# About the Sustained Development of Mine Cities and Districts

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**Key words:** mineral resources, sustainable development, economic transfer model, new energy resources.

## SUMMARY

The sustained development of mine cities and districts are a very important and pressing strategic problem for every country in the world of today. In different countries, un-same social system, different economic regulation and flourishing degree, whatever rich or poor, but, one is common, that is development and existence of cities with the prosperity and recession of mineral resources.

The mineral resources type cities flourished with mineral mining, first established the mines, and then developed the cities. With the mining, mineral resources will tend to exhausted step and step, the mining cities on base of mine will be in face of the serious crisis. It's prosperity or recession are only not a economic problem, also concerning with the existence of all residents and the stability on society.

This paper combined the concrete situations of China, proposed some suggestions concerning with the strategic problems of the sustained development

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## 1. INTRODUCTION

The mineral resources type cities flourished mostly due to mining. It is main base on the provision of mineral energies resources and materials, and advanced the citified course, drived the development of area economy, provided large number of employment, promoted the steady of society. However, with the mining of the mineral resources, it is decreasing step and step. Inevitable law is: exploration – prosperity – decline, then the city outlet problem is initiated after the mineral resources are used up. The sustained development of mining cities and districts is a strategic problem of economic development for every country in the world. USA, Germany, UK, Poland and other countries in Europe understood it earlier, adopted the right step and have many good experiences. But many countries in the world got off a late start and are at the phases of fumbling around. Such as in China, nearly years, there are about 12% among the more than 460 mining cities are facing the challenges of resources exhausted. " following or replacing industry " appeared more and more the imminence.. This problem has been caused the attention of each district and central government. Fuxin of Liaoning Province-coal mining city had elected as a pilot city of economical transformation in China in 4 years ago and the measures on each respect have taken up by central government.

The paper proposed some discussions and suggestions concerning with the sustained economic development in these cities.(districts).

### 2. THE SUSTAINED DEVELOPMENT OF MINERAL RESOURCES

Of course, the exhaustion of resources is not in one day, it has a longer process. In the maintaining period, it still is main industry and must note the sustained development of mineral resources. At first strengthen the exploration to deeper and border area, as far as possible to increase the reserve, raise the degree from C2, C1 to A+B reserve. The districts of mining which is not able using big scale and machinization may take up small scale "fight as a guerrilla" to mining scientifically and rationally. The losses of resources must be decreased as far as possible, the recovery rate of mine resources must be raised, so that the service life of mine districts can be as fully as possible extended.

#### 3. THE ECONOMICAL TRANSFORMATION MODEL OF MINE CITIES

There are the same character between mine cities and general cities, but its also have the different property. In preliminary period of mining, the resources are rich, the condition of mining are relatively better than the exhausted period, so long as the administration are apt and the market are normal, then the benefit of enterprises can be on the rising situation. When the

mine enter into decrepit period, with the decrease of resources, increase of mining hard degree, the benefit of enterprises will be descended.

The economic structure of mine cities are always simple and mainstay industry are mine industry, the decline of mine industry will lead to that cities must to go to a new way, that is the economical transformation model from simple economy forward non-mine (or synthesizing)economy.

## 4. THE LAW OF MINE CITIES ON DEVELOPMENT OF THE ECONOMY

In preliminary period of mine cities, the resources is rich, of course, mine production is first, but experts who are making the strategic of economy development must pay attention to make a long period strategic of sustained development, produce output, benefit and the service life of enterprises should be combined scientifically and rationally, either may realize the sustained development of mine, or can accumulate the actual strength through the development of economy to develop other non-mine industries, to carry out the strategic of sustained development of cities.

It is need to develop the industries relation to mine, according to the plan and step to extend the "industry chain", cultivate other industries. During the prosperous period of mine industry, one or few of new mainstay industries had already been formed step and step, so that after the resources is exhausted, the city economy will can keep continuously the flourishing.

In the development to protect and in the protection to develop, these two points are very important. To strengthen the protection on the environment and construction on ecology; renovating the land reclamation; to handle in time the "three waste materials", change its and become the valuable material. Be sure to pay attention that people can not to get the old road: firstly destroying and then to govern.

# 5. EXTENDING THE INDUSTRY CHAIN, EXPLOITING PLURALISTIC CONSTRUCTION ON ECONOMY, DEVELOPING NEW ENERGY RESOURCES

Mine cities should carry out the pluralistic construction on economy, extending the industry chain, developing the meticulous and deep process of mine produce, cultivating other new industries. Mine cities must be well cycle economy.

Mine cities should combine the character of districts and in accordance with local conditions, may fully to use "three waste materials" to form the new industries. During cultivating other new industries, at same time must pay attention to exploit new energy resources. For instance, the utilization of the coal fines ash, the water drained off from mines can be cleaned and re-used. The mine gas is a valuable energy resources, at present the extracting of gas were already a

successful technology. ( such as it can be drew on surface by drill, from the underground of mining mine and in closed mine, may also use the gas to build the electrical station of mine ). The useful materials can be recovered from the wastes of oil field, coal mines, gems and jade mines, gold mine, metal and rare metal mines...etc, developing new process industries, creating new produces. At present when the technology and materials are being renewed continuously, even light and wind are also energy resources with bright prospects.

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## **BIOGRAPHICAL NOTES**

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