

## Problems and Countermeasures of Promoting Domestic Waste Classification in Anshan City

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### Abstract

With the improvement of people's living standard, the daily per capita household garbage production is also increasing, too much household garbage to the environment and health has brought serious impact. Classification and treatment of household garbage is one of the important measures to build a beautiful Anshan. Anshan Municipal government has set up a special leading group and issued a series of policies to carry out classification and treatment of household garbage. In accordance with the logic of finding problems, analyzing problems and solving problems, this paper has studied the existing problems of promoting household garbage classification in Anshan city, and conducted in-depth analysis to get the development countermeasures of promoting household garbage classification in Anshan city, that is, to increase publicity and improve residents' awareness of household garbage classification; Regularly check and improve the household garbage classification infrastructure and improve the reward and punishment mechanism, mobilize the enthusiasm of garbage classification target.

### Keywords

Household Waste Classification; Countermeasure Research; Anshan.

### 1. Introduction

It is understood that in 2020, China's urban household garbage production is up to 350 million tons, too much household garbage will bring a great impact on people's living environment. With the start and progress of domestic garbage classification in China, more and more cities have begun to advocate the classification of domestic garbage, and issued specific implementation plans of domestic garbage classification. Anshan, located in northeast China and in the middle of Liaoning Province, has a permanent population of 3.3 million and is China's largest steel city. The population of Anshan city is growing relatively fast, and the amount of household garbage is increasing year by year. In response to national policies and the construction of a beautiful Anshan city, Anshan city has issued relevant policies on household garbage classification and treatment.

### 2. Status Quo of Promoting Household Garbage Classification in Anshan City

One of the important measures to build a beautiful Anshan is to classify and manage household garbage. Anshan Municipal government set up a leading group for household garbage Classification and management, which gave a detailed description of the rolling plan for urban and rural household garbage classification in the next four years in the Implementation Plan of the Four-year Rolling Plan for Urban and Rural Household Garbage Classification in Anshan (2017-2020) released in October 2017 [1]. The plan is to basically establish the relevant laws

and regulations and standard system of garbage classification by the end of 2020, and form a replicable and scalable household garbage classification mode. Urban household garbage recycling rate reached 10%, rural household garbage recycling rate reached 5%. Anshan city for further promoting urban and rural living garbage classification work, Anshan government released in July 2019 the Anshan urban and rural living garbage classification in 2019 work plan ", elaborated profoundly the meaning of living garbage classification, the key work of Anshan carrying out the living garbage classification, perfect the relevant system of garbage classification. In May 2020, the Circular on the Implementation Plan of Anshan 2020 Urban and Rural Household Garbage Classification was issued to define the standards of household garbage classification in detail, and to set up unified collection containers for garbage classification, so as to effectively promote the work of household garbage classification. The Regulations of Anshan Municipal Household Garbage Classification Management promulgated in April 2021 further promoted the municipal household garbage classification management and enhanced the standardization of household garbage management [2]. The Regulations of Anshan city on the Management of Household Garbage Classification make detailed provisions on the collection, transportation and disposal of household garbage classification, establish the supervision and evaluation system of household garbage classification management, and punish departments that seriously violate the regulations on household garbage. classification management.

**Table 1.** Policies of Anshan municipal solid waste classification and management

Release Time	Name
October 2017	Implementation plan of four-year rolling plan for urban and rural domestic waste classification in Anshan City (2017-2020)
July 2019	Implementation plan for urban and rural domestic waste classification in Anshan City in 2019
May 2020	Notice on the implementation plan of urban and rural domestic waste classification in Anshan City in 2020
April 2021	Regulations of Anshan City on classified management of domestic waste

Note: The content comes from Anshan Municipal People's government.

### 3. Problems in Promoting Domestic Waste Classification in Anshan City

#### 3.1. The Mobilization of Domestic Waste Classification Policy is Small

Anshan residents are the target objects of domestic waste classification and treatment in Anshan City. The residents' understanding and cooperation with Anshan Municipal Waste Classification and treatment is an important factor for Anshan Municipal government to smoothly promote domestic waste classification. According to the series of plans for urban and rural domestic waste classification issued by Anshan Municipal government, Anshan City has little publicity for domestic waste classification, only staying at the level of guiding the masses to classify waste, and there is no in-depth publicity. According to the survey, in public places such as parks, stations and supermarkets, there are few residents who classify their waste. Most residents only put their waste into the nearest dustbin and did not classify it into the corresponding dustbin. In the residential area, it is found that most residents will pack all types of domestic waste together for delivery, rather than package it by category and then classify it.

#### 3.2. Imperfect Domestic Waste Classification Infrastructure

In the latest regulations on classified management of domestic waste issued by Anshan Municipal People's government, Article 28 stipulates that three types of collection containers

for recyclables, kitchen waste and other waste shall be set up in residential areas and units, and hazardous waste collection containers shall be set up within a certain range. In other public places, three types of collection containers for recyclables, hazardous garbage and other garbage shall be set up. However, according to the visit, some residential areas and public places are not equipped with complete domestic waste collection containers according to the regulations, and most areas, including schools, are only equipped with recyclable and non-recyclable waste collection containers. The correct treatment of domestic waste should include classified delivery of waste, classified collection of waste, classified transportation of waste and classified treatment of waste. The establishment of scientific and complete domestic waste collection containers is the basis of everything. The incomplete domestic waste classification infrastructure is not conducive to the promotion and development of domestic waste classification in Anshan city.

### **3.3. Shortcomings of Domestic Waste Classification Reward and Punishment Mechanism**

According to the plans and regulations on waste classification issued by the leading group for the classification and treatment of domestic waste in Anshan City, it is found that Anshan City has established a domestic waste classification management information system to recover and monitor the information of classified delivery, collection and transportation of domestic waste. If domestic waste is not classified and delivered to the designated collection point or container, and failing to configure domestic waste classification collection containers in accordance with the provisions, a fine shall be imposed. A unit that violates the provisions of the regulations shall be fined not less than 5000 yuan but not more than 50000 yuan, and an individual shall be fined not less than 50 yuan but not more than 200 yuan. However, the urban administrative and law enforcement departments with the power to punish acts in violation of the regulations cannot ensure and monitor the whole process, nor can they timely order the units and individuals in violation of the regulations to correct and punish them. In addition, in the process of promoting the domestic waste classification work, most of the penalties are implemented for the target objects of the domestic waste classification work, and there are few incentive and reward policies.[3]

## **4. Development Countermeasures of Promoting Domestic Waste Classification in Anshan City**

### **4.1. Increase Publicity and Improve the Awareness of Domestic Waste Classification of Target Objects**

Everyone should participate in and take action in the scientific classification and release of domestic waste. Anshan Municipal People's government should strengthen the publicity of domestic waste classification for the target objects, let them understand the general content of domestic waste classification, clarify the importance and necessity of domestic waste classification, and improve their awareness of domestic waste classification. Only in this way can the classification of domestic waste in Anshan be promoted efficiently. The way to increase publicity can be started from the following aspects:

1. Organize domestic waste classification activities. The classification of domestic waste in Anshan City is closely related to everyone. The personnel in public places are relatively concentrated and the personnel mobility is large. Therefore, it is an effective way to publicize and promote the classification of domestic waste in public places. Slogans indicating the classification of domestic waste should be posted in eye-catching positions and waste delivery points in public places, which can not only let residents understand the importance of the government on the classification of domestic waste, so as to change their behavior; Residents

can also be reminded to classify domestic waste at all times. In addition, relevant departments of Anshan Municipal government can also regularly hold domestic waste classification activities in public places to improve residents' awareness of domestic waste classification and their sense of participation in domestic waste classification.

2. Strengthen ecological civilization education for students. Schools should pay attention to education in environmental protection and provide students with popular science and education in the classification of domestic waste. For example, regularly hold popular science activities on waste classification, and regularly check students' mastery and implementation of domestic waste classification. It is of great significance to educate students about the classification of domestic waste, especially for children. Because they are the future of the motherland and can affect their parents and elders to a great extent, they should be instilled with the idea of protecting the environment and caring for the earth as soon as possible.

3. Use the we media platform for publicity. Nowadays, WeChat, Sina micro-blog and short video tiktok are developing rapidly since the media platform, and the speed of information dissemination is very fast. Tiktok official account should be seized by the relevant government departments to establish official voice and WeChat public number to publicize the work of sorting out domestic waste in Anshan or to publicize with Anshan local comprehensive bloggers. During publicity, tweets or short videos should be reasonably arranged to release the content, progress and reward and punishment mechanism of domestic waste classification in Anshan City, so as to improve the residents' understanding of domestic waste in Anshan City and their awareness of domestic waste classification.

#### **4.2. Regularly Check and Improve the Infrastructure of Domestic Waste Classification**

According to the survey, some residential areas and public places in Anshan City are not equipped with complete domestic waste collection containers. Perfect domestic waste classification infrastructure is the basis for the orderly progress of domestic waste classification. In order to better promote the classification of domestic waste in Anshan City, the administrative and law enforcement department of urban management of Anshan City shall notify the heads of relevant departments of all districts and counties to inspect and improve the domestic waste classification infrastructure in residential areas, public places and all kinds of campuses in strict accordance with the regulations of Anshan City on the management of domestic waste classification. In addition, Anshan City Administration and law enforcement department should also randomly spot check the domestic waste collection containers in Anshan City, encourage and praise the districts and counties with complete domestic waste classification infrastructure, and circulate a notice of criticism to the districts and counties with imperfect infrastructure, so as to ensure the perfection and completeness of domestic waste classification infrastructure. A good domestic waste classification infrastructure will not only help residents classify and release domestic waste correctly, but also help the classified collection, transportation and treatment of domestic waste in Anshan City.

#### **4.3. Improve the Reward and Punishment Mechanism and Mobilize the Enthusiasm of Target Objects for Waste Classification**

It has a perfect reward and punishment mechanism for domestic waste classification, which can promote the domestic waste classification in Anshan City to a certain extent. In terms of punishment mechanism, although the current regulations on the classification of domestic waste in Anshan City have formulated punishment measures for violations of the regulations, they can not guarantee and achieve the whole process monitoring of the target object. For this, the urban management and law enforcement department of Anshan City should install cameras within the feasible range and implement the supervision in practice, Relevant departments can

set up waste classification principals in certain areas, such as community principals in residential areas and principals in public places, to monitor and remind violations of the regulations in real time by means of random sampling and video recording, and punish them if necessary.

The organic combination of reward mechanism and punishment mechanism will contribute to the good promotion of domestic waste classification in Anshan City. In terms of incentive mechanism, the person in charge of waste classification in residential areas can introduce and inform the classification methods and standards of domestic waste in the jurisdiction. Irregularly check the residents' domestic waste delivery at the domestic waste delivery location, ask for their door number and make records. During the inspection period, give simple verbal rewards to the residents who meet the requirements for classified delivery of domestic waste, and remind and warn the residents who do not meet the requirements for delivery of domestic waste. [4] At the end of each month, the person in charge of waste classification summarizes the top eight households that meet the requirements of domestic waste classification and release in the region this month, and gives them a notice of praise and encouragement supplemented by material rewards, so as to mobilize the enthusiasm of the target object for waste classification.[5]

The smooth progress of domestic waste classification in Anshan not only contributes to the construction of beautiful Anshan, but also greatly improves the living environment of Anshan residents. A series of plans and regulations issued by the leading group for classified treatment of domestic waste in Anshan not only point out the main direction of phased work, but also clarify the work contents of relevant departments. However, according to the relevant data and investigation, Anshan City has some problems in the process of promoting the domestic waste classification work, including the small publicity and mobilization of the domestic waste classification policy, the imperfect domestic waste classification infrastructure and the insufficient reward and punishment mechanism of domestic waste classification. For this, the urban management and administrative law enforcement department of Anshan City should increase the publicity, Improve the awareness of domestic waste classification of the target object, check and improve the infrastructure of domestic waste classification and improve the reward and punishment mechanism to mobilize the enthusiasm of the target object for waste classification. In the process of promoting domestic waste classification, only by timely checking the work, finding the problems existing in the work and formulating solutions as soon as possible, can we better and faster achieve the expected results of domestic waste classification and finally achieve the overall goal of building a beautiful Anshan.

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