

# Research on Multi-channel Recycling Cooperation Strategy of Urban Renewable Resources Based on Triple Bottom Line

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**ABSTRACT.** *In recent years, China's resource waste and environmental pollution problems need to be solved urgently. The recycling of renewable resources is an important way to solve this problem. However, due to the development of the Internet, the current status of recycling channels in the traditional sense can no longer meet the needs of development. Therefore, this article is devoted to studying how to achieve a good cooperative relationship between online and offline platforms, coordinating the roles assumed by the two, so that they can play their respective roles, and explore a collaborative strategy for multi-channel recycling of renewable resources. Based on the perspective of the triple bottom line, it can maximize the use of renewable resources at the minimum cost, reduce secondary pollution and bring economic benefits, and promote the sustainable development of China's national economy.*

**KEYWORDS:** *triple bottom line, renewable resources, multi-channel recycling, collaboration strategy*

## **1. The current situation and existing problems of multi-channel recycling of urban renewable resources**

### ***1.1 Status of multi-channel recycling of urban renewable resources***

In recent years, the role of renewable resource recovery in China's national economy and environmental protection has become increasingly prominent. However, at present, the main recycling methods of China's renewable resources are still concentrated in the manual recycling of information resources in the form of inefficient traditional people flow and logistics. Under the current rapid development of the Internet, the emergence of renewable resources in the field of network platforms The Internet recycling model has more advantages than traditional recycling methods in terms of recycling efficiency, safety supervision, recycling

prices, and development potential. However, the existing online and offline recycling channels have not formed a good interest community relationship, the relationship and role positioning of the main bodies have not been straightened out, the goals are different, and conflicts and conflicts continue, resulting in high recycling costs and low efficiency, and Generate secondary pollution in recycling.

### ***1.2 Problems with multi-channel recycling of urban renewable resources***

#### ***1.2.1 Insufficient profitability***

Recycling of renewable resources originally belongs to the "walking volume" model. The unit price of recycling is low, and the profit margin is small. Modern people generally do not have the habit of recycling used items except for the elderly, and the Internet audience is mostly young. When implementing online recycling, you will encounter an embarrassing situation where no one cares. Secondly, since the promotion of the Internet + recycling model, many small and medium-sized recycling companies are competing to enter the market, making competition more intense.

#### ***1.2.2 Online and offline interest community relations***

At present, the elderly in the recycling industry in China and those who are willing to deal with wastes account for a relatively large proportion. They are generally unable to master the Internet, or do not understand how to operate through the Internet, and our country's recycling resources are small. The majority of waste recycling stations are scattered, and it is difficult to manage on a large scale, which makes the formation of a large-scale network system for multi-channel recycling relatively difficult. At the same time, compared to online shopping and other forms of online and offline collaboration that already have a very complete system, renewable resources can perform better online trading in addition to used electronic equipment and clothing, such as scrap iron, waste newspapers and other traditional. Recyclables are difficult to conduct in the form of online transactions, and reverse logistics is still in the development stage. In recent years, although some apps for recycling of renewable resources have appeared one after another, providing services such as door-to-door collection of waste, the whole has not yet formed a complete and coherent supply chain.

#### ***1.2.3 Immature technology leads to secondary pollution***

Compared with developed countries, China's recycling of renewable resources is still relatively backward, and many technologies are not mature enough, especially in the processing and processing of renewable resources. Without higher technology, it is easy to cause secondary pollution. When the offline technology is not mature enough, the implementation of the online recycling model may have greater leakage

difficulties in supervision and operation. This will not only be environmentally friendly, but will cause natural resources such as air, soil, and water. Destruction, which in turn threatens the survival of mankind.

## **2. Based on the triple bottom line of urban renewable resources multi-channel recycling subject differences and key influencing factors**

### ***2.1 Economy***

The online recycling platform mainly forms an integrated online and offline recycling system through cooperation with offline recyclers, etc. It has low capital requirements and does not need to establish a special recycling processing system by itself, mainly by providing on-site recycling services and advertising Soft functions such as publicity are profitable and have low costs. The offline recycling platform needs to have its own warehouse, factory and other hard conditions. The profit mainly comes from direct transactions with customers, and the cost is relatively high. However, the mainstream form of the recycling industry currently has many customers. For manufacturers to recycle, generally only need to recycle their similar products, the main goal is to directly recycle from consumers to reduce manufacturing costs. Recycling by retailers is mainly through recycling items from consumers and then returning them to manufacturers at a certain price, so as to earn the difference. For retailers, recycling is only an additional item in their business activities and cannot be used as the main benefit. Since third-party recycling is a specialized agency, the recycling network system is relatively complete, and its main purpose is to achieve profit by recycling various types of renewable resources for processing.

### ***2.2 Society***

Manufacturers, retailers and third-party recycling can realize the reuse of resources, whether online or offline, reducing the waste of renewable resources, contributing to the sustainable development of society and the establishment of an environmentally friendly society. Especially for manufacturers, recycling the waste of their products can help companies establish a good social image, which is conducive to the survival and development of enterprises.

### ***2.3 Environment***

Saving resources and protecting the environment is not only the goal of the recycling subject, but also the goal of all mankind. Regardless of the channels used, as long as the recycling of renewable resources is conducive to the development of green ecology and meets the development requirements of the entire environment. However, when recycling renewable resources, due to the lack of technology, secondary pollution may sometimes result. Therefore, improving recycling

technology is also a problem that companies need to solve urgently.

### **3. Multi-channel recycling cooperation strategy for urban renewable resources**

#### ***3.1 Online platform***

An important factor affecting the multi-channel recycling of urban renewable resources is the construction of Internet platforms. Enterprises should make full use of the "Internet +" platform for innovation and reform, give full play to the advantages of the Internet, increase the popularity of the platform through various social software, optimize the recycling method, and make the recycling method more convenient, such as providing on-site or fixed-point pickup Service to attract more potential customers. Second, improve the information exchange platform, analyze the logistics and data of renewable resource transactions through big data and other means, and monitor and track in real time to achieve timely access to information. At the same time, as of 2019, China has only 748 million mobile phone users, with an average daily use time of 134 minutes. Therefore, the development of mobile app for renewable resources is also conducive to the development of multi-channel recycling.

#### ***3.2 Offline platform***

Improve offline recycling operations, such as establishing offline recycling service stations or establishing cooperative relations with other scattered recycling stations, strengthening offline logistics transactions and distribution services, and forming a complete network of recycling systems with online platforms. Consumers only need to put the items to be recycled into the recycle bin, and use the mobile app or log in to operate online to complete the recycle.

#### ***3.3 Model construction for different recycling entities***

The first is the O2O mode for consumers, recyclers, and processors. Customers place orders through the network, and the recyclers can carry out door-to-door recycling after receiving the recycling request provided by the consumers. . The second is the B2C model for recyclers and consumers. The recyclers will guide customers through selling advertisements and other information to promote the sale of waste products to recyclers. Finally, there is the C2B model. This model is due to the customer's own recycling needs, and the behavior of recycling on the platform.

### **4. Summary**

Urban renewable resource recycling has important significance in the economic, social and environmental aspects, and today, with the rapid development of the

Internet, the online and offline multi-channel recycling method has gradually become the mainstream. By strengthening the construction of the Internet platform, the information exchange platform and offline are improved. The recycling business platform and the realization of online and offline coordination through O2O, B2C, C2B and other modes are in line with China's sustainable development strategy and contribute to the realization of the basic national policy of saving resources and protecting the environment. It also has great significance in the construction of the national economy.

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