

THE ARCTIC SUSTAINABILITY PRINCIPLE

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INTRODUCTION

Although every sovereign State has the right to exploit domestic resources pursuant to its own economic and environmental policy, human beings are entitled to live healthy, productive lives without the threat of disruption to their natural environment.¹ Sustainable development policies are initiated to resolve the innate conflict between principles of environmental conservation and economic development in the context of natural resource exploitation. In essence, sustainable development marries economic progress with environmental conservation and intergenerational equity. In the international political forum, sustainable development means fostering cooperative efforts meant to ultimately mitigate both global poverty and environmental degradation.² In the Arctic, this is accomplished

1. United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3-14, 1992, *Rio Declaration on Environment and Development*, Principle 1, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), Annex I (Aug. 12, 1992) [hereinafter Rio Declaration].

2. *Id.* at Principles 4-7.

by integrating indigenous interests into a collaborative system of governance that forms a clear nexus between traditional Northern indigenous culture, Western concepts of environmental protection, and economic development of the region's natural resources.

The Arctic Sustainability Principle presents a workable solution to problems of collaborative governance by framing indigenous practices as the starting point for any decision of Arctic policy, while also allowing for divergence as necessary. Arctic Sustainability, therefore, has developed as a "hub-and-spoke" model of decision-making for sustainable development; policy is formulated in the context of divergent nationalistic economic motives (the "spokes") that must revolve around indigenous practices (the "hub") in order to form a functional system of governance. This paper begins with a discussion of resource management practices of the Northern indigenous peoples and continues into a discussion of the natural resource exploitation and resulting environmental problems which have plagued the region. The analysis continues to discuss the development of sustainable natural resource practices in the Arctic and, following a discussion of the principles' unique features and benefits, concludes that Arctic national resources are developed pursuant to a unique "Arctic Sustainability Principle" defined by a collaborative governance structure that dedicates significant focus to the traditional practices of indigenous peoples.

I. RESOURCE MANAGEMENT PRACTICES OF THE INDIGENOUS PEOPLES OF THE NORTH

Natural resource extraction in the Arctic occurs within a uniquely isolated context. The Arctic is rich in natural resources that are particularly susceptible to exploitation by virtue of the fact that they are harvested as part of a uniquely un-transparent commodity market. Various foreign sovereigns govern the region pursuant to nationalistic economic motives, and there are relatively few people with a direct interest in mitigating the resulting damage to the Arctic region. The Arctic region is only home to about four million permanent residents,³ and this inherent lack of oversight by non-commercial residents creates the possibility of pervasive and

3. NICOLE STUCKENBERGER, *THIN ICE: INUIT TRADITIONS WITHIN A CHANGING ENVIRONMENT* 31 (2007). It was not until 1987 that President Gorbachev announced that the Soviet government would cooperate with the West with respect to Arctic affairs, thus opening up the Arctic region as a subject of collaborative governance. *See generally*, Ann McElroy, *Health Ecology in Nunavut: Inuit Elders' Concepts of Nutrition, Health, and Political Change*, in *GLOBALIZATION, HEALTH, AND THE ENVIRONMENT: AN INTEGRATED PERSPECTIVE* 107 (Greg Guest ed., 2005) (exploring how macropolitical forces are linked to the Arctic's ecosystemic change).

undetectable market abuses. Notably, the Arctic is home to a number of indigenous peoples⁴ who have traditionally maintained a subsistence culture based upon the unique Arctic environment.⁵ However, eight “Arctic States” have jurisdiction over the various territories that compose the Arctic region: Canada, Denmark (as the sovereign of self-governing Greenland), Finland, Norway, Sweden, Iceland, Russia, and the United States.⁶ Over 40% of the land in the Arctic and almost half of the region’s coastline are under Russian jurisdiction,⁷ which was shielded from international exploitation politically by the Soviet Iron Curtain⁸ and physically by impermeable ice throughout most of the twentieth century.⁹

Although the indigenous peoples of the North have embraced Western institutions to some degree—one clear example being the operation of the Inuit Circumpolar Conference—indigenous cultures in the Arctic remain closely tied to their historic cultural roots.¹⁰ Climate change, modernization, and globalization have forced profound changes upon the Arctic region,¹¹ but the indigenous peoples have very particular cultural practices that have allowed them to survive a part of the world that is notably inhospitable to human life.¹² Indigenous sociopolitical and economic values pervade life in the Arctic, regardless of which Arctic State has jurisdiction over a particular territory.¹³ This is particularly true in the context of natural resource management and environmental conservation practices. For example, the Inuit culture has a very acute and sophisticated concept of climate which feeds directly into regional climate change policy. Social systems in the Arctic revolve around seasonal and daily climates both as a matter of necessity and as a result of cultural identity.¹⁴ Concisely, the Inuit culture conceptualizes climate as a universal force that is manifested as physical reality, either by means of the weather or by means of human behavior.¹⁵

4. ORAN R. YOUNG, ARCTIC POLITICS: CONFLICT AND COOPERATION IN THE CIRCUMPOLAR NORTH 5 (1992).

5. STUCKENBERGER, *supra* note 3, at 31.

6. *Id.*

7. YOUNG, *supra* note 4, at 4.

8. McElroy, *supra* note 3, at 107.

9. STUCKENBERGER, *supra* note 3, at 57.

10. *Id.*

11. McElroy, *supra* note 3, at 107.

12. STUCKENBERGER, *supra* note 3, at 31.

13. *Id.*

14. *Id.* In the Inuit culture, the term “sila” is the most direct analogue to the western conception of climate, but the phrase also connotes the sky, the universe, and general notions of human psychology. *Id.* at 33. Sila is expressed as changing weather conditions, traditionally indicated as snow and ice quality, but it is also used as a general concept of human intelligence. *Id.* For example, “silaluttuq” is defined simply as “bad weather,” whereas a “silatittuq” is a term used to describe a nonsensical or insane person. *Id.*

15. *Id.* at 33.

The Inuit also have a very particular relationship to the game traditionally hunted for subsistence. Indigenous groups in the Arctic sustained themselves for centuries by means of gathering, fishing, and hunting large mammals of the land and sea, such as caribou, polar bears, seals, and whales.¹⁶ These animals are revered as intelligent entities; they were hunted for the subsistence of humankind, but tradition required the hunt to be carried out with proper respect in order for the animal's immortal soul to return for reincarnation and further perpetuity.¹⁷ Conversely, if the animal is hunted in a disrespectful manner, then its soul will not reincarnate and return, and the following season's hunt will be less successful. This model of wildlife resource utilization fosters both local economic progression and conservative environmental policies—achieving the major goal of sustainable development.

In general, indigenous peoples of the North conceive of themselves as part of the Arctic ecosystem.¹⁸ Subsistence cultures generally resist overexploiting natural resources because they depend upon the environment for meeting immediate biological needs.¹⁹ In this sense, the Arctic indigenous peoples live according to a concept of unity between individual self-interest and general environmental protection. In general, indigenous peoples of the North conceive of themselves as part of the Arctic ecosystem.²⁰ Thus, indigenous groups focus on the environment—rather than the economy—in deciding how to form Arctic policy,²¹ and there is an inherent practice of conservation in traditional resource management.²² This “Conservation Ethic” includes respect for the integrity of wildlife, knowledge of where to find valuable resources, the best methods of taking them, and an understanding of the dangers of taking more than necessary.²³

From their very cultural origins, the Inuit and other indigenous peoples of the North innately conceptualize humanity as a substantial part of what Western culture describes as “the integral and interdependent nature of the

16. *Id.* at 32.

17. *Id.* at 36.

18. Charles Johnson, *The Role of Indigenous Peoples in Forming Environmental Policies*, in *CONTESTED ARCTIC: INDIGENOUS PEOPLES, INDUSTRIAL STATES, AND THE CIRCUMPOLAR ENVIRONMENT* 3 (Eric A. Smith & Joan McCarter eds., 1997).

19. Peter Collings, *The Cultural Contest of Wildlife Management in the Canadian North*, in *CONTESTED ARCTIC: INDIGENOUS PEOPLES, INDUSTRIAL STATES, AND THE CIRCUMPOLAR ENVIRONMENT* 18 (Eric A. Smith & Joan McCarter eds., 1997).

20. Johnson, *supra* note 18, at 3.

21. *Id.*

22. Collings, *supra* note 19, at 18–19.

23. *Id.* at 18.

Earth.”²⁴ However, the expansion of economic development in the Arctic and related Western interloping on indigenous markets has significantly altered the traditionally sustainable practices of the Arctic’s indigenous peoples.

II. NATURAL RESOURCE EXPLOITATION IN THE ARCTIC

The rise of commercial whaling and fur trading in the nineteenth century notably altered traditional indigenous practices.²⁵ With the rise of fur trading in the Arctic, the indigenous peoples began to alter traditional subsistence hunting practices in order to adapt to their changing socio-economic environment.²⁶ Foreign commercial entities brought new technologies to the Arctic—namely firearms, steel traps, fishnets, and wooden ships—which eventually became an important part of subsistence hunting practices.²⁷ The new technologies allowed indigenous hunters to capitalize on the trade of seal skin, beaver pelts, and arctic fox fur, and indigenous groups benefitted from longer periods of subsistence on stored whale and caribou meat.²⁸

Despite these benefits, the fur and whaling trades did not bear any substantial growth in indigenous economies, mostly due to competition by Western entities, fluctuations in the fur market, and commonly adverse weather conditions.²⁹ However, the fur and whaling commodities traditionally utilized by the indigenous peoples attracted new settlers, trading posts, and shipping entities, which began to steer the Arctic region toward economic development. The discovery of Klondike gold in 1896³⁰ and the ensuing influx of foreign speculators further catalyzed commercial development in the Arctic and marked the beginning of a period of foreign exploitation that provides a useful analog to modern mining development in the region. The burgeoning market for Klondike gold brought thousands of settlers to an area of the Arctic that is both exceedingly difficult to access

24. See generally Rio Declaration, *supra* note 1 (stating that the Conference on Environment and Development recognizes the integral and interdependent nature of the Earth).

25. DAVID DAMAS, ARCTIC MIGRANTS/ARCTIC VILLAGERS: THE TRANSFORMATION OF INUIT SETTLEMENT IN THE CENTRAL ARCTIC 187 (2002).

26. *Id.* at 188–89.

27. *Id.* at 188.

28. *Id.* at 189.

29. *Id.*

30. Scott Kirkwood, *All that Glitters: Alaska’s Chilkoot Trail, a Unit of the Klondike Gold Rush National Historic Park, Was a Path to Riches for Few, but a Memorable Journey for All*, 81.3 NAT’L PARKS 54 (2007).

and particularly inhospitable to human occupation.³¹ This ultimately culminated in the establishment of large-scale commercial mining operations in the North with related environmental consequences.³²

In that same year, the Working Group on Arctic International Relations was initiated, which led research on maritime issues and potential strategic conflict that could arise between the Arctic States.³³ Initial collaboration among the Arctic States reflected a sentiment that, in addition to being a necessary subject of environmental research and exploration, the region was an important part of national security as well.³⁴ Summarily, environmental regulation in the Arctic region was inherently collaborative, and necessarily so because multiple nations shared responsibility for the environmental problems in the region, in addition to common economic motives.³⁵

The Arctic States share common economic motives with regard to hydrocarbon development, mining, and commercial fishing. Fish exports accounted for nearly 80% of the export income of Iceland and Greenland in the early 1990s.³⁶ The United States has declared “the renewable resources of the Arctic, specifically fish and other seafood,” to be “one of the Nation’s greatest commercial assets,”³⁷ and Arctic fisheries produce as much as 10% of the world’s catch.³⁸ Additionally, the Arctic States also share concerns about non-economic policies in the Arctic, such as indigenous rights and environmental protection. Taking these mutual interests into account, multinational governance over the Arctic region by the Arctic Council is particularly effective at ensuring that economic development of the region is sustainable. However, multinational governance necessarily involves

31. GRAEME WYNN, CANADA AND ARCTIC NORTH AMERICA: AN ENVIRONMENTAL HISTORY 260 (Mark R. Stoll ed., 2007). Canadian regulations requiring at least a ton of supplies exacerbated the difficulty of this journey. *Id.*

32. Foreign speculators had to carry supplies for miles, sometimes on hands and knees, through latitudes of permafrost and icy slopes so steep as to be “almost perpendicular.” *Id.* at 260. These conditions posed an obvious deterrent to large-scale commercial mining in the Arctic, but thousands of foreign speculators managed the journey regardless. *Id.* Some historians estimate that as many as 200,000 people attempted the journey to the Klondike, but only about 40,000 reached the area and only around 4,000 actually managed to strike gold in the region. *Id.* at 263.

33. Mike Perry, *Rights of Passage: Canadian Sovereignty and International Law in the Arctic*, 74 U. Det. Mercy L. Rev. 657, 657 (1996–1997) (citing F. Griffiths & O. Young, “*Impressions of the Co-Chairs’ Reports and Papers 1988*,” Working Group on Arctic International Relations, First Session (Hveragerdi, Iceland) at 1).

34. E.C.H. KESKITALO, NEGOTIATING THE ARCTIC: THE CONSTRUCTION OF AN INTERNATIONAL REGION 47 (2004).

35. *Id.* at 48.

36. *Id.* at 78.

37. Arctic Policy Research Act of 1984, 15 U.S.C. § 4101(a)(3) (2006).

38. KESKITALO, *supra* note 34, at 78.

collective action problems, and consensus becomes more difficult as the number of sovereign entities required for agreement increases.

III. MAJOR ENVIRONMENTAL ISSUES CREATED BY ECONOMIC DEVELOPMENT OF ARCTIC RESOURCES

Early Western miners extracted gold from the subterranean stream beds in anticipation of the spring thaw,³⁹ and, during winter, speculators lit fires to thaw the permafrost, melting and excavating at ever-deeper depths and creating ever-larger piles of displaced earth.⁴⁰ These fires released noxious gasses and other pollutants into the once pure Arctic air and demanded substantial timber resources.⁴¹ The environmental effects of industrial mining practices, beginning with the Klondike gold rush, remain a significant issue in the Arctic environment.⁴² Furthermore, early miners decimated the old-growth forests in the region, resulting in substantial ecological disruption that quickly transformed the formerly robust environment into a relative wasteland.⁴³ This domestic use expanded substantially through evolution of the transatlantic timber trade and related logging activities.⁴⁴ Unsustainable logging activities, such as the over-logging of old-growth forests, have resulted in continued environmental degradation in the Arctic.⁴⁵ In addition to the pollution created by local industrialization, trans-boundary pollution has been identified as an official threat to the Arctic environment.⁴⁶ The Chernobyl disaster in 1986, for example, released radioactive fallout upon the Arctic North.⁴⁷ Additionally, worldwide industrial activity has caused substantial acidification and ozone depletion problems in the region.⁴⁸

39. WYNN, *supra* note 31, at 261.

40. *Id.*

41. *Id.* at 262. According to one historical account, half a cord of wood was required to thaw five cubic feet of frozen gravel. *Id.*

42. G.P. Glasby & Yu. L. Voytekhovskiy, *Arctic Russia: Minerals and Mineral Resources*, GEOCHEMICAL NEWS 140 (July 2009), available at <http://www.geochemsoc.org/publications/geochemicalnews/gn140jul09/arcticrussiamineralsandmin.htm>

43. *Id.*

44. *Id.* at 104.

45. KESKITALO, *supra* note 34, at 56.

46. United States law acknowledges that “industrial pollution not originating in the Arctic region collects in the polar air mass, [and] has the potential to disrupt global weather patterns.” Arctic Policy Research Act of 1984, 15 U.S.C. § 4101(a)(5) (2006).

47. KESKITALO, *supra* note 34, at 56–57.

48. *Id.*

Though the issues posed by local and trans-boundary pollution are substantial, their environmental impacts pale in comparison to the potential impacts of hydrocarbon extraction and combustion. An early U.S. Geological Survey estimated that the Arctic contains about 13% of the world's oil and as much as 30% of its gas.⁴⁹ The bulk of the oil and gas produced in Russia and the United States in the 1990s was extracted from Arctic regions, resulting in widespread adverse direct and indirect environmental effects.⁵⁰ Directly, offshore oil rigging disrupts whale migration and interferes with traditional indigenous whale hunts.⁵¹ Indirectly, the world market's pervasive dependence upon fossil fuels has resulted in the accumulation of excessive carbon dioxide in the atmosphere and related global warming. Unfortunately, both trans-boundary pollution and global warming pose serious threats to traditional Arctic cultures, but Arctic natives have no control over these pollution sources.⁵²

Notably, the Arctic is particularly sensitive to the effects of global warming because so much of the region's ecosystem depends upon thick ice sheets. In the summer of 2007, the Arctic sea ice was melting at an average of four centimeters each day—more than six times averages calculated in the 1990s and more than double the rate of the previous year.⁵³ In that same year, solar radiation heating the Arctic seas was recorded at levels as much as 500% higher than usual, largely due to a feedback effect from warmer seawater.⁵⁴ This translates into an ever-shrinking habitat for Arctic wildlife, decreased fishery population, and large-scale disruption of global ecological functioning. Global warming is a key concern to Arctic natives because climate change will have a particularly dramatic effect on indigenous life in the region, deeply affecting the indigenous cultures of the Arctic.⁵⁵ The integration of indigenous natural resource management practices presents one solution to the environmental consequences of natural resource extraction in the Arctic that reserves the potential for future economic growth.

49. ALUN ANDERSON, *AFTER THE ICE: LIFE, DEATH, AND GEOPOLITICS IN THE NEW ARCTIC* 181 (2009).

50. YOUNG, *supra* note 4, at 4.

51. ANDERSON, *supra* note 49, at 182.

52. Johnson, *supra* note 18, at 4.

53. ANDERSON, *supra* note 49, at 86.

54. *Id.* at 87. This feedback effect is partly due to the fact that open water absorbs 93% of the solar radiation in the Arctic region. Thus, the region will get warmer as more ice melts, causing further melting and further warming. *Id.*

55. Johnson, *supra* note 18, at 4.

IV. DEVELOPMENT OF THE ARCTIC SUSTAINABILITY PRINCIPLE
THROUGH COLLABORATIVE GOVERNANCE AND ACKNOWLEDGEMENT
OF INDIGENOUS RIGHTS IN THE ARCTIC COUNCIL

Arctic governance functions by means of a particular focus on the participation of the indigenous peoples of the North, which serves as a starting point for any decisions about Arctic policy. Historically, Finland acted as a conduit of Western ideas into the Soviet Union, and Arctic environmental policy largely arose out of Finland's reaction to Soviet policies.⁵⁶ In particular, the Finnish believed that the Arctic States should work towards a collaborative treaty to address the Arctic's environmental protection issues, particularly trans-boundary pollutants.⁵⁷ Notable Finnish contributions to sustainable development of the Arctic included the reversal of the atmospheric acidification processes, the development of an effective environmental monitoring system, and mitigation of the radioactive fallout in the region, which occurred as a result of the Chernobyl disaster.⁵⁸ Most significantly, the Finnish led the development of the Arctic Environmental Protection Strategy (AEPS) as a result of concern over the environmental problems in the region.⁵⁹

While Finland instigated early collaboration in Arctic governance, these initiatives largely laid the framework for Canadian development of the modern Arctic Sustainability Principle. Canada emphasized that Arctic governance should be focused on sustainable development, even suggesting the AEPS be renamed the "Arctic Sustainable Development Strategy" to indicate that the policy had a broader focus than environmental protection.⁶⁰ Canadian interests dominated the early development of Arctic policy, culminating in the formation of the Arctic Council—an international agreement which calls for sustainable development of the Arctic region, in addition to establishing bolstered environmental protection in conjunction with the protection of indigenous rights.⁶¹

The AEPS, which predated the Rio Declaration by almost exactly one year, is replete with principles of sustainable economic development in the context of necessary Arctic environmental protection measures. The AEPS recognizes that "[t]he use of natural resources is an important activity of

55. KESKITALO, *supra* note 34, at 58 (quoting ORAN R. YOUNG, *CREATING REGIMES* 72 (1998)).

57. *Id.*

58. *Id.* at 54–57.

59. *Id.* at 54.

60. *Id.* at 62. This proposition was rejected, although it reemerged later as an Arctic Council initiative. *Id.*

61. *Id.*

Arctic nations. Therefore, [the AEPS] should allow for sustainable economic development in the north so that such development does not have unacceptable ecological or cultural impacts.”⁶² Through the AEPS, the Arctic States committed to collaboration and cooperation “to ensure the protection of the Arctic environment and its sustainable and equitable development, while protecting the cultures of indigenous peoples,”⁶³ with a primary objective being the “protection, enhancement and restoration of environmental quality and the sustainable utilization of natural resources, including their use by local populations and indigenous peoples in the Arctic.”⁶⁴ Although indigenous practices were not binding upon the Arctic States, the AEPS made it official policy that the Arctic States “seek to accommodate the traditional and cultural needs, values, and practices of the indigenous peoples as determined by themselves, related to the protection of the Arctic environment.”⁶⁵

Canadian involvement directly resulted in collaborative environmental protection strategies such as the Conservation of Arctic Flora and Fauna (CAFF), which embodies sustainability principles in conjunction with the special involvement of the Arctic indigenous peoples.⁶⁶ Though the AEPS was initiated by the Finnish, Canadian policy perspectives were integral in the inclusion of the indigenous peoples of the area.⁶⁷ Particularly, Canada advanced Arctic governance principles beyond the Finnish focus on pollution remediation to ensure that the region was governed according to principles emphasizing the practices of indigenous people with a traditional relationship to the Arctic environment.⁶⁸ Canada was the driving force in promoting the theme of sustainable development for the AEPS, which

62. Arctic Environmental Protection Strategy Introduction, June 14, 1991, 30 I.L.M. 1624.

63. *Id.*

64. *Id.* at art. 2.1(ii).

65. *Id.* at art. 2.1(iii).

66. CAFF instructs the Arctic States “to create a distinct forum for scientists, indigenous peoples and conservation managers engaged in Arctic flora, fauna and habitat related activities to exchange data and information on issues such as shared species and habitats and to collaborate, as appropriate, for more effective research, sustainable utilization and conservation.” *Id.* at art. 9; *see also* KESKITALO, *supra* note 34, at 62 (stating that CAFF was initiated when the Canadian Wildlife Service of Environment Canada suggested external affairs should include a flora and fauna conservation component).

67. KESKITALO, *supra* note 34, at 64.

68. *Id.* Canada had a long-standing political relationship with the indigenous peoples of the Canadian North. Even before the official recognition of the Nunavut territory pursuant to a 1990 agreement and ratification by democratic vote in 1992, indigenous political organizations such as the Inuit Tapirisat of Canada wielded substantial political influence in domestic governance. *Id.* *See also* McElroy, *supra* note 3, at 122 (explaining how the Inuit Tapirisat of Canada pushed for land claim negotiations and self-governance throughout the 1970s and 80s).

eventually came to be embodied in the collaborative Arctic Council⁶⁹ policies.⁷⁰

The Arctic States formed the Arctic Council in “recognition of the special relationship and unique contributions to the Arctic of indigenous people and their communities.”⁷¹ In addition to coordinating an effort among the Arctic States and indigenous interests in implementing the AEPS, CAFF, and other Arctic policies, the Arctic Council “provide[s] a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic.”⁷²

V. UNIQUE FEATURES OF THE ARCTIC SUSTAINABILITY PRINCIPLE

The fact that non-governmental indigenous groups are allowed to participate in Arctic governance through the Arctic Council is truly unique.⁷³ Although sustainable development inherently focuses on indigenous economics, the degree of indigenous participation in Arctic decision-making within the Arctic Council is particular to the concept of sustainable development in the Arctic.⁷⁴ The “Arctic Sustainability Principle” arose within the context of this unique governance structure, defined by the combination of multinational cooperative governance and a focus on indigenous expertise.

The concept of sustainable development was agreeable to the varied, often competing, interests of the Arctic States,⁷⁵ and requiring indigenous practices to provide a foundation for discussions of Arctic policy provided much-needed focus to the collaborative governance structure. This “environment-indigenous nexus”⁷⁶ allowed for certain practices commonly

69. Participants in the Arctic Council include: the Arctic States, the Inuit Circumpolar Conference, the Saami Council and the Association of Indigenous Minorities in the Far north, Siberia, and the Far East of the Russian Federation, although participation is also open to other organizations of Arctic indigenous peoples “with majority Arctic indigenous constituency, representing: a single indigenous people resident in more than one arctic State; or more than one Arctic indigenous people resident in a single Arctic State.” Declaration on the Establishment of the Arctic Council art. 2, Sept. 19, 1996, 35 I.L.M. 1382 [hereinafter Ottawa Declaration].

70. KESKITALO, *supra* note 34, at 75.

71. Ottawa Declaration, *supra* note 69, at Declaration on the Establishment of the Arctic Council.

72. *Id.* at art. 1(a).

73. KESKITALO, *supra* note 34, at 63.

74. *Id.* at 78.

75. *Id.* at 75.

76. *Id.*

thought of as environmentally exploitative—such as limited commercial use of endangered species—while still requiring consideration of the indigenous Conservation Ethic.⁷⁷ The Arctic Sustainability Principle embodies this nexus between Western concepts of environmental protection and Northern indigenous knowledge in developing a framework for sustainable economic development, culminating in the formation of policy that embodies the natural environment-indigenous-sustainability relationship.

VI. BENEFITS OF THE ARCTIC SUSTAINABILITY PRINCIPLE

By requiring indigenous interests to form the argumentative—but not imperative—framework in which Arctic policy is decided pursuant to multinational interests, the Arctic Sustainability Principle protects indigenous peoples from exploitative practices of a foreign sovereign and, conversely, protects the Arctic environment from potentially exploitative indigenous practices. This duality comes to a head when Western concepts of environmental protection conflict with traditional indigenous conceptions, such as in the legal and ethical opposition to the killing of wild animals for consumptive purposes.⁷⁸ By requiring certain indigenous interests to form the argumentative framework of natural resource policy development, rather than any given sovereign's economic imperatives, the structure of Arctic governance facilitates a particularly flexible and effective implementation of sustainable development principles. Although there are particular Western resource management policies which have proven more effective than indigenous practices, there are inherent benefits to a government structure which requires consideration of indigenous values in the context of local natural resource development.

Wildlife resources provide the most explicit example of potential conflict between Northern and Western concepts of environmental conservation. In the Arctic North, consumption of wild animals is a critical economic and cultural activity.⁷⁹ However, traditional activities such as whaling and seal hunting have elicited political opposition among the Arctic States, which consider the practices environmentally harmful. The United States outlaws whaling, but traditional whaling remains an important economic and cultural activity among indigenous peoples in the northern

77. *Id.* at 76.

78. YOUNG, *supra* note 4, at 127.

79. *Id.* at 126.

regions of Canada, Iceland, Greenland, Norway, and Russia.⁸⁰ A circumstantial analogue exists in seal hunting practices. Until the mid-1980s, seal hunting was a viable economic activity in the United States.⁸¹ However, environmental groups intent upon ending the seal harvest exerted sufficient political pressure and the legislature was subsequently forced to end the practice of commercial seal harvesting within U.S. jurisdictions.⁸² Campaigns against commercial seal harvesting in the U.S. and Canada substantially undermined the market for seal fur harvested by the Inuit and Aleut peoples, and, to some degree, turned these Northern indigenous groups against Western preservationists.⁸³

In this regard, the Arctic Sustainability Principle requires deep consideration of which indigenous practices should form the basis for official policies, as there is often a lack of consensus among even the various indigenous peoples represented by the Arctic Council. While indigenous resource management practices are generally more environmentally sound than the exploitative free market, Western regulatory technologies cannot be disregarded. In this regard, the Arctic States provide an important check and balance to potential shortcomings in indigenous natural resource management practices.⁸⁴

Offshore oil prospecting is another clear point of divergence among the interests of the indigenous peoples of the Arctic. Notably, the Inuit Circumpolar Conference supports onshore oil development because of the infrastructural and educational benefits that it has yielded for the indigenous peoples of the North.⁸⁵ However, many indigenous peoples oppose offshore oil development because of the degree to which the practice disrupts indigenous traditions.⁸⁶ Despite opposition from the Inuit Circumpolar Conference, 2.76 million acres of offshore oil-prospecting leases in the

80. KESKITALO, *supra* note 34, at 79.

81. Pursuant to a multinational agreement, seals were harvested for their fur by the U.S. Government until 1984, when Congress passed the Fur Seal Amendments, PL 98-129 (1983), wherein the U.S. government withdrew from any direct seal harvesting activities and instead delegated the practice to the village corporation of the Pribilof Community. YOUNG, *supra* note 4, at 129. However, political opposition to the practice by environmental groups made the legislature unwilling to ratify the multinational seal hunting protocol in 1984, ending the practice completely within the United States. *Id.*

82. *Id.*

83. *Id.* at 127, 129.

84. For example, wildlife management policies in the Canadian North are partially based on an observation that indigenous natural resource management practices have failed to effectively manage resources subject to the tragedy of the commons. COLLINGS, *supra* note 19, at 14. Under indigenous management, caribou populations have thinned substantially and some local muskoxen species have gone extinct. *Id.* at 15–16.

85. ANDERSON, *supra* note 49, at 182.

86. *Id.*

Chukchi Sea were sold to various international oil companies in February 2008 pursuant to the 2007-2012 Outer Continental Shelf leasing program.⁸⁷ However, any hydrocarbon explorations licensed under this program are conditioned upon a guarantee that “such exploration will not be unduly harmful to aquatic life in the area, result in pollution, create hazardous or unsafe conditions, unreasonably interfere with other uses of the area, or disturb any site, structure, or object of historical or archeological significance.”⁸⁸ Additionally, offshore hydrocarbon exploration is licensed “so as to obtain a proper balance between the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone.”⁸⁹ These offshore oil leases—though not sustainable in-and-of-themselves—reflect sustainable sentiments, at least to the degree that they allow for economic hydrocarbon development while requiring a mandatory degree of environmental remediation. Further, indigenous people are at least afforded additional bargaining power in offshore oil development deals when indigenous values are integrated into Arctic natural resource management practices. Russia particularly affords the indigenous people of the Arctic additional protection against exploitative practices of hydrocarbon developers.⁹⁰

CONCLUSION

Indigenous knowledge is valuable in any effective system of wildlife resource management, particularly the practices of quantifying environmental phenomenon that subsistence cultures must develop to survive.⁹¹ Traditional indigenous activities depend upon the land, whereas a foreign sovereign has little disincentive to mitigate environmental

87. *Id.* at 185.

88. Outer Continental Shelf Lands Act of 2000, 43 U.S.C. § 1340(g)(3) (2006).

89. *Id.* § 1344(a)(3) (2006). In general, “[m]anagement of the Outer Continental Shelf shall be conducted in a manner which considers economic, social, and environmental values of the renewable and nonrenewable resources contained in the outer Continental Shelf, and the potential impact of oil and gas exploration on other resource values of the outer Continental Shelf and the marine, coastal, and human environments.” *Id.* § 1344(a)(1) (2006).

90. The Russian statute “On Guarantees of the Rights of Numerically Small Indigenous Peoples of the Russian Federation,” formally recognizes the indigenous peoples of the Russian North and their right to use their native land for traditional purposes, but it does not imply indigenous control of natural resources. VERMONT LAW SCHOOL INSTITUTE FOR ENERGY AND THE ENVIRONMENT, ARCTIC OFFSHORE OIL AND GAS WHITE PAPER NO. 5: THE ARCTIC OFFSHORE OIL AND GAS GUIDELINES IN GREENLAND AND THE RUSSIAN FEDERATION, 61 (2011).

91. See Collings, *supra* note 19, at 31–33 (applying Milton Freeman’s theories regarding the utility of traditional knowledge in environmental resource management practices to Arctic practices).

disruption.⁹² In the Arctic, indigenous practices clash with the interests of the Arctic States with regard to some points of industrial development and commercialization, but they are consistent with other types of economic development. However, the particularities of Arctic governance force decision-makers to consider natural resources with different economic utility from the indigenous perspective.⁹³

While the indigenous peoples themselves do not have sovereignty over the region, indigenous values are taken into account by means of the uniquely collaborative governance structure that defines Arctic law. Modern Arctic governance revolves around the Inuit Circumpolar Conference, which actively pursues Arctic policies that are mutually satisfying to both the indigenous peoples and the Arctic States that serve as their legal sovereign.⁹⁴ One of the earliest U.S. Arctic policies declares that “the . . . Arctic provides an essential habitat for marine mammals, migratory waterfowl, and other forms of wildlife which are important to the [United States] and which are essential to Arctic residents.”⁹⁵ However, this representation of indigenous peoples does not always translate into a realization of indigenous interests in Arctic policy.

This model justifies some exploitative behavior, such as commercial whaling, hunting, and fishing, but obliges the Arctic States to approach non-traditional economic activity from a context of environmental conservation.

92. This relationship is hyperbolized in Russia’s largely exploitative relationship with the indigenous Arctic cultures and has provided a fulcrum for debate over the development of Arctic resources. See GAIL FONDAHL, *Environmental Degradation and Indigenous Land Claims in Russia’s North*, in CONTESTED ARCTIC: INDIGENOUS PEOPLES, INDUSTRIAL STATES, AND THE CIRCUMPOLAR ENVIRONMENT 65–83 (Eric A. Smith & Joan McCarter eds., 1997) (arguing that the Russian North has constrained aboriginal peoples’ abilities to continue to use their lands).

93. KESKITALO, *supra* note 34, at 78.

94. STUCKENBERGER, *supra* note 3, at 31.

95. Arctic Policy Research Act of 1984, 15 U.S.C. § 4101(a)(17) (2006).