TOWARDS SUSTAINABLE PUBLIC PROCUREMENT IN CHINA: POLICY AND REGULATORY FRAMEWORK, CURRENT DEVELOPMENTS AND THE CASE FOR A CONSOLIDATED GREEN PUBLIC PROCUREMENT CODE

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ABSTRACT

There are great potentials for the development of sustainable public procurement policy in China given the huge size of the Chinese government procurement market, and the unprecedented political and legal environment for such developments. However the current systems are flawed in a number of ways. First, the means to implement sustainable procurement is only limited to that of the ECP List and ELP List, and the implementing effect of the systems themselves is doubtable. Second, the compulsory procurement system has too strong an effect of exclusion and has a problem of legitimacy under the Chinese laws on government procurement and accreditation. Third, the parallel legal framework for the Chinese public procurement may present some problems for wider application of the green procurement policy; fourth, the existing procuring function and its organization is weak and uncertain greatly weaken the possibility for the whole procurement links to consider sustainable factors. Finally, the inherent conflicts between sustainable procurement objective and other objectives may also bring difficulties for implementation of this policy, setting challenges for the implementing capability and development of professionalism.

To effectively implement the green procurement policy and better exploit the potential of sustainable procurement, it is submitted that green procurement policies are implemented through "*procedural extension*" and "*coverage expansion*" of the current green procurement systems and these aspects are consolidated into a

sustainable public procurement code. The proposed Code will embrace the concept and framework of sustainable procurement, and confirm, clarify, coordinate and improve the current green procurement systems and thus contributes to the sustainable development goals in general. Specifically the Code will not only attain the features of the "Procedural extension" and "coverage expansion" discussed in this paper, but also incorporate all aspects of the green policy provided in laws and regulations on energy, environment and resources, and laws on government demand, production, consumption and disposal and the whole supply chain. The Code could be in the form of hard law, or alternatively in the form of a soft law, in which case better policy awareness, coordination, certainty, and consistency can also be achieved.

1. Introduction

Sustainable Procurement is a process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits, not only to the procuring organization, but also to society and the economy, whilst minimizing damage to the environment.[1] Specifically speaking, sustainable procurement takes into consideration not only the purchase cost of the goods or services but also their whole lifecycle cost. Sustainable procurement requires that the possible effects the goods may produce in the whole course of possession on economy, society and environment be taken into the procurement policy making process.

Sustainable procurement indicates that the government supply chain and public service will become more and more low carbon, low rubbish and energy/water conservation, and beneficial to broader sustainable development goal. It also means the construction and management of government asset facilities may take a sustainable policy, reducing carbon emission, waste and consumption of water, and increasing energy efficiency. [2]

In China, sustainable procurement is not a legal concept under the current public procurement laws or other related laws. However, the development in politics and laws in recent years has provided strong political justification and legal basis for sustainable procurement. Remarkable developments for sustainable procurement are also taking place in practice in China.

The second part of this paper reviews the main developments of Chinese laws and regulations towards green energy and environment policy, and analyzes their implications for government procurement.

It is submitted that the development of green energy and environment-friendly policies have given impetus to the government procurement of energy efficient and environment friendly products; compared with those market regulatory tools aiming at implementing policies of green energy and environment development, public procurement may provide a more effective tool, i.e. by integrating the green policy into main procurement decisions of each individual contract, regulation through contract provides a more effective means of implementation of the green policies.

Part three then analyzes the main current systems that are in place to implement green procurement policy, i.e. the preferential or compulsory procurement of products that are listed in Energy Conservation Products List for Government Procurement (ECP List) and Environment-labeled Products List for Government Procurement(ELP List). It is found, through a careful analysis of the design and operation of the system, that the preferential or compulsory list is more that of a qualification system for ECPs and ELPs than that of a system that is of any meaningful implication for the listed products in the most important procurement award decision. It is therefore argued that the effectiveness of the system is doubtful and there is a problem of legality for such compulsory system under the current Chinese laws on government procurement and accreditation. The concern is further supported by our findings through several site interviews. Part three also reviews the institutional design of the procurement function in relation to green procurement and it is submitted that the existing procuring function and its organization greatly weaken the possibility for the whole procurement links to consider sustainable factors.

It is therefore submitted that green procurement policies are more effectively implemented through “procedural extension”-integrating the green procurement considerations through out the whole acquisition process decisions -and “coverage expansion”-through the expansion of coverage of green procurement. Part four then analyzes the “procedural extension” aspect of green procurement, with a focus on the three milestone processes that may have major implication for green concerns: green demand, technical specification with a particular attention to the procurement law issues of green labels and award decision with a particular attention to the issues of award decision based on whole life cost. It is submitted that the best green procurement is no procurement and therefore it is crucially important for government to carefully review and control government demand to avoid improper demand and procurement. While the Chinese procurement laws have little impact on demand review and control, other laws and regulations are evolving towards green government demand control, though rather relaxing. It also reviews the Chinese

procurement rules that govern technical specification with a particular discussion on the procurement law issues of certification of energy efficiency products for government procurement. It is argued that the current green procurement system which makes listed products a must to enter government procurement market and establishes the government designated organization as the sole recognized certification organization may have the negative effect of unrealistically increasing the burden of green suppliers and unduly restrict competition. Since the advantage of most of the green products lies in whole life costing, it is also argued that a whole life costing method be adopted in award decision. Part four further discusses coverage expansion aspect of the proposal. It is observed that current government green procurement system only covers products and therefore it is argued that the green procurement requirement be expanded to cover both service and works procurement. The legality of the expansion could be solved by a broad interpretation of Article 9 of the Chinese government procurement law which implements a general social and economic policy through procurement. A review of related laws and regulation governing works procurement also reveals that many aspect works procurement are actually governed by other area of laws which can be incorporated into a broader concept and framework of green government procurement law.

Part five concludes. It discusses the potential to establish sustainable procurement and green supply chain through government's buying power. It is observed that the current procurement laws and regulations do not implement a concept of sustainable procurement and green supply chain. a number of challenges can be observed through the current procurement law and revealed during out site interview; one, procuring entities are not aware of concept, means and tools of sustainable procurement including those legal requirements provided for under other areas of laws which are actually an integral parts of sustainable procurement; two, parallel legal framework for the Chinese public procurement may present some problems for wider application of the green procurement policy; third, the existing procuring function and its organization is weak and uncertain and may greatly weaken the possibility for the whole procurement links to consider sustainable factors. Finally, the inherent conflicts between sustainable procurement objective and other objectives may also bring difficulties for implementation of this policy, setting challenges for the implementing capability and development of professionalism.

To address these challenges, it is submitted that there is a strong case for the development of a consolidated green public procurement code. The proposed Code will embrace the concept and framework of

sustainable procurement, and confirm, clarify, coordinate and improve the current green procurement systems and thus contributes to the sustainable development goals in general. Specifically the Code will not only attain the features of the “Procedural extension” and “coverage expansion” discussed in this paper, but also incorporate all aspects of the green policy provided in laws and regulations on energy, environment and resources, laws on government demand, production, consumption and disposal, and the whole supply chain as well. The Code could be in the form of hard law, in a sense that the law is binding and as such a law reform program must be initiated by the national legislature, or alternatively in the form of a soft law, in a sense that only green procurement guide is provided, in which case better policy awareness, coordination, certainty, and consistency can also be achieved.

2.The political and legal environment for sustainable public procurement in China: a review of recent developments

For the past decades, while China's economy has undergone continuously rapid development the resource and environment problem are becoming increasingly prominent due to the extensive economic growth pattern. It is thus observed that change of economic growth pattern has been a focus of policy on the political agenda and for the past decades concrete measures have been taken to achieve "energy-conservation and emission reduction" objectives in economic development. For example, The 11th Five-year Plan for National Economic and Social Development made in 2006 set binding targets for the 11th Five-year period (from 2006 to 2010), i.e. the GDP unit energy consumption is to be reduced by 20% and total sum of main pollutants emission cut down by 10%.[] At the same year, the State Council published its Decision for Strengthening the Work of Energy Conservation, setting down a series of policies and measures to promote energy conservation and emission reduction. [3]

Another move towards sustainable development derives from the Chinese government measures to cope with "climate change" as the global issue of climate change is becoming more and more pressing. In June 2007, the State Council set up a national steering group charged with the responsibility of coping with climate change and achieving the objectives of the energy conservation and emission reduction[4]. In the following months the National Plan for Coping with Climate Change was formulated[5]. Two years later, the national legislature was also on the move: it heard and reviewed the State Council's Work Report on Dealing with Climate Change and urged the executive to place sustainable development high on the agenda of national strategy for industrialization and modernization and take effective measures to cope with climate change. [6] In November, 2009, the State Council made a decision setting up the concrete target for emission reduction to control the emission of greenhouse gases and making it a binding index of long and medium term planning for national economic and social development. [7]

Meanwhile, a number of laws were enacted to implement these sustainable policies in recent years, including the Law on Promotion of Clean Production (2002) [8], the Law on Renewable Energy(2005) [9], the Law on Energy Conservation(2008), State Council Regulation on Energy Conservation by Public Entities(2008), [10] State Council Regulation on Energy Conservation in Civil Construction(2008) [11], and the Law on Promotion of Recycled Economy(2008) [12]。

All these laws, inter alia, granted the government procurement an important role to play to achieve sustainable development goals, requiring preferential or compulsory government procurement of energy-conservation or environmentally labeled products. For example, the Law on Promotion of Clean Production (2002) requires government give preferential consideration in its procurement for those energy-conservation, water-conservation and waste-utilization products The Law on Energy Conservation requires public entities give preferential treatment in their procurement to those products and equipment that are on the government procurement list of energy conservation products and equipment(referred to hereafter as ECP List) when purchasing energy-consuming products or equipment. The Regulation on Energy Conservation by Public Entities goes even further by requiring compulsory procurement of energy-conservation products. According to this Regulation, public entities should comply with the state's stipulation on compulsory or preferential procurement, and procure products and equipments that are on the ECP List and Environmentally-labeled Products List for Government Procurement(ELP List) and not procure those energy-consuming products or equipments clearly eliminated by the state[13]. The Regulation also requires that the State Council and provincial governments give priority consideration to those products and equipments with attestation certificate for energy-conservation when preparing the ECP List, and put the products and equipments on the ECP List into the Centralized Procurement Catalogue (CPCatalogue)[14]. The Law on Promotion of Recycled Economy requires governments set up target responsibility for cycled economy, and take such measures as planning, finance, investment and government procurement to promote the development of recycled economy. [15] It also provides for a government procurement policy that is advantageous to the development of recycled economy and requires preferential procurement of products that are energy-, water- or, material-conservation and environment-friendly products and renewable products. [16]

The development of these policies and laws provides favorable political environment and legal foundation for the implementation of sustainable procurement, and thus offering huge potential for sustainable development in China. Firstly, government, whose procurement roughly accounts for 15-20% of a country's GDP[17], is itself a giant consumer. By using its purchasing power to opt for goods and services that also respect the environment, it can make an important contribution towards sustainable development. Green purchasing is also about setting an example for others and influencing the market place. By promoting green procurement, public authorities can provide industry with real incentives for developing green technologies. In some product, works and service

sectors, the impact can be particularly significant, as public purchasers command a large share of the market (in computers, energy-efficient buildings, public transport, and so on). Secondly, **public entities are a creator of the market for green energy and environment-friendly products**. The market competition mechanism pursued by public procurement itself could help generate market mechanism for green products. The scale of government procurement can also help green energy suppliers realize scale economy, cutting down the cost of those green energy and environment friendly products, and thus speed up the differentiation of green market. Last but not least, Sustainable procurement can even create a new kind and more effective regulation through supplier compliance of individual contract that requires green product and service through out the whole supply chain. Effectively enforced regulations – e.g., energy efficiency standards for appliances – could in principle achieve a similar outcome. Problems arise, however, where government's enforcement capacity is weak or where, due to political lobbying by affected industry groups for example, legislation or regulation may be blocked. In contrast, contract regulation provides an effective instrument to attain the green goal by enforcing green requirement through individual contract terms and conditions to which suppliers must comply. The incentive for supplier compliance of green procurement and supply chain is apparently true given the immense government's buying power and the risk of exclusion from government procurement market or lost of contract in case of noncompliance. The effectiveness of this mechanism is further strengthened by the peculiar bid protest system that is available to the aggrieved suppliers. If public entities or the successful suppliers fail to comply with these green procurement requirements, the disadvantaged supplier may file a complaint for redress, a private enforcement mechanism which would effectively implement the proclaimed green policy in individual contract.

However, as will be argued in part 3 and 4 below, the effectiveness of the current green procurement systems is limited and that further reform is needed to realize the huge potential of sustainable procurement.

3. Current Developments for Sustainable Procurement and Assessment of the Enforcement Mechanism

3.1 The government procurement system for ECPs

3.1.1 Legal foundations for government procurement of ECPs

The Chinese Government Procurement Law(GPL) enacted in 2002

stipulates in article 9 hereof that "Government procurement shall be conducted in such a manner as to facilitate achievement of the economic and social development policy goals of the State, including but not limited to **environmental protection**, assistance of underdeveloped or ethnic minority regions, and promotion of small and medium-sized enterprises." While the provision does not literally provide for procurement policy for energy-conservation product, it could be argued that such policy can be founded on this provision since energy conservation policy is an environmentally sensitive policy, and is thus clearly inseparable from environment protection policy. In other words, procurement policy for environmental purpose under article 9 can be interpreted broadly to apply to green energy procurement policy. A more expansive approach would be to interpret the foundation of procurement for green energy related products under the procurement law against the broader context of "economic and social development policy" that the article seeks to promote as green energy policy is apparently one of the focuses of national policies and strategies for sustainable development, as discussed in part 1.

In fact, it was with the remarkable developments of the government procurement law and the energy conservation policies that the current system for procurement of ECPs. [18] .The later enacted Energy Conservation Act(2008) places the issue of energy conservation on" the first priority of the national energy development strategy" and explicitly requires public entities to give preferential procurement consideration to the products and equipments on the ECP List. These developments indicate that the significant development of energy conservation policy and law itself has endowed government procurement with an important role to play, [19] and government procurement policy for energy conservation ***products*** is well founded on the energy laws themselves and doesn't necessarily need to rely on the interpretation of the government procurement law. However, the case is different when works and service procurement is concerned as the energy laws provide for government procurement policies only for products (see further discussion in part 5.2).

3.1.2 Preferential system for procurement of energy conservation products

The current system of government procurement of ECPs was formally implemented in December 2004 when the Ministry of Finance(MoF) and the National Development and Reform Commission(NDRC) jointly published the Opinion on Implementing Government Procurement of Energy Conservation Products(ECP Opinion). According to the ECP Opinion, government purchasers shall accord preferential consideration to ECPs in their procurement,

and gradually phase out those products of low energy efficiency.

By the ECP Opinion, categories of ECPs that fall under the scope of government procurement are determined and published in the form of ECP List which will be duly updated, expanded and published. The categories are jointly selected by MoF and NDRC from the certified ECPs by the state-approved ECP certification agency considering the comprehensive circumstances such as government procurement reform process, and technology and market maturity for ECPs. The **Circular on Establishing System of Compulsory Government Procurement of ECPs further requires the authorities to formulate the ECP List in a scientific way and lays down the conditions for inclusion:** firstly, the listed products should be ECPs certified by state-accredited certification agencies with prominent energy conservation effects; secondly, the product should be mass produced with mature technology and reliable qualities; thirdly, the product should have a sound supply system and an excellent after-service capacity; fourthly, suppliers of the products should meet the requirements of government procurement law for the suppliers of government procurement.

3.1.3 The nature and value of "preferential" ECP List

According to the ECP Opinion, government entities are required to give preferential consideration to energy efficient products fallen under the ECP List in their procurement decision provided that the level of technology and services of that product can satisfy the purchase requirement. The procuring entities are also required to clearly stipulate, in the bid document (including the documents for negotiation under the negotiated procedure and for request for quotation as applicable), the energy efficiency requirement for the products, the range of preference accorded to the ECPs and the evaluation criteria and methods.

By the ECP Opinion, preferential consideration may be applicable where the level of technology and services of that product can satisfy the purchase requirement. This provision seems to indicate that the procurer needs to set up minimum technical requirement. Two circumstances can be envisaged as to the approach to applying the preferential requirement and both are related to the purchaser's requirement. One is the case where there is no requirement for energy efficiency in relation to their demand specification, which entails products outside the ECP List (including non ECPs and ECPs not yet on the ECP List) eligible for the bid. Then a criterion of energy efficiency is included in the succeeding award decision, to the advantage of ECPs and the products with higher energy efficiency, and the weight accorded to it against the comprehensive evaluation criteria. While a product on the ECP List does have an advantage in

award decision in relation to the energy efficiency criterion, it does not necessarily mean that the supplier of ECP or the product with higher energy efficiency will win the contact since award decision is generally based on comprehensive factors. A non ECP could win the contact and an ECP that is not on the ECP List could also win the contract if it is more competitive based on the comprehensive evaluation criteria. Then the value of the ECP List is questionable in relation to the preferential policy for procurement of products on the ECP List, in a sense that products outside the ECP. List may win the contract.

Under the second circumstance, the specification of the purchaser "demands" does include a requirement for energy efficiency and the preconditions for applying the "preferential treatment" again indicates that the requirement for energy efficiency in technical specification is still a basic requirement so that more energy-efficient products are eligible for bid. Then in the succeeding award decision, a bigger margin of preference is given to those with higher energy efficiency. Under this circumstance, none ECPs are not eligible for bid and competition is among the ECPs. While products with higher energy efficiency may enjoy an advantage in relation to the criterion for energy efficiency and its relative weight against the comprehensive evaluation criteria, the eventual successful bid is still based on the outcome of the comprehensive evaluation process. Again, the products on the ECP List may win the contract and the products outside the ECP List may also win the contract. In this sense, whether a product is covered by the List is not of actual significance.

3.1.4 The system for "compulsory" procurement of ECP

As is in line with the above analysis, products on the ECP List are sometime losing the bid to non listed products in practice, rendering the effect of the preferential procurement policy for listed ECPs void. Policies and measures thus developed later to rescue this situation. In June 2007, the State Council published the Comprehensive Working Plan for Energy Conservation and Emission Reduction, which requires explicitly that the government agencies strengthen their measures for energy-conservation and green procurement and institute a new policy of compulsory procurement for energy-,, water-conservation products and ELPss. A later Circular establishes the categories of such products for compulsory procurement asterisked within the ECP List. [20] The Circular also lays out the principles to be followed while determining the categories of products for compulsory procurement: firstly, the products are for general purpose use, fit for centralized procurement and have better scale economy; secondly, they have prominent effectiveness in

energy efficiency and remarkable value for money; thirdly, there is sufficient supply of such products with a perood of minimum 5 suppliers, to ensure adequate products competition and .scope of purchaser selection.

By May 2009, the categories of products for compulsory procurement under the 5th ECP List covers air conditioners, lighting products (including both-ends fluorescent lights, self-blast fluorescent lights, one-end fluorescent lights and pipe-shaped fluorescent lights blasts), televisions, electrical water heaters, computers, printers, displays, toilets and water injection well chokes.

3.1.5 Nature of the "compulsory" ECP List and the related procurement policy issues

3.1.5.1 The compulsory list as a list of eligibility and the strong effect of exclusion

As can be observed, the purpose for establishing the compulsory list system for ECPs is to strengthen the measures to promote government's energy-efficiency policy through government procurement. Under this system, in purchasing the goods covered by this list, the procurers can only select from those on the "compulsory" ECP List.The "compulsory" list is then in effect a qualified supplier/product list. Those not included in this list will not have opportunity to enter the government procurement market. Notwithstanding this list is "open" and adjusted regularly."

While it may be a good practice to maintain a list of approved list of suppliers/products in government procurement, the compulsory list attains a nature of too strong exclusion, which entails with it an issue of legitimacy under the procurement laws. Firstly, the requirement that the products must be accredited to be eligible for the government procurement market excludes other evidence of product energy efficiency. From the perspective of a sound public procurement law, when the purchaser establishes the list, it adopts the evidence that the covered products are ECPs. With certificate of accredited ECP and the fact that its product is included in the list, a bidder can evidence to a purchaser that its product is qualified ECP (and the degree of efficiency) and eligible for participating in particular procurement and granted preference. The advantage of this practice towards procurement efficiency is obvious since it provides much assurance for purchasers of the information about the scientific attributes of the products involved on its energy efficiency. However, the fact that a product is not included in the list can not preclude suppliers from furnishing the purchasers other sources of evidence for the energy-efficient attributes of a certain product in a particular procurement. In other words, the requirement for only admittance of "attested" evidence and the exclusion of other source of evidence

involves an issue of legitimacy under the government procurement law.

Secondly, the compulsory list also excludes the authority of other certification agencies which entails with it another element of legitimacy under both the attestation law and procurement law. As will be discussed later in part 4.1.2, the current Chinese laws and policies on certification is aimed at establishing a competitive certification system in China, and the certification by nature and by the legal definition under the Chinese law only attains with it the effect of evidence of scientific attributes of a certain product involved. In other words product certification is voluntary and suppliers are free to decide whether or not and where to have their products certified, or alternatively furnish the purchasers other sources of evidence. Therefore, the requirement for only admitting one certification agency and excluding others is not in line with the current Chinese law and policy on certification and the fact of excluding other sources of evidence with the effect of supplier exclusion in a particular procurement is not in line with sound procurement rules.

3.1.5.2 The requirement for consideration in bid evaluation and the counter effect of conflicting policies

While the motive for a suppler to have its product accredited and admitted in the list is to win government contract, whether it can in reality win the contract depends on its competitiveness in relative to its competitors. There is a clear requirement on purchasers to consider adequately product energy efficiency in evaluation criteria which must be provided in the bid documentation and presumably a higher score is given to product with higher energy efficiency.

However to what extent the energy-efficient policy is promoted in award decision depends on the weight of the criteria for energy efficiency in relative to other criteria in the comprehensive evaluation system. It is also relevant to accord higher score to product with higher energy efficiency for the purpose of promoting energy-efficient policy. Another way to promote energy-efficiency policy in the award decision is to base the economic decision on whole life cost rather than the purchase cost only. However, our field interviews reveal that the relative weight of the criteria for energy efficiency is low, ranging between 5-8%; almost all award decisions are based on purchase cost, which to a great extent counteracts the advantages the higher energy efficient product enjoys since in many cases products with lower energy efficiency are more competitive in relation to purchase cost; It is also found that in many cases all listed products are given the same score for simplicity of appling the legal

requirement, irrespective of the degree of energy efficiency. Therefore it can be argued that the effectiveness of the compulsory list is limited. To make it worse, in some of the reviewed cases, the energy performance of the evaluated products are not considered at all in the award decision due to the alleged conflict of policies arising from a MOF Circular prohibiting further consideration of a factor once it has been used as an eligibility criteria. [21]If this understanding is right, the compulsory list is in effect reduced to an eligibility list only, and consideration of energy performance of the products in the award decision is excluded, which greatly defeats the policy objective that the system intends to achieve.

3.2 . The government procurement regime for ELPs

3.2.1 System of "preferential" procurement of ELPs

In order to fulfill the requirements of the government procurement law and related environment protection law and policies[22], on October 24 of 2006, the then National Environment Protection Bureau (now the Ministry of Environmental Protection, or MEP)and MOF jointly published the Opinion on Implementing Government Procurement of ELPs and the List of Government Procurement of ELPs (ELP List), a milestone development of China's green procurement policy.

According to this Opinion, MOF and MEP co-determines the scope of preferential procurement by category from among the ELPs certified by government-recognized certification agencies in the form of "ELP List" after taking into consideration the level of market maturity, the progress of government procurement reform, and the degree of technological development of each product. The first ELP List included 14 categories of products with 856 models from 81 enterprises. It has since been updated each year, most recently in March of 2010. The fifth version of the list contains 24 different product types. [23]Although there is some overlap between the ECP List and ELP List (e.g. TVs, computers, printers, monitors, photocopiers, solar water heating systems, building materials, and faucet taps), there are a number of product types unique to the ELP List, including building materials, furniture, paints, solvents, and ceramics.

The Opinion requires all level government agencies give preferential consideration to ELPs in their procurement with fiscal funds and not to procure products hazardous to environment and human health. If the type of products to be purchased by the purchaser is covered in the list, preference should be given to those listed products provided that the performance, technology, service and other indexes are the same.

In conducting the procurement, the government purchaser should clearly state its environment protection requirement for the products, the qualifications to be achieved by suppliers and their products and the assessment criteria for preferential procurement. Later in a Circular published by the MOF and MEP on adjustment of the list, the system for preferential procurement of ELPs is preserved and its relationship with the ECP List is coordinated. [24] It is stipulated in the Circular that "if the products to be procured by the procurer fall under the scope of the government's compulsory ECP List, procurement should be made from among the ECP List. Those covered by both the preferential lists should be given priority over those covered by only one preferential list." Meanwhile, the Circular further extends the preferential requirement for ELPs to government works procurement: "*Government works procurement should strictly implement the system of government preferential procurement of ELPs*. In determining the main contractor, a procurer and its associated procuring agent should unequivocally fulfill the requirement of the government policy of procuring ELPs."

It should be noted that although the State Council's Comprehensive Working Plan for Energy Conservation and Emission Reduction (issued in June 2007) provides for a *compulsory* requirement for the procurement of high energy efficient products, water efficient products and *ELPs* for office facilities(such as air conditioners, computers, printers, monitors, copy machines), lighting products and water utilities, the compulsory procurement requirement under the current regime for procurement of ELPs is only confined to energy and water efficient products and not to ELPs so far.

3.2.2 Commentary on the system of "preferential" procurement of ELPs

As the policy of preferential procurement of ELPs is implemented in very much the same way as that of ECPs, readers are kindly referred to part 3.3 of this paper for comment on the effectiveness of the preferential procurement system for ECPs.

3.3 The weakness of institutional design and the procurement functions

Sustainable procurement requires the needs for goods, services, works and utilities be met in a way that achieves value for money on a whole life basis in terms of generating benefits to the organisation, society and the economy, whilst minimising damage to the environment. The allocation of the Chinese procurement function is however confined which delimits the possibility of sustainable policy consideration based on the whole life-cycle process. The issue can be observed from both ***horizontal*** and ***vertical*** perspectives and proposals for further reform are made accordingly.

3.3.1 The *horizontal* perspective of the Chinese Procurement Functions under the GPL

A horizontal perspective of procurement function looks at how procurement is organized among different parts of governments, and to be specific, how government procurement is centralized or decentralized. Despite of the different arguments on the advantages and disadvantages of centralized and decentralized procurement, it is general recognized that the greater the importance of the procurement activities, the more centralized decisions tends to be. Since environmental management and protection is a major challenge for societies, and can now be considered core for many governments, centralization can play a key role in promoting green procurement policies and establishing an appropriate common standards. The positive effects produced by purchasing environmentally sustainable items through local units can be magnified by large-scale centralized procurement. [25] Thus it can be argued that there is a need for centralizing government procurement for the purpose of green procurement.

Under the Chinese government procurement law, a combination of centralized and decentralized procurement organization is implemented. The law establishes a central procurement agency but confines the scope of its procurement business only to those defined by a Centralized Purchasing Catalogue(CP Catalogue) [26]…supposedly to the procurement for general purpose use. While there is clear policy-maker's intent to centralize the government procurement, the development of government centralized procurement function has proved much more complex. The CP Catalogue, which is prepared by MOF and approved by the State Council at central level and provincial government at local level, proves to be very political, in a sense that the purchase business of different parts of government is actually divided by the mechanism. It can be observed at central level that the supervisory authority (MOF) is also supporting a number of other government departments to set up their own central procurement centers, to the effect that much of the procurement business is allocated among the various procurement centers. At provincial and local level, the organizations of the procurement function are varied, with some government procurement centers subordinated and attached to different part of the government. Some even contract out the procurement function relying commercial procurement company to conduct government procurement. It is thus observed that the position of the centralized procurement center is to a large extent week and uncertain and the benefit of centralized procurement function is yet to be exploited. The situation is further degenerated by the limited scope of procurement competence granted to it by law.

3.3.2 The *vertical* perspective of the Chinese Purchasing Functions under the GPL

Public procurement is by no means confined to the purchase function, rather it is a process which may begins at a point where the procurement needs are established and includes the description of requirements to satisfy the needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, disposal of waste and the impact of this process could be conducted through out the whole supply chains. A vertical perspective of the procurement function looks at how the whole procurement process, from demand management down to the whole supply chain, is divided among different parts of government and the scope of procurement competence granted to the procurement centers who are supposed to be the professional buyers for the government.

The concept for sustainable public procurement requires for integration of energy-conservation/environmental consideration into the whole process decisions, including the definition of government needs for procurement and technical specification, supplier selection, contract terms and conditions, contract performance compliance and even down to the whole supply chain. However, the Chinese public procurement laws to a great extent regulate only the award process and the centralized procurement function is confined to the act of purchase. Such function can not have much say on the definition of government needs and the best way to satisfy the needs; neither can it be involved in contract performance. The limited scope of purchase competence could substantially debilitate the capacity of the procurement function to exploit the potential of sustainable procurement.

3.4 Assessment of current developments: a summary

To assess the effectiveness of the current Chinese green procurement systems requires quantitative data which is lack at the moment. Without this data, the only way to evaluate the efficacy of the systems is based on published laws and regulations rather than concrete results. A number of observations can be made based on the regulatory analysis with assistance of site interviews:

First, the means to implement sustainable procurement is only limited to that of the ECP List and ELP List, and the implementing effect of the systems themselves is doubtable. Second, the compulsory procurement system has too strong an effect of exclusion and has a problem of legitimacy under both the Chinese laws on government procurement and accreditation. Third, the existing procuring function and its organization greatly weaken the possibility for the whole procurement links to consider sustainable factors.

To effectively implement the green procurement policy and better exploit the potential of sustainable procurement, it is submitted that green procurement policies are implemented through "procedural extension" and "coverage expansion" of the current green procurement systems and these aspects are consolidated into a sustainable public procurement code.

4. Towards a Consolidated Sustainable Public Procurement Code: Procedural Extension and coverage expansion

4.1 Integrating the green procurement considerations through out the whole acquisition process: the Procedural Extension

As is discussed earlier, a more effective approach is to integrate the green procurement consideration into the whole acquisition process. This part will focus on the three milestone processes that may have major implication for green concerns: green demand, technical specification with a particular attention to the procurement law issues of green labels and award decision with a particular attention to the issues of award decision based on whole life cost.

4.1.1 Regulatory framework for green government demand

4.1.1.1 Managing procurement demand

Green purchasing is not always about buying greener products. It may simply means buying less. One should bear in mind that the greenest procurement is no procurement. Thus if there are chances to control government or even reduce demand through careful management of the demand and internal reallocation of government assets and resources it would contribute to sustainable procurement as well as value for money. However, government procurement law is generally more concerned with regulating on how to purchase and less likely to control government demand. In China, for example, rules regarding government demand management are generally provided in the regulation on state assets management.[27] The regulations provide for the general principles that executive agencies must follow while deciding the acquisition of assets, including, inter alia, the demand being appropriate in relation to their function, and frugal;[28].it also place much emphasis on internal reallocation of assets to reduce the case for purchase(article 13).[29] it specifically requires a policy of preference for internal adjustment and renting, rather than purchase, to satisfy government demand for general purpose asset for important conference, large mass activities and contemporary works.[30] while it is plausible that rules one government demand control are in place, it's implementation may be

relaxing and varied among departments given the lack of sufficient political checks and general nature of the rules which entails with it much discretion for the user departments.

4.1.1.2. Setting green government demand：the impact of Chinese environment and energy laws on green government demand

The green standards that the relevant Chinese environment and energy laws establish will have great impact on the government procurement demand.

Firstly, there are national standards for energy efficiency. State establishes the compulsory standards for energy efficiency for construction; the State also establishes the standards for new and renewable energy. The State institutes energy efficiency label system for household appliance, verification system of the level of energy efficiency for product and equipment. The state also provides for the product catalogues that are prohibited for use. Purchasers must follow these legal requirements and conform to these standards when determining procurement demand and formulating technical specification.

Secondly, there is an evaluation and review system for environmental impact and energy efficiency. For example, the Clean Production Promotion Act requires an environmental impact evaluation for new, renovation and expansion construction project. [31] The energy laws require an evaluation and review system for fixed asset investment project. Projects not conforming to these compulsory energy efficiency standards will not be approved or ratified for construction, and if constructed, not allowed to put into operation[32].the evaluation and review system also requires stringent control of the construction scale and standards of the public entities. [33]

Thirdly, quota for energy consumption is formulated. The Energy Conservation Act (Article 16) requires government formulate quota for energy consumption based on the comprehensive level and nature of energy consumption by public entities in relative to different lines and sectors and the financial departments of government formulate the standards for energy consumption expenditure by public entities based on such quotas. [34] The Regulation on Energy Conservation by Public Entities (article 17) requires public entities to use energy within the scope of the allocated energy consumption quota and strengthen the management of energy consumption expenditure; meanwhile, the Regulation on Energy Conservation in Civil Construction(article 21) requires the property owners of government office buildings and large public buildings to test and mark the energy utility efficiency of the buildings and publish the test result according to relevant state regulation and receive social surveillance. [35] Such requirements may be of great impact on the subject matter

and technical specification of the new construction contract and alteration contract for existing buildings. [36]

4.1.1.3 Is there a case to regulate procurement demand through public procurement law?

As is discussed above, to exploit the benefit of sustainable procurement it is crucially important for government to carefully review and control government demand to avoid improper demand and procurement. While the Chinese procurement laws have little impact on demand review and control, other laws and regulations are evolving towards green government demand control. However, the effectiveness of the current system is limited in a number of ways. Firstly, there is less stringent budget control under the current political and administrative system, therefore the effectiveness of budget and demand control through budget rules is limited; secondly, the current rules on demand control is provided for at ministerial or lower level, meaning they have a lower effect and their enforcement may be weak; thirdly, the rules are very general leaving ample discretion to the user departments and taking with it much colors of self regulation. Therefore the formulation and implement of these rules may be easily captured by interest parties including the user departments. Last but not least, the green requirements on demand scattered in different regulations other than the procurement laws may not be discernible to the procurement function at all, which is the case from our site interviews with many procurement officers who are too much possessed with procurement rather than other area of laws. Therefore it is arguable that such requirements are consolidated into a sustainable public procurement code. The benefit of this approach is multitudinal. One, it is easily accessible to the procurement function; two, the procurement function is separate from the user department and thus can serve as a vehicle to put check and balance on government demand; third, the procurement function is supposedly the government procurement experts who is better informed as how to satisfy the user demand including the green requirement. Fourth, standardization of demand and economy of scale may be better achieved once demand control is placed with the procurement function.

4.1.2 Technical specifications

Technical specifications lay down the characteristics of the products or services to be procured, such as quality, performance, safety and dimensions, symbols, terminology, packaging, marking and labeling, or the processes and methods for their production and requirements relating to conformity assessment procedures prescribed by procuring entities. [37]Technical specifications have two functions. They describe the contract to the market so that companies can decide whether it is

of interest to them. They also determine the level of competition, provide measurable requirements against which tenders can be evaluated and constitute minimum compliance criteria. If they are not clear and correct, they will inevitably lead to unsuitable offers. Offers not complying with the technical specifications have to be rejected.

4. 1.2.1 Regulation of technical specifications in Chinese laws

The Chinese public procurement laws regulate technical specifications in a number of ways. Firstly, formulation and publish of specification shall conform to the general principles of sound government procurement, in particular the principle of transparency and the principle of non discrimination .where there is a state regulation on technical specification and standards, it shall be provided in the bidding document. [38] The bidding documents may not refer to any particular supplier or contain any other preferential or discriminatory content. [39] State can provide for environment technical specification, safety or health standards provided that they are in line with the principle of transparency.

4. 1.2.2 Types of technical specifications

Technical specification can be classified into two general categories: design-based or descriptive specification, where the focus is on input of the subject matter of the purchase, and performance-based specification, where the focus is on the output of the subject matter of the purchase. A performance-based approach usually allows more scope for market creativity and in some cases will challenge the market into developing innovative technical solutions and international norms on public procurement have a clear preference for performance-based technical specification.. [40]

Specification can also be based on well-established technical standards. For example, one of the important measured adopted under the environment and energy laws to achieve the green policy goal is to formulate and enforce environment and energy-efficiency standards. [41] Purchasers may integrate these environmental and energy-efficient standards into technical specification when formulating the subject matter of contract. For example, the key objectives of control, reutilization and eco-utilization of the so-called waste promoted by the Recycled Economy Promotion Act can be effectively achieved if reutilized products can be purchased by government. As a matter of fact, such legal foundation is well provided for under the Act.[42]

The Chinese public procurement laws do not provide anything on the choice of performance-based specification and technical standards. However it is submitted that performance-based specification be used as green energy market innovation is crucially important for the

development of energy-efficient policy and clearly promoted under the current energy laws. Future reforms of the Chinese public procurement laws will definitely have an important role to play in that it can provide for authorization, clarity and guidance as to the use of performance-based specification and environment/energy-efficient technical standards.

4.1. 2.3.Alternative bid

Purchase may also allow for potential bidders to submit alternative bid if he is not sure whether any green alternatives to the products, services or works he wants to purchase exist, or that he remain unsure about their quality or price. In this case, purchasers firstly establishes a minimum specification, for example a neutral technical specification without requirement for energy-efficiency or the minimum environmental specifications, and then allow bidders to submit alternative bid with green specification or better environment/energy-efficiency performance and compare all bids. The current Chinese procurement acts allows for alternative bids and requires advance provision of such allowance in the tender documents when alternative bid is used.

4. 1.2.4. The issues of use of environment/energy-efficient labels as technical specification

Environmental- or eco-labels criteria are based on studies that analyse the environmental impact of a product or service throughout its life cycle, the 'cradle to grave' approach, based on valid scientific information. Such labels can be used as technical specifications in government procurement；for example, the label of Energy Star [43]is widely used in USA government procurement and Eco-labels are used in EU under the authorization of EU procurement laws. [44] Chinese energy/environment laws establish energy efficiency/environment labels/certification systems, which can be used as technical specifications in government procurement.

4.1.2.4.1 Energy-efficiency/environment labels/certification system

（1）China Energy Label

The Energy Conservation Act provides(article 18) that state institutes energy-efficiency label management for energy-consumption products which are used widely and consuming large quantity of energy such as household appliance. Energy efficiency label refers to an information label which contains with it the grades of energy efficiency and other performance indexes for energy-consumption products. Energy efficiency label is by nature a product compliance label and products conforming to China energy efficiency standards

can use China Energy Label. [45] The manufacturers or importers of the products that fall under the scope of energy efficiency management can test the energy efficiency of their products by using their own testing capacity or otherwise entrusting it to approved testing institutions verified by the state, and establish the grades of the energy efficiency for their products according to national energy-efficiency standards.

（2）energy-efficient product verification system

In addition to the energy label system, China also establishes energy-conservation product certification system. Relevant regulation defines Energy-conservation products as the products that can satisfy the relevant quality and safety standards requirement and the energy efficiency or energy consumption index of which are up to internationally-advanced level or domestically-advanced level comparable to internationally-advanced level in relation to the same products or products with similar functions in social use. [46] The energy-conservation product certification by nature is attestation of a particular product as a certified energy-conservation product. A certification must conform to relevant standards and technical requirement, confirmed by certification institution and evidenced by issuing energy-conservation product attestation certificate and energy-conservation label. [47] Manufactures or marketers can voluntarily apply to the qualified certification institution approved by competent authority for energy-conservation product certification and once satisfying test requirements they are awarded the certificates and eligible to use the certification labels on the products or their packages. [48]

Therefore, the Chinese energy-efficiency label or product certification system is comparable to a typical label or certification system: firstly, it provides scientific evidence that the labeled or certified products are in conformity with relevant technical norms or the compulsory requirement or standards of relevant technical norms. [49] Thus in case of procurement involving green technical specification, it can be assumed that the labeled or certified product can satisfy the specification requirement of government. Secondly, while the energy-efficiency label for defined categories of products is compulsory, the energy-conservation product certification is voluntary. [50] This is true even for those products that must be certified according to national regulations where manufacturers, marketers or importers can voluntarily entrust one of the institutions for certification. [51]

(3) China environment label system

China began to implement an environmentally-label system in 1993

under which third party verification agencies certify enterprises and their products according to the technical standards and verification rules provided by the competent authorities. Based on a number of international standards, including the ISO 14020 standard, and created according to China-specific standards created by the Standardization Administration of the People's Republic of China (SAC), the list contains products that are verified by state-recognized third party verification agencies as free of hazardous chemicals or organic compounds, energy efficient, containing reusable or recyclable materials, and following all national and local laws governing air and water pollution in their manufacturing, packaging, and transport processes. [52] The Chinese government has also maintained a list of environmentally labeled ('green') products for government procurement since 2006.

4.1.2.4.2 The public procurement issues of use of environment/energy-efficient labels as technical specification

As is discussed in part 3, the Chinese green procurement system enforces a compulsory procurement requirement for energy-efficient products. However the system has too strong an exclusion effect and has a problem of legality under Chinese laws on public procurement and certification. It is therefore submitted that when such green labels are used as technical specification—meaning products with these labels are taken as conforming to the greet technical specification, suppliers are also allowed to supply other forms of evidence other than the labels that their products can satisfy the green technical requirement under the particular contract.

4.1.3 Award criteria

4.1.3.1 General provisions on award criteria under the Chinese public procurement laws

Award decision is one of the most important procurement decisions where the contracting authority evaluates the quality of the bids (the offers) and compares prices.

Under the Chinese Bidding law (BL), the successful tender shall either be:

(i) The bid with the lowest price subject to satisfying all substantive requirements provided in the solicitation document (hereafter referred to as the *lowest bid price*). This method should generally be used in the procurement of standard or commoditised goods and common services.

(ii) The bid satisfying all comprehensive evaluation criteria provided in the solicitation document to the greatest degree (hereafter referred to as the *most advantageous method*).

The BL also requires that the award criteria and the evaluation method be specified and published previously in the bid document. It is also required that those criteria be objective and quantifiable and each given relative weighting, or where appropriate be expressed in monetary terms. It is clear that green criterion can well be integrated into the award criteria given the sound legal foundation to promote such policies and discretion that the purchasers enjoy to include criteria they deem to be appropriate. Such green criterion may also be given a weighting relative to other criteria at the discretion of the purchasers. However the effectiveness of integrating green policies into award decision may be limited as purchasers may not be willing to consider such policy or only give less weighting to relative green criterion due to unawareness of such policy or some possible conflict of policies as discussed above. It is also a prevailing fact the price of the bid is based on purchase cost only and not on life-cycle costing (LCC).

4. 1.3.2 Life-cycle costing in award decision

At the award stage of a procurement procedure, the price of a bid is always one of the most influential factors. Life-cycle costing involves including in the award decision all the costs that will be incurred during the lifetime of the product or service including purchase cost, operating costs and end-of-life costs. Compared with the decision based on purchase pricing, award decision based on LCC gives green/energy-efficient product real advantage in award decision as for many such products the competitive advantage lies in LLC not on purchase cost.

While the Chinese procurement laws do not further define the price of the bid, it is observed that only purchase price be considered in practice. Therefore it is argued that LCC approach be employed in award decision so that the green policy objective be more effectively achieved, and such move deserves future regulatory initiative for both clarity and guidance.

4.2 Coverage expansion for sustainable public procurement

4.2.1 Works procurement

Given the importance of green policy and the requirement for consistency in applying such policy, and to effectively exploit the potential of sustainable public procurement in China it is submitted that the requirement for procurement of ECPs and ELPs be extended to cover both works and service procurement. However such initiative may be challenged by the existing parallel legal frameworks for the Chinese public procurement and the legal uncertainty that works procurement is governed by the GPL, which explains to some

extent why the competent authority puts product procurement as a priority of development. Unlike product procurement, there are no direct provisions on government procurement of works and service under the relevant energy/environment laws

However works sector is an important area where green policy can be effectively implemented. For example green policy can be effectively achieved if the design of the building can take into consideration of energy/water conservation and the maintenance cost during the whole life-cycle of the building.

The legal uncertainty of applicable laws on government procurement of works can be solved by improved coordination among competent enforcement authorities for both the GPL and BL.[53] Despite the fact that legal basis for government procurement of energy-efficient/environment-friendly works is not provided directly by the relevant energy/environment laws it can be solved to some extent by a broad interpretation of Article 9 of the GPL, an article requiring the promotion of sustainable development policies generally through government procurement. In addition, the general requirement for energy conservation in works under energy/environment laws[54] may have great impact on the definition of the subject matter and technical specification of contract [55]. It is thus submitted that these general requirements provided by other area of laws can be better enforced by incorporating them into a broader concept and framework of green government procurement law.

4.2.2 Services procurement

The development of energy conservation service market is crucially important for the government policy of energy conservation and the Energy Conservation Act establishes a policy to support the development of energy conservation service market and thus provides the potential for government procurement of energy conservation service. Given the fact that the Chinese energy conservation service market is underdeveloped it is crucially important that government play an important role in building up the relevant energy conservation service market. Government procurement of energy conservation service not only provide direct support to the development of the market ,but also promote the setting up of rule of plays in this particular market and thus improve the innovative dynamics and competitiveness of the sector. As green energy service is one of the important parts of the Chinese energy market and an important component for that the Chinese energy laws seek to promote[56] a question is then raised as how to support the development of the energy service market. Government may take such measures as fiscal incentives, tax exemption and financial support to energy conservation service but one more effective

measure is for government to procure such energy service. As a matter of fact, the Regulation on Energy Conservation by Public Institutions has already authorized public institutions to purchase some energy conservation services, of typical form of which is the so called *energy management contracting(EMC).* [57] By nature EMC is no more than a mechanism for government procurement of energy conservation service, albeit a more innovative one with a mechanism of private finance and saving-sharing, and it is thus submitted that the procurement rules shall be followed in contracting for the energy conservation service from the market.

In additional to the a few direct provision of government procurement of service under the energy laws, the legal foundation of government procurement of service is sound under the GPL. However one challenge in relation to the procurement of green service would be the difficulty to define the green services. This difficulty arises from that fact that Chinese service market is underdeveloped in general and many service procurement are not taken as government procurement. It also involves a complex policy issue of in-house provision of service and contracting out. Thus it is submitted that the proposed sustainable government procurement code could provide support to these developments.

5 . The potential and challenges for sustainable procurement in China and the case for a consolidated green public procurement code

There are great potentials for the development of sustainable public procurement policy in China given the huge size of the Chinese government procurement market[58], and the unprecedented political and legal environment for such developments. However a number of challenges can be observed to exploit the great potential of sustainable procurement and green supply chain in China: one, procuring entities are not aware of concept, means and tools of sustainable procurement including those legal requirements provided for under other areas of laws which are actually an integral parts of sustainable procurement; two, parallel legal framework for the Chinese public procurement may present some problems for wider application of the green procurement policy; third, the existing procuring function and its organization is weak and uncertain and may greatly weaken the possibility for the whole procurement links to consider sustainable factors. Finally, the inherent conflicts between sustainable procurement objective and other objectives may also bring difficulties for implementation of this policy, setting challenges

for the implementing capability and development of professionalism.

To address these challenges, it is submitted that there is a strong case for the development of a consolidated green public procurement code. The proposed Code will embrace the concept and framework of sustainable procurement, and confirm, clarify, coordinate and improve the current green procurement systems and thus contributes to the sustainable development goals in general. Specifically the Code will not only attain the features of the "Procedural extension" and "coverage expansion" discussed in this paper, but also incorporate all aspects of the green policy provided in laws and regulations on energy, environment and resources, and laws on government demand, production, consumption and disposal and the whole supply chain. The Code could be in the form of hard law, in a sense that the law is binding and as such a law reform program must be initiated by the national legislature, or alternatively in the form of a soft law, in a sense that only green procurement guide is provided, in which case better policy awareness, coordination, certainty, and consistency can also be achieved.

NOTES

[1] The Sustainable Procurement Task Force (SPTF)(2006)，*Working Group 1 – International Benchmarking Final Report.*[On-line]. Available at http://www.sustainable-development.gov.uk/government/task-forces/procurement/documents/wg1-report.pdf

[retrieved June 9, 2008]

[2] UK government (2007). *UK Government's Sustainable Procurement Action Plan-Incorporating the government response to the report of the Sustainable Procurement Task Force.*[On-line]. Available at http://www.defra.gov.uk/sustainable/government/documents/SustainableProcurementActionPlan.pdf [Retrieved January 26, 2010]

[3] State Council Decision on Strengthening Energy conservation, Sate council issuance No. 28 （2006）国务院，《国务院关于加强节能工作的决定》，国发（2006）28 号

[4] 《国务院关于成立国家应对气候变化及节能减排工作领导小组的通知》，国发（2007）18 号, State Council Circular on Setting Up the National Steering Group for Dealing with Climate Change,

Energy Conservation and Emission Reduction, State Council Issuance No 18(2007)

[5] 《国务院关于印发中国应对气候变化国家方案的通知》，国发（2007）17 号,State Council Circular On Issuing the Chinese National Plan for Dealing with Climate Change, State Council Issuance. No 17(2007)

[6] 《全国人民代表大会常务委员关于积极应对气候变化的决议》，2009 年 8 月 27 日第十一届全国人民代表大会常务委员第十次会议通过 The Decision of the Standing Committee of the National People Congress on Actively Dealing with Climate Change, Passed at the 10th Meeting of the Standing Committee of the 11th National People's Congress on August 27, 2009.

[7] 国务院总理温家宝 11 月 25 日主持召开的国务院常务会议上，决定到 2010 年我国单位国内生产总值二氧化碳排放比 2005 年下降 40%至 45%，作为约束性指标纳入国民经济和社会发展中长期规划。A Decision made by the State Council Standing Committee on November 25, 2009 requires that the CO2 Emission per unit GDP be reduced by 40%-45% bench-marked against the level of that in 2005 ,and the level of reduction is written into the long and medium term planning of the national economic and social development as a binding index.

[8]**中华人民共和国清洁生产促进法**(下称"清洁生产促进法"，2002 年 6 月 29 日第九届全国人民代表大会常务委员会第二十八次会议通过，自２００３年１月１日起施行)；the Chinese Clean Production Promotion Act, enacted by the 28th Session of Standing Committee of the 9th National People's Congress on June 29, 2002, and effective on January 1, 2003.

[9]**中华人民共和国可再生能源法**（下称"可再生能源法"，2005 年 2 月 28 日第十届全国人民代表大会常务委员会第十四次会议通过，自２００６年１月１日起施行） the Chinese Renewable Energy Act, enacted by the 14 Session of the Standing Committee of the 10th National People's Congress on February 28, 2005, and effective on January 1, 2006.

[10] State Council Regulation on Energy Conservation by Public Entities(2008), enacted by the 18th State Council Standing Committee on July 23, 2008, and effective on October 1, 2008. 2008 年 7 月 23 日国务院第 18 次常务会议通过，自 2008 年 10 月 1 日起施行）

[11] 2008 年 7 月 23 日国务院第 18 次常务会议通过，自 2008 年 10 月 1 日起施行。Council Regulation on Energy Conservation in Civil

Construction(2008), enacted by the 18th State Council Standing Committee on July 23, 2008, and effective on October 1, 2008.

[12] （2008年8月29日第十一届全国人民代表大会常务委员会第四次会议通过，自2009年1月1日起施行）the Law on Promotion of Recycled Economy(2008), enacted by the 4th session of the Standing Committee of the 11th National People's Congress, and effective on January 1, 2009.

[13] 公共机构节能条例第十八条。Article 18 of the Regulation on Energy Conservation by Public Entity.

[14] 公共机构节能条例第十九条。Article 19 of the Regulation on Energy Conservation by Public Entity. A CP Catalogue is generally taken as a mechanism for centralized procurement. For more detailed discussion of this mechanism, see **Cao Fuguo**, *China'S Government Procurement Policy And Institutional Framework: History, Structure And Operation*, Handbook of International Government Procurement , in Khi V. Thai(ed.), International Handbook of Government Procurement, Francis and Taylor Group,2009.

[15] 循环经济促进法第八条。Article 8 of the Recycled Economy Promotion Act.

[16]循环经济促进法第四十七条。Article 47 of the Recycled Economy Promotion Act.

[17] European Commission(2004). "A report on the functioning of Public Procurement markets in the EU: benefits from the application of EU directives and challenges for the future",5.

[18] 2004年4月，国务院办公厅《关于开展资源节约活动的通知》提出，各级财政要支持资源节约和资源综合利用，并将节能、节水设备(产品)纳入政府采购目录。A Circular on Conducting Resource Conservation Activities by the State Council Office requires that the finance departments of government atdifferent levels support resource conservation and its comprehensive utility, and put energy- and water-conservation equipment(product) on the government procurement catalogue.

[19]这与欧洲一个学者的观察类似：对可再生能源和能源效率的优惠，已经不再是环境政策一个边际化的问题，而是经济和国家安全的基本问题。The preference for renuable energy and energy efficiency is no longer an marginal issue of environment policy, but rather an foundamental issue of national economy and security. For further discussion, See, Kunzlik, Peter(2009). chapter 9 "The procurement of 'green' energy" In Arrowsmith, Sue, and Kunzilk, Peter(Eds.) Social and Environmental Policies in EC Procurement

Law: New Directives and New Directions, UK:Cambridge University Press:377

[20]财政部、国家发展改革委共同起草并由国务院办公厅于 2007 年 12 月下发了《建立政府强制采购节能产品制度的通知》the Circular on Setting up the System of Compulsory Government Procurement of Energy-conservation Product prepared jointly by MOF and NDRC and issued by the State Council Office in December, 2007.

[21]财政部关于加强政府采购货物和服务项目价格评审管理的通知（财库[2007]2 号）】,该文件禁止将投标人的资格条件列为评分因素。而在将强制采购清单视为合格供应商/产品清单之后，根据该规定，在之后的评标中，就不能将产品的节能效率作为评标标准。MOF Circular on Strengthening the Price Evaluation Management of Government Procurement of Goods and Service (MOF Treasury No 2(2007)) prohibits the use of an eligibility criterion as a bid evaluation factor. It is thus understood by some procurement officers that while the Compulsory Procurement List is in effect used as an eligibility list of suppliers and products, the factor of energy efficiency may not be further used as an evaluation criterion later at the award stage based on the aforementioned Circular.

[22] 《实施意见》：为贯彻落实《国务院关于加快发展循环经济的若干意见》（国发〔2005〕22 号），积极推进环境友好型社会建设，发挥政府采购的环境保护政策功能，根据《中华人民共和国政府采购法》和《中华人民共和国环境保护法》，制定本意见。但是，环境保护法并没有关于政府采购环境友好产品的政策要求。

[23] Notice on Issuing of the Green Government Procurement List (First List) 【2005】Research for this report was conducted according to the fifth list in the adjusted government procurement list for products with environmental logos released on March 4th, 2010 for public notification. As of March 21st 2010, the Ministry of Finance and the Ministry of Environmental Protection hadn't released the final fifth official list. This final list may slightly differ from the list used for this paper.

[24]财政部 环境保护部关于调整环境标志产品政府采购清单的通知，2009 年 8 月 31 日。

[25] Dimitri, Nicola, Dini, Federico, Piga, Gustavo(2009). "when should procurement be centralized?" In Dimitri, Nicola, Piga, Gustavo, Spangnolo, Giancarlo(Eds.) *Handbook of Procurement* ,UK: Cambridge University Press:47-81.

[26] For more knowledge of the CP Catalogue, see CAO Fuguo,China's Government Procurement Policy and Institutional

Framework: History, structure and operation in Khi Thai, International Handbook of Public Procurement, p332

[27]行政单位国有资产管理暂行办法,事业单位国有资产管理暂行办法 the Provisional Measure on Sate Asset Management by Executive Entities, the Provisional Measure on Sate Asset Management by Public Entities.

[28]行政单位国有资产管理暂行办法(article 12) the Provisional Measure on Sate Asset Management by Executive Entities

[29]如行政单位国有资产管理办法第十二条规定，行政单位国有资产配置应当遵循几个原则，其中包括(二)与行政单位履行职能需要相适应；(四)勤俭节约，从严控制。 第十三条 对有规定配备标准的资产，应当按照标准进行配备；对没有规定配备标准的资产，应当从实际需要出发，从严控制，合理配备。财政部门对要求配置的资产，能通过调剂解决的，原则上不重新购置。Article 12 of the Provisional Measure on Sate Asset Management by Executive Entities requires that the supply of the state assets by the executive entities shall follow a number of principles, namely, inter alia, being in proportion with the demand for performing its function, thrifty and subject to strict control ,etc. and Article 13 hereof further requires that the assets shall supplied according to the supply standards and where there is no such standards, be supplied reasonably and subject to strict control. If the required assets can be allocated internally, the finance department will in principle allow new procurement.

[30] 中央国家机关通用资产配置管理暂行办法（2007 年 9 月 13 日）国务院机关事务管理局。国务院机关事务管理局关于印发《中央国家机关办公设备和办公家具配置标准（试行）》的通知（国管资〔2009〕221 号）； the Provisional Measures on the Management of General Purpose Assets Supply by the Central National Organs(issued by the State Council General Affairs Administration on September 13 2007) , and the Circular on the Equipment Standards of Office Equipment and Furniture by the National Central Organs issued by the State Council General Affairs Administration(SCGAA),SCGAA(2009)No.221.

[31]清洁生产促进法第十八条 Article 18 of Clean Production Promotion Act.

[32]节能法第十五条 Article 15 of the Energy Conservation Act.

[33] 公共机构节能条例第二十条 Article 20 of the Regulation on Energy Conservation by Public Entities.

[34] 公共机构节能条例第十七条、第四十九条；循环经济促进法第

二十五条。Article 17 of the Regulation on Energy Conservation by Public Entities and Article 25 of the Recycled Economy Promotion Act.

[35]民用建筑节能条例第二十一条。Article 21 of the Regulation on Energy Conservation in Civil Building.

[36] Such legal requirements can be comparable to the legal requirement by the EU relevant laws on energy efficiency that member states establish minimum energy efficiency standards for newly constructed building and alteration project for existing buildings. See Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 (OJ L 1, 4.1.2003),

[37] WTO Government Procurement Agreement, Article 6.

[38] Article 19 of the Bidding Law, which requires that technical specification be provided in the bidding documents.

[39] Article 20 of the Bidding law

[40] See Article 6 of WTO GPA and Article 23 of Directive 2004/18/EC and Article 34 of Directive

2004/17/EC.。

[41] 节能法第十三条，第十四条等, Article 13 and 14 of Energy Conservation Act; see also discussion in part 5.1.2.4

[42] Article 47 of the Recycled Economy Promotion Act . See discussion in part 2.

[43] In 1993 the US Federal Government decided to purchase only 'Energy star'-compliant IT equipment. The federal government is the world's largest single computer purchaser, and it is estimated that this decision played a significant part in the subsequent move to compliance with 'Energy star' standards for the vast majority of IT equipment on the market. For more information see：http://www.energystar.gov。

[44] See Article 23 of Directive 2004/18/EC and Article 35 of Directive 2004/17/EC.

[45]能源效率标识管理办法第二条。Article 2 of Administrative Measure on Energy Efficiency Label Management.

[46]中国节能产品认证管理办法（1999 年 2 月 11 日）第二条。Article 2 of the Chinese Administrative Measure on Certification of Energy Conservation Products(enacted on February 11 ,1999)

[47]中国节能产品认证管理办法（1999 年 2 月 11 日）第三条。Article

3 of the Chinese Administrative Measure on Certification of Energy Conservation Products(enacted on February 11 ,1999)

[48]节能法第二十条。Article 3 of the Chinese Energy Conservation Act.

[49]根据中华人民共和国认证认可条例第二条规定，本条例所称认证，是指由认证机构证明产品、服务、管理体系符合相关技术规范、相关技术规范的强制性要求或者标准的合格评定活动。According to Article 2 of the Regulation on Certification and Verification of P.R.C, the Certification hereof refers to the compliance evaluation activities where the certification entity certifies that a product, service and management system is in conformity with relevant technical norms or the compulsory requirement or standards of relevant technical norms.

[50]节能法第二十条。Article 20 of the Energy Conservation Act.

[51]中华人民共和国认证认可条例第三十四条。Article 34 of the the Regulation on Certification and Verification of P.R.C

[52]http://kjs.mep.gov.cn/zghjbz/rzhcx/200611/t20061106_95664 and http://kjs.mep.gov.cn/zghjbz/rzhcx/200604/t20060411_75656.htm

[53] For detailed discussion, see Cao Fuguo, *China's Government Procurement Policy And Institutional Framework: History, Structure And Operation*, Handbook of International Government Procurement , in Khi V. Thai(ed.), International Handbook of Government Procurement, Francis and Taylor Group,2009.

[54] For example, Energy Conservation Act establishes compulsory energy conservation standards for construction, enforcement mechanism that is oriented on energy conservation design, and requires energy performance labels and their publication for government-owned buildings and other large public buildings The Energy Conservation Act further requires execution of energy-conservation evaluation and review system for fixed-asset investment. In addition, the energy-conservation standards for civil building are compulsory for works procurement. The energy conservation requirement under the Energy conservation Act covers not only new buildings, but energy conservation alteration of existing buildings as well.

[55] A comparable provision can be found in Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 (OJ L 1, 4.1.2003), to be transposed into national law by 4 January 2006 at the lates.欧盟也有类似规定。欧盟有关建筑能源效率的指令（Directive 2002/91/EC）要求成员国就新建建筑的建设和既存

大型建筑更新改造确定最低的能效标准，这将对建筑合同标的和技术规格的确定产生影响。

[56]Article 10 of the Clean Production Promotion Act; article 22 of the Energy Conservation Act.如清洁生产促进法第十条规定，国务院和省、自治区、直辖市人民政府的经济贸易、环境保护、计划、科学技术、农业等有关行政主管部门，应当组织和支持建立清洁生产信息系统和技术咨询服务体系，向社会提供有关清洁生产方法和技术、可再生利用的废物供求以及清洁生产政策等方面的信息和服务。节能法第二十二条规定，国家鼓励节能服务机构的发展，支持节能服务机构开展节能咨询、设计、评估、检测、审计、认证等服务。国家支持节能服务机构开展节能知识宣传和节能技术培训，提供节能信息、节能示范和其他公益性节能服务。

[57] Article 66 of the Energy Conservation act; article 26 and 27 of the Regulation on Energy conservation by Public entities. 节能法第六十六条规定，国家运用财税、价格等政策，支持推广电力需求侧管理、合同能源管理、节能自愿协议等节能办法。公共机构节能条例第二十六条规定，公共机构可以采用合同能源管理方式，委托节能服务机构进行节能诊断、设计、融资、改造和运行管理。其他节能服务要求也有要求。如公共机构节能条例第二十七条规定，公共机构选择物业服务企业，应当考虑其节能管理能力。公共机构与物业服务企业订立物业服务合同，应当载明节能管理的目标和要求。

[58] Figures from the Ministry of Finance (MOF) indicate that China purchased at least RMB 599 billion (US $88 billion) of goods and services in 2008, an increase of RMB 133 billion (US $19 billion) over 2007 and more than triple the amount in 2003. In total, procurement accounted for 9.6 percent of fscal expenditures and two percent of total GDP in 2008. However, these figures substantially underestimate the size of the market because sub-central level public investment in infrastructure projects is not included.

REFERENCE

The Sustainable Procurement Task Force (SPTF)(2006)，*Working Group 1 – International Benchmarking Final Report.*[On-line]. Available at http://www.sustainable-development.gov.uk/government/task-forces/procurement/documents/wg1-report.pdf

[retrieved June 9, 2008]

UK government (2007). *UK Government's Sustainable Procurement Action Plan-Incorporating the government response to the report of the Sustainable Procurement Task Force.*[On-line]. Available at http://www.defra.gov.uk/sustainable/government/documents/SustainableProcurementActionPlan.pdf [Retrieved January 26, 2010]

European Commission(2004). *A report on the functioning of Public Procurement markets in the EU: benefits from the application of EU directives and challenges for the future.*[On-line].Available at http://ec.europa.eu/internal_market/publicprocurement/docs/public-proc-market-final-report_en.pdf [retrieved December 12,2009]

Fuguo, Cao(2009). chapter 15 "China's Government Procurement Policy And Institutional Framework: History, Structure And Operation", in Khi V. Thai(Eds.), *International Handbook of Public Procurement*, Francis and Taylor Group: 323-356.

Kunzlik, Peter(2009). chapter 9 "The procurement of 'green' energy" In Arrowsmith, Sue, and Kunzilk, Peter(Eds.) Social and Environmental Policies in EC Procurement Law: New Directives and New Directions, UK:Cambridge University Press:369-407

Dimitri, Nicola, Dini, Federico, Piga, Gustavo(2009). "when should procurement be centralized?" In Dimitri, Nicola, Piga, Gustavo, Spangnolo, Giancarlo(Eds.) *Handbook of Procurement* ,UK: Cambridge University Press:47-81.

State Council(2006),State Council Decision on Strengthening Energy conservation, Sate council issuance No. 28.

State Council(2007),State Council Circular on Setting Up the National Steering Group for Dealing with Climate Change, Energy Conservation and Emission Reduction, State Council Issuance No 18.

State Council(2007),State Council Circular On Issuing the Chinese National Plan for Dealing with Climate Change, State Council Issuance. No 17.

Standing Committee of the National People Congress(2009),The Decision of the Standing Committee of the National People Congress on Actively Dealing with Climate Change, Passed at the 10th Meeting of the Standing Committee of the 11th National People's Congress on August 27, 2009.

Standing Committee of the National People Congress(2002), The Chinese Clean Production Promotion Act, enacted by the 28th Session of Standing Committee of the 9th National People's Congress on June 29, 2002, and effective on January 1, 2003.

Standing Committee of the National People Congress(2005),The Chinese Renewable Energy Act, enacted by the 14 Session of the Standing Committee of the 10th National People's Congress on February 28, 2005, and effective on January 1, 2006.

State Council(2008),State Council Regulation on Energy Conservation by Public Entities, enacted by the 18th State Council Standing Committee on July 23, 2008, and effective on October 1, 2008.

State Council(2008),Council Regulation on Energy Conservation in Civil Construction, enacted by the 18th State Council Standing Committee on July 23, 2008, and effective on October 1, 2008.

Standing Committee of the National People Congress(2008),the Law on Promotion of Recycled Economy(2008), enacted by the 4th session of the Standing Committee of the 11th National People's Congress, and effective on January 1, 2009.