

## Analysis on Conflicts of China's Coal Tax Reform

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**ABSTRACT:** This paper investigates the conflicts which are resulted from coal tax reform in China from economic and public policy perspectives. An analytical framework involving actors, values, interests and institution has been applied. China's central government eagers to achieve fiscal revenue increase, environmental protection and energy conversation goals by a good governance of coal system. As a traditional and feasible policy instrument, taxation is regarded for dealing with energy issues in politics and governance. However, coal tax reform proposal has induced many controversies in China. The causes of that include value conflicts of all actors, competing interests of all parties and institutional barriers of economic, politics and legislation. Therefore, the government cannot regulate coal issues only through taxation. The case reveals that good governance on coal cannot be achieved only by economic tools as coal system contains so high stake and involves so many players.

**Keywords:** energy tax; coal tax regime; policy instrument; energy conflicts

**JEL Classifications:** H20; Q32; Q38; Q48

### 1. Introduction

Energy has led to several problems including environmental, secure and social challenges. Since the Industrial Revolution, economic boom has been continuously inducing an increase in energy use while energy has fed the industrialization. That is, economic growth and energy use are driven by each other (Stern, 2011). Nowadays, energy has been a vital variable of good governance which can be defined as "effectiveness and efficiency, the rule of law, participation, transparency, and social co-ordination" (Meadowcroft, 2007). Thus, authorities need to regulate energy issues to achieve sustainability, development and equity<sup>1</sup>, using governance instruments.

Taxation is the oldest tool used by governments (Schneider and Ingram, 1990). Since it was introduced into resource management (Nanley, et al., 2007), governments have regulated energy issues through taxation, for adjusting the cost gap and dealing with the externalities in terms of public goods and market failure (Goldthau, 2011). However, policy instruments are used by policymakers to achieve their purpose not only just for economic optimization, but for sustainable development<sup>2</sup>, benefit equity and social justice. Consequently, we may ask: can government attain these public objectives through tax instruments without conflicts? If conflict happens, what is the underlying cause? Is there better approach for resolving these conflicts?

This study will answer these questions based on a China's case. The purpose of this case study is to examine the types of energy conflicts resulting from a current tax tool implement, and to investigate the reasons for these conflicts. Four dimensions are analysed: actors, values, interests and institutional barriers.

### 2. Case Selection

China's energy tax system, which has been established in 1984 and revised in 1994, involves coal, oil, natural gas and other mineral products. Currently, China's energy tax is determined by the quantity exploited rather than the market value, and the tax revenue is owned by provincial government in production province rather than central government (Liu, 2008). In recent years, China attempts to launch a nationwide energy tax reform after testing on oil and gas in Xinjiang provinces from 2010

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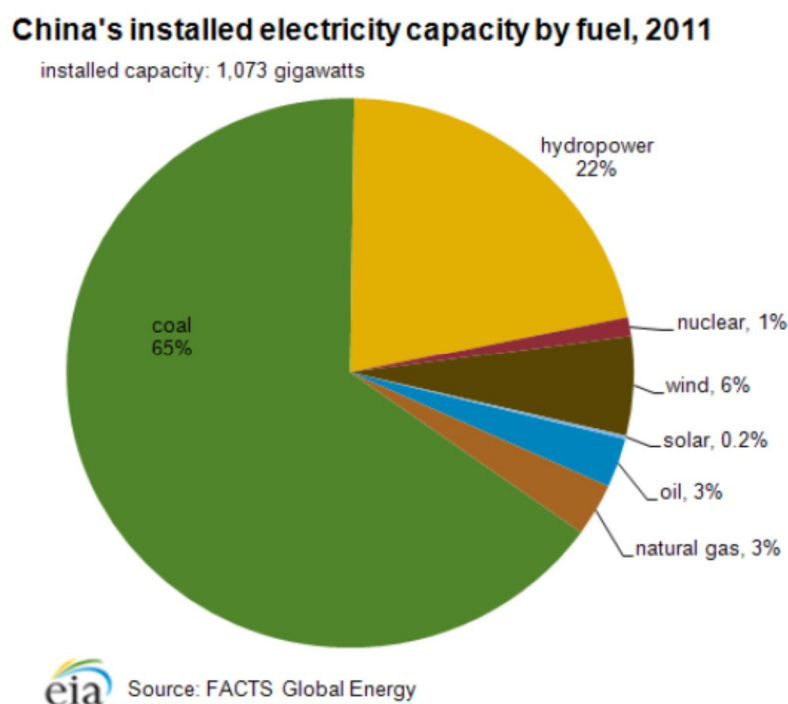
<sup>1</sup> It includes intragenerational equity and intergenerational equity (Brundtland, 1987).

<sup>2</sup> Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, 1987).

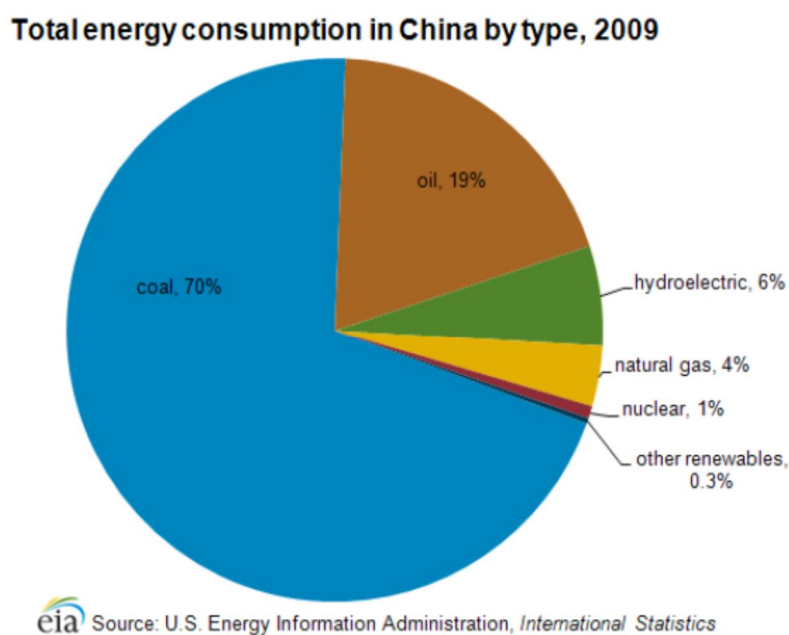
(Shan and Weng, 2010). However, the centre of controversy is about coal.

Coal, as it were, is the blood of China's industrialization and modernization. China's Energy White Paper (2007) states that China's development depends upon coal for many years as China's energy resources are dominated by coal. According to U.S. Energy Information Administration (EIA) report (2012), coal accounts for around 70% in China's total energy consumption and more than 60% electricity generation (See Figures 1 and 2). Additionally, China's energy consumption structures 'with coal playing the main role will remain unchanged for a long time to come.' (China's Energy White Paper, 2007). Therefore, coal is a vital sector for China's energy security and growth stability.

**Figure 1. The share of China's fuel for electricity generation**



**Figure 2. The Share of China's energy consumption by different fuels**



Source: U.S. Energy Information Administration, viewed 7 October 2012, <<http://www.eia.gov/countries/cab.cfm?fips=CH>>.

Correspondingly, China at present confronts many challenges on coal regulation. Coal has been, up to now, the main cause of smoke pollution as well as the main source of carbon emissions in China; China's economy is sensitive to coal market fluctuation; coal industry development does not benefit all parties in the society. These reflect that the social cost of coal is not equal to its social benefit.

Coal price plays an essential role in coal issues. But China has been suffered from the distortion of coal price for a long time. For one thing, the coal price cannot reflect the environmental and ecological degradation during exploitation and consumption given the low and fixed energy tax rate; For another thing, although China's coal market has transited from planned economy to market economy to some degree, it still in the low level of marketization and the coal price cannot reflect the scarcity of coal resources; in addition, the coal price also underestimates the cost of ensuring safe production, education and training (Zhang and Zhao, 2010). Hence, China's central government deems that the coal price mechanism is a crucial factor for rebalancing and sustaining development in the coal industry and national economy, while the key of it is coal tax reform.

The reform proposal which is raised in 2012 indicates that setting 3%-5% tax rate based on coal price replaces current quantity-based tax<sup>3</sup> (Xie, 2012). Put differently, the amount of coal tax will fluctuate in accordance with the market value instead be fixed by the quantity of production. The aim of this reform is for increasing government revenue, curbing excessive production, saving resources and protecting environment, but without changing the proprietorship of resource tax revenue. However, the actors holding different values and interests would lead to conflicts.

### 3. Actors

The actors involved in this reform can be observed from three angles: market, local government and central government. They are listed in table 1.

**Table 1. The Actors and their positions**

Angles	Actors	Position
Central government	National Development and Reform Commission (NDRC)	A main macroeconomic management administration of China, regulating the overall price level, output, employment, resource conservation and climate change. It also takes responsibility for making coal policy.
	State Administration of Taxation (SAT)	It charges the tax affairs in all country including setting tax rate and making specific regulations.
	State-owned Assets Supervision and Administration Commission of the State Council (SASAC)	It is the major stakeholder of all the state-owned coal companies.
Local government	Coal-production provinces	They are the main objectives whom central government want to help them develop using coal tax.
	Coal-consumption provinces	They are developed regions with larger population and more GDP but without coal reserve. And they have more policy impact on central government.
Market	Coal companies	They lie in the upstream of the production chain and nearly a competitive market.
	Electricity companies	They are the main consumer of coal and all are state-owned.
	Residents	They are in the downstream of the production chain and mainly use electricity for life.

### 4. Analysis

The case is analysed in three dimensions: values conflicts, competing interests and institutional barriers.

#### 4.1 Value conflicts

Different actors harbour different values. The value conflicts are observed in this study by three categories: supply side, demand side and governments. Coal companies lie in the supply side; electricity companies which are the main coal consumers and residents lie in the demand side;

<sup>3</sup> According to China Energy Newswire (2010), in many provinces, the coal tax amounts to about RMB 8 (\$1.27) per ton, but the coal price reported by China Qingdao coal market ranges from RMB 450 to RMB 700 per ton.

governments in this study are observed from local and central levels separately.

◆ **Coal companies**

Traditionally, China's coal industry has been fragmented by large state-owned companies, local state-owned companies and a large quantity of town and village coal companies (EIA, 2012). But pursuing profit is their common value as a business. Moreover, they firmly believe that government should alleviate the mass tax burdens and promote the market efficiency instead of doing the opposite (Wang, 2010). Thus, they would be against the tax reform.

◆ **Electricity companies**

In China, the electricity industry is tightly connected with coal. As a main raw material of electricity generation, coal price increase will exacerbate the cost of electricity companies. Nonetheless, they cannot increase electricity price as a response because the price is controlled by government<sup>4</sup> (Austin, 2005). Electricity sector treats the reform as discrimination unless central government frees up electricity price. Consequently, they will oppose the reform too.

◆ **Residents**

Many people support the reform in their value, because for a long time, the energy tax rate is too low to manifest the scarcity of coal. Consequently, coal mines can gain supernormal profit so easy that they neglect to protect the resources and environment. It is against the principle of social and ecological justice.

◆ **Central government**

It insists on the reform concerning about fiscal revenue, energy security, environment and potential over production risk in coal industry. The new energy tax system would substantially increase the amount tax which energy companies should pay. Correspondingly, it could discourage the production of coal companies and control the irrational expansion of coal production. To some degree, it also may relieve the pressure of environment.

On the local government level, as the coal reserves distribute unevenly and mainly concentrate in some certain regions, provinces can be divided into two parts: coal-production provinces and coal-consumption provinces.

◆ **Coal-production provinces**

Eight provinces listed in table 2 contribute more than 80% coal production (Qu, 2011).

**Table 2. China's main coal production provinces**

provinces	location	development	Autonomous or not
Shanxi	centre	undeveloped	NO
Inner Mongolia	west	undeveloped	YES
Shaanxi	west	undeveloped	NO
Xinjiang	west	undeveloped	YES
Ningxia	west	undeveloped	YES
Guizhou	west	undeveloped	NO

These provinces are energy-driven economy meaning that the GDP and fiscal revenue in these regions are mainly from the energy industry and energy tax. Coal is seen as the most precious gift for them. However, coal should have contributed more and Chen (2012) states that the government revenue, under current energy tax regime, is over underrated. If these governments could gain more fiscal revenue from energy tax, they will have more power to deal with problems in development by these funding. Energy tax can assist them develop and growth more rapidly. Moreover, the autonomous regions believe that, they should not only own coal tax revenue, but also should enjoy the right of setting resource tax rate in their region based on the principle of Regional Ethnic Autonomy Law (Wang, 2011). Despite that, they are in favour of the reform.

◆ **Coal-consumption provinces**

The coal-consumption provinces are complaining about who should own the tax revenue. Previously, it seems reasonable that the quantity-based revenue belongs to the original production

<sup>4</sup> China's electricity regulation regime involves two state-owned grid enterprises, five national generation groups, four assistant groups and one regulator. Electricity is seen as a kind of necessity for all the people so the price is inflexible. But coal market is almost a competitive market.

provinces as the output is produced in that region. However, the logic of price-based revenue allocation is vague. Good price based on the market is created by all the people, in other words, the revenue should be shared by all the participants not just by who produce it. It is something about rationality (Zhang and Pan, 2007). And also, the coal-consumption provinces can use the tax to offset environmental costs when they use energy. To sum up, all the actors and their values can be seen in table 3.

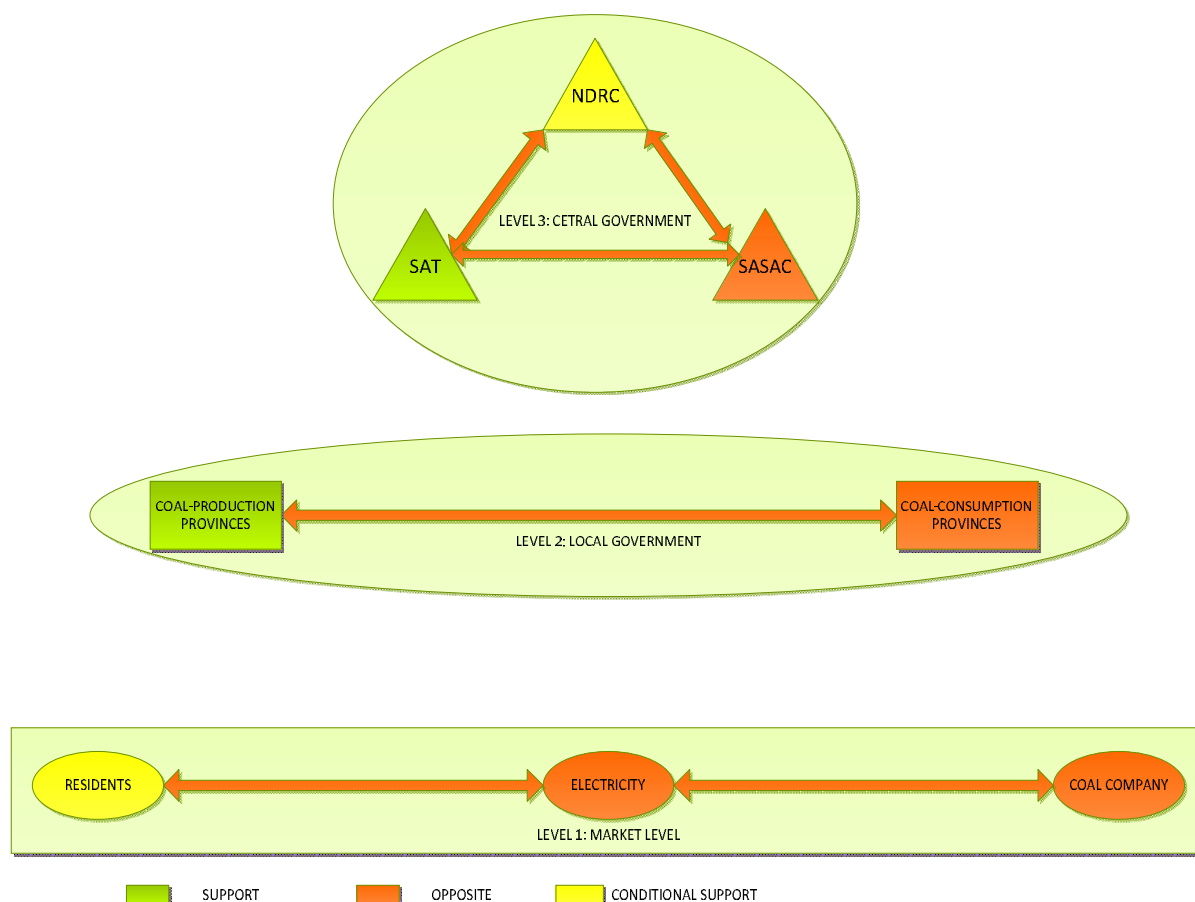
**Table 3. Actors and Values**

Actors		Value	Attitude	
Supply side	Coal company	efficiency	opposite	
Demand side	Electricity sector	equity	opposite	
	residents	justice	support	
Regulation bodies	Central government	optimal	support	
	Local gov.	Coal-production	fairness	support
		Coal-consumption	rationality	opposite

### 4.2 Competing interests

Any reform involves interest conflicts. So how to govern different interests of stakeholders is China's biggest challenge. The interest conflicts could be investigated from three horizontal dimensions. The first one is conflicts among coal mines, electricity companies and terminal residents; the second conflict lies within local provinces; the last one exists in different departments of central government. See Figure 3.

**Figure 3. Analysis on interest conflicts**



#### **4.2.1 Level I: Coal company vs. electricity sector vs. residents**

Higher coal tax rate will result in the coal price increase, yet as a main coal consumer, electricity generations cannot enhance electricity price, which is supervised by government. The benefit shrinking in electricity sector would trigger the conflicts between these two sectors on price negotiation.

On the other hand, although residents support this reform, they cannot accept a high living cost. As the terminal energy consumer, they will fight with electricity companies if latter wants to increase the price.

Thus, interest conflicts among coal mines, electricity companies and residents will lead to market fluctuations. Electricity companies tend to be against the reform accompany with coal mines; while for terminal residents, they would support the reform only if electricity price was fixed or they can get enough subsidies to hedge against the increase in living cost.

#### **4.2.2 Level II: coal-production provinces vs. coal-consumption provinces**

Coal-production provinces are commonly coal-driven economies which are sensitive to energy price. A flourishing coal industry will lead to GDP growth, lower unemployment rate and larger tax revenue, so they will benefit more if coal price increases (Shan and Weng, 2010). Meanwhile, these governments shoulder responsibilities for protecting resources and environment in their region. Under the existing resource revenue allocation arrangement, these local governments can collect more revenue from new tax system and impose mines in their region to be more eco-friendly.

Nevertheless, the other coal-consumption provinces, which are a manufacture-driven economy, will be seriously influenced by new tax system. If coal price goes high, many factories will slump. They will confront higher unemployment, lower output and fiscal revenue. Consequently, new tax regime will hurt their development.

#### **4.2.3 Level III: conflicts in central government**

Nowadays, there is no special energy administration in China's cabinet. Since the ministry of coal industry has been rescinded in 1998, the power of coal regulation is sharing by several divisions.

##### ◆ National Development and Reform Commission(NDRC)

For energy conservation and emission reduction, NDRC should support the new tax regime; however, it could contradict the responsibility of regulating inflation (NDRC, 2003). If the new tax is launched in booming session, it would lead to cost push inflation; otherwise, it could lead to deflation in depression session. Considering the political interest of itself, it looks a dilemma for NDRC.

##### ◆ State Administration of Taxation (SAT)

Increasing government revenue is always its interest, especially, when it facing to many complains from western resourceful provinces about their fiscal problems. Thus, SAT is a supporter from its standpoint.

##### ◆ State-owned Assets Supervision and Administration Commission of the State Council(SASAC)

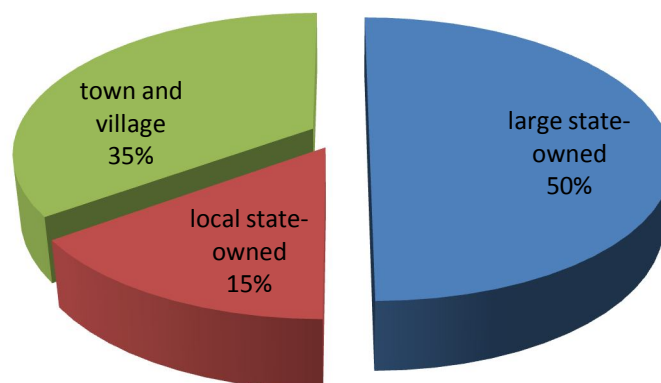
By contrast, SASAC will be an opponent of SAT because it 'performs investor's responsibilities, manages the state-owned assets and enhances the value of the state-owned assets' (SASAC, 2003). That is to say, anything could harm the interest of state-owned companies is against the interest of SASAC. In 2010, state-owned companies take the highest percentage of total coal production (see Figure 4).

Put differently, the new resource tax will hurt 65% state-owned coal companies inevitably. As the strong coal lobby in central government, SASAC will fight for the interest of coal industry and argue with SAT and NDRC.

#### **4.3 Institutional barriers**

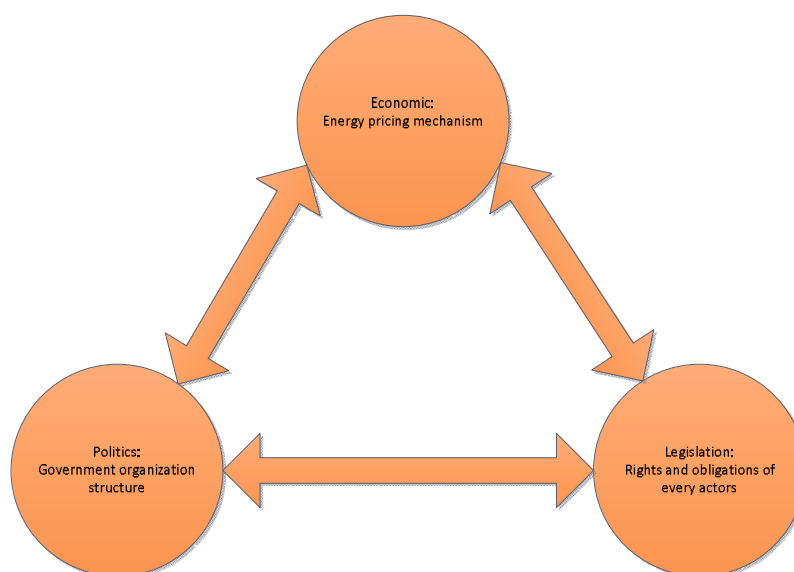
Some institutional barriers could be responsible for these conflicts. Overall, they can be investigated through economic, political and legislation dimensions. See Figure 5.

**Figure 4. The distribution of coal supply in 2010, by ownership**



Source: State Administration of Work Safety

**Figure 5. Overview of institutional barriers**



◆ **Economic**

The unreasonable pricing mechanism of the energy market has existed for a long time. The upstream industry, coal, enjoys more marketization than the downstream industry electricity. The coal price is formulated by the market but the electricity price is controlled by the government. The electricity price cannot fluctuate with the coal price simultaneously. The pricing system does not reflect the interest of every part in the industry chain and the scarcity of energy. This controversy is the kernel in the economics review.

◆ **Political**

Government structure lies in the heart of politics. In the central government, the power of coal supervision is divided into different sectors which have different standpoints. Among local governments, the absent channel for harmonizing interests and values is the key reason. China's parliament members are elected on the basis of the proportion of population in every province, thus, there is no a political mechanism, which can represent each province equally by the same number of representatives. That is why the local appeals, especially for those with smaller population in west,

always are ignored in the parliament<sup>5</sup>.

#### ◆ Legislation

There are also ambiguous areas in the law. For instance, the rights of autonomous regions are not clear and sometimes conflict with other regulations; the power of taxation and the right of deriving tax revenue have not been defined appropriately. Overall, many conflicts happen in the vacancy of law.

### 5. Assessment and Possible Options

Based on the analysis above, the competing interest is the most significant governance challenge which is China's government facing. Tax reform *per se* is about benefit reallocation and transfer. Thus, China could need to do some preparations before starting the resource tax reform.

Firstly, a successful resource tax reform should be under the condition that the energy market and pricing reform have been finished successfully. Only if they eliminate the monopoly and control in electricity market, can coal tax reform go on wheels. Correspondingly, some increased revenue from new tax regime should be transferred to residents as a subsidy for a possible increase in energy price.

Secondly, the central government should establish the ministry of energy for integrating the energy regulation powers and avoiding conflicts of interest.

Thirdly, the government can use some incentive tools (Schneider & Ingram, 1990) to encourage coal companies to save energy not only by taxation.

Alternatively, the government could utilize various practice of resource taxation (Garnaut, 2010), such as the progressive profits tax (PPT) to ease coal companies' tax burden whereas improving its financial account.

### 6. Conclusion

China's experience on energy tax reform reveals that there is no win-win result can be achieved. Probably because the coal system with so high stakes, which involves many stakeholders with distinct values, is too complex to be taken full account of the acceptability of all parties among various interest groups. Put differently, government cannot advance a change without conflicts only by taxation instrument. Tax tools have some instinctive limitations as a kind of authority methods. Instead, other policy tool combinations could be considered for multi-goals achievement.

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<sup>5</sup> China's parliament is Standing Committee of the National People's Congress.



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