The effect of environmental change to the Arctic indigenous is comprehensive, which involves economy, culture, education, health, diet and many other aspects. Taking Canadian Inuit as an example, this article, which considers economic factor as main thread, will investigate the social life changes of indigenous people in the background of global environmental changing. Firstly, traditional Inuit economic activity—hunting barely survives because of environmental changing. Secondly, environmental offers convenience for developing mineral resources in the Arctic areas. Yet, from a sustainable development perspective, the marginal benefit of economic activities brought by environmental change will cause inestimable influence for Inuit along with resource exhaustion. Finally, tourism, which is the second important industry for Inuit people, will be damaged for the traditional Inuit activities that cater to visitors' curiosity changing quietly under the combined effect of climatic, environmental change and external civilization impacting. In general, the environmental change in a mixed blessing for Inuit people, and the future is uncertain.