivals due to climate change will destroy employment opportunities.¹⁰⁵

D. Ecotourism, Climate Tourism, and the Arctic Circle

"Ecotourism" is a subset of tourism that has gained popularity with environmentally-conscious travelers in the past fifteen to twenty years.¹⁰⁶ The term ecotourism has taken on several meanings and is often used flexibly both in the industry and by tourists themselves.¹⁰⁷ The term has been used both narrowly and broadly.¹⁰⁸ It is used narrowly to identify a type of tourism that takes into consideration the environmental, social, and economic impacts of travel practices.¹⁰⁹ It is often used broadly to describe various types of environmental or nature-focused travel.¹¹⁰ The term ecotourism is also consistent with the principles of sustainable tourism.¹¹¹

100. See *id.* (stating that changing climate and weather patterns can significantly affect tourists' decisions).

101. *Id.*

102. See *id.*

103. See *id.*

104. See *id.*; Perez-Salom, *supra* note 53, at 806.

105. UNWTO, Climate Change and Tourism: Background, *supra* note 11.

106. See THE INTERNATIONAL ECOTOURISM SOCIETY, *supra* note 11, at 2.

107. Karen Roach, *The International Year of Ecotourism: Tackling the Challenges of Global Regulation*, 27 SUFFOLK TRANSNAT'L L. REV. 191, 193 (2003).

108. See *id.*

109. *Id.*

110. *Id.* Often confused with, or cited alongside ecotourism are other distinct subsets of tourism, including: adventure tourism, a form of nature based tourism that incorporates an element of risk, high levels of physical exertion, and the need for specialized skill; geotourism, tourism that sustains or enhances the geographical character of a place through its environment, heritage, aesthetics, culture, and the well-being of its residents; nature-based tourism, any form of tourism that relies primarily on the natural environment for its attractions or settings; responsible tourism, tourism that maximizes benefits to local communities and minimizes negative social or environmental impacts while conserving cultures, habitats, and species; and sustainable tourism, tourism that meets the needs of present tourist and host regions while protecting and enhancing opportunities for the future. THE INTERNATIONAL ECOTOURISM SOCIETY, *supra* note 11, at 3.

111. See Roach, *supra* note 107. For a definition of sustainable tourism, see *supra* note 110.

The International Ecotourism Society (TIES) defines ecotourism as “[r]esponsible travel to natural areas that conserves the environment and improves the well-being of local people.”¹¹² TIES contends that tourists who participate in ecotourism and businesses that implement and profit from ecotourism should follow a set of defined principles.¹¹³ Those principles are: minimizing impact, building environmental and cultural awareness and respect, providing positive experiences for visitors and hosts, providing direct financial benefits for conservation, providing financial benefits and empowerment for local people, and raising sensitivity to the host country’s political, environmental, and social climate.¹¹⁴

In conjunction with the growing awareness of climate change,¹¹⁵ ecotourism has gained popularity with environmentally-conscious tourists looking to minimize the environmental impacts from their travel.¹¹⁶ The statistics from this market reflect its growing popularity.¹¹⁷ In 2004, TIES estimated that ecotourism was growing three times faster than the global tourism industry as a whole.¹¹⁸ Furthermore, according to TIES, ecotourism has been growing twenty to thirty-four percent each year since the 1990s.¹¹⁹ The United Nations Environment Programme (UNEP) and Conservation International have indicated that most of the global expansion of tourism is occurring in the world’s remaining natural areas.¹²⁰ In the U.S., approximately thirteen percent of the 18.6 million U.S. leisure travelers can be regarded as ecotourists.¹²¹ A 2005 study estimates that ecotourism is one of the fastest growing travel trends in the U.S.¹²² The study further estimates ecotourism to be a seventy-seven billion dollar market, representing five percent of the overall U.S. travel and tourism market.¹²³ Furthermore, a 2003 study found that more than three-quarters of U.S. travelers felt it important that their travels not damage the environment.¹²⁴

112. The International Ecotourism Society, Definitions and Principles, http://www.ecotourism.org/webmodules/webarticlesnet/templates/eco_template.aspx?articleid=95&zoneid=2 (last visited Nov. 11, 2008). In referencing ecotourism, this comment will utilize TIES’ definition of the term.

113. *Id.*

114. *Id.*

115. *See supra* text accompanying notes 14-17.

116. *See* Roach, *supra* note 107, at 192-103 (discussing the development of ecotourism).

117. *See* THE INTERNATIONAL ECOTOURISM SOCIETY, *supra* note 11.

118. *Id.* at 2.

119. *Id.*

120. *Id.*

121. THE INTERNATIONAL ECOTOURISM SOCIETY, FACT SHEET: ECOTOURISM IN THE U.S. 1, *available at* http://www.ecotourism.org/webmodules/webarticlesnet/templates/eco_template.aspx?articleid=15&zoneid=2 (follow “Ecotourism in the United States” hyperlink) (last visited Nov. 11, 2008).

122. *Id.* (in calculating statistics, study also included areas of eco-travel networks, eco-volunteering trips, active sports trip programming, green tourism, and environmentally responsible tourism in its definition of “ecotourism”).

123. *Id.*

124. *Id.* at 3.

A subset of the popular ecotourism travel market is the newly-emerging niche market called “climate tourism.”¹²⁵ Climate tourism refers to travel centered around visiting areas of the world showing a visible impact from long-term warming trends.¹²⁶ Climate tourism has become increasingly popular in the Arctic Circle for tourists wishing to see its rare environment before it disappears as a result of climate change.¹²⁷ Tourism companies are now using climate change in the Arctic as a persuasive marketing tool—a “see it before it is gone” pitch to tourists.¹²⁸ Companies plug the need to see melting glaciers, retreating ice sheets, polar bears, and penguins all before they disappear as a result of climate change.¹²⁹ However, it is due to the warming trends of climate change that some of these remote areas are even accessible to climate tourists.¹³⁰

One main attraction for climate tourists is the chance to see a glacier splinter off or “calve” into icebergs.¹³¹ In the Arctic, the number of annual visiting tourists has increased to one and a half million, up from one million in the 1990s.¹³² One particular location, the Svalbard archipelago in Norway, has experienced a thirty-three percent increase in visitors in the past five years, bringing the total number of annual visitors to approximately 80,000.¹³³ Another attraction is the newly emerged “Warming Island,” a three-finger shaped island off the east coast of Greenland.¹³⁴ Long buried under the Greenland ice sheet, Warming Island was discovered in 2005.¹³⁵ However, in satellite photos from 1985, Warming Island appeared as part of the mainland, completely covered and locked in ice.¹³⁶ Trips to Warming Island for 2008 were booked early in the year.¹³⁷

125. Naik, *supra* note 14.

126. *Id.*

127. *Id.*; *Climate Tourism Heats Up*, GLOBORATI, Oct. 3, 2007, <http://www.globorati.com/wordpress/2007/10/03/climate-tourism-heats-up.htm>.

128. Stephen Leahy, *Tourism at the End of the World*, NOW PUBLIC, Jan. 18, 2008, <http://www.nowpublic.com/environment/tourism-end-world>. Communications director for TIES stated, however, that ecotourism companies are shying away from such marketing strategies because they want tourists to both see the changing environment and act to protect it for future generations. *Id.*

129. *Id.* Other areas around the world at risk include ancient ruins in Thailand, coral reefs in Belize, thirteenth century mosques in the Sahara, and the Cape Floral Kingdom in South Africa. Similar to polar bears and penguins, tourists might travel to other areas of the world to catch a glimpse of the world’s remaining tigers or lady’s slipper orchids. *Id.*

130. *See id.* (discussing newly unearthed areas due to climate change); *supra* notes 34-35, 38-46 and accompanying text.

131. *See* Naik, *supra* note 14.

132. *Melting Ice Will Affect Hundreds of Millions, Globally, New UN Report Says*, U.N. NEWS SERVICE, Jun. 4, 2007, <http://www.un.org/apps/news/printnewsAr.asp?nid=22773>.

133. Naik, *supra* note 14.

134. *Id.*; *Climate Tourism Heats Up*, *supra* note 127.

135. Betchart Expeditions, *A Voyage of Discovery to Warming Island, Greenland*, http://www.betchartexpeditions.com/antarctica_warmIs.htm (last visited Nov. 11, 2008).

136. *Id.*

137. *Id.* Betchart Expeditions’ discovery trip to Warming Island for September 16-27, 2008 sold out in the spring of 2008. The cost was \$5,745.00 plus airfare. *Id.*

Climate tourists also flock to the Arctic just to see melting glaciers and retreating ice sheets.¹³⁸ One such glacier in Greenland known as Jacobshavn has become a popular tourist destination as it has retreated over nine miles since 2002.¹³⁹

However, the irony of the situation is apparent. Tourists and concerned environmentalists are in part contributing to the problem by flocking to the Arctic Circle to catch a firsthand glimpse of the effects of climate change.¹⁴⁰ Each trip by train, airplane, or cruise ship emits more quantities of carbon dioxide and other greenhouse gases and contributes to the overall global climate change phenomenon.¹⁴¹

E. The Impacts of Climate Tourism

1. Environmental Impacts

Climate tourism may impose significant detrimental effects on the overall global climate.¹⁴² While exploring various locations, tourists contribute to the production of waste and pollution.¹⁴³ Tourists also contribute to the consumption of natural resources, such as water and land.¹⁴⁴ Furthermore, as tourist destinations develop, the amount of construction increases, which results in increased noise and air pollution.¹⁴⁵ Finally, the increased threat of oil spills is of particular significance, as increasing numbers of cruise ships transport climate tourists to remote locations.¹⁴⁶ These repercussions of climate tourism all have a direct impact on the overall environment.¹⁴⁷

Climate tourists can also have an adverse impact on the climate in the specific regions they visit.¹⁴⁸ Primarily, the actual physical visits by tourists can have significant adverse impacts on the surrounding environment.¹⁴⁹ Depending on the fragility of the environment, the sheer numbers of people traversing the location might put it at risk.¹⁵⁰ For example, the great increase in the volume of climate tourists has endangered fragile vegetation in some areas.¹⁵¹ Moreover,

138. Naik, *supra* note 14.

139. *Id.*

140. *Id.*

141. *Id.*; UNWTO, Climate Change and Tourism: Background, *supra* note 11; see *supra* notes 83-90 and accompanying text.

142. See Perez-Salom, *supra* note 53, at 804-05.

143. *Id.* at 804.

144. *Id.*

145. *Id.* at 805.

146. Naik, *supra* note 14.

147. Perez-Salom, *supra* note 53, at 803-05.

148. See *id.* at 803.

149. *Id.* at 804.

150. See Naik, *supra* note 14.

151. *Id.*

local wildlife is also under continuing threat with the increasing numbers of tourists.¹⁵²

However, climate tourism also has the potential to make a positive environmental impact.¹⁵³ The stream of income from climate tourists provides a large incentive to preserve the environmentally-sensitive area in order to ensure the continuation of such income.¹⁵⁴ Likewise, such income also provides incentives to preserve natural resources.¹⁵⁵ Additionally, a portion of tourism-generated income could be used to ensure the conservation of resources.¹⁵⁶ For example, Scandinavian Airlines System, a Stockholm-based airliner that flies among Denmark, Norway, and Sweden, created a voluntary program allowing passengers to pay a fee to offset their flight-related emissions.¹⁵⁷ The fee is then spent on a renewable-energy project.¹⁵⁸ However, the program has not yet gained popularity among travelers.¹⁵⁹

2. *Economic Impacts*

Climate tourism has positive economic impacts on the regions visited by tourists. Primarily, tourism is a large source of income for many regions.¹⁶⁰ Small communities in areas afflicted by climate change will draw more climate tourists, thus supporting their local economies.¹⁶¹ The most tangible benefits realized are expenditures on goods and services.¹⁶² For example, local businesses that rely on tourists, such as handicrafts and recreational activities, will be supported by the increased volume of tourists and their expenditures.¹⁶³ In addition, local agriculture and construction industries will also receive benefits from the increased demand for buildings and food.¹⁶⁴ Furthermore, increased tourist arrivals will promote the development of infrastructure to support and benefit

152. *Id.*

153. *See Leahy, supra* note 128.

154. *See id.* (noting that the key for tourist operators to stay in business is to keep the environment pristine).

155. Perez-Salom, *supra* note 53, at 806.

156. *See id.*

157. Naik, *supra* note 14 (the fee was set at 8 Euros, or roughly \$10.31, as of Nov. 11, 2008); SAS International, Do you want to offset your CO2 emissions?, <http://www.flysas.com/en/About-SAS/CO2-emissions/> (last visited Nov. 11, 2008).

158. Naik, *supra* note 14.

159. *Id.* As of the Naik article's release, SAS recorded approximately 600 registered transactions. SAS carries nearly four million passengers a month. *Id.*

160. Perez-Salom, *supra* note 53, at 806.

161. *See id.*

162. *Id.*

163. *See id.*; Naik, *supra* note 14.

164. UNWTO, Climate Change and Tourism: Background, *supra* note 11.

both tourists and local residents.¹⁶⁵ Overall, such growth and development in the local economies will also increase the availability of jobs in the communities.¹⁶⁶

However, climate tourism can also exert negative economic impacts in the regions visited by tourists.¹⁶⁷ First, communities that are dependent on tourism as a main source of income are extremely vulnerable, as changes in the flow of tourists will significantly affect their economy.¹⁶⁸ Additionally, the increased demands for goods and services resulting from tourism could have the negative effect of increasing prices for goods and services.¹⁶⁹ As a result, local consumers may be priced out of the market for the goods and services they need.¹⁷⁰ Furthermore, the increase in job opportunities brings with it other jobseekers who engage in social wrongs such as crime.¹⁷¹

III. CURRENT LEGAL REGIME

A. Legal Background

1. General Arctic Environmental Legal Regime

Eight nations make up the Arctic Circle: Canada, Denmark/Greenland, Finland, Iceland, Sweden, Norway, Russia, and the United States.¹⁷² Environmental protection in these nations is controlled primarily through national domestic law because all land areas fall under the sovereignty of each of the respective nations.¹⁷³ Some nations are also bound through regional regulation.¹⁷⁴ For example, Denmark, Finland, and Sweden are subject to laws of the European Union, while Canada and the United States are subject to the *North American Agreement on Environmental Cooperation*.¹⁷⁵ International environmental laws and environmental principles are currently gaining momentum in the Arctic legal regime.¹⁷⁶ Global treaties affect environmental protection in the Arctic; however, the vast majority of these treaties deal only with the protection of the marine

165. Perez-Salom, *supra* note 53, at 806.

166. *Id.*

167. *See id.* at 804-06 (discussing negative impacts of ecotourism that can translate into economic costs).

168. *Id.*

169. *Id.*

170. *Id.*

171. *Id.*

172. NOWLAN, *supra* note 20.

173. *Id.* However, the laws of the individual Arctic nations are increasingly being influenced by global treaties. Specifically, treaties focusing on marine conservation have been of great influence to domestic law. Thus, to date, much of the focus of the Arctic domestic legal framework has been on marine conservation. *Id.*

174. *Id.*

175. *Id.*

176. *Id.*

environment.¹⁷⁷ Certain other recent treaties such as *Biodiversity Convention* and *Persistent Organic Pollutants* were designed to address narrow environmental issues that arise specifically in the Arctic.¹⁷⁸ All of these legal measures are binding approaches to regulating environmental protection in the Arctic Circle.¹⁷⁹

Another important legal control in the Arctic Circle has been the use of “soft law” agreements.¹⁸⁰ A soft law agreement is an agreement between two or more nations that is non-binding and is thus arguably less important and less effective than binding law.¹⁸¹ The use of soft law agreements in the Arctic began with the Arctic Environmental Protection Strategy (AEPS) in 1991 and its *Declaration on Protection of the Arctic Environment*.¹⁸² The AEPS is a non-binding framework for promoting environmental cooperation.¹⁸³ In 1996, the AEPS was absorbed and integrated into a new organization, the Arctic Council.¹⁸⁴ The Arctic Council is an intergovernmental forum that was formed to address concerns common among the Arctic nations.¹⁸⁵ The Arctic Council describes itself not as an international organization but as “a high-level forum intended to provide a means for promoting cooperation among Arctic states . . . on common Arctic issues, in particular issues of sustainable development and environmental protection in the

177. *Id.* at 4-5. Such treaties include the 1973 International Convention for the Prevention of Pollution from Ships and its corresponding 1978 Protocol, commonly called MARPOL; the 1972 Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matters; and the 1990 International Convention on Oil Pollution Preparedness, Response, and Co-Operation. Richard J. Ansson, Jr., *The North American Agreement on Environmental Protection and the Arctic Council Agreement: Will These Multinational Agreements Adequately Protect the Environment?*, 29 CAL. W. INT'L L.J. 101, 117 (1998).

178. NOWLAN, *supra* note 20. The 1992 *Convention on Biological Diversity* was the first treaty to address the conservation and protection of global ecosystems. The Convention addressed the biodiversity crisis—namely the lack of nature reserves, human overpopulation, resource consumption, and species extinction. The Convention included three themes, each of which gave rise to legal obligations. The themes included: conservation of biodiversity, sustainable use of biological resources, and equitable sharing of benefits derived from the use of biological resources. The 2001 *Persistent Organic Pollutants Treaty* gained its momentum from recent scientific studies concluding that persistent organic pollutants were present in the tissue, blood, and breast milk of Arctic residents who lived a great distance from the source of any such pollutants. The treaty implements control measures for the production, use, import, export, and disposal of persistent organic pollutants such as aldrin, chlordane, DDT, dioxins, heptachlor, and PCBs. *Id.* at 24, 27.

179. *Id.*

180. *Id.* at ix.

181. *Id.* at vii, 2.

182. *Id.* at ix. The eight Arctic nations first began discussing a coordinated approach to protecting the Arctic environment in 1989. With the end of the Cold War and prominent environmental disasters such as Chernobyl and the ExxonValdez oil spill, Arctic national representatives wanted to join together to tackle common environmental problems. After two years of negotiation, the eight nations adopted the AEPS in 1991. *Id.* at 7.

183. *Id.* at 2. Although the eight Arctic nations formally agreed to the obligations of the AEPS in writing, it was not a legal treaty, and parties did not believe that binding obligations were being imposed upon them. The AEPS worked to describe environmental issues, survey the existing legal regime, and proposed six priorities for action. The six priorities for action were persistent organic pollutants, oil pollution, heavy metals, noise, radioactivity, and acidification. *Id.* at 8.

184. *Id.* at ix.

185. *Id.* at 2.

Arctic.”¹⁸⁶ Each of the eight Arctic nations is a member of the Arctic Council, with each nation being represented by a Senior Arctic Official.¹⁸⁷ Participation in the Arctic Council is also open to observers such as non-Arctic states, intergovernmental organizations, and non-governmental organizations.¹⁸⁸

The Arctic Council has five working groups through which it conducts most of its activities.¹⁸⁹ The five working groups include: the Sustainable Development Program; the Arctic Monitoring and Assessment Program; the Emergency, Prevention, Preparedness, and Response Program; the Protection of Arctic Marine Environment; and the Conservation of Arctic Flora and Fauna.¹⁹⁰ In the past decade, the Arctic Council has created several new governance initiatives.¹⁹¹ For example, the Sustainable Development and Utilization Initiative of 1991 was implemented to help Arctic governments improve economic, environmental, and social conditions of their indigenous communities.¹⁹²

Overall, there are gaps in the Arctic environmental legal regime.¹⁹³ Some of the gaps relate to specific environmental issues, such as incomplete biodiversity protection.¹⁹⁴ Other gaps relate to the integration of indigenous peoples and the sharing of resource benefits with indigenous and local communities.¹⁹⁵ Specifically, the AEPS has been criticized as putting forth only a piecemeal effort, as it did not establish any concrete targets and established only few timetables and general national commitments.¹⁹⁶ Since the AEPS was integrated into the Arctic Council, it appears that no significant change has resulted.¹⁹⁷ Although the Arctic Council is a relatively new forum, it still has no enforcement authority and is under-funded.¹⁹⁸ Moreover, it contains few, if any, substantive

186. *Id.* at 5 (quoting Declaration on the Establishment of the Arctic Council 1 (1996), available at <http://arctic-council.org/filearchive/Declaration%20on%20the%20Establishment%20of%20the%20Arctic%20Council-1.pdf>).

187. *Id.*

188. *Id.* at 11.

189. *Id.* at 12.

190. *Id.* The Sustainable Development Program was created to sustainably protect and enhance the health, culture and economies of Arctic inhabitants. The Arctic Monitoring and Assessment Program was created to monitor the levels and assess the impact of anthropogenic pollutants in the Arctic. The Conservation of Arctic Flora and Fauna was created to address special needs of Arctic species and their habitats in Arctic region. The Emergency, Prevention, Preparedness, and Response Program was created to facilitate cooperation and action among the Arctic nations in the event that a comprehensive regional response is needed to an environmental emergency. The Protection of Arctic Marine Environment Program was created to address policy and non-emergency response measures related to the protection of the marine environment from pollution. *Id.* at 12-15; Ansson, *supra* note 177.

191. NOWLAN, *supra* note 20, at 5.

192. Ansson, *supra* note 177, at 123.

193. NOWLAN, *supra* note 20, at x.

194. *Id.* at 5.

195. *Id.*

196. *Id.* at 9.

197. *See id.* at 15 (although the Council has been criticized for its ineffectiveness, it is still a young organization and observers have noted it might still be too soon to tell if any significant change has taken place).

198. *Id.*

commitments to take tangible action.¹⁹⁹ Furthermore, the Arctic Council has no decision-making powers and none of the member nations have relinquished any decision-making power to the Council.²⁰⁰ Overall, the regional soft law regime is plagued by problems of unenforceability, the lack of specific commitments, the lack of targets and timetables for action, and chronic under-funding.²⁰¹

2. Environmental Legal Regime and Ecotourism

Similar to the general environmental legal regime in the Arctic Circle, ecotourism is regulated on a nation-by-nation basis.²⁰² Most Arctic nations are host to at least one popular tourism location;²⁰³ however, currently there is no binding, enforceable regulation in place.²⁰⁴ The lack of a comprehensive regulatory scheme raises the issue of potential variances in individual nation's ecotourism regulations.²⁰⁵

Ecotourism in the Arctic has also been the subject of various soft law agreements created by non-governmental organizations (NGOs). As described above, these soft law agreements are non-binding and simply establish goals and standards or recommend initiatives in regulating ecotourism.²⁰⁶ For example, the World Ecotourism Summit held in 2002 acknowledged that one of the greatest problems facing the ecotourism industry was the lack of internationally recognized standards.²⁰⁷ The declaration produced by the Summit set an agenda to make ecotourism activities more sustainable, analyzed action that should be taken by individual nations and NGOs, and concluded with proposals to develop global ecotourism initiatives.²⁰⁸ However, similar to other soft law agreements, the declaration produced by the Summit lacked any enforceable measures and concluded only with proposals.²⁰⁹ Overall, similar to soft law agreements on

199. *Id.*

200. *Id.* Some argue that the decision-making power of the Council has been purposely limited by the United States. *Id.*

201. *Id.* at 5; see Perez-Salom, *supra* note 53, at 822.

202. See Roach, *supra* note 107, at 195.

203. See Naik, *supra* note 14 (Norway is host to the Svalbard archipelago, Greenland boasts "Warming Island" and Ilulissat, Canada has Manitoba, and Alaska is home to the Northwest Passage).

204. Roach, *supra* note 107, at 201 (noting that the UN faces problems not only with the content of voluntary guidelines but also with enforceability, and that the only functioning regulatory framework of ecotourism is national regulation).

205. See *id.* at 195.

206. See *id.* at 197-198; *supra* note 181 and accompanying text.

207. See Roach, *supra* note 107, at 197. The World Ecotourism Summit was held in honor of the United Nations' declared "International Year of Ecotourism." The Summit was unprecedented in scale and included regional conferences on every continent and a global dialogue among those in the ecotourism field. *Id.*

208. See *id.* at 198.

209. See *id.* (criticizing the resulting Declaration's benefits as "hazy"); compare with text accompanying note 201.

general environmental protection in the Arctic, soft law agreements on regulating ecotourism lack significant effectiveness.²¹⁰

B. Regulation in Norway—The Svalbard Environmental Protection Act

The Svalbard archipelago in Norway has become a popular tourist destination with approximately 80,000 visitors per year, representing a thirty-three percent surge between the years of 2002 and 2007.²¹¹ In 2001, Norway's legislature enacted the Svalbard Environmental Protection Act ("Act"), a special piece of legislation intended to address the unique Svalbard environment.²¹² The purpose of the Act is to "preserve a virtually untouched environment in Svalbard with respect to continuous areas of wilderness, landscape elements, flora, fauna, and cultural heritage."²¹³ The overriding objective of the Act is to allow for settlement, research, and commercial activities that comport with environmentally sound practices, similar to the concept of sustainability.²¹⁴ If these activities do not comport with environmentally sound practices, then the activities must yield to the extent that they threaten the preservation of the environment.²¹⁵ This overriding objective of the Act is also further supported by the general duty of care enumerated by the Act.²¹⁶ This duty of care requires and holds responsible all people to show consideration to the natural environment and to exercise caution to avoid unnecessarily damaging or disturbing the natural environment or cultural heritage.²¹⁷

The Act is also inventively drafted for Norwegian law because in addition to outlining the law, the Act also outlines basic principles of environmental law.²¹⁸ These principles serve both as the guiding core of the Act as well as the basis for Norway's exercise of authority over Svalbard.²¹⁹ For example, section six of the

210. See *supra* notes 181, 201 and accompanying text. But see Roach, *supra* note 107, at 197 (arguing that the accelerated growth of ecotourism presents difficulty in preserving a relevant international law standard, but that NGOs present viable alternatives through their leadership roles, backing of national agendas with sound environmental policy, and ability to draw national attention to issues to promote change).

211. Naik, *supra* note 14.

212. Hans Chr. Bugge, *Protection of Arctic Biodiversity in Norwegian law: The Svalbard Environmental Protection Act*, 1-2, available at <http://uit.no/getfile.php?PageId=396&FileId=1273> (last visited Nov. 11, 2008).

213. Svalbard Environmental Protection Act, ch. 1, §1 (2001), available at <http://www.regjeringen.no/en/doc/Laws/Acts/Svalbard-Environmental-Protection-Act.html?id=173945>.

214. *Id.*; see Bugge, *supra* note 212, at 5 (noting that preservation of the environment is the main objective of the Act). The requirements of preservation are similar to those of sustainability. For a definition of sustainable tourism, see *supra* note 110 and accompanying text. According to the U.S. Environmental Protection Agency, sustainability is defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." U.S. Environmental Protection Agency, Sustainability, <http://www.epa.gov/sustainability/> (last visited Nov. 11, 2008).

215. Bugge, *supra* note 212, at 5.

216. See *id.*

217. Svalbard Environmental Protection Act, § 5.

218. Bugge, *supra* note 212, at 5.

219. Svalbard Environmental Protection Act, § 6.

Act states, “[t]he guidelines set out in sections [seven] to [ten] shall form the basis for the exercise of authority under this Act. In particular, the authorities shall ensure that the exercise of authority pursuant to this Act and its individual provisions, when seen as a whole, is in accordance with these guidelines.”²²⁰ The principles of environmental law then addressed by the Act include the precautionary principle, the environmental pressure principle, and the polluter pays principle.²²¹

The precautionary principle is laid down explicitly in section seven of the Act.²²² It states that if an administrative body lacks information on the effects of a certain action upon the environment, the administrative body’s authority is to be exercised in a way that avoids damage to the environment.²²³

The environmental pressure principle is laid down in section eight.²²⁴ This section addresses the impact of any new activities and states that such new activities shall be evaluated based on the overall pressure they exert on the natural environment.²²⁵ This section promotes an ecosystem approach to managing the environment by evaluating activities that may be harmful to the environment and by addressing the pressure or level of harm they exert.²²⁶ This type of broad approach implicates the ecosystem principle while also attempting to reconcile the typical disconnect between law policies and administrative systems.²²⁷

Finally, the polluter pays principle is addressed in section nine of the Act.²²⁸ This principle states that the cost of preventing and limiting damage to the environment is borne by the person who either is the cause of such damage or would be the cause of such damage.²²⁹ This section also expands on the traditional polluter pays idea to include *all* types of damage to the environment, not simply forms of pollution.²³⁰ Other damage that may be covered by the polluter pays principle includes damage to flora, fauna, and wildlife.²³¹

After laying down basic principles, the Act then outlines principles with regard to protection of specific areas of environmental concern.²³² The Act

220. *Id.*

221. *Id.* §§ 7-9. Professor Bugge notes that the environmental pressure principle is very close to an “ecosystem approach.” Bugge, *supra* note 212, at 5.

222. Svalbard Environmental Protection Act, § 7.

223. *Id.*

224. *Id.* § 8.

225. *Id.*

226. Bugge, *supra* note 212, at 5.

227. *Id.*

228. Svalbard Environmental Protection Act, § 9.

229. *Id.*

230. Bugge, *supra* note 212, at 5.

231. *See id.*

232. Svalbard Environmental Protection Act, ch. 3-7.

addresses the protection of flora and fauna,²³³ protection of areas,²³⁴ land use planning,²³⁵ activities with an environmental impact,²³⁶ and access and passage.²³⁷

In the area of flora and fauna protection, the overarching principle is that the natural productivity, diversity, and habitats of species shall be maintained.²³⁸ For example, seabird colonies are protected because ship sirens, fire shots, and other loud noises are not allowed to be sounded within one nautical mile of a seabird colony in the months of April through September, the core months for ships to be passing through Svalbard.²³⁹ Polar bears are not to be disturbed or exposed to danger unless they pose an immediate risk of injury to a person or substantial damage to property.²⁴⁰ Furthermore, flora is not to be damaged or removed unless for a specific research or teaching purpose.²⁴¹

In the “[p]rotected areas” section of the Act, certain areas of the region may be specially protected as national parks, nature reserves,²⁴² or may be given special status as biotopes, or geotopes,²⁴³ or on the basis of an international convention.²⁴⁴ These protective measures may lead to the prohibition or regulation of environmentally harmful activities.²⁴⁵ Such measures could also limit access or passage that might potentially threaten or work against the protection of those areas.²⁴⁶

The “[a]ctivities that have an environmental impact” section is the most wide reaching set of regulations.²⁴⁷ This section first requires a permit for any new activity or undertaking that will have an impact on the site or effect on the

233. *Id.* ch. 4, §§ 30, 31, 33.

234. *Id.* ch. 3.

235. *Id.* ch. 6.

236. *Id.* ch. 7.

237. *Id.*

238. *Id.* § 24.

239. *Id.* § 30.

240. *Id.*

241. *Id.* §§ 28-29.

242. *Id.* §§ 16-17.

243. *Id.* § 18. A biotope is an “area that is uniform in environmental conditions and in its distribution of animal and plant life.” THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (Houghton Mifflin, 4th ed. 2004), available at <http://dictionary.reference.com/browse/biotope> (last visited February 22, 2008). A geotope is the “geological component of the abiotic matrix present in an ecotope.” Examples of geotopes include an exposed outcrop of rocks, an erratic boulder, a grotto, ravine, or cave. Wikipedia, <http://en.wikipedia.org/wiki/Geotope> (last visited Nov. 11, 2008).

To be given special status as a biotope or geotope, the area must be of particular importance to the surrounding flora or fauna or contain distinctive geological formations. Svalbard Environmental Protection Act, § 18.

244. *Id.* § 20 (the Act provides that special status may be given to an area based on an international convention “on the protection of the natural environment or cultural heritage.” Such protected status must be granted in a regulation by the King).

245. Bugge, *supra* note 212, at 7.

246. *Id.*

247. Svalbard Environmental Protection Act, ch. 7 (consisting of the most regulatory subparts in the entire Act).

environment, if not already covered by a land use plan.²⁴⁸ Specifically, hotels and other overnight accommodation businesses are required to obtain permits.²⁴⁹ The Act also incorporates an overall prohibition on pollution, prohibiting the possession, action, or initiation of anything that may entail a risk of pollution.²⁵⁰ This wide-reaching principle is an example of the environmental ambition evidenced throughout the Act.²⁵¹ This section also addresses a subject at the heart of tourism in the Arctic—dumping and incineration of waste from ships or vessels.²⁵² The Act prohibits the dumping, incineration, and the release of waste into the ocean from a ship or vessel.²⁵³ This restriction does, however, create an exception in the case of discharging sanitary wastewater or uncontaminated waste food from small vessels.²⁵⁴ Overall, the restrictions set forth in this section require any activity with an environmental impact to have a permit from Svalbard's environmental protection ministry.²⁵⁵

Finally, the sections of the Act dealing with access and passage encompass regulations pertinent to the issues of tourism and environmental protection in Svalbard.²⁵⁶ Under general Norwegian law, the public is granted a right of access and passage through uncultivated lands whether the lands are private or public property.²⁵⁷ The Act limits this general right, however, by imposing a rule of care upon the public.²⁵⁸ Members of the public may not "harm, pollute, or in any other way damage the natural environment . . . or result in unnecessary disturbance to humans or animals."²⁵⁹ The rights of the public are further limited by the governor's general power to prohibit access and passage that puts special pressure on the environment.²⁶⁰ For example, a hotly contested issue in Svalbard is motor traffic and its impact on the environment.²⁶¹ Off-road motor traffic on thawed ground or on ground that is not snow-covered is generally prohibited, and when such traffic is permitted, it is only permitted along special trails or by special permit.²⁶² These policies are strict and do not provide any latitude for

248. *Id.* § 57.

249. *Id.*

250. *Id.* § 65. In addition to providing a general prohibition on activities that entail a risk of pollution, the Act also specifies a prohibition against the release of environmentally hazardous substances and waste discharges from ships. *Id.* §§ 66-67.

251. *See* Bugge, *supra* note 212, at 5, 8.

252. Svalbard Environmental Protection Act, §§ 67-68.

253. *Id.*

254. *Id.* § 67.

255. *Id.* § 57.

256. *Id.* §§ 73-75.

257. Bugge, *supra* note 212, at 9.

258. Svalbard Environmental Protection Act, § 73.

259. *Id.*

260. *Id.*

261. Bugge, *supra* note 212, at 9.

262. Svalbard Environmental Protection Act, § 80.

permanent residents.²⁶³ However, regulation of off-road traffic on snow-covered ground, frozen ground, and ice-covered watercourses is more liberal for permanent residents.²⁶⁴ The Act states that the regulations shall ensure that permanent residents have more rights to the use of motor traffic than visitors.²⁶⁵ This is an explicit example of the Act giving more rights to permanent residents and limiting the rights of visitors.²⁶⁶

Also pertinent to the issue of tourism's impact on the environment are the effects caused by aircraft. Under the Act, aircraft cannot land in an area other than a licensed landing strip without first obtaining a special permit from the governor.²⁶⁷ Aircraft are also prohibited from flying closer than one nautical mile from large known concentrations of mammals and birds.²⁶⁸

Most importantly, the Act also creates specific remedies and compensation guidelines that are available against those in violation of it.²⁶⁹ First, the Act holds those in violation strictly liable for the economic loss caused by the environmental damage.²⁷⁰ Second, the Act states that any person who has damaged the environment in violation of the Act may be ordered to pay compensation to a special fund created by the governor.²⁷¹ The compensation collected under this provision goes to the Svalbard Environmental Protection Fund.²⁷² Furthermore, under the authority of the Act, beginning April 1, 2007, all visitors to Svalbard must pay an environment fee.²⁷³ The income from this fee is also contributed to the Svalbard Environmental Protection Fund.²⁷⁴ The money collected is then used for protecting the Svalbard environment through surveying, monitoring, and restoring the environment as well as contributing to information and training activities.²⁷⁵

263. See Bugge, *supra* note 212, at 9.

264. *Id.*

265. Svalbard Environmental Protection Act, § 81.

266. See Bugge, *supra* note 212, at 9-10.

267. Svalbard Environmental Protection Act, § 83.

268. *Id.*

269. *Id.* ch. 9.

270. *Id.* § 95.

271. *Id.*

272. *Id.* § 98.

273. The Governor of Svalbard, Environment fee from 1 April, Apr. 23, 2007, <http://www.sysselmannen.svalbard.no/eng/show.asp?page=goxpage00000090.html> (on file with author). As of Feb. 22, 2008, the fee was set at 150 NOK, or \$28.21. Residents of Svalbard must also pay the fee but can then be reimbursed. *Id.*

274. *Id.*

275. Svalbard Environmental Protection Act, § 98. Twenty-six applicants submitted a total of forty-two proposals to receive a share of the initial distribution of funds from the Svalbard Environmental Protection Fund in October 2007. Those proposals applied for a total of 11.2 million NOK in funds, or \$2.1 million (as of Feb. 22, 2008). Ultimately, 1.7 million NOK, or approximately \$320,000 was allocated to fifteen projects and initiatives. Of the fifteen projects, thirty-eight percent were research projects, receiving a total of 640,000 NOK, or approximately \$120,000. Svalbard Science Forum, First Allocation of funding from Svalbard's environmental protection fund, <http://www.ssf.npolar.no/pages/news121.htm> (last visited Nov. 11, 2008).

Overall, the Svalbard Environmental Protection Act is a comprehensive act.²⁷⁶ It is framed and supported by three principles of environmental law: the precautionary principle; the environmental pressure principle; and the polluter pays principle.²⁷⁷ Most importantly, this Act provides the sanctions and enforcement procedures necessary to be truly effective in restricting activities that harm the environment.²⁷⁸

IV. CURRENT GUIDELINES SET FORTH BY INTERGOVERNMENTAL AND NON-GOVERNMENTAL ORGANIZATIONS

A. World Tourism Organization

The United Nations World Tourism Organization (UNWTO) is a special division of the United Nations and is the leading international organization in the field of tourism.²⁷⁹ Its purposes include serving as a global forum for tourism policy issues and playing a central role in promoting the development of responsible and sustainable tourism.²⁸⁰ The UNWTO boasts 157 member countries and territories and over 300 members from the private sector, educational institutions, regional and local tourism associations.²⁸¹

The UNWTO held the Second International Conference on Climate Change and Tourism in Davos, Switzerland in 2007.²⁸² The goal of the conference was to respond in a timely and balanced fashion to the increasing problems of climate change and the tourism sector.²⁸³ This conference produced a soft law agreement known as the *Davos Declaration: Climate Change and Tourism, Responding to Global Challenges*.²⁸⁴ The basic premise of the declaration was to make certain agreements among conference members and then call for certain actions of various groups and organizations.²⁸⁵

The *Davos Declaration* first sets out a series of stated conference agreements.²⁸⁶ The conference members first agreed that climate is an important

276. Bugge, *supra* note 212, at 10.

277. Svalbard Environmental Protection Act, §§ 7-9.

278. Bugge, *supra* note 212, at 6, 10.

279. U.N. World Tourism Organization, *supra* note 57; UNWTO, Climate Change and Tourism: FAQ, *supra* note 11.

280. UNWTO, Climate Change and Tourism: FAQ, *supra* note 11.

281. *Id.*

282. U.N. WORLD TOURISM ORGANIZATION, DAVOS DECLARATION: CLIMATE CHANGE AND TOURISM, RESPONDING TO GLOBAL CHALLENGES I (2007), available at <http://www.unwto.org/pdf/pr071046.pdf>. The conference united over 450 participants from over eighty countries and twenty-two international organizations, private sector organizations, private sector companies, research institutions, other NGOs, and members of the media. *Id.* at 2.

283. *Id.*

284. *Id.*

285. *Id.*

286. *Id.*

resource for tourism and that the tourism sector is highly sensitive to the effects of climate change.²⁸⁷ It was noted that the tourism sector contributed to approximately five percent of global carbon dioxide emissions.²⁸⁸ Second, the conference members agreed that tourism will continue to be a key player in the global economy.²⁸⁹ Third, it was agreed that there is an urgent need to adopt policies which encourage sustainable tourism and reflect environmental, social, economic, and climate responsiveness, especially given tourism's unique importance in the global challenges of climate change and poverty reduction.²⁹⁰ Finally, and most importantly, it was agreed that the tourism sector must rapidly respond to climate change and work to reduce its greenhouse gas emissions.²⁹¹ In order to do so, the conference agreed that action was required to mitigate greenhouse gas emissions from transportation and accommodation activities, adapt tourism businesses and destinations to changing climate conditions, apply technology to improve energy efficiency, and secure financial resources to assist poor countries.²⁹²

The *Davos Declaration* then calls for a series of actions depending on the type of agency or organization involved.²⁹³ The calls for action are broken apart by government and international organizations, tourism industry and destinations, consumers, research and communication networks, and the conference itself.²⁹⁴ Generally, the calls for action of government and international organizations and the tourism industry and destinations are the most numerous and rigorous, while the calls for action of the remaining three categories are fewer and simpler.²⁹⁵

The *Davos Declaration* provides for eight calls for action of governments and international organizations.²⁹⁶ First, it calls for tourism to be incorporated in the implementation of existing commitments under the United Nations Framework Convention on Climate Change (UNFCCC)²⁹⁷ and its Kyoto Protocol and to launch

287. *Id.*

288. *Id.*; see *supra* notes 83-93 and accompanying text.

289. U.N. WORLD TOURISM ORGANIZATION, *supra* note 282.

290. *Id.*

291. *Id.*

292. *Id.*

293. *Id.*

294. *Id.* at 2-4.

295. See *id.*

296. *Id.* at 2-3.

297. The UNFCC is an international treaty that was entered into by over 189 countries in 1992 to consider what could be done to cope with global warming and to cope with whatever temperature increases were inevitable. The main goal of the UNFCC is to prevent "dangerous" human interference with the climate system by stabilizing greenhouse gas emissions. To do so, the UNFCC requires precise and regularly updated inventories of greenhouse gas emissions from the participating countries. The UNFCC also placed the heaviest burden for combating climate change and the level of greenhouse gas emissions on industrialized nations, as they are the largest source of emissions. Overall, the greatest accomplishment of the 1992 conference was simply to recognize that there was a problem with global climate change. Finally, the UNFCC also noted that it was a framework document that could be amended and ratified over time. Such an amendment came about in 1997 with the Kyoto Protocol. The Kyoto Protocol shares the same goals as the UNFCC; however the major

an effective and comprehensive climate change framework for the future at the UNFCCC December 2007 Conference.²⁹⁸ Second, the *Davos Declaration* calls for the implementation of concrete and simultaneous actions for mitigation, adaptation, technology, and financing, consistent with the United Nations' Millennium Development Goals.²⁹⁹ Third, it calls for providing financial, technical, and training support to tourism destinations and operators in developing countries to ensure that they can participate in the global climate response framework.³⁰⁰ Fourth, the *Davos Declaration* calls for governmental and international organization to promote interdisciplinary partnerships, networks, and information exchange systems essential to the sustainable development of the tourism sector.³⁰¹ Fifth, it calls for a collaboration of international strategies, policies, and action plans to reduce greenhouse gas emissions in transportation, accommodation, and other related tourism activities.³⁰² Sixth, the *Davos Declaration* calls for the use of education and awareness programs for public and private sector tourism participants, as well as consumers.³⁰³ Seventh, it calls for the development and promotion of regional and local climate information services which are closely tailored to the tourism

difference between the two documents is that while the UNFCC encouraged countries to stabilize their greenhouse gas emissions, the Protocol commits them to do so. The Kyoto Protocol provides for strict enforcement measures that are legally binding. Overall, the Kyoto Protocol requires developed countries to reduce their emissions below levels set for each country in the UNFCC. The target emissions must be met between 2008 and 2012, and make up a total cut in emissions of at least five percent of the 1990 baseline levels. Review and enforcement of these commitments is to be carried out by UN bodies. All of the nations making up the Arctic Circle have ratified the Kyoto Protocol except the United States. U.N. Framework Convention on Climate Change, Essential Background, http://unfccc.int/essential_background/items/2877.php (last visited Nov. 11, 2008); U.N. Framework Convention on Climate Change, Feeling the Heat: The United Nations Framework Convention on Climate Change, http://unfccc.int/essential_background/feeling_the_heat/items/2914.php (last visited Nov. 11, 2008); U.N. Framework Convention on Climate Change, The Kyoto Protocol, http://unfccc.int/kyoto_protocol/items/2830.php (last visited Nov. 11, 2008).

298. U.N. WORLD TOURISM ORGANIZATION, *supra* note 282, at 2. The UNFCC Conference hosted in Bali, Indonesia in December 2007 joined representatives from over 180 countries and observers from intergovernmental and non-governmental organizations. At the Conference, parties to the UNFCC and the Kyoto Protocol held meetings. The Conference ultimately culminated in the adoption of the Bali Roadmap, a statement consisting of a number of forward-looking decisions for reaching a secure future in regard to climate change. The Roadmap included the Bali Action Plan, which included a new negotiating process for tackling climate change, the creation of an Adaptation Fund, and decisions on technology transfer and ways to reduce greenhouse gas emissions from deforestation. U.N. Framework Convention on Climate Change, The United Nations Climate Change Conference in Bali, http://unfccc.int/meetings/cop_13/items/4049.php (last visited Nov. 11, 2008).

299. U.N. WORLD TOURISM ORGANIZATION, *supra* note 282, at 2. The United Nations Millennium Development Goals are to: eradicate extreme hunger and poverty; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria, and other diseases; ensure environmental sustainability; and develop a global partnership for development. U.N., U.N. Millennium Development Goals, <http://www.un.org/millenniumgoals/> (last visited Nov. 11, 2008).

300. U.N. WORLD TOURISM ORGANIZATION, *supra* note 282, at 2.

301. *Id.* at 3.

302. *Id.*

303. *Id.*

sector.³⁰⁴ Finally, the *Davos Declaration* calls for the implementation of various measures, including policy and regulatory measures for effective adaptation and mitigation of climate change.³⁰⁵

The *Davos Declaration* also calls for seven points of action from the tourism industry and tourism destinations.³⁰⁶ First, it calls for the industry to take leadership in implementing concrete measures, such as incentive programs, to mitigate climate change and reduce risks due to climate volatility.³⁰⁷ Second, it calls for the promotion and use of investments in energy-efficient tourism programs and the use of renewable energy resources, in order to reduce the “carbon footprint” of the tourism sector.³⁰⁸ Third, it calls for the tourism sector to be integrated into the creation and implementation of local, regional, and national mitigation strategies.³⁰⁹ Fourth, the *Davos Declaration* calls for the tourism sector to work to conserve biodiversity, natural ecosystems, and landscapes in a manner which strengthens resilience to climate change and ensures long-term sustainable use of the environment as a tourism resource.³¹⁰ Fifth, it calls for working to achieve a carbon-free environment by diminishing pollution through design, operations, and market responsive mechanisms.³¹¹ Sixth, it calls for the implementation of climate-focused diversification, in order to reposition destinations and their support systems, as well as to create an all-season supply and demand.³¹² Lastly, the *Davos Declaration* calls for the tourism industry and destinations to raise awareness of climate change issues among customers and staff.³¹³

Finally, the *Davos Declaration* has two calls to action for tourism sector consumers.³¹⁴ It calls for consumers to consider the climate, economic, societal, and environmental impacts of their tourism options before making a decision and to reduce their carbon footprint or work to offset emissions that could not otherwise be directly reduced.³¹⁵ The *Davos Declaration* also encourages consumers to opt for environmentally-friendly activities that reduce their carbon footprint and that contribute to the preservation of the natural environment.³¹⁶

304. *Id.*

305. *Id.* (specifically, the *Davos Declaration* calls for implementing “policy, regulatory, financial, managerial, educational, behavioral, diversification, research and monitoring measures”).

306. *Id.*

307. *Id.*

308. *Id.*

309. *Id.* (citing the UNFCCC Nairobi Work Programme on Impacts, Vulnerability, and Adaptation to Climate Change as an important opportunity for the tourism sector to enhance knowledge and stimulate action).

310. *Id.* (citing specifically the conservation of systems that act as “earth lungs” such as carbon sinks, systems that protect coastlines such as mangroves or coral reefs, or systems that can remove greenhouse gases such as forest management).

311. *Id.*

312. *Id.*

313. *Id.*

314. *Id.*

315. *Id.*

316. *Id.*

In its concluding two sections, the *Davos Declaration* sets forth calls to action for research and communication networks and the Conference itself.³¹⁷ These sections encourage research and communication networks to conduct targeted research on the impacts of climate change, develop tools for risk assessment, compare the costs and benefits of various environmental responses, and to promote responsible travel and raise awareness.³¹⁸ In its concluding section on the conference, the *Davos Declaration* makes several final calls to action.³¹⁹ First, it invites all the referenced groups to implement its recommendations with concrete commitments and action plans.³²⁰ It also stresses the need for the UNWTO to continue to lead the process, consider holding a third conference, and to review progress and identify further needs.³²¹ As a final remark, the *Davos Declaration* urges the entire tourism sector to regard climate change as one of the greatest challenges to sustainable development.³²²

B. Linking Tourism and Conservation

The World Wildlife Fund (WWF) is a Switzerland-based NGO that is literally devoted to “saving the planet.”³²³ The WWF, in conjunction with Alaskan governmental agencies, developed the first ecotourism certification program for the Arctic Circle governments.³²⁴ The certification program is entitled Linking Tourism and Conservation (LINKS).³²⁵ LINKS’ main goal is to reward companies who use environmentally-sound practices while also supporting local interests.³²⁶ It certifies small companies providing tourism services as environmentally responsible to the tourism industry and consumers.³²⁷ The LINKS certification program incorporates the WWF’s Ten Principles for Arctic Tourism and recommends behaviors for operators and tourists based on these principles.³²⁸ These recommended behaviors include specific conduct that

317. *Id.* at 4.

318. *Id.*

319. *Id.*

320. *Id.*

321. *Id.*

322. *Id.*

323. World Wildlife Fund, What We Do, http://www.panda.org/about_wwf/what_we_do/index.cfm (last visited Nov. 11, 2008).

324. Roach, *supra* note 107, at 205.

325. *Id.*

326. *Id.*

327. *Id.*

328. *Id.*; G. David Twynam & Margaret E. Johnston, *The Use of Sustainable Tourism Practices*, 29 ANNALS OF TOURISM RESEARCH 1165, 1166 (2001), available at http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V7Y475YF0FJ&_user=66001&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000005478&_version=1&_urlVersion=0&_userid=66001&md5=6ab7c6e627f6a30cb816d8e2c6e249ac. The Ten Principles for Arctic Tourism are: make tourism and conservation compatible; support the preservation of wilderness and biodiversity; use natural resources in a sustainable way; minimize consumption, waste, and pollution; respect local cultures; respect historic and scientific sites; arctic communities should

should or should not take place within the context of the ten principles regarding interaction with the environment, wildlife, and people of the Arctic.³²⁹ All companies receiving certification must agree to abide by these ten principles.³³⁰

In return for agreeing to abide by the ten principles and becoming certified, small ecotourism businesses and the Arctic environment receive a host of benefits.³³¹ Certified companies receiving free advertising on the LINKS website and are allowed to display a certification logo that identifies them as environmentally responsible.³³² Furthermore, the Arctic environment benefits as LINKS encourages long-term improvement of ecotourism practices through an education and incentive-based program.³³³ Additionally, the LINKS program adopts uniform standards for nations in the Arctic Circle with unique environmental problems.³³⁴

V. CALL FOR ACTION

A. *Why Regional Regulation is Necessary*

The Arctic Circle is in need of a comprehensive set of regional regulations in order to adequately protect its fragile environment.³³⁵ Such regulation is necessary to address Arctic environmental protection generally as well as to specifically address the impact of the increasing volume of climate tourists visiting the Arctic region.³³⁶ The current scheme of soft law agreements implemented by intergovernmental and non-governmental organizations is not adequate to fully protect the environment.³³⁷

An Arctic regulatory scheme on general environmental protection is necessary to provide better protection and longevity for the Arctic environment.³³⁸ Many commentators, organizations, scientists, and government representatives

benefit from tourism; trained staff are the key to responsible tourism; make your trip an opportunity to learn about the Arctic; and follow safety rules. WWF International Arctic Programme, Ten Principles for Arctic Tourism, [http://assets.panda.org/downloads/10principlesforarctic_tourism\(eng\)_f612.pdf](http://assets.panda.org/downloads/10principlesforarctic_tourism(eng)_f612.pdf) (last visited Nov. 11, 2008).

329. Twynam & Johnston, *supra* note 328. For example, under the first principle of Arctic Tourism, the code of conduct for tour operators provides five related actions, including planning activities so they do not conflict with conservation efforts and undertaking post-trip evaluations to confirm that activities were conducted in an environmentally sound manner. The code for tourists provided advice on six actions, including supporting reputable, conservation minded operators and suppliers, and supporting and joining in Arctic conservation projects and organizations. *Id.*

330. Roach, *supra* note 107, at 205.

331. *See id.* at 205-206.

332. *Id.*

333. *See id.* at 206.

334. *Id.*

335. NOWLAN, *supra* note 20; *see* UNWTO, Climate Change and Tourism: Background, *supra* note 11.

336. NOWLAN, *supra* note 20.

337. *See id.*

338. *See id.* at 57.

have argued for the implementation of a regional regulatory agreement on general environmental protection.³³⁹ Such a regulatory agreement would pose many advantages.³⁴⁰ The most important advantage would be the ability to legally bind the Arctic nations to a set of environmental protection standards.³⁴¹ Such a binding legal scheme could garner serious consideration with the use of enforceable targets, timetables, and scheduled dues.³⁴² Another advantage of regional regulation would be a greater level of political commitment to environmental protection from the Arctic nations.³⁴³ Such regulation could also help overcome problems of underfunding for groups such as the Arctic Council by assessing dues on every nation.³⁴⁴ Finally, a budget and a dedicated office staffed with personnel could advance the aims of the environmental protection regulation more quickly and efficiently than the current voluntary scheme of intergovernmental organizations such as the Arctic Council.³⁴⁵

Such regional regulation also needs to specifically address the growing impacts of ecotourism and climate tourism on the Arctic region.³⁴⁶ As tourism activities in the Arctic contribute toward the degradation of the environment, there is a need for regulation to address these issues.³⁴⁷ An Arctic regulatory scheme could implement policies and strategies for the tourism industry to not only face the current effects of climate change, but more importantly, to mandate preventative actions for future effects.³⁴⁸ An Arctic regional regulatory scheme encompassing policies, strategies, and preventative actions for tourism's impact on the environment would work to effectively mitigate tourism's contribution to climate change in the Arctic Circle.³⁴⁹

The current regional legal regime, composed mostly of soft law agreements from intergovernmental and non-governmental organizations (NGOs), is inadequate to fully protect the Arctic environment.³⁵⁰ Primarily, by their nature, soft law agreements are non-binding and do not entail any recourse or sanctions for nations in violation of their principles.³⁵¹ Such NGOs must develop better

339. *See id.*

340. *Id.* at 58.

341. *Id.*

342. *Id.*

343. *Id.* A concern is that some Arctic nations are becoming less attentive to the work of the Arctic Council. For example, at the 2000 meeting of the Arctic Council, only three ministers were present representing their countries. *Id.*

344. *Id.*

345. *Id.*

346. *See* UNWTO, *Climate Change and Tourism: Background*, *supra* note 11.

347. *See id.*

348. *See* NOWLAN, *supra* note 20, at 55, 58 (noting that the Arctic environment is changing quickly and that the main advantage of binding regulation is the implementation of future goals and deadlines).

349. *See id.*

350. *See id.* at 5.

351. *Id.* at vii, 2; *see supra* text accompanying note 181.

procedures for implementing and assuring compliance with their agreements before the soft-law approach will be sustainable.³⁵²

B. How Regional Regulation Can Be Implemented

A regional regulatory scheme on general environmental protection as well as ecotourism could be implemented through the already existing framework of the Arctic Council.³⁵³ The eight Arctic nations have already empowered the Council to create non-binding standards for environmental protection in the Arctic.³⁵⁴ The Council could use its current framework to implement a binding regulatory scheme to protect the Arctic environment.³⁵⁵ Based on the current framework, it would be relatively easy to formalize regulation, add innovative features to address the particular needs of the Arctic, and divide implementation, authority, and enforcement among the five existing Working Groups of the Council.³⁵⁶ The ability of the Arctic Council to adapt to and implement such regional regulation is further exhibited by the relatively speedy change from the AEPS to the Arctic Council in the 1990s.³⁵⁷

C. Suggested Components for Regional Regulatory Scheme

To be fully comprehensive, an Arctic regulatory scheme should encompass and bring together aspects from various other legal devices. Such a scheme could be centered on general environmental principles, could have its regulatory provisions modeled after successful national statutes or soft law agreements, and could provide for both enforcement measures and incentive programs that would center around environmental protection and mitigating ecotourism's effects on climate change.

In formulating a cohesive Arctic regulatory scheme for general environmental protection, the regulation could initially lay out general environmental principles and then support them through comprehensive, wide-reaching regulation and incentive programs. The regulation could lay out the three basic principles of environmental law: the precautionary principle, the ecosystem

352. See Roach, *supra* note 107, at 215. But see Natalia Loukacheva, Position Paper, *Legal Challenges in the Arctic* (2006), http://www.nrf.is/Open%20Meetings/Oulu%20Lulea%202006/Position%20Papers/Leuka%20cheva_4th%20NRF%20PP.pdf (presented for Northern Research Forum Open Meeting in Oulu, Finland and Lulea, Sweden, arguing that the existing "web of soft-law agreements, informal arrangements, and growing institutional cooperation in the Arctic show that such measures can be efficient in addressing existing challenges"), and NOWLAN, *supra* note 20, at 58 (stating that the main argument against the implementation of a regional Arctic treaty is that the current soft-law arrangement is relatively new and it is too early to evaluate whether the current legal regime needs to be controlled by an Arctic treaty).

353. See NOWLAN, *supra* note 20, at 59.

354. Ansson, *supra* note 177, at 130.

355. See *id.*

356. NOWLAN, *supra* note 20, at 59; see *supra* notes 181-192 and accompanying text.

357. NOWLAN, *supra* note 20, at 59.

principle, and the polluter pays principle.³⁵⁸ Then, such as was done in the Svalbard Environmental Protection Act, the provisions of the regulation could be focused on furthering the environmental ambitions embodied by these three fundamental principles of environmental law.³⁵⁹ Moreover, the regional regulation could be modeled after a national scheme, such as the Svalbard Act, that has been widely successful in implementing environmental protection policies.³⁶⁰ The regional regulation could also encompass enforcement measures such as fines or sanctions. Those fines and sanctions could be put toward a fund and used for furthering environmental protection and research, as is done under the Svalbard Act.³⁶¹ Finally, a regulatory scheme on general environmental protection could also encompass incentives such as a general “environmentally-friendly” certification program, modeled after LINKS.³⁶² Such a certification program could also include incentives such as providing extra marketing and promotion, or decreasing dues paid to the enforcement agency.³⁶³

For an Arctic regulatory scheme to employ strategies and measures necessary for the ecotourism industry’s role in climate change to be mitigated, the regulation should: (1) look to guidelines set forth by NGOs, (2) adapt those guidelines into wide-reaching regulation, and (3) utilize incentive strategies such as certification programs. The majority of the regulation should be devoted to addressing the key issues raised by tourism and ecotourism activities.³⁶⁴ These issues, and non-binding solutions to them, have already been addressed by NGOs such as the World Tourism Organization.³⁶⁵ These existing agreements and preventative measures could be adapted into regulatory measures. Such regulation could then be supported by enforcement measures, like those provided in the Svalbard Act, and follow the same principle of using proceeds from fines or sanctions to promote environmental protection and research.³⁶⁶ Furthermore, the specific measures dealing with ecotourism activities could also implement a special certification program, like that utilized by LINKS, to reward and highlight a business’s sound practices.³⁶⁷

358. See *supra* text accompanying note 221; NOWLAN, *supra* note 20, at 59.

359. See *supra* text accompanying notes 218-221.

360. See *supra* text accompanying notes 274-276.

361. See *supra* text accompanying notes 267-273.

362. See *supra* notes 321-328 and accompanying text.

363. See *supra* notes 331-332 and accompanying text.

364. See UNWTO, Climate Change and Tourism: Background, *supra* note 11.

365. See *supra* notes 277-292 and accompanying text.

366. See *supra* text accompanying notes 274-276.

367. See *supra* notes 321-332 and accompanying text.

VI. CONCLUSION

Climate change is a phenomenon affecting the Arctic Circle and the world. The greenhouse gas emissions causing the Earth's climate change are due to a handful of significant global economic sectors. The tourism industry is not the greatest polluter by any means; however, the activities that make up the tourism sector do implicate the greatest polluters and thus contribute to the global climate change phenomenon. Specifically, tourism in the Arctic Circle has become increasingly popular over the last decade. Greater numbers of climate tourists have flocked to the Arctic Circle to view its unique environment and the changes taking place in that environment due to climate change. However, these tourists are themselves inherently contributing to the climate change crisis.

The current Arctic legal regime imposes binding regulations on a nation-by-nation basis and through global treaties. Many non-binding measures are also imposed through the work of intergovernmental and non-governmental organizations and their respective conferences and declarations. Overall, the Arctic Circle currently does not have binding regional regulation to govern the protection of its unique environment. It also does not have binding regional regulation to govern the actions of climate tourists to ensure that their travels do not further contribute to climate change.

The Arctic Circle must take steps to implement a binding regional regulatory scheme. Such regional regulation should implement measures to protect the environment generally, as well as implement measures to ensure that the travels of climate tourists do not further contribute to climate change. Although tourists visiting the Arctic Circle are not wholly responsible or even greatly responsible for the global climate change phenomenon, regional regulation still must be enacted to protect the Arctic environment. The irony of concerned environmentalists visiting the Arctic to see glaciers and ice sheets before they disappear due to climate change, while contributing to greenhouse gas emissions through their travels, cannot be ignored.

