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## Study on restrictive actors of clean development mechanism

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### ABSTRACT

Increasingly prominent ecological and environmental problems in the world, as well as the scarcity of fossil energy, are promoting the rapid development of clean energy investment, the CDM is a effective method to solve this problem. CDM is an important cooperation system between developed and developing countries for protecting environment and energy under the Tokyo Protocol. It is also the only system involving developing on account of the uncertainty of the Kyoto Protocol and the ambiguity of CDM, so it will meet so many restrictive actors during the process, this thesis will study this problem and reveal the reasons to direct clean development mechanism's operation.

### KEYWORDS

Clean development mechanism; Restrictive actors; Development.



## INTRODUCTION

Some scientists has put forward that the industrialized process will hoist global temperature in 20 century, but the climate change was not be paid attentions until 70s in 20 century. IPCC was built in 1988 by UN because more and more governments recognized that global climate change will bring forward crisis. This committee set up science, effect and countermeasure work group to evaluate knowledge of climate change and check up the effect, it will also study out relative polices.

The Kyoto Protocol was subscribed in 1997 in Kyoto, Japan. It is the milepost of environment protection and continuable development for human being, and all of the governments will be supervised in greenhouse gas let.<sup>[1]</sup>

## RESTRICTIVE ACTORS OF CLEAN DEVELOPMETN

### Dilemma of investment and finance

The investment of China clean energy is always in a advanced position in the world, the investment of China clean energy was 1/3 of world clean energy market, about four billions was put in this area. The development of China clean energy is favored by VC and PE, although affected by financing crisis in 2008, the investment of PE is still very actively.

There is a surplus in new energy area since 2012, the investment of wind electricity and photovoltaic has been debased, and it also affected PE's investment's zeal. Solar energy's products can not match a high price, and so many companies load high burden of debt, they face huge crisis. Although the governments have ordered the banks to relax the loan policy, but the commercial banks have to take constrictive policies for the high venture of solar energy industry, for this reason it will bring a vicious circle.<sup>[2]</sup>

TABLE VC/PE scale of investment

|      | Financing quantity (US\$ billion) | Case |
|------|-----------------------------------|------|
| 2007 | 920.12                            | 72   |
| 2008 | 1353.11                           | 74   |
| 2009 | 1611.75                           | 71   |
| 2010 | 1496.44                           | 102  |
| 2011 | 1912.34                           | 90   |
| 2012 | 87.32                             | 10   |

### Common commercial risk

The commercial risks lies in the item period during the stage of design and construction. If the investors can not get full information at the beginning of the item, they can make up this risk by investigation; if the item can not be finished in time, the investors can assign the Turnkey contract to ensure the whole price and time. The biggest question in the stage of beginning and running is that the supplying materials will be rise, if the period is very long, the investors and the suppliers can consult the price and debase the risk of supply.

### Political risk

To get the admission is a very important and necessary tache of CDM. The difficulties of getting permission for the investors depends on the developing countries. The investors can protect themselves by different measures: first they must find out which kinds of permissions are needed and which organs can provide the permission, then they must know how much fees will be spent. The investors maybe will face a bigger risk which come from law's change, such as price control, taxation and import and export control. Moreover the new environment law in the developing countries can also affect CDM items. Imposition and confiscation are the common and complicated risk faced by investors. Because there is a long time between the investment and getting profit, the item can be disturbed and interrupt by government, for this reason, the investors can take preventing and make up measures to deal with such risk.<sup>[3]</sup>

Another question coming with CDM is that if the CERS can be regarded as asset. The CERS can not be regarded as tangible asset in most times, because it is not materialized, and we can not really give it a conception and evaluate its value, but CERS is a kind of mining materials, so it is necessary for the investors to know relative regulation of host countries about mining materials.

### CDM's self risk

Because it need a series of long and complicated procedures from the beginning to the end assigned by EB, any mistake during the period will lead failure of the item. The basic condition of registration for CDM is permitted by host country, and this permission must be brought to DOE. The organ in China is Development and Reform Commission, the latent risk for investors maybe is the standard of permission has been raised by host country. Although DOE is folk organization, it has the

right to decide CDM item's permission for it is the approving organ of EB. EB will issue the permission approved by DOE. If the investors have the item's ownership, CERS will be the key factors for the permission by DOE.

Methodology is a kind of measure to calculate the outlet quantity, if it is approved by EB, it can be applied in other items, so if the CDM can be approved, it depends on the application of methodology, because EB will check if the CERS is calculated by relative methodology.<sup>[4]</sup>

Leakage is the net change which can calculate an attribute GHG of CDM, if the GHG is rising, we can deduct this kind of outlet from the whole item, so that the CERS's approving quantity is debased. The calculation of leakage is complicated, because this kind of outlet is outside the limit and it won't be checked by relative organ, so we can not know if it is the additional outlet by the item.

### RELATIVE COUNTERMEASURES

(1)As one of the biggest carbon transition countries, China has not built a intact carbon transition market, and it has no right to make a price. For the complex of CDM's approved, it is very difficult to register in UN, so we can open our country's carbon transition market and perfect transition mechanism and relative policies.

(2)Develop other clean energy area and invest technology and R&G'

The government should restrain the status of exceeding produce, and check the program of new item strictly. It should encourage other clean energy's development and pay more attentions to wind electricity. For the solar energy depends on import and we should invest on new technology area.

(3)Transform to environment protecting company and strive for government's sustain

China Development and Reform Commission (CDRC) has pointed that solar energy and wind energy are not the main body of investment, the check of pollution and administration will take instead of new energy. The item will try its best to transform from clean energy to environment protecting companies and strive for government's sustain.<sup>[5]</sup>

(4)the government will supply public service by allowance and fund

The global warming and relative law will bring negative externality, this kind of externality's rectified will depend on government's intervention and the most effective measure is supplying public service by allowance, fund and training.

### CONCLUSION

CDM is still in the stage of perfection, for its ambiguity and uncertainty, both sides of transition face so much risk during the process. Although the clean energy will become the focus in the future, there are so many obstacles such as financing shortage, political risk, law risk. Most risk comes from no familiar with the international market and opponent, understanding such risk will help CDM's progress for a better direction.

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