APS1018 History and Philosophy of Engineering – Final Team Projects, Fall 2013

Environmental Policy for Sustainability in China

Since the policy "Reform and Opening up" developed by the Chinese Government in 1978, China has been developing with dramatic speed. Products labeled "Made in China" can be found everywhere. However, this social, economic and technological development is bringing about increasingly serious environmental pollution. People living in northern China often will not go outside without a face mask, for fear of air pollution. Environmental conservation is not yet established as a primary concern in everyone's mind, despite its critical importance to the survival and development of the population.

This report illustrates current issues of environmental pollution in three aspects: Education, morality and legislation. We describe both the positive and negative impacts of each aspect. In addition, we provide examples showing their development as well as the current situation.

We found that significant development can be found in environmental education; the giant difficulty is lack of professional knowledge in teaching groups. There is currently little morality-driven incentive towards environmental improvement. In the legislative aspect, implementation of laws and regulations is currently poor and needs to be improved.

Environmental protection should be the responsibility of not only the government, but the whole society.

Conclusion

Over the past few decades, China has experienced a rapid growth in its economy. However, the fast growth has been built upon recklessly over-exploiting natural resources such as petroleum, which brings along subsequent environmental issues. China is paying the price through environmental pollution. In this report we discuss the history and impacts of environmental pollution in China mainly from three perspectives: Educational, moral and legislative.

As to environmental education, we forecast it will develop. However, the public awareness and lack of resources are primary barriers to more effective education.

As for morality, the public mindset is that "profits are more important than environment" and consequently there is little moral pressure on polluters to clean up their operations.

As to environmental legislation, there has been ample attention to the Chinese government's record on environmental legislation but it is noted that implementation of the rules is poor and must be improved.

Recommendations

Environmental Education

In order to respond to the lack of environmental education in elementary and secondary schools, the government should encourage more professional teachers who have a basic sense of environmental protection, such as graduates from environmental protection courses. Improved environmental education should be included within university curricula. Modern university students need to be equipped with professional knowledge of environmental conservation.

Environmental Morality

The most effective method to improve environmental morality would be through the educational system. Environmental responsibility should be taught at all stages; this would engender a protective sense in the public. Additionally, environmental morality should be promoted through books, magazines, TV shows etc.

Environmental Legislation

Even though the Chinese government has gained attention over environmental legislation, several legislative issues should be considered. Specifically, the Chinese government should consistently revise and improve the Law of Environmental Protection, such as adding a series of feasible rules and enhancing the authority of environmental departments. In addition, the Chinese government should allocate more funds for establishing and improving environmental legislation.