ISSN: 2688-8653

# How Will Current Policies of Sustainable Development Affect Future Generations

# -- From Design Perspective

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#### **Abstract**

Nowadays, with more and more serious environmental pollution and resource depletion problem, people gradually realized the importance of environment protection, and sustainable development has become one of the hot spot in our society. To achieve sustainable development can be a complicated problem. However, using design method to do more environmental friendly operation can be a good way to achieve the sustainable development goal and improve our living environment. This essay will from the perspective of design to talk about how will design contribute to environment protection and help to achieve sustainable development goal. What' more, this essay will also discuss how will current policies of sustainable development affect our future generations.

### **Keywords**

Sustainable Development; Design; Environment Pollution; Technology; Science.

### 1. Introduction

With the social development and the improvement of humanity's living standards, people realized that the over exploitation and unreasonable use of resources are potentially restricting the development of human society. Therefore, the concept of sustainable development has been put forward. The INCN and UN-EP organization (1991) defined sustainable development as using cleaner and more efficient technologies to reduce energy and natural resources consumption as much as possible. Therefore, how to balance the relationship between resource consumption and social development needs is an important issue for humanity. It can be seen that sustainable development is closely related to the quality of life in many aspects.

As resources are exhausted, people's quality of life will also decline. However, resource waste and low resource recycling rate as two main acute problems in society have not aroused enough attention, and if the resource issues can't be solved properly, that will be a severe test for human intergenerational development. Nowadays, when all activities tend to plan in detail, design becomes a powerful instrument for humanity to have a better life. Martin, C. (2019) claims that under existing circumstances, it's feasible to integrate the ecological factors into the product design and development process to reduce the impact of the product on the environment in its life cycle. This can be understood as by design method to improve the utilization of products and reduce unnecessary packaging, thus decreasing the waste of resources. Germany adopts the "Packaging Regulations" (German Federal Cabinet, 1993) to improve the recycling rate of items and achieve the purpose of conserving the resource. This essay will discuss the feasibility and advantages of ecological product design in the first part. Besides, the German "Packaging Regulations" as one of the most effective resource recycling regulations will be focused on. Further evaluation of the current policy and suggestions on resource-saving will be mentioned.

ISSN: 2688-8653

### 2. How can Design Make our Environment Better

Nowadays, with the progress of the design industry and the development of science and technology, the ecological design industry has developed rapidly as an effective response to resource waste and environmental pollution. Qin, Y(2020) claims that with the development of the social economy, society will bring more convenient and comfortable life experiences. However, in order to achieve this quality of life, human beings must consume a large number of resources. In other words, on the premise of ensuring social production, how to save resources to the greatest extent is the problem that people need to solve. In this context, as one of the main methods to solve the problems of resources and the environment, ecological design has gradually attracted the attention of the international community. Mengqing, Z. (2020) states that with the construction of the ecological city development, the community put forward higher requirements for the quality of life and living environment. That is to say, reasonable use of humanized design methods to meet human needs and realize the recycling of products is undoubtedly beneficial to social development.

With the development of education and science technology, improving humanity's environmental awareness and reducing unnecessary material waste through design methods are all feasible and practical ways to reduce waste of resources. When the design rise to a higher level, the needs of different audiences and social problems will become the key elements in the R & D and production of design products. (Ashley, 1993). Therefore, designers and producers can be based on audience needs and hot social issues to conduct product design and production, that is to say by using design methods to integrate people's needs with social issues. Therefore, many unnecessary production wastes can be avoided. Moreover, this way can draw people's attention to resource waste and environmental pollution problems. In the initial stage of designing a product, designers can plan the material selection of the product reasonably and consider the Eco-friendly characteristic and recyclability of the product. Qin, Y. (2020) pointed out that as the material basis of humanity's daily life place, the material composition of these daily necessities can be more diversified. This can be understood as the rational use of ecological materials that can intervene from the source to achieve the feasibility of the ecological design of household products. Through this method, humanity can make the material composition of daily necessities more environmentally friendly and save resources to a certain extent to achieve the purpose of not only facilitating people's lives but also saving resources and protecting the environment.

## 3. What can We Learn from the Other Country

The packaging regulations formulated by Germany is one of the most famous regulations on sustainable development policies in the world, which has not only sets a model for future generations in Germany to formulate relevant sustainable development regulations, but also reduces the consumption of resources in the current German society. In 1991, Germany (German Federal Cabinet, 1993) formally implemented the national packaging regulations, which stipulates the trade industry should undertake the obligations for the recycling of packaging, transportation, conversion packaging and sales packaging. Haiyun, X. (2001) states that with the implementation of the packaging regulations, most of the industries have realized that the industry needs to take the obligation of recycling packaging materials. Therefore, a large number of factories and various handicraft manufacturers have begun to reduce unnecessary outer packaging of products through various design methods and sift packaging materials. Under the legal framework, Germany formulates laws and regulations to promote the development of a circular economy in different industries. These legislative measures have greatly promoted the development of the German circular economy in the past decades, effectively protected raw material resources, and transformed the whole consumption and

ISSN: 2688-8653

production into a unified circular economy system. The success of German packaging regulations has not only sets a great example in achieving sustainable development, solving the contradiction between development and resource shortage but also provides an example for many other countries in the world.

In today's society, many policies on sustainable development have achieved great results, which also provides a model for future generations to formulate relevant regulations on sustainable development, for example, 'the community renewable resources recycling system of Beijing' and 'the garbage classification policy of Shanghai' are all based on the reality of China's social conditions and issued on the recycling of resources regulations. Current policies give humanity many inspiration and examples about environmental protection and resource conservation, which will also influence future generations to think about the future development of society. (Xin, 2020) In future, there will be more countries focusing on the benefits of resource recycling and environmental protection based on the existing policies. Moreover, future generations will also put forward more practical and feasible sustainable development policies in the future, and subjects like design will also play a greater role in the future.

### 4. Conclusion

This essay emphasizes the role that design can play in various general current social policies and the process of achieving sustainable development. In addition, This essay also enumerates whether environmental friendly materials can be used as the basis of product design so as to realize the ecological and environmental characteristics of the design products, finally, achieve the recyclability of the products. In this essay, whether the design methods can be used to reduce unnecessary product packaging through listing the German packaging regulations so as to achieve the purpose of saving resources and protecting the environment were also discussed. However, to achieve the ultimate goal of sustainable development still needs the joint efforts of all humanity, whether it is the state's policy on resource control and environmental protection or through the design methods to improve the recyclability of products, to achieve sustainable development goal, the most critical element is to raise people's awareness in the entire society, so do that humanity can actually realize the seriousness of the current social problems, so as to provide better solutions for various social problems.

#### References

- [1] Ashley, S., (1993). Designing for the environment. Mechanical Engineering, 15(3), 53-5.
- [2] German Federal Cabinet. (1993) Packaging Regulation. Retrieved November 8, 2020, from http://de. mofcom.gov.cn.
- [3] Haiyun, X., & Qingsong, Li. (2001). Duales System Deutschland and Packaging Garbage Treatment. Environmental Sanitation Engineering, 9(3), 153-154.
- [4] Martin, C. (2019). Designing for the Circular Economy. Routledge: Taylor & Francis.
- [5] Mengqing, Z. (2020). Excessive Design Criticism from the Perspective of Design Ethics. Interpretation of Design Ethics, 7-9. Retrieved November 8, 2020, from https://kns.cnki.net/kcms.
- [6] Qin, Y. (2020). Research on the Application of Ecological Materials in the Design of Modern Home Products. Ecological Materials and Household Product Design, 11-23. Retrieved November 8, 2020, from https://kns.cnki.net/kcms.
- [7] Paul, A. & Rasmus, J. (2018). Sustainable development using renewable energy systems. International Journal of Sustainable Energy Planning and Management, 29(6), 2-3.
- [8] Xin, S. (2020). Waste classification experience in Shanghai and the inspiration to the Yangtze River Delta. Renewable Resources and Circular Economy, 3-4. Retrieved December 4, 2020, from https://kns.cnki.net/kcms.