

Energy Working Group

Key Recommendations

1. Develop a Comprehensive and Systematic Approach to Energy Saving and Emission Reduction

- Encourage Chinese companies to absorb best international technologies and practices by partnering with international companies in building energy infrastructure projects
- Improve transparency in the bidding process by publishing all bids on a centralised website with clear evaluation criteria
- Reform energy prices and allow adequate margins for oil refineries
- Develop a national policy for heat and power co-generation projects and oblige grid companies to supply and purchase power from these projects
- Allow power plants a direct supply to industrial consumers, in order to minimize power transmission losses

2. Promote an Open and Competitive Market through the Energy Law

- Assess fully the impact of a government controlled energy market versus an open and competitive energy market on national security before promulgating the draft Energy Law
- Add “establishing efficient energy markets” as part of the purposes of the Energy Law

3. Provide Concrete Policy Support for Renewable Energy Development

a. Ensure Renewable Energy Quotas are not a Barrier for Foreign Investment

- Allow Joint Venture (JV) firms with majority Chinese shareholding to account for the entire capacity as their share of renewable capacity in the capacity portfolio to meet their quota requirement

b. Regulate and Clarify Relations between Renewable Energy Developers and Grid Companies

- Develop a new set of grid codes for renewable power sources to reflect their specific technical features
- Establish a standard procedure for the assignation of connection points to the grid
- Publish a standard Power Purchase Agreement and a standard Grid-Interconnection Agreement

c. Provide Sufficient and Stable Incentives for Renewable Energy Projects

- Formulate a transparent feed-in-tariff on a provincial basis, which should be indexed to inflation and which allows reasonable return on investment
- Provide clear and transparent information on the final tariff and conditions of grid connection before starting investment
- Include Renewable Energy in the Catalogue of Enterprise Income Tax Incentives
- Accelerate the Value-Added Tax (VAT) refund process
- Ensure equal treatment for foreign and domestic investors both in terms of subsidies and import and export conditions
- Align, in a clear way, renewable energy policies and fiscal policies through enhancing coordination among different authorities, and enforcing this alignment at all levels of administration

d. Develop Technical Standards for Renewable Energy Equipment

- Adopt internationally advanced technical standards in order to reduce long-term risk of renewable energy equipment

4. Allow Majority Foreign Owned Projects to be Eligible as Clean Development Mechanism (CDM) projects

- Allow foreign companies to have a majority stake in CDM projects

5. Improve the Entire Value Chain for Clean Coal Technologies

- Provide economic incentives to further encourage the development of Clean Coal Technologies and encourage Intergrated Gasification Combined Cycle (IGCC) and Carbon Capture and Sequestration (CCS) research and demonstration projects
- Provide financial incentives or support to oil products and chemicals produced from Coal to Liquids and Coal to Chemicals routes
- Publish a timetable to make de-nitrification (De-NOx) compulsory and ensure that the De-NOx refund policy is consistently applied to all investors
- Formulate policies and regulations to encourage industrial pilot projects on CCS



Introduction to the Working Group

The Energy Working Group comprises over 35 member companies, with 2007 combined revenues exceeding EUR 16 billion; overall cumulative investment of over EUR 17 billion; and collective employment of more than 90,000 people in China. The largest European energy and equipment manufacturing companies as well as industrial energy consumers are active members of the Working Group.

The Working Group seeks to establish an effective and constructive dialogue on energy policies with appropriate Chinese authorities, in order to:

- 1) Provide input for energy policy work in China by sharing issues, concerns as well as experiences of European energy industries operating in China.
- 2) Promote fair and transparent conditions for competition and enhanced cooperation between European and Chinese companies.
- 3) Promote the development and integration of clean and renewable energies.

Recent Developments

The Working Group welcomes the following significant policy developments by the Chinese government since June 2007:

- In June 2007: National Climate Change Program (Action Plan) issued by the National Development and Reform Commission (NDRC)
- In August 2007: Natural Gas Utilization Policy promulgated by the NDRC
- In September 2007: All Citizens' Action Plan for Energy Saving and Emission Reduction published by the NDRC
- In September 2007: Mid to Long-term Renewable Energy Development Plan to 2020 published by the NDRC
- In October 2007: Publication of the revised Foreign Investment Guiding Catalogue, which further encourages foreign investment in clean and renewable energy development, circular economy and environmental protection
- In November 2007: 11th Five-Year Program on Environmental Protection approved by the State Council
- In December 2007: Draft Energy Law published for public consultation
- In December 2007: White Paper on China Energy Situation and Policies published by the State Council
- In March 2008: Creation of new energy governance system, including establishment of the State Energy Administration and the National Energy Commission
- In June 2008: the NDRC increased domestic prices of oil products and electricity

At the same time, the Working Group believes there is room for general policy improvements in the following areas:

- **Energy Development Plans and Project Approvals:** Energy development plans lag significantly behind current market conditions and the energy project approval process lacks transparency
- **Foreign Investment Catalogue:** It remains unclear what actually constitutes 'encouragement' for those projects listed under the 'encouraged' category
- **Price Control and Distortion:** With rising prices of coal and crude oil and the government's control of prices for electricity and oil products at artificially low levels, both Chinese power producers and oil refiners continue to experience significant losses. This distortion leads to energy supply insecurity, energy waste, environmental pollution and effectively subsidizes the rich instead of the poor
- **Opening of the Oil Market:** Despite the opening of the domestic wholesale market in December 2006, significant regulatory barriers exist to protect the vested interest of incumbent national oil companies. It is in China's energy security interest to promote diversification of energy supply sources, including oil product import channels as well as diversification of market participants

Key Recommendations

1. Develop a Comprehensive and Systematic Approach to Energy Saving and Emission Reduction

Concern

Energy saving and emission reduction are tasks that require a comprehensive and systematic approach across different sectors and segments involving all stakeholders. In many areas, European companies would like to play a role in introducing advanced technologies but are discouraged or restricted from doing so.

Assessment

i. Energy Infrastructure Investment

Energy infrastructure projects consume a significant amount of energy during their life cycles. If not well designed, built and managed, these projects can also be a large source of pollution. As large energy infrastructure projects are built to operate for 20-40 years, the technologies used often are locked into the whole life cycle of the project. Although European companies offer advanced technologies, Chinese companies tend to build the projects alone and public procurement for large projects frequently excludes foreign participation.

ii. Fuel Quality and Air Pollution

In terms of fuel quality, although China has imposed increasingly stringent standards on car manufacturers, these measures will not be sufficiently effective as most Chinese refineries are not capable of producing fuels with the specified quality. Refinery upgrading and renovation

needs a significant level of investment and specialised technologies. China's pricing control on domestic oil products, however, deprives Chinese refiners the financial ability to invest and makes it unprofitable for foreign companies to participate.

iii. Cogeneration

Grid connection, access to the power grid both for back-up supply and sale of excess electricity remain the biggest hurdles for co-generation. Qualified co-generation projects should be allowed to connect to the grid and power grid companies should be obliged to purchase the power from such projects. Standards for the overall efficiency of such units should be defined and a preferential fuel supply ensured.

iv. Direct Power Supply

Allowing power plants a direct supply to industrial consumers can help minimize power transmission losses. This creates the opportunity of economic win-win agreements between suppliers and consumers and increases the reliability of supply.

Recommendation

- Encourage Chinese companies to absorb best international technologies and practices by partnering with international companies in building energy infrastructure projects
- Improve transparency in the bidding process by publishing all bids on a centralised website with clear evaluation criteria
- Reform energy prices and allow adequate margins for oil refineries
- Develop a national policy for heat and power co-generation projects and oblige grid companies to supply and purchase power from these projects
- Allow power plants a direct supply to industrial consumers in order to minimise power transmission losses

2. Promote an Open and Competitive Market through the Energy Law

Concern

The Energy Law, once promulgated, will have a significant impact on all participants in China's energy market. However, the December 2007 draft Energy Law illustrated elements of tightened control by the government that run contrary to creating an open and competitive energy market.

Assessment

The Working Group welcomed the opportunity to comment on the draft version of the Energy Law and provided the Office of Energy Leading Group with comprehensive comments and recommendations.

The draft law adopts the theory that energy development is related to China's national security, thereby mandating the state to strengthen control over the energy sector. The draft suggests that this should be accomplished through a dominantly state-owned investment regime, strict planning and project approval processes, close monitoring and control of international energy trading activities, and protection of China's investment in overseas energy projects. Given China's status as a large energy importing country, an overly regulated market as envisaged by the draft law risks creating inefficiencies that could pose an even greater threat to national security.

The draft fails to pay adequate attention to the importance of economic efficiency as a key component of the 3 'E' objectives of energy policy (Energy security, Environmental protection and Economic Efficiency).

Recommendation

- Assess fully the impact of a government controlled energy market versus an open and competitive energy market on national security before promulgating the draft Energy Law
- Add 'establishing efficient energy markets' as part of the purposes of the Energy Law

3. Provide Concrete Policy Support for Renewable Energy Development

a. Ensure Renewable Energy Quotas are not a Barrier for Foreign Investment

Concern

The mandatory quota for renewable-based installed capacity for large power companies discourages Chinese power producers from establishing equity JVs with foreign companies.

Assessment

The Mid to Long Term Program of Renewable Energy Development requires any power company with a total installed capacity above 5 Giga Watt (GW) to have at least 3% of the total capacity from non-hydro renewable energy sources by 2010. This share gradually increases to 8% by 2020.

In order to meet their renewable energy quotas, most Chinese power firms, especially the major national power producers, are reluctant to partner with foreign investors in renewable power projects due to their concern that foreign investment would dilute the share of renewable power installed capacity in their equity installed capacity portfolio.

The mandatory quota of renewable installed capacity therefore acts as a de facto investment barrier to foreign companies interested in taking an equity position in China's renewable power projects. This is inconsistent with the revised Guiding Catalogue on Foreign Invested Industries



2007 and many other policies that encourage foreign investment in renewable energy.

Recommendation

- Allow JV firms with majority Chinese shareholding to account for the entire capacity as their share of renewable capacity in the capacity portfolio in order to meet their quota requirements

b. Regulate and Clarify Relations between Renewable Energy Developers and Grid Companies

Concern:

Renewable energy developers face a series of grid interconnection difficulties. These difficulties create delays, reduce profits and increase risks and uncertainty to the detriment of the development of the renewable energy sector in China.

Assessment

i. New Grid Codes for Renewable Power

Fundamental to the 15% target of renewable energy by 2020 is the development of a new grid code for renewable power. Due to the intermittent nature of power generation from renewable energy projects, traditional codes are no longer suitable. Increased flexibility should be encouraged as a major design principle for the new grid codes and other technical requirements.

ii. Assignment of Connection Points to the Grid

The Renewable Energy Law obliges grid companies to provide grid-connection services to renewable energy projects and to remove the barriers to grid extension. In consideration of these expenses, grid companies are compensated through a premium for renewable power. However in many cases, the assignment of connection points to the grid lacks transparency, and grid companies often use technical reasons for not complying with their obligations under the Renewable Energy Law.

iii. Model Power Purchase Agreement and Grid Interconnection Agreement

There is no standard Power Purchase Agreement that regulates the commercial aspects of the obligation of grid companies to purchase all electricity generated by renewable energy projects. Neither a fixed electricity purchasing tariff nor a fixed feed-in-tariff period has been established in any regulation. Also lacking is a regulation regarding liabilities in case of breach of agreement. At the same time, despite the obligation to purchase all electricity from renewable energy projects, grid companies are limiting the access in some areas with weaker grids, causing large economic losses to renewable energy developers.

A model Grid-Interconnection Agreement would also help to create a standard relationship between grid companies and renewable power developers.

Recommendation

- Develop a new set of grid codes for renewable power sources to reflect their specific technical features
- Establish a standard procedure for the assignment of connection points to the grid
- Publish a standard Power Purchase Agreement and a standard Grid-Interconnection Agreement

c. Provide Sufficient and Stable Incentives for Renewable Energy Projects

Concern

If the ambitious targets for renewable energy are to be reached, stronger and more systematic support schemes must be developed. These support schemes should be developed to support all players in the renewable industry, both domestic and foreign.

Assessment

i. Renewable Energy Tariff System

Given that the NDRC Pricing Bureau will not approve and issue a final tariff approval until after the construction of renewable energy projects, investors have to make an investment decision based on a tentative tariff that they submit in the feasibility report. This subjects the investor to unfair risk.

As the tariffs are low in many provinces and are not annually indexed to inflation, renewable energy investors face a situation where their revenues remain fixed while the operation and maintenance costs increase year by year due to by the effect of inflation pressures and wear and tear on facilities. Such a circumstance poses a risk for investors.

ii. Enterprise Income Tax

The new Enterprise Income Tax established a preferential tax treatment for state-supported infrastructure projects as well as environmental protection, energy and water saving related projects. However, the relevant catalogue outlining the eligible sectors does not include renewable energy projects.

iii. Refund of Value-Added-Tax (VAT) for the Purchase of Domestically Produced Equipment

Foreign investors in encouraged categories are allowed to receive a VAT rebate for the purchase of domestically produced equipment. However, there is a lack of predictability as to when the VAT refund will be secured. In some instances the VAT refund process can take up to 18 months, leading to inefficient working capital management and a decrease on project profitability.

iv. Transparency on Subsidies, Tax Incentives and other Incentives

China's support mechanism for renewable energies has evolved from providing direct subsidies to the supplier to a more complicated system that also includes tax reductions and exemptions, preferential price and credit guarantees

and other subsidies implemented by central and local governments.

There is no transparent and systematic policy on these incentives nor is there information to help investors understand how to benefit from these incentive policies from central and provincial authorities.

Recommendation

- Formulate a transparent feed-in-tariff on a provincial level, which should be public and stable, indexed to inflation and allow reasonable returns on investment
- Provide clear and transparent information on the final tariff and conditions of grid connection before starting investment
- Include Renewable Energy in the Catalogue of Enterprise Income Tax Incentives
- Accelerate the VAT refund process
- Ensure equal treatment for foreign and domestic investors both in terms of subsidies and import and export conditions
- Align, in a clear way, renewable energy policies and fiscal policies through enhancing coordination among different authorities and enforcing this alignment at all levels of administration

d. Develop Technical Standards for Renewable Energy Equipment

Concern

There is an urgent need to create new or harmonize existing standards for renewable energy equipment.

Assessment

The lack of technical standards for turbines is a serious issue since there are around 30 local wind turbine manufacturers. This standardization process should be set at the national level based on international practices rather than allowing individual companies to set their own standards.

Recommendation

- Adopt internationally advanced technical standards in order to reduce the long-term risk of renewable energy equipment

4. Allow Majority Foreign-Owned Projects to be Eligible as CDM Projects

Concern

Current Chinese regulations restrict foreign companies from holding a majority share in CDM projects thus discouraging investment that could benefit China's efforts to improve energy efficiency, reduce emissions and transfer technology.

Assessment

The revenue gained from CDM projects plays a major role in the economic feasibility of many renewable energy, energy efficiency, waste, and water recycling related investments and the eventual transfer of technology and know-how.

However, Article 11 of the Measures for the Administration of the Operation of CDM Projects states that any project owner applying for CDM registration must be a Chinese company or a JV with at least 51% Chinese ownership. This prevents European companies from investing in complex projects that require strong operational skills and significant intellectual property inputs. They are left with choices between giving up control over the project or investing in projects with majority control but without CDM revenues and thus not profitable.

The CDM rules administered by the United Nations Framework on Convention of Climate Change (UNFCCC) do not have such a restriction, nor do the practices of other large CDM countries such as India and Brazil.

Expanding the eligibility for foreign companies to have controlling stakes in CDM projects would encourage more foreign investment in the development of new clean energy solutions and energy efficiency upgrade projects, supporting the objectives of the Mid to Long Term Program of Renewable Energy Development and the Guiding Catalogue on Foreign Invested Industries.

Recommendation

- Allow foreign companies to have a majority stake in CDM projects

5. Improve the Entire Value Chain for Clean Coal Technologies

Concern

Although China has been developing clean coal technologies for power generation and for conversion into fuels and chemicals, China's approach to the development of clean coal technologies does not take the whole value chain into account.

Assessment

More than 75% of China's electric power is generated by coal-fired power plants, which contribute to roughly 50% of China's total CO₂ and SO₂ emissions. Thermal power plants with De-NOx technologies can reduce Nitrogen Oxide emissions by 80%. China has announced intentions to make De-NOx compulsory in thermal power plants, but no timetable is available as to when this will be published.

China has also launched a number of coal conversion projects. However, there is no policy differentiation or support for oil products and chemicals produced from Coal



to Liquids and Coal to Chemicals routes, as it is being considered in other countries.

In addition, China has launched several IGCC projects, like the Huaneng GreenGen project linked with CCS. Some Chinese companies such as China GreenGen have declared their intentions to develop CCS technologies. They are also working with international partners such as the European COACH program. The government should work out policies and regulations to encourage this work.

Recommendation

- Provide economic incentives to further encourage the development of Clean Coal Technologies and encourage CCS and IGCC and research and demonstration projects
- Provide financial incentives or support to oil products and chemicals produced from Coal to Liquids and Coal to Chemicals routes
- Publish a timetable to make De-NOx compulsory and ensure that the De-Nox refund policy is consistently applied to all investors
- Formulate policies and regulations to encourage industrial pilot projects on CCS

Abbreviations

CCS	Carbon Capture and Sequestration
CDM	Clean Development Mechanism
De-NOx	(decreasing amount of nitrogen oxides) denitrification
GW	Giga Watt = 1 000 000 000 Watt
IGCC	Intergrated Gasification Combined Cycle
JV	Joint Venture
NDRC	National Development and Reform Commission
UNFCCC	United Nations Framework on Convention of Climate Change
VAT	Value-Added Tax

能源工作组

主要建议

1. 制定全面和系统的节能减排办法

- 鼓励中国企业与国际企业合作建设能源基础设施项目，吸收国际最佳技术和实践经验
- 通过一个集中管理的网站明示招标项目的评价标准，提高所有投标、招标过程的透明度
- 改革能源价格，允许炼油厂获得充足的利润
- 制定全国性政策支持热电联产发电项目，责成电网公司供应和购买这些项目的电力
- 为尽量减少输电的损失，允许发电厂直接向工业用户供电

2. 通过《能源法》推进开放、自由竞争市场的建设

- 颁布《能源法》草案前，比较政府严格管控的能源市场与开放、自由竞争的能源市场，全面评估两者对国家安全的影响
- 在《能源法》立法的宗旨中加入“建立高效的能源市场”一项

3. 为开发可再生能源提供具体的政策支持

- a. 确保可再生能源配额不会成为外商投资的障碍
 - 为达到配额要求，允许中方控股的合资公司将其可再生能源总装机容量算作中方可再生能源配额的一部分
- b. 规范并明确可再生能源开发商和电网公司之间的关系
 - 为可再生能源发电制定一套反映其特定技术特性的新电网接入标准
 - 制定电网联接点分配的标准程序
 - 公布可再生能源电力购销协议范本和电网联接协议范本
- c. 为可再生能源项目制订充分和稳定的激励措施
 - 制定透明的省级上网电价，将其与通货膨胀挂钩，并保证合理的投资回报率
 - 在项目投资前提供有关最终电价和入网条件的明确而透明的信息
 - 将可再生能源列入《企业所得税优惠目录》
 - 加快增值税退税过程
 - 确保国内外投资者在补贴与进出口条件方面获得平等对待
 - 通过加强不同政府机关之间的协作，明确地协调可再生能源政策和财政政策，并确保协调后的政策在各级行政机关得以执行
- d. 制定可再生能源设备的技术标准
 - 采用国际先进技术标准，减少可再生能源设备的长期风险

4. 准许外商控股项目具备申请 CDM 项目的资格

- 允许外商控股项目拥有申请CDM项目的资格

5. 改善洁净煤技术的整个价值链

- 提供经济优惠政策，进一步鼓励开发洁净煤技术，鼓励一体化煤气化联合循环（IGCC）和碳捕获和封存技术的研究和示范项目
- 为煤制油和煤化工技术制造的石油产品和化学品提供金融优惠政策和支持
- 公布强制采用脱硝技术的日程表，确保所有投资者统一享受脱硝的退税政策
- 制定政策和法规，鼓励碳捕获和封存技术的工业试点项目



工作组简介

能源工作组由超过 35 家欧盟企业会员组成；2007 年，企业会员在华的总收入超过 160 亿欧元，累计投资总额超过 170 亿欧元，在中国的员工总数超过 9 万人。欧盟最大的能源和设备生产企业与工业能源消费企业都是能源工作组的活跃成员。

能源工作组希望就能源政策问题，与中国政府有关部门展开有效和建设性的对话，其目的如下：

- 1) 通过与有关部门交流在中国运营的欧盟能源企业所遇到的问题、关注事项和经验，为中国政府制定能源政策提供素材
- 2) 在欧盟公司与中国企业之间建立公平、透明的竞争环境并加强两者之间的合作
- 3) 促进清洁能源和可再生能源的开发与整合

近期发展

工作组欢迎中国政府 2007 年 6 月以来所制定的下列重大政策：

- 2007 年 6 月：国家发展和改革委员会颁布的《中国国家气候变化方案（行动计划）》
- 2007 年 8 月：国家发展和改革委员会颁布的《天然气利用政策》
- 2007 年 9 月：国家发展和改革委员会公布的《全民节能减排行动计划》
- 2007 年 9 月：国家发展和改革委员会公布的《可再生能源中长期发展规划》
- 2007 年 10 月：《外商投资指导目录》修订版公布，进一步鼓励外商在清洁能源和可再生能源的开发、循环经济和环境保护等领域进行投资
- 2007 年 11 月：国务院批准通过的《环境保护第十一个五年规划》
- 2007 年 12 月：《能源法草案》向公众征求意见
- 2007 年 12 月：国务院新闻办对外发布《中国能源状况与政策》白皮书
- 2008 年 3 月：新的能源管理体制，包括国家能源局和国家能源委员会的建立

- 2008 年 6 月，国家发展和改革委员会调高了成品油与电力的价格

与此同时，能源工作组相信，中国政府亦能够在以下几个方面改善整体能源政策工作：

- 能源发展规划和项目审批：能源发展规划严重滞后于市场现状，能源项目审批过程缺乏透明度
- 外商投资产业目录：目前针对目录中“鼓励”类项目如何进行“鼓励”的实际内容仍不明确
- 价格管制和扭曲：伴随煤和原油价格的上涨，加上政府对电力和石油产品价格进行人为的低价控制，中国电力生产商和炼油厂继续遭受重大亏损。价格扭曲导致能源供应的不安全、能源浪费和环境污染，也使富人而非穷人成为政府补贴的受益者
- 石油市场开放：尽管中国政府已经于 2006 年 12 月开放了国内石油批发市场，目前仍然存在很多的监管壁垒，用以保护现有国有石油企业的既得利益。从保障中国能源安全的利益出发，中国政府应当促进能源供应来源的多样化，包括石油产品进口渠道，以及市场参与者的多样化

主要建议

1. 制定全面和系统的节能减排办法

问题

节能减排目标的实现要求全面系统的方法，涉及各行业各部门的所有利益相关者。在许多领域里，尽管欧盟企业愿意在引进先进技术的过程中发挥作用，但却受到阻碍或限制。

分析

a. 能源基础设施投资

能源基础设施项目在其生命周期内会消耗大量的能源。如果能源基础设施的设计、建设和管理不善，这些项目也可能成为巨大的污染源。由于大型能源基础设施项目的设计运营年限均为 20-40 年，所采用的技术便往往被锁定于项目整个生命周期。虽然欧盟企业能提供先进技术，但中国公司倾向于独立

建设项目，而且大型项目的公开采购经常排斥外国公司的参与。

b. 燃料质量和空气污染

就燃料品质而言，虽然中国政府已经开始对汽车生产企业执行越来越严格的标准，但是，如果中国的炼油企业没有能力提供特定规格的燃油，以上措施就不会充分有效地发挥作用。炼油厂的升级和改造显然需要大量投资和专业技术。但是，中国政府对国内石油产品的价格控制使中国炼油企业缺乏投资所需的财力，同时也令外国公司无利可图，失去参与的动力。

c. 热电联产

热电联产的最大障碍在于如何与电网进行联接，以供应备用电力和销售剩余电力。应该允许合格的热电联产项目与电网联接，并强制要求电网企业购买这些热电联产项目的电力。必须为上述项目制定整体效率标准，保证特惠燃料的供应。

d. 直接供电

允许发电厂向工业用户直接供电，这有助于最大限度地减少输电损失。这为电力供应商和电力消费者达成经济双赢的协议提供了绝佳的机会，并增加了电力供应的可靠性。

建议

- 鼓励中国企业与国际企业合作建设能源基础设施项目，吸收国际最佳技术和实践经验
- 通过一个集中管理的网站明示招标项目的评价标准，提高所有投标、招标过程的透明度
- 改革能源价格，允许炼油厂获得充足的利润
- 制定全国性政策支持热电联产发电项目，责成电网公司供应和购买这些项目的电力
- 为尽量减少输电的损失，允许发电厂直接向工业用户供电

2. 通过《能源法》推进开放、自由竞争市场的建设

问题

《能源法》一经颁布将对中国能源市场的所有参与者产生重大影响。然而，2007年12月公布的《能源法》草案列示了中国政府加强市场管制的一些措施，这与营造开放、自由竞争的能源市场背道而驰。

分析

中国欧盟商会对有机会就《能源法》草案发表意见表示欢迎，并已向国家能源领导小组办公室提供了全面的意见和建议。

《能源法》草案基于能源开发关系到国家安全的理念，强调国家必须加强对能源部门的控制。根据这一理念，草案建议实行国有资本为主的投资产权制度、制定严格的规划和项目审批程序、密切监管和控制国际能源贸易活动，保护中国公司在海外能源项目的投资，等等。鉴于中国作为能源进口大国的地位，《能源法》草案所构造的一个严格管制的市场可能会导致市场效率低下，从而对国家安全构成更大威胁。

该草案没有充分体现出能源政策3E目标之一的经济效率的重要性（3“E”为能源安全、环境保护和效率）。

建议

- 颁布《能源法》草案前，比较政府严格管控的能源市场与开放、自由竞争的能源市场，全面评估两者对国家安全的影响
- 将“建立高效的能源市场”列入《能源法》的立法宗旨

3. 为开发可再生能源提供具体的政策支持

a. 确保可再生能源配额不会成为外商投资的障碍

问题

对大型电力公司实行的可再生能源装机容量的强制性配额阻碍了中国电力生产商与外国公司建立可再生能源合资企业。



分析

《可再生能源中长期发展规划》规定对于权益发电装机总容量超过500万千瓦的电力公司，所拥有的非水电可再生能源发电装机总容量应在2010年达到其权益发电装机总容量的3%，并在2020年前逐渐增至8%。

为达到可再生能源配额的要求，大多数中国电力企业，尤其是主要的国家电力生产商，都不愿意与外国投资者就可再生能源项目进行合资合作，他们担心外国公司合资可能会使其权益发电装机总容量中的再生能源配额的份额降低。

因此，对于有兴趣参股中国可再生能源项目的外国公司而言，可再生能源装机容量的强制性配额构成了实质性投资壁垒。这与修订后的《2007年外商投资产业指导目录》和其他许多鼓励外商投资于可再生能源领域的政策不符。

建议

- 为达到配额要求，允许中方控股的合资公司将其可再生能源总装机容量算作中方可再生能源配额的一部分

b. 规范和明确可再生能源开发商和电网公司之间的关系

问题

可再生能源开发商面临许多上网难的问题。这些困难造成项目延误、利润减少、风险和不确定性增加，从而阻碍中国可再生能源的发展。

分析

i. 为可再生能源制定新电网接入标准

为实现2020年可再生能源占能源结构15%的目标，一个非常重要的工作就是为可再生能源制定新的电网接入标准。由于可再生能源项目发电的间歇性，传统接入标准已经不再适用。应鼓励将提高灵活性作为新电网接入标准和其他技术要求的主要设计原则。

ii. 电网连接点的分配

《可再生能源法》规定电网公司必须为可再生能源项目提供电网连接服务，并消除可再生能源项目电网扩展的障碍。考虑到相应的花费，电网公司通过收取可再生能源电力溢价而获得补偿。但在许多情况下，电网连接点的分配缺乏透明度，而且电网公司经常利用技术因素逃避《可再生能源法》规定的义务。

iii. 电力购销协议和电网连接协议范本

目前尚不存在电力购销协议范本来规定电网公司承担购买可再生能源项目全部发电量义务的相关商业安排。亦无任何法规条例设定固定的电力购买价格或固定的电价期限。关于违约责任的法规条例也非常缺乏。与此同时，尽管电网公司有义务购买可再生能源项目生产的所有电力，但是在一些电网较弱的地区，电网公司却限制对可再生能源的接入，这给可再生能源开发商造成了大量的经济损失。

电网连接协议范本也将有助于电网公司和可再生能源开发商之间建立标准化关系。

建议

- 为可再生能源发电制定一套反映其特定技术特性的新电网接入标准
- 规定电网连接点分配的标准程序
- 公布可再生能源电力购销协议范本和电网连接协议范本

c. 为可再生能源项目制定充分稳定的激励措施

问题

要实现宏伟的可再生能源目标，必须制定更强大和更系统的支持方案。这些支持方案必须有利于可再生能源产业的所有国内外参与者。

分析

i. 可再生能源价格体系

鉴于可再生能源项目建设完成前，国家发展和改革委员会价格司不会批准和签发最终价格审批，投资者的

投资决策只能基于其提交的可行性研究报告中建议的暂定价格。这为投资者增加了不应有的风险。

由于许多省份的电价很低，而且不与每年的通货膨胀率挂钩，因此可再生能源投资者面临严峻的形势，即营业收入固定不变，但运营和维护费用却因通货膨胀的压力和设施损耗而逐年提高，此商业环境令投资者面临巨大的投资风险。

ii. 企业所得税

新的企业所得税针对国家扶持的基础设施项目，以及环保、能源和节水有关的项目制定了税收优惠措施。然而，税收优惠目录中有资格的产业部门不包括可再生能源项目。

iii. 购买国产设备的增值税 (VAT) 退税

对于中国政府规定鼓励类产业，虽然外国投资者购买国内生产设备可以获得增值税退税。但他们却难以预见何时能获得增值税退税。某些情况下，增值税退款过程长达 18 个月，这将导致流动资金管理效率和项目盈利能力下降。

iv. 补贴、税收优惠和其他激励措施的透明度

中国可再生能源的支持机制已从直接向供应商提供补贴发展为更加复杂的体系，包括税收减免、价格优惠、信贷担保和其他中央和地方政府提供的补贴。

目前没有对这些激励措施制定出透明和系统的政策框架，也没有提供指导信息以帮助投资者从中央和省级政府提供的这些激励政策中获益。

建议

- 制定透明的省级上网电价，将其与通货膨胀挂钩，并保证合理的投资回报率
- 在项目投资前提供有关最终电价和入网条件的明确而透明的信息
- 将可再生能源纳入《企业所得税优惠目录》
- 加速增值税退税过程
- 确保国内外投资者在补贴与进出口条件方面获得平等对待
- 通过加强不同政府机关之间的协作，明确地协调

可再生能源政策和财政政策，并确保协调后的政策在各级行政机关得以执行

d. 制定可再生能源设备的技术标准

问题

当前迫切需要为可再生能源设备建立新的标准或统一现行标准。

分析

缺乏风电涡轮机技术标准是非常严重的问题，因为中国拥有大约 30 家风力涡轮机制造商。这个标准化的过程应由根据国际实践经验在全国层面制定，而不是任由单个公司自行制定标准。

建议

- 采用国际先进技术标准，减少可再生能源设备的长期风险

4. 准许外商控股项目具备申请CDM项目的资格

问题

目前中国的法规不允许外国公司控股的项目具有申请 CDM 的资格，这阻碍了中国获得有利于提高能源效率、减少排放量和接受技术转让的投资。

分析

CDM 项目的收入影响到可再生能源、能源效率、废弃物与废水回收等众多项目相关投资的经济可行性，并关系到技术知识的最终转让。

然而，中国《CDM 项目运营管理措施》第 11 条规定，申请注册 CDM 项目的业主必须是中资企业，或是中方持股不少于 51% 的合资企业。这阻碍了欧盟企业投资于需要强大运营技能和大量知识产权投入的复杂项目。因此这些企业面临两条路，要么放弃项目的控股权，要么投资可控股但无 CDM 收入从而无利可得的项目。

《联合国气候变化框架公约》的 CDM 条例没有这



样的限制，印度和巴西等其他 CDM 大国也没有这样的做法。

扩大 CDM 项目的资格范围，允许外国公司控股 CDM 项目会鼓励更多的外资投入到新型清洁能源方案的开发和能源效率升级项目，促进实现《可再生能源中长期发展规划》和《外商投资产业指导目录》的目标。

建议

- 允许外商控股项目拥有申请 CDM 项目的资格

5. 改善洁净煤技术的整个价值链

问题

虽然中国一直在开发洁净煤技术，并将其用于发电和燃料与化工产品转化，但是中国开发洁净煤技术的方法并未考虑到洁净煤技术的整个价值链。

分析

中国 75% 以上的电力来自燃煤发电厂，其二氧化碳和二氧化硫的排放量约占全国排放总量的 50%。采用脱硝技术的热力发电厂可将氮氧化合物的排放量降低 80%。中国已宣布将在热力发电厂强制使用脱硝技术，但何时公布强制法令仍不得而知。中国还启动了一批煤转化项目。然而，在煤制油和煤化工技术制造石油产品和化学品的市场推广方面，中国并未像其他国家一样制定相关的优惠或支持性政策。

此外，中国已启动了几个一体化煤气化联合循环 (IGCC) 发电项目，例如采用碳捕获和封存技术的华能集团绿色煤电项目。中国绿色煤电有限公司等一些中国公司已宣布发展碳捕获和封存技术 (CCS) 的意图。他们也正在与欧洲 COACH 计划等国际合作伙伴合作。中国政府应制定政策和法规，鼓励此类工作。

建议

- 提供经济优惠政策，进一步鼓励开发洁净煤技

术，鼓励一体化煤气化联合循环 (IGCC) 和碳捕获和封存技术的研究和示范项目

- 为煤制油和煤化工技术制造的石油产品和化学品提供金融优惠政策和支持
- 公布强制采用脱硝技术的日程表，确保所有投资者统一享受脱硝的退税政策
- 制定政策和法规，鼓励碳捕获和封存技术的工业试点项目

缩略语

CCS	碳捕获和封存
CDM	清洁发展机制
De-NOx	(减少氧化氮的排放量) 脱硝
GW	千兆瓦
IGCC	一体化煤气化联合循环
JV	合资企业
NDRC	国家发展和改革委员会
UNFCCC	联合国气候变化框架公约
VAT	增值税