

Study on Optimization for Central Financial Special Fund of Environmental Protection

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Abstract: The central special fund of environmental protection is the main channel for the central government to make financial input into the environmental protection in China, which plays an important role in leading the environmental investment of local finance, enterprises and society. Based on the current situation, the article analyzes the scope and emphases supported by various environment special funds. Results show that the special fund lacks the effective integration, tends to be emergency-oriented and needs effective supervision. In light of those problems, the paper probes how to optimize the environmental protection special fund in China and makes some recommendations, such as coordination among various government departments with regard to the use of special funds, establishing a performance-based payment mechanism, founding the state environmental protection investment company as well as strengthening the control of the capital flow, etc.

Key words: environmental protection; special fund; optimum design; performance

The Chinese government has paid high attention to environmental protection and made great efforts in improving investment policies for environmental protection. In recent years the size of environmental protection investment has been increasing year by year due to the enhanced financial input from both government and industrial sector thus providing a strong support for strengthening pollution control and improving environmental quality. The earmarked fund for environmental protection from central finance (hereinafter referred to as central special fund of environmental protection) is the main channel for the central government to make financial input into the environmental protection in China, which plays an important role in leading the environmental investment of local finance, enterprises and society.

1 Central special funds for environmental protection

1.1 Financial input for environmental protection from central finance

There are two sources of central special fund of environmental protection – infrastructure investment administered by the National Development and Reform Commission (NDRC) and central financial special fund administered by the Ministry of Finance (MOF). In 2008, there were 11 special funds under the former with total fund of 11.3 billion RMB yuan (not including the additional fund in the fourth season of the year) and 7 special funds under the latter with total fund of 16.4 billion RMB yuan in which 2.43 billion RMB yuan was budgeted for environmental protection accounting for 2.3% of the central budgeted expenditure.

Of the total amount of central special fund of environmental protection more than half was from the central financial special fund administered by MOF, which is comparatively stable with respect to the size of each special fund. This paper will be focusing on the analysis of various central special funds administered by MOF.

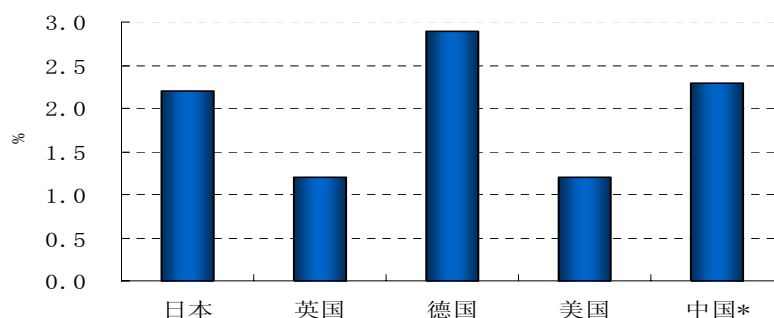


Figure 1 Comparison of environmental expenditure in 2007

* China is based on 2008 data

1.2 Classification of central special fund of environmental protection

The central special fund of environmental protection is the fund earmarked for environmental protection in the central government budget. In general, there are three types of central special fund of environmental protection in terms of the scope supported by the fund.

- (1) Comprehensive special fund. It supports to address diverse environmental issues in different regions.
- (2) Special fund for specific regions which supports to address environmental issues in one or more regions, e.g. the central special funds for the pollution control in “three rivers and three lakes” regions and in Songhua river basin.
- (3) Special fund for specific environmental areas or element, e.g. using money award instead of subsidiary fund in the construction of pipeline network matched with the urban waste water treatment facilities, special fund for protected areas, and central special fund for environmental protection of rural areas.

1.3 Current status of central special fund of environmental protection

The establishment of the central special fund of environmental protection is of great importance in raising fund and increasing the financial input by the central government for environmental protection.

(1) Central special fund of environmental protection

The Ministry of Finance set up the central special fund of environmental protection in 2004. In the “11th Five-Year Plan” period, the fund had supported the capacity-building of environmental monitoring and supervision; water source protection for centralized drinking water supply; regional environmental security; promotion of new techniques and technologies of pollution control; and etc. From 2004 to 2009, a total of 8 billion yuan of the fund had been used in the above-mentioned projects playing an important role in improving the regional environmental quality.

(2) Special fund for emission reduction of key pollutants

The fund set up in 2007 and governed by the 《Provisional Regulation on the Administration of the Central Finance Special Fund for Emission Reduction of Key Pollutants》 is mainly utilized for supporting the construction of monitoring, indicator, and checking systems of pollution reduction of key pollutants. The allocated fund in 2007, 2008, and 2009 was 1.33, 2.5, and 1.5 billion yuan respectively playing an important role in improving the capacity of environmental monitoring and supervision.

(3) Special fund for water pollution control of “Three Rivers and Three Lakes” and Songhua river basin

To ensure the achievement of emission reduction targets of the “11th Five-Year Plan” period, the central government set up a special fund for the water pollution control of “Three Rivers and Three Lakes” and Songhua river basin in 2007. MOF issued the 《Provisional Regulation on the Administration of the Special Fund for the Water Pollution Control of Three Rivers and Three Lakes” and Songhua River Basin》 in December 2007. The fund mainly supports the construction projects of waste water treatment and solid waste disposal facilities and their matching pipeline network; industrial waste water complete treatment facility and clean production; regional pollution control; and other water pollution control projects within the planned scope. The transfer payment of the special fund was made from the central government to the provincial government with the latter responsible for the management of specific projects. The total fund transferred in 2009 was 5 billion yuan.

(4) Special fund as money award instead of subsidiary fund to encourage the construction of pipeline network matched with the urban waste water treatment facilities

In 2007, a new means of payment of the special fund was exercised in addition to the subsidy and discounted loan. The projects using discount loan or using money award instead of subsidy are encouraged and prioritized. To support the construction of pipeline network matched with the urban waste water treatment facilities in the central and western areas of China, the central government set up a special fund as money award instead of subsidiary fund to encourage the real increase of urban waste water treatment capacity in those areas and promulgated the 《Provisional Regulation on the Administration of the Special Fund as Money Award Instead of Subsidy for the Construction of Pipeline Network of Urban Waste Water Treatment Facilities》 in which it is provided that the fund transferred from central government to local government should be strictly earmarked for the construction of pipeline network matched with the urban waste water treatment facilities. The total amount of this fund transferred in 2009 was 10 billion yuan.

(5) Central special fund for rural environmental protection

The central government set up a special fund for rural environmental protection in 2008 using this fund as money award instead of subsidy to encourage and support the integrated environmental management in rural areas and the construction of pilot village. The fund was 500 million yuan in 2008 involving 700 villages. In 2009, the fund was 1 billion yuan involving 1400 villages and mainly used to support the protection of drinking water sources, domestic waste water treatment and solid waste disposal, pollution control of animal and poultry production, treatment of contamination caused by rural enterprises which have been out of operation, and pilot ecological conservation projects thus strengthening the integrated environmental management in rural areas and addressing the prominent environmental problems that threaten the health of the public and cause strong complaint, and have adverse impact on the sustainable development^[1].

In addition, the central government has set up other special funds such as special fund for nature reserves (protected areas), special fund for pollution control of intensive animal and poultry production, special fund for heavy metal pollution control, financial awards for energy-saving technical renovation and for phasing out out-of-date production capacity, and financial subsidy for the promotion of energy efficient products, etc.

Table 1 Main special funds related to environmental protection

No	Title of the special fund	Emphasis /scope supported	starting year	Responsible department
1	special fund for nature reserves	National protected areas in the central and western areas of China that are of typical ecological characteristics and important scientific value; Well managed national protected areas that can play an exemplary role for other Pas; National PAs that weak in management infrastructure.	2001 年	MOF, former State Environmental Protection Administration
2	special fund for pollution control of intensive animal and poultry production	Pilot projects and technical promotion on pollution control and comprehensive utilization of waste of intensive animal and poultry production enterprises in the central and western areas; regions where the pollution load is heavy due to concentrated and large scale of animal and poultry production; regions with centralized intensive animal and poultry production but without adequate subsidy for pollution control; regions where stakeholders are active in rural environmental protection and strong measures are taken.	2003	MOF, former State Environmental Protection Administration (SEPA)
3	Central special fund for environmental protection	Projects on: environmental monitoring; protection of drinking water source for centralized water supply; regional environmental security; environmental protection action in the construction of new socialist village; promotion and application of new techniques and technologies on pollution control; and other pollution control projects identified by MOF and SEPA	2004	MOF, SEPA
4	Central special fund for emission reduction of key pollutants	Establishing indicator system of emission reduction of key pollutants, and monitoring and performance assessment system to facilitate the government function by the central environmental protection departments. Rewarding enterprises and regions who have made significant achievement in emission reduction	2007	MOF, SEPA
5	Special fund for	Construction of waste water treatment and solid waste disposal facilities and their pipeline network; industrial waste water complete	2007	MOF, SEPA

No	Title of the special fund	Emphasis /scope supported	starting year	Responsible department
	water pollution control of “three rivers and three lakes” and Songhua river basin	treatment facility and clean production; regional pollution control; pollution prevention and control in the drinking water source areas; pollution control of scaled animal and poultry production; integrated treatment of urban water bodies, and other water pollution control projects within the planned scope.		
6	Special fund as money award instead of subsidiary fund to encourage the construction of pipeline network matched with the urban waste water treatment facilities	The construction of pipeline network matched with large-scale waste water treatment facilities in key river basins will be prioritized; emphasis on the construction of pipeline network matched with waste water treatment facilities in water source areas; construction of pipeline network matched with waste water treatment facilities in densely populated urban areas; construction of pipeline network matched with other planned waste water treatment facilities	2007	MOF, Ministry of Construction
7	Central special fund for rural environmental protection	Protection of rural drinking water source; rural domestic waste water treatment and solid waste disposal; pollution control of animal and poultry production; treatment of contamination caused by rural enterprises which have been out of operation; prevention and control of	2008	MOF, Ministry of Environmental Protection (MEP)

No	Title of the special fund	Emphasis /scope supported	starting year	Responsible department
		agricultural non-point source pollution; other integrated environmental management measures that improve rural environmental quality.		
8	Special fund for heavy metal pollution control	Integrated control of pollution sources; addressing the historical legacy of heavy metal pollution; pilot project of contaminated site remediation; and capacity building of heavy metal monitoring.	2009	MOF, MEP
9	Fund for rewarding energy-saving technical renovation	Renovation of coal-fired industrial boilers/kilns; utilization of residue heat and pressure; oil-saving technology and substitute for oil; energy-saving motor system and optimization of energy system. The financial award is aiming at supporting the energy-saving technical renovation of enterprises.	2007	MOF, NDRC
10	Fund for rewarding the phasing out of out-of-date production capacity	13 industries: power, iron making, steel making, electrolytic aluminum, iron alloy, carbide, coke, cement, glass, paper making, alcohol, monosodium glutamate, and citric acid. The fund can only be used for phasing out out-of-date production capacity	2007	MOF
11	Financial subsidy for production of renewed and energy-saving building materials	Discounted loan for expanding production capacity of renewed and energy-saving building materials; money award to the promotion and utilization of renewed and energy-saving building materials; development of relevant technical standards and specifications; relevant administrative expenditure approved by MOF.	2008	MOF
12	Financial subsidy for the promotion of energy efficient products	Promotion of energy efficient products including supervision and examination, standard and labeling, information management, and popularity training, etc.	2009	MOF, NDRC
13	Special fund for renewable energy development	Oil substitute, renewable energy development and utilization in heat supply for buildings, heating and refrigeration, power generation, etc.; using sugar cane, cassava, and sweet sorghum as raw material to produce bio-ethanol ; using oil crops/plants to produce bio-diesel; renewable energy development and utilization for heat supply to buildings, heating and refrigeration; promotion and application of	2006	MOF

No	Title of the special fund	Emphasis /scope supported	starting year	Responsible department
		power generation by wind, solar, and marine energy; other planned renewable energy activities.		

2 Analysis on major problems in central special funds

It is no doubt that the establishment of central special fund of environmental protection has played important role in increasing central government's financial input for environmental protection. However there have been some problems in the operation of the funds such as lack of effective integration, tending to be emergency-oriented, and the low overall effectiveness.

2.1 Lack of integration in environmental investment, without synergy among various funds

At present, each type of special fund has its own focal supporting areas with some overlap between different funds. In general, the size of the funds is comparatively small with each fund established independently and lacking coordination and synergy among various funds. Therefore it is difficult to put together the limited resources for addressing key environmental issues.

2.2 The special fund of environmental protection tends to be emergency-oriented lacking long-term consideration

The existing special funds of environmental protection have been established mainly for dealing with some emergent and significant environmental issues being of apparent ad hoc nature. This is because that China is in a development stage when it is difficult to have the long-term and stable fund sources to guarantee adequate financial input for environmental protection.

2.3 Lacking effective supervision and management, paying much attention to investment and less attention to effectiveness

There is no corresponding mechanism of performance assessment for projects that utilize the environmental protection special fund. Thus the problems emerged in the process of project implementation can't be effectively addressed in time.

3 Recommendation on the optimization of central special funds of environmental protection

Given the current state of the use of central special funds for environmental protection and existing problems in their administration, it is suggested that the central special fund of environmental protection or national environmental protection fund should be established by integrating the existing special funds within the central government budget thus stabilizing the fund source, optimizing the fund payment, mobilizing funds from other sources, strengthening supervision and administration on the fund, and increasing the effectiveness of fund use.

3.1 Integrating special funds of environmental protection to promote synergy

Integrate the existing special funds by establishing a special fund of environmental protection within the central government budget. In terms of environmental elements, the scope of the fund use could be categorized into capacity-building on environmental supervision, water pollution prevention and control, air pollution prevention and control, solid waste pollution prevention and control, and

ecological conservation and construction, etc. To follow the existing way of fund administration, the special fund of environmental protection within the central government budget shall be co-administered by MOF and MEP. MOF will be mainly responsible for budgeting and fund administration including the development of annual general budget, budgeting principles and priorities, reviewing project budget and appropriating budgeted fund to implementing organizations of the projects, and supervising the state of fund use and management. MEP will be mainly responsible for the review, supervision and management of the projects which use the special fund, including development of project management measures, organizing the review process on the fund-using project application based on the annual general budget, making suggestion to MOF on the annual budget according to the established budgeting procedures, and, in conjunction with MOF, supervising project implementation and assessing the performance of the projects.

3.2 Establishing national environmental protection fund and founding national environmental protection investment corporation

The national environmental protection fund will be a mixed fund established by government and dominated by government fund for the purposes of controlling pollution, improving environmental quality, promoting socio-economic development, and transformation of economic structure.

The fund will be managed by a fund management agency, i.e. the national environmental protection investment corporation, jointly established by MOF and MEP. The national environmental protection investment corporation will be a non-banking policy financial institution with the corporate status. The Board of Directors (BOD) consisting of representatives from MOF, MEP, and other relevant departments will be established for the corporation. The by-law of the corporation will be developed and the fund custodian bank be identified.

The fund will mainly come from the central government budget including part of pollution fee that has been handed over to state treasury, other special fiscal appropriations, donation of individuals and organization from home and abroad, low interest loan from international financing institutions, other funds approved by the State Council, in which the other special fiscal appropriations can be determined by setting a certain percentage of annual increment of fiscal revenue, or by setting a certain percentage of central tax revenue, such as environment relevant cancellation of export tax refund, vehicle purchasing tax, resource tax, urban maintenance and construction tax, consumption tax, etc. thus stabilizing the fund sources and channels.

The scope of the funds use should be clearly identified. Profit earning by the corporation will be allowed with the condition that certain percentage of the income must be used for environmental pollution control projects. The remaining part of the income can be used for commercial investment, mainly on industrial pollution treatment and other pollution treatment projects that are fund-renewable and profitable.

The way of fund use should be provided. The investment corporation will develop annual plan of fund use; enterprises prepare and submit the application materials; after approval by the Investment Corporation and relevant department the fund can be used for supporting the projects in the form of money award instead of subsidy, low interest loan, and discounted loan, etc.

3.3 Stabilizing fund sources and establishing a performance based mode of fund expenditure

The fund sources include part of pollution fee that has been handed over to state treasury and other budgeted revenue of the central finance. A certain percentage of annual central budget or of the increment of fiscal revenue could be allocated to the special fund of environmental protection, thus ensuring the stable growth of the fund. The way of fund use should be innovated and based on performance. The financial support for pollution control projects could take different mode, e.g. money award instead of subsidy/investment, giving financial subsidy/investment after the completion of the project, in order to maximize the leading role of the special fund of environmental protection in mobilizing the credit capital, social fund and funds from other sources to support environmental

protection projects that conform with industry policies, technology policies, and public interests[2].

3.4 Broadening the scope of fund use and strengthening the leading role of the fund

Broadening the scope of fund use or establishing new special fund earmarked to reward, subsidize, or compensate projects that are of obvious environmental and social benefit and could make comparatively major contribute to the achievement of environmental targets. The fund could be used for rewarding enterprises which have made significant achievement in emission reduction and for supporting the development of environmental industry by subsidizing the production and utilization of environmental equipment. The fund could also be used for compensating the costs incurred by phasing out enterprises, for supporting the implementation of international environmental conventions and addressing environmental issues of historical legacy, for strengthening the guidance in industrial emission reduction and in industrial restructure.

3.5 Intensifying supervision and management of fund, improving the effectiveness of fund use

It is suggested that the benefit evaluation and investment review should be further strengthened in the effort to improve the benefit of fund use[3]. A dual tracing and benefit-evaluating mechanism being in the charge of both financial departments and competent government agencies of the fund-using organizations should be employed for supervising the use of fund transferred from central finance. The financial departments are mainly responsible for special fund budget, transfer payment, and review of the earmarked fund, etc. The competent government agencies are mainly responsible for tracing project development, project tendering, project implementation, and contracting, etc[4]. They are also responsible for intensifying the supervision over the operation of pollution control facilities and the enforcement of penalty against the law-breaching behaviors in the effort to make the constructed pollution control facilities produce environmental benefits.

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